Appendices

A.

Air Quality and Greenhouse Gas Emissions Background and Modeling Data

Appendices

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Air Quality and Greenhouse Gas Background and Modeling Data

AIR QUALITY

Climate/Meteorology

SOUTH COAST AIR BASIN

The project site lies within the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (SCAQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the project site is the San Fernando Monitoring Station (ID No. 047759). The average low is reported at 42.9°F in December, and the average high is 92.4°F in August (WRCC 2017).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. The historical rainfall average for the project area is 17.66 inches per year (WRCC 2017).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 2005).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (SCAQMD 2005).

Air Quality Regulations

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (SCAQMD). However, SCAQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state

to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Ozone (O_3)[3]	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)[4]	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)[5]	24 hours	25 µg/m^3	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hour	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016a.

Notes: ppm: parts per million; µg/m^3: micrograms per cubic meter

* Standard has not been established for this pollutant/duration by this entity.

1 California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

4 On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

5 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

CRITERIA AIR POLLUTANTS

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb) are primary air pollutants. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO_x) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and NO_2 are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (SCAQMD 2005; USEPA 2017a). The SoCAB is designated under the California and National AAQS as being in attainment of CO criteria levels (CARB 2016b).

Volatile Organic Compounds (VOC) are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of VOCs include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of ozone (O_3), SCAQMD has established a significance threshold for this pollutant (SCAQMD 2005).

Nitrogen Oxides (NO_x) are a byproduct of fuel combustion and contribute to the formation of O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO_2). The principal form of NO_2 produced by combustion is NO, but NO reacts with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_x. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in

bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 part per million (ppm). NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure (SCAQMD 2005; USEPA 2017a). The SoCAB is designated as an attainment area for NO_2 under the National AAQS California AAQS (CARB 2016b).

Sulfur Dioxide (SO_2) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2 (SCAQMD 2005; USEPA 2017). When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. The SoCAB is designated as attainment under the California and National AAQS (CARB 2016b).

Suspended Particulate Matter (PM_{10} and $PM_{2.5}$) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 millionths of a meter or 0.0004 inch) or less. Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns (i.e., 2.5 millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on arid landscapes also contributes substantially to local particulate loading (i.e., fugitive dust). Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems (SCAQMD 2005).

The US Environmental Protection Agency's (EPA) scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms (SCAQMD 2005). There has been emerging evidence that even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤ 0.1 millionths of a meter or <0.000004 inch), known as ultrafine particulates (UFPs), have human health implications, because UFPs toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (SCAQMD 2013). However, the EPA or CARB have yet to adopt AAQS to regulate these particulates. Diesel particulate matter (DPM) is classified by the CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental effects such as visibility impairment,[1] environmental damage,[2] and aesthetic damage[3]

[1] $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

(SCAQMD 2005; USEPA 2017a). The SoCAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2016b).[4]

Ozone (O_3) is commonly referred to as "smog" and is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in the presence of sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for the formation of this pollutant. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (SCAQMD 2005; USEPA 2017a). The SoCAB is designated as extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2016b).

Lead (Pb) concentrations decades ago exceeded the state and federal AAQS by a wide margin, but have not exceeded state or federal air quality standards at any regular monitoring station since 1982 (SCAQMD 2005). However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources[5] recorded every localized violations of the new state and federal standards. As a result of these localized violations, the Los Angeles County portion of the SoCAB was designated in 2010 as nonattainment under the National AAQS for lead (SCAQMD 2012; CARB 2016b). The project is not characteristic of industrial-type projects that have the potential to emit lead. Therefore, lead is not a pollutant of concern for the project.

TOXIC AIR CONTAMINANTS

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean

[2] Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

[3] Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

[4] CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM_{10} standards during the period from 2004 to 2007. In June 2013, the EPA approved the State of California's request to redesignate the PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

[5] Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 identified that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2012).

Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

CARB has promulgated the following specific rules to limit TAC emissions:

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Multiple Airborne Toxics Exposure Study (MATES)

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on ambient concentrations of TACs and estimated the potential health risks from air toxics in the SoCAB. In 2008, SCAQMD conducted its third update to the MATES study (MATES III). The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, accounting for 84 percent of the cancer risk (SCAQMD 2008a).

SCAQMD recently released the fourth update (MATES IV). The results showed that the overall monitored risk for excess cancer from a lifetime exposure to ambient levels of air toxics decreased to approximately 418 in one million. Compared to the 2008 MATES III, monitored excess cancer risks decreased by approximately 65 percent. Approximately 90 percent of the risk is attributed to mobile sources while 10 percent is attributed to TACs from stationary sources, such as refineries, metal processing facilities, gas stations, and chrome plating facilities. The largest contributor to this risk was diesel exhaust, accounting for approximately 68 percent of the air toxics risk. Compared to MATES III, MATES IV found substantial improvement in air quality and associated decrease in air toxics exposure. As a result, the estimated basin-wide population-weighted risk decreased by approximately 57 percent compared to the analysis done for the MATES III time period (SCAQMD 2015a).

The Office of Environmental Health Hazard Assessment (OEHHA) updated the guidelines for estimating cancer risks on March 6, 2015. The new method utilizes higher estimates of cancer potency during early life exposures, which result in a higher calculation of risk. There are also differences in the assumptions on breathing rates and length of residential exposures. When combined together, SCAQMD estimates that risks for a given inhalation exposure level will be about 2.7 times higher using the proposed updated methods identified in MATES IV (e.g., 2.7 times higher than 418 in one million overall excess cancer risk) (SCAQMD 2015a).

Air Quality Management Planning

SCAQMD is the agency responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2016 AQMP

The 2016 AQMP addresses strategies and measures to attain the 2008 federal 8-hour ozone standard by 2031, the 2012 federal annual $PM_{2.5}$ standard by 2025, the 2006 federal 24-hour $PM_{2.5}$ standard by 2019, the 1997 federal 8-hour ozone standard by 2023, and the 1979 federal 1-hour ozone standard by year 2022. It is projected that total NO_X emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by year 2022 (SCAQMD 2017), which requires reducing NO_X emissions in the SoCAB to 250 tpd. Reducing NO_X emissions would also reduce $PM_{2.5}$ concentrations within the SoCAB. However, as the goal is

to meet the 2012 federal annual $PM_{2.5}$ standard no later than year 2025, SCAQMD is seeking to reclassify the SoCAB from "moderate" to "serious" nonattainment under this federal standard. A "moderate" non-attainment would require meeting the 2012 federal standard by no later than 2021. Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA (SCAQMD 2017). The 2016 AQMP was adopted by the Board on March 3, 2017.

LEAD STATE IMPLEMENTATION PLAN

In 2008 EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB, outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.
- **Nonattainment/Transitional:** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*. The SoCAB is designated in attainment of the California AAQS for sulfates. The SoCAB is designated as nonattainment for lead (Los Angeles County only) under the National AAQS.

Table 2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM_{10}	Serious Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Nonattainment[1]
CO	Attainment	Attainment
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only)[2]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2016b.

[1] SCAQMD is seeking to reclassify the SoCAB from "moderate" to "serious" nonattainment under federal $PM_{2.5}$ standard.

[2] In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas within the SoCAB are unclassified.

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the SCAQMD. The project site is located within Source Receptor Area (SRA) 6 – West San Fernando Valley. The air quality monitoring station closest to the project site is the Reseda Monitoring Station. This station monitors O_3, CO, NO_2, and $PM_{2.5}$. Data for SO_2 and PM_{10} are supplemented by the Burbank – W Palm Avenue Monitoring Station. The most current five years of data monitored at these monitoring stations are included in Table 3. The data show recurring violations of the federal $PM_{2.5}$ standard, state PM_{10} standard, and both the state and federal O_3 standards. The CO, NO_2, and SO_2 standards and have not been violated in the last five years.

Table 3 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2012	2013	2014	2015	2016
Ozone (O_3)[1]					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	18	7	6	11	9
State 8-hour ≥ 0.07 ppm (days exceed threshold)	39	21	31	34	23
Federal 8-Hour > 0.075 ppm (days exceed threshold)	23	11	11	15	14
Max. 1-Hour Conc. (ppm)	0.129	0.124	0.116	0.119	0.122
Max. 8-Hour Conc. (ppm)	0.098	0.092	0.092	0.094	0.098
Carbon Monoxide (CO)[1]					
State 8-Hour > 9.0 ppm (days exceed threshold)	0	*	*	*	*
Federal 8-Hour ≥ 9.0 ppm (days exceed threshold)	0	*	*	*	*
Max. 8-Hour Conc. (ppm)	2.70	*	*	*	*
Nitrogen Dioxide (NO_2)[1]					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Federal 1-Hour ≥ 0.100 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	0.0709	0.0581	0.0589	0.0725	0.0555
Sulfur Dioxide (SO_2)[2]					
State 24-Hour ≥ 0.04 ppm (days exceed threshold)	0	0	*	*	*
Federal 24-Hour ≥ 0.14 ppm (days exceed threshold)	0	0	*	*	*
Max 24-Hour Conc. (ppm)	0.002	0.002	*	*	*
Coarse Particulates (PM_{10})[2]					
State 24-Hour > 50 µg/m³ (days exceed threshold)	1	1	1	*	*
Federal 24-Hour > 150 µg/m³ (days exceed threshold)	0	0	0	*	*
Max. 24-Hour Conc. (µg/m³)	55.0	53.3	68.6	*	*
Fine Particulates ($PM_{2.5}$)[1]					
Federal 24-Hour > 35 µg/m³ (days exceed threshold)	2	1	0	1	0
Max. 24-Hour Conc. (µg/m³)	41.6	41.8	27.2	36.8	41.5

Source: CARB 2017a
ppm: parts per million; parts per billion, µg/m³: micrograms per cubic meter
Notes: * Data not available.
[1] Data obtained from the Reseda Monitoring Station.
[2] Data obtained from the Burbank – W Palm Avenue Monitoring Station.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the

enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

Methodology

Projected construction-related air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.1, distributed by the California Air Pollutant Control Officers Association (CAPCOA 2016). CalEEMod compiles an emissions inventory of construction (fugitive dust, off-gas emissions, onroad emissions, and offroad emissions), area sources, indirect emissions from energy use, mobile sources, indirect emissions from waste disposal (annual only), and indirect emissions from water/wastewater (annual only) use. The calculated emissions of the project are compared to thresholds of significance for individual projects using the SCAQMD's CEQA Air Quality Analysis Guidance Handbook (SCAQMD 1993).

Thresholds of Significance

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in SCAQMD's *CEQA Air Quality Handbook* and the significance thresholds on SCAQMD's website.[6] CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. SCAQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed though an analysis of localized CO impacts and localized significance thresholds (LSTs).

REGIONAL SIGNIFICANCE THRESHOLDS

SCAQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 4, *SCAQMD Significance Thresholds*, lists SCAQMD's regional significance thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although ultrafine particulates contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from PM. However, the EPA or CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, SCAQMD has not developed thresholds for them.

[6] SCAQMD's Air Quality Significance Thresholds are current as of March 2015 and can be found here: http://www.aqmd.gov/ceqa/hdbk.html.

Table 4 SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO_X)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO_X)	150 lbs/day	150 lbs/day
Particulates (PM_{10})	150 lbs/day	150 lbs/day
Particulates ($PM_{2.5}$)	55 lbs/day	55 lbs/day

Source: SCAQMD 2015b.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk ($PM_{2.5}$, TACs)
- Aggravates respiratory disease (O_3, $PM_{2.5}$)
- Increases bronchitis (O_3, $PM_{2.5}$)
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O_3)
- Reduces resistance to infections and increases fatigue (O_3)
- Reduces lung growth in children ($PM_{2.5}$)
- Contributes to heart disease and heart attacks ($PM_{2.5}$)
- Contributes to premature death (O_3, $PM_{2.5}$)
- Linked to lower birth weight in newborns ($PM_{2.5}$) (SCAQMD 2015c)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of $PM_{2.5}$ is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (SCAQMD 2015d).

Mass emissions in Table 4 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not single-handedly trigger a regional health impact. SCAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the SoCAB. To achieve the health-based standards established by the EPA, SCAQMD prepares an AQMP that details regional programs to attain the AAQS.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. Typically, for an intersection to exhibit a significant CO concentration, it would operate at level of service (LOS) E or worse without improvements (Caltrans 1997). However, at the time of the 1993 Handbook, the SoCAB was designated nonattainment under the California AAQS and National AAQS for CO.

With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined. In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hot spot analysis conducted for the attainment by SCAQMD for busiest intersections in Los Angeles during the peak morning and afternoon periods plan did not predict a violation of CO standards. [7] As identified in SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017).

LOCALIZED SIGNIFICANCE THRESHOLDS

SCAQMD developed LSTs for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at the project site (offsite mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 5, *SCAQMD Localized Significance Thresholds*.

[7] The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

Table 5 SCAQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO_2 Standard (CAAQS)	0.18 ppm
Annual NO_2 Standard (CAAQS)	0.03 ppm
24-Hour PM_{10} Standard – Construction (SCAQMD)[1]	10.4 µg/m^3
24-Hour $PM_{2.5}$ Standard – Construction (SCAQMD)[1]	10.4 µg/m^3
24-Hour PM_{10} Standard – Operation (SCAQMD)[1]	2.5 µg/m^3
24-Hour $PM_{2.5}$ Standard – Operation (SCAQMD)[1]	2.5 µg/m^3

Source: SCAQMD 2015b.
ppm – parts per million; µg/m^3 – micrograms per cubic meter
[1] Threshold is based on SCAQMD Rule 403. Since the SoCAB is in nonattainment for PM_{10} and $PM_{2.5}$, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, SCAQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated onsite that would trigger the levels shown in Table 5 for projects under 5-acres. These "screening-level" LSTs tables are the localized significance thresholds for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 5.

In accordance with SCAQMD's LST methodology, construction LSTs are based on the acreage disturbed per day based on equipment use. The construction LSTs for the project site in SRA 4 are shown in Table 6, *SCAQMD Screening-Level Construction Localized Significance Thresholds,* for receptors within 82 feet (25 meters).

Table 6 SCAQMD Construction Localized Significance Thresholds

	Threshold (lbs/day)[1]			
Acreage Disturbed	Nitrogen Oxides (NO_X)	Carbon Monoxide (CO)	Coarse Particulates (PM_{10})	Fine Particulates ($PM_{2.5}$)
≤1.00 Acre Disturbed Per Day	57	585	4.00	3.00
<1.17 Acres Disturbed Per Day	61	629	4.51	3.34

Source: SCAQMD 2008b.
[1] LSTs are based on receptors within 82 feet (25 meters) in SRA 4.

Because the project is not an industrial project that has the potential to emit substantial sources of stationary emissions, operational LSTs are not an air quality impact of concern associated with the project.

Whenever a project would require use of chemical compounds that have been identified in SCAQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the SCAQMD. Table 7, *Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project.

(*California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369 (Case No. S213478)*). CEQA does not require CEQA-level environmental document to analyze the environmental effects of attracting development and people to an area. However, the environmental document must analyze the impacts of environmental hazards on future users, when a proposed project exacerbates an existing environmental hazard or condition. Residential, commercial, and office uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards, so these thresholds are typically applied to new industrial projects.

Table 7 SCAQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases

Source: SCAQMD 2015b.

GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,[8] carbon (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[9] The major GHG are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.

- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.

- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.

    - *Chlorofluorocarbons (CFCs*) are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-

[8] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop o rather than a primary cause of change.

[9] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017c). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

- ***Perfluorocarbons (PFCs)*** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.

- ***Sulfur Hexafluoride (SF6)*** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.

- ***Hydrochlorofluorocarbons (HCFCs)*** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.

- ***Hydrofluorocarbons (HFCs)*** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; USEPA 2017b).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 8, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fourth Assessment Report GWP values for CH_4, a project that generates 10 metric tons (MT) of CH_4 would be equivalent to 250 MT of CO_2.[10]

[10] CO_2-equivalence is used to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. The global warming potential of a GHG is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Table 8 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

GHGs	Second Assessment Report Atmospheric Lifetime (Years)	Fourth Assessment Report Atmospheric Lifetime (Years)	Second Assessment Report Global Warming Potential Relative to CO_2[1]	Fourth Assessment Report Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	50 to 200	50 to 200	1	1
Methane[2] (CH_4)	12 (±3)	12	21	25
Nitrous Oxide (N_2O)	120	114	310	298
Hydrofluorocarbons:				
HFC-23	264	270	11,700	14,800
HFC-32	5.6	4.9	650	675
HFC-125	32.6	29	2,800	3,500
HFC-134a	14.6	14	1,300	1,430
HFC-143a	48.3	52	3,800	4,470
HFC-152a	1.5	1.4	140	124
HFC-227ea	36.5	34.2	2,900	3,220
HFC-236fa	209	240	6,300	9,810
HFC-4310mee	17.1	15.9	1,300	1,030
Perfluoromethane: CF_4	50,000	50,000	6,500	7,390
Perfluoroethane: C_2F_6	10,000	10,000	9,200	12,200
Perfluorobutane: C_4F_{10}	2,600	NA	7,000	8,860
Perfluoro-2-methylpentane: C_6F_{14}	3,200	NA	7,400	9,300
Sulfur Hexafluoride (SF_6)	3,200	NA	23,900	22,800

Source: IPCC 1995; IPCC 2007.

Notes: The IPCC has published updated global warming potential (GWP) values in its Fifth Assessment Report (IPCC 2013) that reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2. However, GWP values identified in the Fourth Assessment Report are used by SCAQMD to maintain consistency in statewide GHG emissions modeling. In addition, the 2014 Scoping Plan Update was based on the GWP values in the Fourth Assessment Report.

1 Based on 100-year time horizon of the GWP of the air pollutant relative to CO_2.

2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

Regulatory Settings

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The U.S. Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements, but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

The EPA's endangerment finding covers emissions of six key GHGs—CO_2, CH_4, N_2O, hydro fluorocarbons, per fluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for

decades by scientists in the United States and around the world (the first three are applicable to the proposed project).

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 metric tons (MT) or more of CO_2 per year are required to submit an annual report.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO_2 per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2010/2012)

The current Corporate Average Fuel Economy (CAFE) standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon [mpg] by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017–2025, which will require a fleet average of 54.5 mpg in 2025.

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the CAA, the EPA has been developing regulations for new stationary sources such as power plants, refineries, and other large sources of emissions. Pursuant to the former President Obama's 2013 Climate Action Plan, the EPA was directed to also develop regulations for existing stationary sources. However, the EPA is reviewing the Clean Power Plan under President Trump's Energy Independence Executive Order.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-03-05, Executive Order B-30-15, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32), and Senate Bill 375 (SB 375).

Executive Order S-03-05

Executive Order S-03-05, signed June 1, 2005. Executive Order S-03-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32, the Global Warming Solutions Act. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-03-05.

CARB 2008 Scoping Plan

The final Scoping Plan was adopted by CARB on December 11, 2008. The *2008 Scoping Plan* identified that GHG emissions in California are anticipated to be approximately 596 $MMTCO_2e$ in 2020 (CARB 2008). In December 2007, CARB approved a 2020 emissions limit of 427 $MMTCO_2e$ (471 million tons) for the state (CARB 2008). In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 $MTCO_2e$ per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

First Update to the Scoping Plan

CARB completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan was adopted at the May 22, 2014, board hearing. The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan. As part of the update, CARB recalculated the 1990 GHG emission levels with the updated GWPs in the Fourth Assessment Report, and the 427 $MMTCO_2e$ 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher at 431 $MMTCO_2e$ (CARB 2014).

As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the update also addresses the state's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a midterm target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with or exceeds the trajectory created by statewide goals (CARB 2014). CARB identified that reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit (CARB 2014).

Executive Order B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions within the state to 40 percent of 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the State and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires the Natural Resources Agency to conduct triennial updates the California adaption strategy,

Safeguarding California, in order to ensure climate change is accounted for in State planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and Assembly Bill 197 (AB 197) into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

2017 Climate Change Scoping Plan Update

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On January 20, 2017, CARB released the *Draft 2017 Climate Change Scoping Plan Update* with adoption hearings planned for summer of 2017. The *Draft 2017 Climate Change Scoping Plan Update* includes the potential regulations and programs including strategies consistent with AB 197 requirements to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 (CARB 2017b).

California's climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning, to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks;
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030);
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030;
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks;

- Implementing the Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydroflurocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030;
- Continued implementation of SB 375;
- Post-2020 Cap-and-Trade Program that includes declining caps;
- 20 percent reduction in GHG emissions from refineries by 2030[11]; and
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the *2017 Climate Change Scoping Plan* also identified local governments as essential partners in achieving the State's long-term GHG reduction goals and identified local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 $MTCO_2e$ or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds—consistent with the Scoping Plan and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and mitigation measures that avoid or minimize project emissions to the degree feasible; or, a performance-based metric using a climate action plan or other plan to reduce GHG emissions is appropriate (CARB 2017b).

The Scoping Plan scenario is set against what is called the business-as-usual (BAU) yardstick—that is, what the GHG emissions would look like if the State did nothing at all beyond the existing policies that are required and already in place to achieve the 2020 limit, as shown in Table 9, *2017 Climate Change Scoping Plan Emissions Reductions Gap to Achieve the 2030 GHG Target*. It includes the existing renewables requirements, advanced clean cars, the "10 percent" Low Carbon Fuel Standard (LCFS), and the SB 375 program for more vibrant communities, among others. However, it does not include a range of new policies or measures that have been developed or put into statute over the past two years, Also shown in the table, the known commitments are expected to result in emissions that are 50 $MMTCO_2e$ above the target in 2030. In order to make up the "gap", a new Post- 2020 Cap-and-Trade Program and refinery measure are key components of the 2017 Scoping Plan.

[11] The plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources in accordance with AB 197. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and-Trade Program, which constrains and reduces emissions at covered sources.

Table 9 2017 Climate Change Scoping Plan Emissions Reductions Gap to Achieve the 2030 GHG Target

Modeling Scenario	2030 GHG Emissions $MMTCO_2e$
Reference Scenario (Business-as-Usual)	392.4
With Known Commitments	310
2030 GHG Target	260

Source: CARB 2017b.

Table 10, *2017 Climate Change Scoping Plan Emissions Change by Sector to Achieve the 2030 Target*, provides estimated GHG emissions by sector, compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030.

Table 10 2017 Climate Change Scoping Plan Emissions Change by Sector to Achieve the 2030 Target

Scoping Plan Sector	1990 $MMTCO_2e$	2030 Proposed Plan Ranges $MMTCO_2e$	% Change from 1990
Agricultural	26	24-25	-4% to -8%
Residential and Commercial	44	38-40	-9% to -14%
Electric Power	108	42-62	-43% to -61%
High GWP	3	8-11	167% to 267%
Industrial	98	77-87	-11% to -21%
Recycling and Waste	7	8-9	14% to 29%
Transportation (including TCU)	152	103-111	-27% to -32%
Net Sink[1]	-7	TBD	TBD
Sub Total	431	300-345	-20% to -30%
Cap-and-Trade Program	NA	40-85	NA
Total	431	260	-40%

Source: CARB 2017b.
Notes: TCU = Transportation, Communications, and Utilities; TBD: To Be Determined.
[1] Work is underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH_4. Black carbon is the light-absorbing component of fine particulate matter (PM) produced during incomplete combustion of fuels. SB 1383 requires the state board, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030, as specified. The bill also establishes targets for reducing organic waste in landfill. On March 14, 2017, CARB adopted the *Short-Lived Climate Pollutant Strategy*, which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic

sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s, despite the tripling of diesel fuel use (CARB 2017c). In-use on-road rules are expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. SCAQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these charbroilers by over 80 percent (CARB 2017c). Additionally, SCAQMD Rule 445, wood-burning devices limits installation of new fireplaces in the SoCAB.

SB 375 – Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS)

In 2008, Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). SB 375 requires CARB to periodically update the targets, no later than every 8 years. CARB plans to propose updated targets for consideration in 2016, with the intent to make them effective in 2018. Sustainable communities strategies (SCSs) adopted in 2018 would be subject to the updated targets (CARB 2015).

The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 $MMTCO_2e$ of reductions by 2020 and 15 $MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

SB 375 requires CARB to periodically update the targets, no later than every 8 years. CARB plans to propose updated targets for consideration in 2016, with the intent to make them effective in 2018. Considerations for the next round of targets include whether to change the nature or magnitude of the emissions reduction targets for each of the MPOs, and whether the target-setting methodology should account for advances in technologies that reduce emissions. Such changes in methodology would permit cities to account for emissions reductions from advances in cleaner fuels and vehicles and not only from land use and transportation planning strategies.

SCAG's 2016-2040 RTP/SCS

SB 375 requires the MPOs to prepare a sustainable communities strategy in their regional transportation plan. For the SCAG region, the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted on April 7, 2016 and is an update to the 2012 RTP/SCS (SCAG 2016). In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

The 2016-2040 RTP/SCS projects that the SCAG region will meet or exceed the passenger per capita targets set in 2010 by CARB. It is projected that VMT per capita in the region for year 2040 would be reduced by 7.4 percent with implementation of the 2016-2040 RTP/SCS compared to a no-plan year 2040 scenario. Under the 2016-2040 RTP/SCS, SCAG anticipates lowering GHG emissions 8 percent below 2005 levels by 2020, 18 percent by 2035, and 21 percent by 2040. The 18 percent reduction by 2035 over 2005 levels represents a 2 percent increase in reduction compared to the 2012 RTP/SCS projection. Overall, the SCS is meant to provide growth strategies that will achieve the aforementioned regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around High Quality Transit Areas and Livable Corridors, and creating Neighborhood Mobility Areas to integrate land use and transportation and plan for more active lifestyles (SCAG 2016). However, the SCS does not require that local general plans, specific plans, or zoning be consistent with SCS; instead, it provides incentives to governments and developers for consistency.

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the CAFE standards under *Federal Laws*, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new low carbon fuel standard (LCFS) for transportation fuels sold within the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would

use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

Senate Bills 1078, 107, X1-2, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewable portfolio standard (RPS) established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08 was signed in November 2008, which expands the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SBX1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

SENATE BILL 350

Senate Bill 350 (de Leon), was signed into law September 2015. SB 350 establishes tiered increases to the RPS of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

California Building Standards Code – Building Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017.

The 2016 Standards continues to improve upon the previous 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Under the 2016 Standards, residential and nonresidential buildings are 28 and 5 percent more energy efficient than the 2013 Standards, respectively

(CEC 2015a). Buildings that are constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the prior 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features. While the 2016 standards do not achieve zero net energy, they do get very close to the state's goal and make important steps toward changing residential building practices in California. The 2019 standards will take the final step to achieve zero net energy for newly constructed residential buildings throughout California (CEC 2015b).

California Green Building Standards Code – CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as "CALGreen") was adopted as part of the California Building Standards Code (Title 24, CCR). CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[12] The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, and were last updated in 2016. The 2016 Standards became effective on January 1, 2017.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) were adopted by the California Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. Though these regulations are now often viewed as "business-as-usual," they exceed the standards imposed by all other states and they reduce GHG emissions by reducing energy demand.

Solid Waste Regulations

California's Integrated Waste Management Act of 1989 (AB 939, Public Resources Code 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses.

The California Solid Waste Reuse and Recycling Access Act (AB 1327, California Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

[12] The green building standards became mandatory in the 2010 edition of the code.

Section 5.408 of the 2013 California Green Building Standards Code also requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

In October of 2014 Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

Water Efficiency Regulations

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the Energy Commission, in consultation with the department, to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;

3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[13]

[13] The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency (SCAQMD 2010):

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD is proposing a screening-level threshold of 3,000 $MTCO_2e$ annually for all land use types or the following land-use-specific thresholds: 1,400 $MTCO_2e$ for commercial projects, 3,500 $MTCO_2e$ for residential projects, or 3,000 $MTCO_2e$ for mixed-use projects. These bright-line thresholds are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions:

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

The SCAQMD Working Group has identified an efficiency target for projects that exceed the screening threshold of 4.8 $MTCO_2e$ per year per service population ($MTCO_2e$/year/SP) for project-level analyses and 6.6 $MTCO_2e$/year/SP for plan level projects (e.g., program-level projects such as general plans) for the year 2020.[14] The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.[15]

evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

[14] It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

[15] SCAQMD took the 2020 statewide GHG reduction target for land use only GHG emissions sectors and divided it by the 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

For the purpose of this project, SCAQMD's project-level thresholds of 3,000 $MTCO_2e$ and 4.8 $MTCO_2e$/year/SP are used. If projects exceed the bright line and per capita efficiency targets, GHG emissions would be considered potentially significant in the absence of mitigation measures.

Life cycle emissions are not included in this analysis because not enough information is available for the proposed project, and therefore life cycle GHG emissions would be speculative.[16] Black carbon emissions are not included in the GHG analysis because CARB does not include this pollutant in the state's AB 32 inventory and treats this short-lived climate pollutant separately.[17]

[16] Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analyses was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials are also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

[17] Particulate matter emissions, which include black carbon, are analyzed in Section 5.2, *Air Quality*. Black carbon emissions have sharply declined due to efforts to reduce on-road and off-road vehicle emissions, especially diesel particulate matter. The State's existing air quality policies will virtually eliminate black carbon emissions from on-road diesel engines within 10 years (CARB 2017c).

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CalEEMod Land Use Inputs: Proposed Project

Project Location:	12431 Roscoe Boulevard, City of Los Angeles in the San Fernando Valley
Climate Zone:	12
Operation Year	2022
Land Use Setting	Urban
Utility Company	LADWP
Source Receptor Area:	7 - East San Fernando Valley

Total Acreage:	37.2
Disturbed Acreage:	13.47

Type	Land Use Type	Land Use Unit Amount	Land Use Size Metric	Lot Acreage	Land Use Square Feet
Phase 1					
Education	High School	134.33	1000bsf	3.08	134,334
				3.08	
Phase 2					
Education	High School	176.43	1000bsf	4.05	176,427
Parking	Parking Lot	275.945	1000bsf	6.33	275,945
				10.39	

New Land Uses/Development*

Phase 1		
Building B Auditotium	*26,801*	building square feet (BSF)
Building C Food Service and Maintenance	*15,521*	
Lunch Shelter	*5,000*	
Building D Gymnasium	*42,667*	
Building E Library	*13,900*	
Building Subtotal	***103,889***	
Phase 2		
Building A Administration	***71,036***	BSF
Basketball Courts	*47,820*	
Tennis Courts	*29,005*	
*Parking A Restriping***	*121,251*	SF
*Parking C Restriping***	52,788	SF
*Parking B Restriping***	25,081	SF
Asphalt Subtotal	**275,945**	**SF**

**Based in information provided by the District.*

***sqft based on aerial photograph*

Renovation/Modernization*

Phase 1 Repaint	
Building 49	*43*
Building 50	*1,125*
Building 55	*849*
Building 56	*360*
Building 59	*21,090*
Building 37	*500*
Building 40	*2,300*
Building 41	*1,400*
Building 42	*280*
Building 43	*240*
Building 76	*2,258*
Total	***30,445***

Phase 2 Repaint and Re-roof	
Building 4	13,732
Building 5	12,072
Building 6	9,753
Building 7	9,110
Building 8	8,619
Building 12	*4,542*
Building 25	*8,212*
Building 26	*9,441*
Building 27	*9,624*
Buildings 28, 29	*13,416*
Building 30	*6,870*
Total	***105,391***

**Based in information provided by the District.*

Demolition

Phase 1		
Asphalt		
*Asphalt to be demolished:**	948.7	tons
Asphalt debris to be hauled offiste:	**948.7**	**tons**
1-way haul distance	20.0	miles (CalEEMod default)
*Haul truck capacity***	12.64	tons
*Haul Duration****	44	days
Total Haul Trips	150	trip ends
Daily Haul Trips	3	trip ends/day

**Based on measurement using Google Earth of areas anticipated to be demolished.*
***Based on 10 CY capacity haul truck per District and conversion factor of 1.2641662 tons/CY per CalEEMod methodology.*
****Based on information provided by District.*

Building		
Building Amount Demolition Volume:	103,662	building square feet
Building Demolition Debris Amount:*	**4,768**	**tons**
1-way haul distance	20.0	miles (CalEEMod default)
*Haul truck capacity***	12.64	tons
*Haul Duration****	44	days
Total Haul Trips	754	trip ends
Daily Haul Trips	17	trip ends/day
Total Haul Amount	**5,717**	tons
Total Haul Trips	904	trip ends (CalEEMod Default)
1-way haul distance	20	miles (CalEEMod Default)
Haul truck capacity	12.64	tons

**Based on CalEEMod conversion factor of 0.046 ton per square feet of building material.*
***Based on 10 CY capacity haul truck per District and conversion factor of 1.2641662 tons/CY per CalEEMod methodology.*
****Based on information provided by District.*

Phase 2		
Asphalt		
*Asphalt to be demolished:**	913.8	tons
Asphalt debris to be hauled offiste:	**913.8**	tons
1-way haul distance	20.0	miles (CalEEMod default)
*Haul truck capacity***	12.64	tons
*Haul Duration****	43	days
Total Haul Trips	145	trip ends
Daily Haul Trips	3	trip ends/day

**Based on measurement using Google Earth of areas anticipated to be demolished.*

Building		
*Building Amount Demolition Volume:**	99,895	BSF
Building Demolition Debris Amount:	**4,595**	**tons**
1-way haul distance	20.0	miles (CalEEMod default)
*Haul truck capacity***	12.64	tons
*Haul Duration****	43	days
Total Haul Trips	727	trip ends
Daily Haul Trips	17	trip ends/day
Total Haul Amount	**5,509**	tons
Total Haul Trips	872	trip ends (CalEEMod Default)
1-way haul distance	20	miles (CalEEMod Default)
*Haul truck capacity****	12.64	tons (CalEEMod default)

**Based on information provided by District.*
***Based on CalEEMod conversion factor of 0.046 ton per square feet of building material.*
***Based on 10 CY capacity haul truck per District and conversion factor of 1.2641662 tons/CY per CalEEMod methodology.*

Intallation and Removal of Portables*

Phase 1		
Buildings		
Number of Current Portables Removed	0	units
*Total Demolished Classrooms***	28	units
Number of Temporary Portables Installed	28	units
Total Removal + Installation Haul Trips	56	trip ends
Duration	44	work days
Daily Haul Trips	1	trip ends/day
1-way haul distance	20	miles

**Based on information provided by the District.*
***Calculated using Table 2*

Soil Haul*

Soil Export Amount	11,025	cubic yards
Total Haul Trips	1,575	trip ends
Daily Haul Trips	35	trips ends/day
1-way haul distance	20	miles (CalEEMod Default)
*Haul truck capacity***	14	CY
Haul Duration	45	days

*Based in information provided by the District.
**Per District.

Phase 2		
Buildings		
Number of Temporary Portables Removed	28	units
Total Haul Trips	56	trip ends
Duration	45	work days
Daily Haul Trips	1	trip ends per day
1-way haul distance	20	miles

*Based on information provided by the District.

Soil Haul*

Soil Export Amount	10,535	cubic yards
Total Haul Trips	1,505	trip ends
Daily Haul Trips	35	trips ends/day
1-way haul distance	20	miles (CalEEMod Default)
*Haul truck capacity***	14	CY
Haul Duration	43	days

*Based in information provided by the District.
**Per District.

Construction Trips

Building Construction Phase		
*Worker Trip Rate:**	0.42	trip/KSF
*Vendor Trip Rate:**	0.1639	trip/KSF

Development Phase	Worker Trip	Vendor Trip
Phase 1		
New Buildings	44	17
Renovated Buildings	13	5
Phase 2		
New Buildings	30	12
Renovated Buildings	44	17

*CalEEMod Version 2016.3.1 Users Guide, Appendix A.

Architectural Coating

	Building*
Percentage of Exterior Painted:	100%
Percentage of Interior Painted:	100%

*Assumes 100 percent of exterior and interior paintable areas would be coated.

*Non-Residential Interior Paint VOC content:**	50	grams per liter
*Non-Residential Exterior Paint VOC content:**	100	grams per liter
*Parking Paint VOC content :**	100	grams per liter
*Parking Paint VOC content:**	100	grams per liter

*Based on SCAQMD Rule 1113.
*Based on SCAQMD Rule 1113.

Land Use	Land Use Amount	CalEEMod Paintable Surface Area Multiplier*	Total Paintable Surface Area (BSF)	Total Paintable Interior Surface Area (BSF)*	Total Paintable Exterior Surface Area (BSF)*
Phase 1					
High School	134,334	2.0	268,668	201,501	67,167
			Subtotal:	***201,501***	***67,167***
Phase 2					
High School	176,427	2.0	352,854	264,641	88,214
			Subtotal:	***264,641***	***88,214***
Parking Lot	275,945	0.06	16,557	0	**16,557**

**Based on CalEEMod methodology in calculating the paintable surface areas for a nonresidential building and surface parking lot.*

Construction Phasing: Phase 1*

5-Day Work Week

18 Month Construction Schedule

		Buildout Duration	18	months
Phase Name	**Start Date**	**End Date**	**Workdays**	**Total Days**
Demolition	1/1/2019	3/2/2019	44	60
Building Construction - Portables Installation	1/15/2019	3/16/2019	44	60
Site Preparation/Grading	3/4/2019	5/3/2019	45	60
Building Construction	5/6/2019	4/30/2020	259	360
Architectural Coating	3/1/2020	4/30/2020	44	60
Asphalt Paving	5/1/2020	6/30/2020	43	60

Construction Phasing: Phase 2*

		Buildout Duration	18	months
Phase Name	**Start Date**	**End Date**	**Workdays**	**Total Days**
Demolition	8/1/2020	9/30/2020	43	60
Site Preparation/Grading	10/1/2020	11/30/2020	43	60
Building Construction	12/1/2020	11/26/2021	259	360
Architectural Coating	10/27/2021	11/26/2021	23	30
Temporary Portables Removal	11/29/2021	1/28/2022	45	60
Asphalt Paving	11/29/2021	1/28/2022	45	60
			2	17.9

*Based on schedule provided by the District.

Phase 1&2 Construction Equipment Mix*

***Based on information provided by the District unless otherwise noted.**

	Equipment Model	Pieces of Equipment	Hrs Op	HP	LF[1]	Worker Trips/ Day	Vendor Trips
Demolition						**20**	**2**
Excavator	Excavator	**1**	8	**158**	**0.38**		
Loader	Tractors/Loaders/Backhoes	**1**	8	**97**	**0.37**		
Bobcat/skid steer loader	Skid Steer Loaders	**1**	8	**65**	**0.37**		
Crushing Equipment	Crushing/Proc. Equipment	**1**	8	**85**	**0.78**		
Jackhammers	Crushing/Proc. Equipment	**2**	8	**85**	**0.78**		
Air Compressor	Air Compressor	**2**	8	**78**	**0.48**		
Water Truck[2]		**1**					**2**
Max Building Debris Haul (10CY)							**10**
Max Asphalt Debris Haul (10CY)							**10**
Site Preparation						**18**	**2**
Excavator	Excavator	**1**	8	**158**	**0.38**		
Compactor	Plate Compactors	**1**	8	**8**	**0.43**		
Loader	Tractors/Loaders/Backhoes	**1**	8	**97**	**0.37**		
Skip Loader	Tractors/Loaders/Backhoes	**1**	8	**97**	**0.37**		
Roller	Roller	**2**	8	**80**	**0.38**		
Trencher	Trencher	**1**	8	**78**	**0.50**		
Water Truck		**1**					**2**
Soil Haul Trips (14 CY trucks)							**35**
Building Construction							**CalEEMod Default+J25**
Concrete Trucks[3]	Cement and Mortar Mixers	**5**	8	**9**	**0.56**		**10**
Pile Driver	Bore/Drill Rigs	**1**	8	**221**	**0.50**		
Concrete Pump	Pumps	**1**	8	**84**	**0.74**		
Crane	Cranes	**1**	8	**231**	**0.29**		
Rough Terrain Forklift	Rough Terrain Forklift	**4**	8	**100**	**0.40**		
Backhoes	Tractors/Loaders/Backhoes	**2**	8	**97**	**0.37**		
Air Compressor	Air Compressor	**1**	8	**78**	**0.48**		
Delivery Trucks							**12**
Phase 1 Worker /Vendor CalEEMod Default						**56**	**22**
Phase 2 Worker /Vendor CalEEMod Default						**190**	**74**
Building Construction - Temporary Portables Intallation						**0**	**0**
Crane	Cranes	**1**	8	**231**	**0.29**		
Haul Truck[4]							**56**
Architectural Coating[1]							**0**
Air compressor	Air compressor	**1**	6	**78**	**0.48**		
Phase 1 worker CalEEMod Default						**11**	
Phase 2 worker CalEEMod Default						**38**	
Asphalt Paving						**30**	**18**
Skip loader	Tractors/Loaders/Backhoes	**2**	8	**97**	**0.37**		
Roller	Roller	**1**	8	**80**	**0.38**		
Paver	Paver	**1**	8	**130**	**0.42**		
Asphalt Trucks[5]	Cement and Mortar Mixers	**8**	8	**9**	**0.56**		**16**
Water Truck		**1**					**2**
Temporary Portables Removal						**0**	**0**
Crane	Crane	**1**	8	**231**	**0.29**		
Phase 2 Haul Truck[4]							**56**

[1] Utilizes CalEEMod default values.

[2] Assumes 2 trips per water truck per day.

[3] Utilizes cement and mortar mixers and assumes 2 truck trips per truck per day to capture emissions from operation of cement trucks.

[4] Associated with hauling of the temporary portable classroom buildings.

[5] Utilizes cement and mortar mixers and assumes 2 truck trips per truck per day to capture emissions from operation of asphalt trucks.

Pavement Volume to Weight Conversion

Phase I Location	Total SF of Area[1]	Assumed Thickness (foot)[2]	Debris Volume (cu. ft)	Weight of Crushed Asphalt (lbs/cf)2	AC Mass (lbs)	AC Mass (tons)
Tennis Courts	25,086	0.33	8,362	45	376,290	188.15
Basketball Courts	29,115	0.33	9,705	45	436,725	218.36
Pavement (Building B)	26,409	0.33	8,803	45	396,135	198.07
Pavement (Building C)	13,097	0.33	4,366	45	196,455	98.23
Pavement (Building D)	21,786	0.33	7,262	45	326,790	163.40
Pavement (Building E)	11,000	0.33	3,667	45	165,000	82.50
P-2 Demo	11,912	0.33	3,971	45	178,680	89.34
P-4 Demo	53,800	0.33	17,933	45	807,000	403.50
					Total	**948.70**
Phase II Location						
Pavement (Building A)	121,835	0.33	40,612	45	1,827,525	913.76
Courtyard Harscape	13,250	0.33	4,417	45	198,750	99.38
					TOTAL	**1862.46**

[1] As measured on Google Earth based on the proposed project site plan.

[2] *Pavements and Surface Materials* . Nonpoint Education for Municipal Officials, Technical Paper Number 8. University of Conneticut Cooperative Extension System, 1999.

Demo Haul Trip Calculation

*Conversion factors**

0.046	ton/SF	<<---CalEEMod Appendix A
1.2641662	tons/cy	<<---CalEEMod Appendix A
20	tons	<<---CalEEMod User's Guide
15.820705	CY	
0.7910352	CY/ton	

Building Demoltion Haul Trips (BSF and Haul Truck (CY) given)

Number	Phase 1 Building	Number of Classrooms	BSF Demo	Tons/SF	Tons	Haul Truck (CY)	Haul Truck (Ton)	Round Trips	Total Trip Ends
46	Boys Gymnasium	1	31,294	0.046	1439.524	16	20.23	71	142
45	Girls Gymnasium	1	18,117	0.046	833.382	16	20.23	41	82
57	Concessions		528	0.046	24.288	16	20.23	1	2
13	Classroom Bldg A (13)	2	3,001	0.046	138.046	16	20.23	7	14
24	Utility		6,375	0.046	293.25	16	20.23	14	29
23	Cafeteria		29,347	0.046	1349.962	16	20.23	67	133
22	Student Store		1,322	0.046	60.812	16	20.23	3	6
		4	**89,984**		**4139.264**				

Number	Phase 1 Building	Number of Classrooms	BSF Demo	Tons/SF	Tons	Haul Truck (CY)	Haul Truck (Ton)	Round Trips	Total Trip Ends
9	Admin Building		18,927	0.046	870.642	16	20.23	43	86
10	Library + Study Hall		11,620	0.046	534.52	16	20.23	26	53
2	Music Buildings	2	5,248	0.046	241.408	16	20.23	12	24
1	Auditorium		21,573	0.046	992.358	16	20.23	49	98
11	Transofrmer Room		133	0.046	6.118	16	20.23	0	1
31	Math + Science Building	7	27,404	0.046	1260.584	16	20.23	62	125
16-21	6 Sanitary Buildings		5,282	0.046	242.972	16	20.23	12	24
39	Classroom Building N (31)	8	9,708	0.046	446.568	16	20.23	22	44
		17	**99,895**		**4595.17**				

Totals	21	**189,879**	

Number	Portables	Number of Classrooms		Phase Removed
15	Two/Three Unit Relocatable		2,304	1
32	Two/Three Unit Relocatable	2	2,668	1
33	Two/Three Unit Relocatable	1	2946	1
64	Single Unit Modular	1	960	1
65	Single Unit Modular	1	960	1
66	Single Unit Modular	1	960	1
67	Single Unit Modular	1	960	1
80	Single Unit Modular		960	1
81	Single Unit Modular		960	1
		7	**13,678**	

	Classrooms	Sqft	Tons
Total	**28**	**203,557**	**8734.434**

*CalEEMod User's Guide Version 2016.3.1, Appendix A

Construction Trips Worksheet

Phase Name	Worker Trips/Day	Vendor Trips/Day	Total Haul Trips	Workdays	Haul Trips/Day	Start Date	End Date
Phase 1							
Demolition	20	2	904	44	21	1/1/2019	3/2/2019
Site Preparation	18	2	1,575	45	35	3/4/2019	5/3/2019
Building Construction	56	34	0	259	0	5/6/2019	4/30/2020
Temporary Portables Installation	0	0	0	44	0	1/15/2019	3/16/2019
Architectural Coating	11	0	56	44	1	3/1/2020	4/30/2020
Paving	30	18	0	43	0	5/1/2020	6/30/2020
Phase 2							
Demolition	20	2	872	43	21	8/1/2020	9/30/2020
Site Preparation	18	2	1,505	43	35	10/1/2020	11/30/2020
Building Construction	190	86	0	259	0	12/1/2020	11/26/2021
Architectural Coating	38	0	0	23	0	10/27/2021	11/26/2021
Temporary Portables Removal	0	0	56	45	1	11/29/2021	1/28/2022
Paving	30	18	0	45	0	11/29/2021	1/28/2022

Phase Name	Worker Trips/Day	Vendor Trips/Day	Haul Trips/Day	Total Trips/Day
Phase 1				
Demolition	20	2	21	43
Site Preparation	18	2	35	55
Building Construction	56	34	0	90
Temporary Portables Installation	0	0	0	0
Architectural Coating	11	0	1	12
Paving	30	18	0	48
Phase 2				
Demolition	20	2	21	43
Site Preparation	18	2	35	55
Building Construction	190	86	0	276
Architectural Coating	38	0	0	38
Temporary Portables Removal	0	0	1	1
Paving	30	18	0	48
			Max Daily Trips	**276**

Regional Construction Emissions Worksheet: Phase 1

Demolition Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
	Fugitive Dust					1.1886	0.18
	Off-Road	2.0685	15.818	16.6948	0.0262	1.0307	1.0079
	Total	**2.0685**	**15.818**	**16.6948**	**0.0262**	**2.2193**	**1.1878**
Offsite							
	Hauling	0.1931	6.2927	1.3417	0.0164	0.3823	0.1206
	Vendor	8.31E-03	0.2315	0.0614	5.20E-04	0.0143	5.10E-03
	Worker	0.0999	0.0734	0.9643	2.44E-03	0.2255	0.0611
	Total	**0.3013**	**6.5976**	**2.3674**	**0.0194**	**0.6221**	**0.1867**
TOTAL		***2.3698***	***22.4156***	***19.0622***	***0.0456***	***2.8414***	***1.3745***

Demolition							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
	Fugitive Dust					1.1886	0.18
	Off-Road	2.0685	15.818	16.6948	0.0262	1.0307	1.0079
	Total	**2.0685**	**15.818**	**16.6948**	**0.0262**	**2.2193**	**1.1878**
Offsite							
	Hauling	0.1979	6.3767	1.4323	0.0161	0.3827	0.121
	Vendor	8.67E-03	0.2318	0.0677	5.10E-04	0.0143	5.12E-03
	Worker	0.1108	0.0813	0.885	2.29E-03	0.2255	0.0611
	Total	**0.3173**	**6.6898**	**2.385**	**0.0189**	**0.6225**	**0.1872**
TOTAL		***2.3858***	***22.5078***	***19.0798***	***0.0451***	***2.8418***	***1.3750***
	Max	***2.39***	***22.51***	***19.08***	***0.05***	***2.84***	***1.38***

Temporary Portables Installation Summer								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2019**						
	Off-Road		0.504	6.007	2.293	5.77E-03	0.2546	0.2343
	Total		**0.504**	**6.007**	**2.293**	**5.77E-03**	**0.2546**	**0.2343**
Offsite								
	Hauling		0.012	0.3898	0.0831	1.02E-03	0.0237	7.47E-03
	Vendor		0	0	0	0	0	0
	Worker		0.2798	0.2056	2.7001	6.82E-03	0.6314	0.171
	Total		**0.2917**	**0.5954**	**2.7832**	**7.84E-03**	**0.655**	**1.79E-01**
TOTAL			***0.7957***	***6.6024***	***5.0762***	***0.0136***	***0.9096***	***0.4128***
Portable Installation + Demolition Overlap			***3.1655***	***29.0180***	***24.1384***	***0.0592***	***3.7510***	***1.7873***

Temporary Portables Installation Winter								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2019**						
	Off-Road		0.504	6.007	2.293	5.77E-03	0.2546	0.2343
	Total		**0.504**	**6.007**	**2.293**	**5.77E-03**	**0.2546**	**0.2343**
Offsite								
	Hauling		0.0123	0.395	0.0887	1.00E-03	0.0237	7.49E-03
	Vendor		0	0	0	0	0	0
	Worker		0.3101	0.2277	2.4779	6.42E-03	0.6314	0.171
	Total		**0.3224**	**0.6227**	**2.5666**	**7.42E-03**	**0.6551**	**1.79E-01**
TOTAL			***0.8264***	***6.6297***	***4.8596***	***0.0132***	***0.9097***	***0.4128***
Portable Installation + Demolition Overlap			***3.2122***	***29.1375***	***23.9394***	***0.0583***	***3.7515***	***1.7878***
	Max		***3.2122***	***29.1375***	***24.1384***	***0.0592***	***3.7515***	***1.7878***

Site Preparation Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
Fugitive Dust						0.0118	1.79E-03
Off-Road		1.6539	16.007	14.5327	0.0205	1.042	0.9594
Total		**1.6539**	**16.007**	**14.5327**	**0.0205**	**1.0538**	**0.9612**
Offsite							
Hauling		0.3289	10.7199	2.2856	0.028	0.6513	0.2054
Vendor		8.31E-03	0.2315	0.0614	5.20E-04	0.0143	5.10E-03
Worker		0.0899	0.0661	0.8679	2.19E-03	0.2029	0.055
Total		**0.4271**	**11.0175**	**3.2149**	**0.0307**	**0.8685**	**0.2654**
TOTAL		***2.0810***	***27.0245***	***17.7476***	***0.0512***	***1.9223***	***1.2266***
Portable Installation + Site Prep Overlap		***2.8767***	***33.6269***	***22.8238***	***0.0648***	***2.8319***	***1.6394***
Solo Site Prep		***2.0810***	***27.0245***	***17.7476***	***0.0512***	***1.9223***	***1.2266***

Site Preparation Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
Fugitive Dust						0.0118	1.79E-03
Off-Road		1.6539	16.007	14.5327	0.0205	1.042	0.9594
Total		**1.6539**	**16.007**	**14.5327**	**0.0205**	**1.0538**	**0.9612**
Offsite							
Hauling		0.3371	10.863	2.44	0.0275	0.652	0.2061
Vendor		8.67E-03	0.2318	0.0677	5.10E-04	0.0143	5.12E-03
Worker		0.0997	0.0732	0.7965	2.07E-03	0.2029	0.055
Total		**0.4455**	**11.1679**	**3.3042**	**0.0301**	**0.8692**	**0.2662**
TOTAL		***2.0994***	***27.1749***	***17.8369***	***0.0506***	***1.9230***	***1.2274***
Portable Installation + Site Prep Overlap		***2.9258***	***33.8046***	***22.6965***	***0.0638***	***2.8327***	***1.6402***
Solo Site Prep		***2.0994***	***27.1749***	***17.8369***	***0.0506***	***1.9230***	***1.2274***
Overlap Max		***2.9258***	***33.8046***	***22.8238***	***0.0648***	***2.8327***	***1.6402***
Site Prep Max		***2.0994***	***27.1749***	***17.8369***	***0.0512***	***1.9230***	***1.2274***

Building Construction Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
Off-Road		3.4208	34.217	29.5671	0.0539	1.8163	1.7095
Total		**3.4208**	**34.217**	**29.5671**	**0.0539**	**1.8163**	**1.7095**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.133	3.7034	0.9827	8.36E-03	0.2285	0.0816
Worker		0.2798	0.2056	2.7001	6.82E-03	0.6314	0.171
Total		**0.4127**	**3.909**	**3.6828**	**0.0152**	**0.8598**	**0.2526**
TOTAL		***3.8335***	***38.1260***	***33.2499***	***0.0691***	***2.6761***	***1.9621***

Building Construction Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
Off-Road		3.4208	34.217	29.5671	0.0539	1.8163	1.7095
Total		**3.4208**	**34.217**	**29.5671**	**0.0539**	**1.8163**	**1.7095**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.1387	3.7083	1.0831	8.14E-03	0.2289	0.0819
Worker		0.3101	0.2277	2.4779	6.42E-03	0.6314	0.171
Total		**0.4488**	**3.936**	**3.561**	**0.0146**	**0.8602**	**0.2529**
TOTAL		***3.8696***	***38.1530***	***33.1281***	***0.0685***	***2.6765***	***1.9624***

	Max	***3.8696***	***38.1530***	***33.2499***	***0.0691***	***2.6765***	***1.9624***

Building Construction Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Off-Road	3.1584	31.5861	29.2764	0.0539	1.5975	1.5038
	Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**	**1.5975**	**1.5038**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.1138	3.4039	0.8919	8.30E-03	0.2209	0.0743
	Worker	0.2577	0.1833	2.4519	6.61E-03	0.6312	0.1708
	Total	**0.3715**	**3.5873**	**3.3438**	**0.0149**	**0.8521**	**0.2451**
TOTAL		***3.5299***	***35.1734***	***32.6202***	***0.0688***	***2.4496***	***1.7489***

Building Construction Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Off-Road	3.1584	31.5861	29.2764	0.0539	1.5975	1.5038
	Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**	**1.5975**	**1.5038**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.119	3.4032	0.9836	8.08E-03	0.2211	0.0746
	Worker	0.2862	0.203	2.2457	6.23E-03	0.6312	0.1708
	Total	**0.4052**	**3.6062**	**3.2293**	**0.0143**	**0.8523**	**0.2454**
TOTAL		***3.5636***	***35.1923***	***32.5057***	***0.0682***	***2.4498***	***1.7492***

	Max	***3.5636***	***35.1923***	***32.6202***	***0.0688***	***2.4498***	***1.7492***

Architectural Coating Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Archit. Coating		28.3017				0	0
Off-Road		0.2422	1.6838	1.8314	2.97E-03	0.1109	0.1109
Total		**28.5439**	**1.6838**	**1.8314**	**2.97E-03**	**0.1109**	**0.1109**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0	0	0	0	0	0
Worker		0.0506	0.036	0.4816	1.30E-03	0.124	0.0336
Total		**0.0506**	**0.036**	**0.4816**	**1.30E-03**	**0.124**	**0.0336**
TOTAL		***28.5945***	***1.7198***	***2.3130***	***0.0043***	***0.2349***	***0.1445***
Building Construction+Architectural Coating		***32.1244***	***1.7198***	***2.3130***	***0.0043***	***0.2349***	***0.1445***

Architectural Coating Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Archit. Coating		28.3017				0	0
Off-Road		0.2422	1.6838	1.8314	2.97E-03	0.1109	0.1109
Total		**28.5439**	**1.6838**	**1.8314**	**2.97E-03**	**0.1109**	**0.1109**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0	0	0	0.00E+00	0	0
Worker		0.0562	0.0399	0.4411	1.22E-03	0.124	0.0336
Total		**0.0562**	**0.0399**	**0.4411**	**1.22E-03**	**0.124**	**0.0336**
TOTAL		***28.6001***	***1.7237***	***2.2725***	***0.0042***	***0.2349***	***0.1445***
Building Construction+Architectural Coating		***32.1637***	***36.9160***	***34.7782***	***0.0724***	***2.6847***	***1.8937***
	Max	***32.16***	***36.92***	***34.78***	***0.07***	***2.68***	***1.89***

Paving Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Off-Road	1.3599	12.0472	11.8187	0.0192	0.65	0.6072
	Paving	0				0	0
	Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**	**0.65**	**0.6072**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.064	1.9147	0.5017	4.67E-03	0.1243	0.0418
	Worker	0.1381	0.0982	1.3135	3.54E-03	0.3381	0.0915
	Total	**0.2021**	**2.0129**	**1.8152**	**8.21E-03**	**0.4624**	**0.1333**
TOTAL		***1.5620***	***14.0601***	***13.6339***	***0.0274***	***1.1124***	***0.7405***

Paving Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Off-Road	1.3599	12.0472	11.8187	0.0192	0.65	0.6072
	Paving	0				0	0
	Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**	**0.65**	**0.6072**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0669	1.9143	0.5533	4.54E-03	0.1244	0.0419
	Worker	0.1533	0.1087	1.203	3.34E-03	0.3381	0.0915
	Total	**0.2202**	**2.0231**	**1.7563**	**7.88E-03**	**0.4625**	**0.1335**
TOTAL		***1.5801***	***14.0703***	***13.5750***	***0.0271***	***1.1125***	***0.7407***

	Max	***1.58***	***14.07***	***13.63***	***0.03***	***1.11***	***0.74***

MAX DAILY		**32.16**	**38.15**	**34.78**	**0.07**	**3.75**	**1.96**

Regional Thresholds		**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?		No	No	No	No	No	No

Regional Construction Emissions Worksheet: Phase 1

Demolition Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
	Fugitive Dust					1.1886	0.18
	Off-Road	2.0685	15.818	16.6948	0.0262	1.0307	1.0079
	Total	**2.0685**	**15.818**	**16.6948**	**0.0262**	**2.2193**	**1.1878**
Offsite							
	Hauling	0.1931	6.2927	1.3417	0.0164	0.3823	0.1206
	Vendor	8.31E-03	0.2315	0.0614	5.20E-04	0.0143	5.10E-03
	Worker	0.0999	0.0734	0.9643	2.44E-03	0.2255	0.0611
	Total	**0.3013**	**6.5976**	**2.3674**	**0.0194**	**0.6221**	**0.1867**
TOTAL		***2.3698***	***22.4156***	***19.0622***	***0.0456***	***2.8414***	***1.3745***

Demolition							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
	Fugitive Dust					1.1886	0.18
	Off-Road	2.0685	15.818	16.6948	0.0262	1.0307	1.0079
	Total	**2.0685**	**15.818**	**16.6948**	**0.0262**	**2.2193**	**1.1878**
Offsite							
	Hauling	0.1979	6.3767	1.4323	0.0161	0.3827	0.121
	Vendor	8.67E-03	0.2318	0.0677	5.10E-04	0.0143	5.12E-03
	Worker	0.1108	0.0813	0.885	2.29E-03	0.2255	0.0611
	Total	**0.3173**	**6.6898**	**2.385**	**0.0189**	**0.6225**	**0.1872**
TOTAL		***2.3858***	***22.5078***	***19.0798***	***0.0451***	***2.8418***	***1.3750***

Temporary Portables Installation Summer								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2019**						
	Off-Road		0.504	6.007	2.293	5.77E-03	0.2546	0.2343
	Total		**0.504**	**6.007**	**2.293**	**5.77E-03**	**0.2546**	**0.2343**
Offsite								
	Hauling		0.012	0.3898	0.0831	1.02E-03	0.0237	7.47E-03
	Vendor		0	0	0	0	0	0
	Worker		0.2798	0.2056	2.7001	6.82E-03	0.6314	0.171
	Total		**0.2917**	**0.5954**	**2.7832**	**7.84E-03**	**0.655**	**1.79E-01**
TOTAL			***0.7957***	***6.6024***	***5.0762***	***0.0136***	***0.9096***	***0.4128***
Portable Installation + Demolition Overlap			***3.1655***	***29.0180***	***24.1384***	***0.0592***	***3.7510***	***1.7873***

Temporary Portables Installation Winter								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2019**						
	Off-Road		0.504	6.007	2.293	5.77E-03	0.2546	0.2343
	Total		**0.504**	**6.007**	**2.293**	**5.77E-03**	**0.2546**	**0.2343**
Offsite								
	Hauling		0.0123	0.395	0.0887	1.00E-03	0.0237	7.49E-03
	Vendor		0	0	0	0	0	0
	Worker		0.3101	0.2277	2.4779	6.42E-03	0.6314	0.171
	Total		**0.3224**	**0.6227**	**2.5666**	**7.42E-03**	**0.6551**	**1.79E-01**
TOTAL			***0.8264***	***6.6297***	***4.8596***	***0.0132***	***0.9097***	***0.4128***
Portable Installation + Demolition Overlap			***3.2122***	***29.1375***	***23.9394***	***0.0583***	***3.7515***	***1.7878***

Site Preparation Summer								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2019**						
	Fugitive Dust						0.0118	1.79E-03
	Off-Road		1.6539	16.007	14.5327	0.0205	1.042	0.9594
	Total		**1.6539**	**16.007**	**14.5327**	**0.0205**	**1.0538**	**0.9612**
Offsite								
	Hauling		0.3289	10.7199	2.2856	0.028	0.6513	0.2054
	Vendor		8.31E-03	0.2315	0.0614	5.20E-04	0.0143	5.10E-03
	Worker		0.0899	0.0661	0.8679	2.19E-03	0.2029	0.055
	Total		**0.4271**	**11.0175**	**3.2149**	**0.0307**	**0.8685**	**0.2654**
TOTAL			***2.0810***	***27.0245***	***17.7476***	***0.0512***	***1.9223***	***1.2266***
Portable Installation + Site Prep Overlap			***2.8767***	***33.6269***	***22.8238***	***0.0648***	***2.8319***	***1.6394***
Solo Site Prep			***2.0810***	***27.0245***	***17.7476***	***0.0512***	***1.9223***	***1.2266***

Site Preparation Winter								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2019**						
	Fugitive Dust						0.0118	1.79E-03
	Off-Road		1.6539	16.007	14.5327	0.0205	1.042	0.9594
	Total		**1.6539**	**16.007**	**14.5327**	**0.0205**	**1.0538**	**0.9612**
Offsite								
	Hauling		0.3371	10.863	2.44	0.0275	0.652	0.2061
	Vendor		8.67E-03	0.2318	0.0677	5.10E-04	0.0143	5.12E-03
	Worker		0.0997	0.0732	0.7965	2.07E-03	0.2029	0.055
	Total		**0.4455**	**11.1679**	**3.3042**	**0.0301**	**0.8692**	**0.2662**
TOTAL			***2.0994***	***27.1749***	***17.8369***	***0.0506***	***1.9230***	***1.2274***
Portable Installation + Site Prep Overlap			***2.9258***	***33.8046***	***22.6965***	***0.0638***	***2.8327***	***1.6402***
Solo Site Prep			***2.0994***	***27.1749***	***17.8369***	***0.0506***	***1.9230***	***1.2274***

Building Construction Summer

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
Off-Road		3.4208	34.217	29.5671	0.0539	1.8163	1.7095
Total		**3.4208**	**34.217**	**29.5671**	**0.0539**	**1.8163**	**1.7095**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.133	3.7034	0.9827	8.36E-03	0.2285	0.0816
Worker		0.2798	0.2056	2.7001	6.82E-03	0.6314	0.171
Total		**0.4127**	**3.909**	**3.6828**	**0.0152**	**0.8598**	**0.2526**
TOTAL		***3.8335***	***38.1260***	***33.2499***	***0.0691***	***2.6761***	***1.9621***

Building Construction Winter

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2019**						
Off-Road		3.4208	34.217	29.5671	0.0539	1.8163	1.7095
Total		**3.4208**	**34.217**	**29.5671**	**0.0539**	**1.8163**	**1.7095**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.1387	3.7083	1.0831	8.14E-03	0.2289	0.0819
Worker		0.3101	0.2277	2.4779	6.42E-03	0.6314	0.171
Total		**0.4488**	**3.936**	**3.561**	**0.0146**	**0.8602**	**0.2529**
TOTAL		***3.8696***	***38.1530***	***33.1281***	***0.0685***	***2.6765***	***1.9624***

Building Construction Summer

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Off-Road		3.1584	31.5861	29.2764	0.0539	1.5975	1.5038
Total		**3.1584**	**31.5861**	**29.2764**	**0.0539**	**1.5975**	**1.5038**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.1138	3.4039	0.8919	8.30E-03	0.2209	0.0743
Worker		0.2577	0.1833	2.4519	6.61E-03	0.6312	0.1708
Total		**0.3715**	**3.5873**	**3.3438**	**0.0149**	**0.8521**	**0.2451**
TOTAL		***3.5299***	***35.1734***	***32.6202***	***0.0688***	***2.4496***	***1.7489***

Building Construction Winter

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Off-Road		3.1584	31.5861	29.2764	0.0539	1.5975	1.5038
Total		**3.1584**	**31.5861**	**29.2764**	**0.0539**	**1.5975**	**1.5038**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.119	3.4032	0.9836	8.08E-03	0.2211	0.0746
Worker		0.2862	0.203	2.2457	6.23E-03	0.6312	0.1708
Total		**0.4052**	**3.6062**	**3.2293**	**0.0143**	**0.8523**	**0.2454**
TOTAL		***3.5636***	***35.1923***	***32.5057***	***0.0682***	***2.4498***	***1.7492***

Architectural Coating Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Archit. Coating		17.6886				0	0
Off-Road		0.2422	1.6838	1.8314	2.97E-03	0.1109	0.1109
Total		**17.9308**	**1.6838**	**1.8314**	**2.97E-03**	**0.1109**	**0.1109**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0	0	0	0	0	0
Worker		0.0506	0.036	0.4816	1.30E-03	0.124	0.0336
Total		**0.0506**	**0.036**	**0.4816**	**1.30E-03**	**0.124**	**0.0336**
TOTAL		***17.9814***	***1.7198***	***2.3130***	***0.0043***	***0.2349***	***0.1445***
Building Construction+Architectural Coating		***21.5113***	***36.8932***	***34.9332***	***0.0731***	***2.6845***	***1.8934***

Architectural Coating Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Archit. Coating		17.6886				0	0
Off-Road		0.2422	1.6838	1.8314	2.97E-03	0.1109	0.1109
Total		**17.9308**	**1.6838**	**1.8314**	**2.97E-03**	**0.1109**	**0.1109**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.00E+00	0	0	0.00E+00	0	0.00E+00
Worker		0.0562	0.0399	0.4411	1.22E-03	0.124	0.0336
Total		**0.0562**	**0.0399**	**0.4411**	**1.22E-03**	**0.124**	**0.0336**
TOTAL		***17.9870***	***1.7237***	***2.2725***	***0.0042***	***0.2349***	***0.1445***
Building Construction+Architectural Coating		***21.5506***	***36.9160***	***34.7782***	***0.0724***	***2.6847***	***1.8937***
	Max	***21.55***	***36.92***	***34.78***	***0.07***	***2.68***	***1.89***

Paving Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Off-Road	1.3599	12.0472	11.8187	0.0192	0.65	0.6072
	Paving	0				0	0
	Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**	**0.65**	**0.6072**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.064	1.9147	0.5017	4.67E-03	0.1243	0.0418
	Worker	0.1381	0.0982	1.3135	3.54E-03	0.3381	0.0915
	Total	**0.2021**	**2.0129**	**1.8152**	**8.21E-03**	**0.4624**	**0.1333**
TOTAL		***1.5620***	***14.0601***	***13.6339***	***0.0274***	***1.1124***	***0.7405***

Paving Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Off-Road	1.3599	12.0472	11.8187	0.0192	0.65	0.6072
	Paving	0				0	0
	Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**	**0.65**	**0.6072**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0669	1.9143	0.5533	4.54E-03	0.1244	0.0419
	Worker	0.1533	0.1087	1.203	3.34E-03	0.3381	0.0915
	Total	**0.2202**	**2.0231**	**1.7563**	**7.88E-03**	**0.4625**	**0.1335**
TOTAL		***1.5801***	***14.0703***	***13.5750***	***0.0271***	***1.1125***	***0.7407***

MAX DAILY	**21.55**	**38.15**	**34.93**	**0.07**	**3.75**	**1.96**
Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

Regional Construction Emissions Worksheet: Phase 1

Demolition Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2019**				
	Fugitive Dust			1.1886	0.18
	Off-Road	15.818	16.6948	1.0307	1.0079
	Total	**15.818**	**16.6948**	**2.2193**	**1.1878**

Demolition					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2019**				
	Fugitive Dust			1.1886	0.18
	Off-Road	15.818	16.6948	1.0307	1.0079
	Total	**15.818**	**16.6948**	**2.2193**	**1.1878**
	Onsite Max	***15.82***	***16.69***	***2.22***	***1.19***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Temporary Portables Installation Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2019**				
Off-Road		6.007	2.293	0.2546	0.2343
Total		**6.007**	**2.293**	**0.2546**	**0.2343**
Onsite Overlap		***21.8250***	***18.9878***	***2.4739***	***1.4221***

Temporary Portables Installation Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2019**				
Off-Road		6.007	2.293	0.2546	0.2343
Total		**6.007**	**2.293**	**0.2546**	**0.2343**
Onsite Overlap		***21.8250***	***18.9878***	***2.4739***	***1.4221***
	Onsite Overlap Max	***21.83***	***18.99***	***2.47***	***1.42***
	Non-Overlap Max	***6.01***	***2.29***	***0.25***	***0.23***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Site Preparation Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2019**				
	Fugitive Dust			0.0118	1.79E-03
	Off-Road	16.007	14.5327	1.042	0.9594
	Total	**16.007**	**14.5327**	**1.0538**	**0.9612**
Onsite Overlap		***22.0140***	***16.8257***	***1.3084***	***1.1955***

Site Preparation Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2019**				
	Fugitive Dust			0.0118	1.79E-03
	Off-Road	16.007	14.5327	1.042	0.9594
	Total	**16.007**	**14.5327**	**1.0538**	**0.9612**
Offsite					
Onsite Overlap		***22.0140***	***16.8257***	***1.3084***	***1.1955***
	Onsite Overlap Max	***22.01***	***16.83***	***1.31***	***1.20***
	Non-Overlap Max	***16.01***	***14.53***	***1.05***	***0.96***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Building Construction Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2019**				
	Off-Road	34.217	29.5671	1.8163	1.7095
	Total	**34.217**	**29.5671**	**1.8163**	**1.7095**

Building Construction Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2019**				
	Off-Road	34.217	29.5671	1.8163	1.7095
	Total	**34.217**	**29.5671**	**1.8163**	**1.7095**
	Onsite Max	***34.22***	***29.57***	***1.82***	***1.71***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Building Construction Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
Off-Road		31.5861	29.2764	1.5975	1.5038
Total		**31.5861**	**29.2764**	**1.5975**	**1.5038**

Building Construction Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
Off-Road		31.5861	29.2764	1.5975	1.5038
Total		**31.5861**	**29.2764**	**1.5975**	**1.5038**
	Onsite Max	***31.59***	***29.28***	***1.60***	***1.50***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Architectural Coating Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
Archit. Coating				0	0
Off-Road		1.6838	1.8314	0.1109	0.1109
Total		**1.6838**	**1.8314**	**0.1109**	**0.1109**
Building + Painting Overlap		***33.2699***	***31.1078***	***1.7084***	***1.6147***

Architectural Coating Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
Archit. Coating				0	0
Off-Road		1.6838	1.8314	0.1109	0.1109
Total		**1.6838**	**1.8314**	**0.1109**	**0.1109**
Building + Painting Overlap		***33.2699***	***31.1078***	***1.7084***	***1.6147***

Onsite Overlap Max	***33.2699***	***31.1078***	***1.7084***	***1.6147***
Onsite Max	***1.68***	***1.83***	***0.11***	***0.11***
<=1-Acre LSTs	***80***	***498***	***4***	***3***
Exceeds LST?	***No***	***No***	***No***	***No***

Paving Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
	Off-Road	12.0472	11.8187	0.65	0.6072
	Paving			0	0
	Total	**12.0472**	**11.8187**	**0.65**	**0.6072**

Paving Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
	Off-Road	12.0472	11.8187	0.65	0.6072
	Paving			0	0
	Total	**12.0472**	**11.8187**	**0.65**	**0.6072**
	Onsite Max	***12.05***	***11.82***	***0.65***	***0.61***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Regional Construction Emissions Worksheet: Phase 2

Demolition Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Fugitive Dust					1.172	0.1775
	Off-Road	2.8395	21.4679	24.8781	0.0393	1.3145	1.2908
	Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**2.4865**	**1.4682**
Offsite							
	Hauling	0.1771	5.8311	1.2921	0.016	0.3491	0.1091
	Vendor	7.11E-03	0.2127	0.0557	5.20E-04	0.013	4.44E-03
	Worker	0.092	0.0655	0.8757	2.36E-03	0.2079	0.0567
	Total	**0.2763**	**6.1093**	**2.2235**	**0.0189**	**0.57**	**0.1702**
TOTAL		***3.1158***	***27.5772***	***27.1016***	***0.0582***	***3.0565***	***1.6384***

Demolition							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Fugitive Dust					1.172	0.1775
	Off-Road	2.8395	21.4679	24.8781	0.0393	1.3145	1.2908
	Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**2.4865**	**1.4682**
Offsite							
	Hauling	0.1814	5.9065	1.3732	0.0157	0.3493	0.1094
	Vendor	7.44E-03	0.2127	0.0615	5.00E-04	0.013	4.46E-03
	Worker	0.1022	0.0725	0.802	2.22E-03	0.2079	0.0567
	Total	**0.2911**	**6.1917**	**2.2367**	**0.0185**	**0.5703**	**0.1705**
TOTAL		***3.1306***	***27.6596***	***27.1148***	***0.0578***	***3.0568***	***1.6387***
	Max	***3.13***	***27.66***	***27.11***	***0.06***	***3.06***	***1.64***

Site Preparation Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Fugitive Dust						0.0118	1.79E-03
Off-Road		1.5401	14.8331	14.4608	0.0205	0.9425	0.8679
Total		**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.9543**	**0.8697**
Offsite							
Hauling		0.3057	10.0639	2.2301	0.0276	0.6024	0.1883
Vendor		7.11E-03	0.2127	0.0557	5.20E-04	0.013	4.44E-03
Worker		0.0828	0.0589	0.7881	2.13E-03	0.1871	0.051
Total		**0.3957**	**10.3356**	**3.0739**	**0.0303**	**0.8026**	**0.2437**
TOTAL		***1.9358***	***25.1687***	***17.5347***	***0.0508***	***1.7569***	***1.1134***

Site Preparation Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Fugitive Dust						0.0118	1.79E-03
Off-Road		1.5401	14.8331	14.4608	0.0205	0.9425	0.8679
Total		**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.9543**	**0.8697**
Offsite							
Hauling		0.3132	10.1942	2.37	0.0272	0.6029	0.1887
Vendor		7.44E-03	0.2127	0.0615	5.00E-04	0.013	4.46E-03
Worker		0.092	0.0652	0.7218	2.00E-03	0.1871	0.051
Total		**0.4126**	**10.4721**	**3.1533**	**0.0297**	**0.8031**	**0.2442**
TOTAL		***1.9527***	***25.3052***	***17.6141***	***0.0502***	***1.7574***	***1.1139***

	Max	***1.95***	***25.31***	***17.61***	***0.05***	***1.76***	***1.11***

Building Construction Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Off-Road		3.1584	31.5861	29.2764	0.0539	1.5975	1.5038
Total		**3.1584**	**31.5861**	**29.2764**	**0.0539**	**1.5975**	**1.5038**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.2988	8.9353	2.3411	2.18E-02	0.5453	0.1866
Worker		0.8744	0.622	8.3191	2.24E-02	1.9753	0.5388
Total		**1.1731**	**9.5573**	**10.6602**	**0.0442**	**2.5207**	**0.7254**
TOTAL		***4.3315***	***41.1434***	***39.9366***	***0.0981***	***4.1182***	***2.2292***

Building Construction Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Off-Road		3.1584	31.5861	29.2764	0.0539	1.5975	1.5038
Total		**3.1584**	**31.5861**	**29.2764**	**0.0539**	**1.5975**	**1.5038**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.3123	8.9334	2.582	2.12E-02	0.546	0.1872
Worker		0.9709	0.6887	7.6192	2.11E-02	1.9753	0.5388
Total		**1.2833**	**9.6221**	**10.2012**	**0.0423**	**2.5214**	**0.726**
TOTAL		***4.4417***	***41.2082***	***39.4776***	***0.0962***	***4.1189***	***2.2298***

	Max	***4.4417***	***41.2082***	***39.9366***	***0.0981***	***4.1189***	***2.2298***

Building Construction Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Off-Road		2.895	28.7691	29.0092	0.054	1.3889	1.3078
Total		**2.895**	**28.7691**	**29.0092**	**0.054**	**1.3889**	**1.3078**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.2553	8.1555	2.1321	2.16E-02	0.52	0.1623
Worker		0.8145	0.5598	7.6527	2.17E-02	1.9747	0.5383
Total		**1.0698**	**8.7153**	**9.7848**	**0.0433**	**2.4947**	**0.7006**
TOTAL		***3.9648***	***37.4844***	***38.7940***	***0.0973***	***3.8836***	***2.0084***

Building Construction Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Off-Road		2.895	28.7691	29.0092	0.054	1.3889	1.3078
Total		**2.895**	**28.7691**	**29.0092**	**0.054**	**1.3889**	**1.3078**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.268	8.1387	2.3585	2.10E-02	0.5205	0.1628
Worker		0.906	0.6197	6.9969	2.05E-02	1.9747	0.5383
Total		**1.174**	**8.7583**	**9.3553**	**0.0415**	**2.4953**	**0.7011**
TOTAL		***4.0690***	***37.5274***	***38.3645***	***0.0955***	***3.8842***	***2.0089***
	Max	***4.0690***	***37.5274***	***38.7940***	***0.0973***	***3.8842***	***2.0089***

Architectural Coating Summer							
Onsite	**2021**						
Archit. Coating		74.4456				0	0
Off-Road		3.1376	21.8848	26.0516	4.26E-02	1.3487	1.3487
Total		**77.5831**	**21.8848**	**26.0516**	**4.26E-02**	**1.3487**	**1.3487**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0	0	0	0.00E+00	0	0
Worker		0.1629	0.112	1.5305	4.34E-03	0.395	0.1077
Total		**0.1629**	**0.112**	**1.5305**	**4.34E-03**	**0.395**	**0.1077**
TOTAL		***77.7460***	***21.9968***	***27.5821***	***0.0469***	***1.7437***	***1.4564***
Painting and Building Overlap		**81.7108**	**59.4812**	**66.3761**	**0.1442**	**5.6273**	**3.4648**

Architectural Coating Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Archit. Coating		74.4456				0	0
Off-Road		3.1376	21.8848	26.0516	4.26E-02	1.3487	1.3487
Total		**77.5831**	**21.8848**	**26.0516**	**4.26E-02**	**1.3487**	**1.3487**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0	0	0	0.00E+00	0	0
Worker		0.1812	0.1239	1.3994	4.09E-03	0.395	0.1077
Total		**0.1812**	**0.1239**	**1.3994**	**4.09E-03**	**0.395**	**0.1077**
TOTAL		***77.7643***	***22.0087***	***27.4510***	***0.0467***	***1.7437***	***1.4564***
Painting and Building Overlap		**81.8333**	**59.5361**	**65.8155**	**0.1422**	**5.6279**	**3.4653**
	Max	***81.8333***	***59.5361***	***66.3761***	***0.1442***	***5.6279***	***3.4653***

Temporary Portables Removal Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Off-Road		0.4129	4.8493	1.9829	5.77E-03	0.1969	0.1811
Total		**0.4129**	**4.8493**	**1.9829**	**5.77E-03**	**0.1969**	**0.1811**
Offsite							
Hauling		0.0104	0.3338	0.0783	9.70E-04	0.0602	1.61E-02
Vendor		0	0	0	0	0	0
Worker		0.8145	0.5598	7.6527	0.0217	3.6549	0.9507
Total		**0.8248**	**0.8936**	**7.731**	**2.27E-02**	**3.7151**	**9.67E-01**
TOTAL		***1.2377***	***5.7429***	***9.7139***	***0.0285***	***3.9120***	***1.1479***

Temporary Portables Removal Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Off-Road		0.4129	4.8493	1.9829	5.77E-03	0.1969	0.1811
Total		**0.4129**	**4.8493**	**1.9829**	**5.77E-03**	**0.1969**	**0.1811**
Offsite							
Hauling		0.0106	0.3379	0.083	9.50E-04	0.0603	1.62E-02
Vendor		0	0	0	0	0	0
Worker		0.906	0.6197	6.9969	0.0205	3.6549	0.9507
Total		**0.9166**	**0.9576**	**7.0799**	**2.14E-02**	**3.7152**	**9.67E-01**
TOTAL		***1.3295***	***5.8069***	***9.0628***	***0.0272***	***3.9121***	***1.1479***

Temporary Portables Removal Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2022**						
Off-Road		0.373	4.1843	1.8923	5.77E-03	0.1737	0.1598
Total		**0.373**	**4.1843**	**1.8923**	**5.77E-03**	**0.1737**	**0.1598**
Offsite							
Hauling		9.87E-03	0.3101	0.0775	9.60E-04	0.0736	1.93E-02
Vendor		0	0	0	0	0	0
Worker		0.7629	0.5057	7.0605	0.021	3.6544	0.9502
Total		**7.73E-01**	**0.8158**	**7.1379**	**2.19E-02**	**3.7279**	**9.70E-01**
TOTAL		***1.1458***	***5.0001***	***9.0302***	***0.0277***	***3.9016***	***1.1293***

Temporary Portables Removal Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2022**						
Off-Road		0.373	4.1843	1.8923	5.77E-03	0.1737	0.1598
Total		**0.373**	**4.1843**	**1.8923**	**5.77E-03**	**0.1737**	**0.1598**
Offsite							
Hauling		0.0101	0.3136	0.082	9.40E-04	0.0736	1.93E-02
Vendor		0	0	0	0	0	0
Worker		0.8509	0.5596	6.4444	0.0197	3.6544	0.9502
Total		**0.861**	**0.8733**	**6.5263**	**2.07E-02**	**3.728**	**9.70E-01**
TOTAL		***1.2340***	***5.0576***	***8.4186***	***0.0265***	***3.9017***	***1.1293***

Paving Summer								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2021**						
	Off-Road		1.2803	11.2564	11.7726	0.0192	0.5811	0.5438
	Paving		0.3686				0	0
	Total		**1.6489**	**11.2564**	**11.7726**	**0.0192**	**0.5811**	**0.5438**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0547	1.7476	0.4569	4.63E-03	0.1114	0.0348
	Worker		0.1286	0.0884	1.2083	3.43E-03	0.3118	0.085
	Total		**0.1833**	**1.836**	**1.6652**	**8.06E-03**	**0.4232**	**0.1198**
TOTAL			***1.8322***	***13.0924***	***13.4378***	***0.0273***	***1.0043***	***0.6636***
Paving + Portable Installation Overlap			***3.0699***	***18.8353***	***23.1517***	***0.0557***	***4.9163***	***1.8115***

Paving Winter								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2021**						
	Off-Road		1.2803	11.2564	11.7726	0.0192	0.5811	0.5438
	Paving		0.3686				0	0
	Total		**1.6489**	**11.2564**	**11.7726**	**0.0192**	**0.5811**	**0.5438**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0574	1.744	0.5054	4.50E-03	0.1115	0.0349
	Worker		0.1431	0.0978	1.1048	3.23E-03	0.3118	0.085
	Total		**0.2005**	**1.8418**	**1.6102**	**7.73E-03**	**0.4233**	**0.1199**
TOTAL			***1.8494***	***13.0982***	***13.3828***	***0.0269***	***1.0044***	***0.6637***
Paving + Portable Installation Overlap			***3.1789***	***18.9051***	***22.4456***	***0.0541***	***4.9165***	***1.8116***
	Max		***3.1789***	***18.9051***	***23.1517***	***0.0557***	***4.9165***	***1.8116***

Paving Summer								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2022**						
	Off-Road		1.1727	10.1215	11.6877	0.0192	0.4939	0.4636
	Paving		0.3686				0	0
	Total		**1.5412**	**10.1215**	**11.6877**	**0.0192**	**0.4939**	**0.4636**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0514	1.6619	0.4323	4.58E-03	0.111	0.0344
	Worker		0.1205	0.0798	1.1148	3.31E-03	0.3117	0.0849
	Total		**0.1718**	**1.7418**	**1.5471**	**7.89E-03**	**0.4227**	**0.1193**
TOTAL			***1.7130***	***11.8633***	***13.2348***	***0.0271***	***0.9166***	***0.5829***
Paving + Portable Installation Overlap			***2.8588***	***16.8634***	***22.2650***	***0.0548***	***4.8182***	***1.7122***

Paving Winter								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2022**						
	Off-Road		1.1727	10.1215	11.6877	0.0192	0.4939	0.4636
	Paving		0.3686				0	0
	Total		**1.5412**	**10.1215**	**11.6877**	**0.0192**	**0.4939**	**0.4636**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0539	1.6574	0.4784	4.46E-03	0.1111	0.0345
	Worker		0.1344	0.0884	1.0175	3.11E-03	0.3117	0.0849
	Total		**0.1883**	**1.7458**	**1.4959**	**7.57E-03**	**0.4228**	**0.1194**
TOTAL			***1.7295***	***11.8673***	***13.1836***	***0.0268***	***0.9167***	***0.5830***
Paving + Portable Installation Overlap			***2.9635***	***16.9249***	***21.6022***	***0.0532***	***4.8184***	***1.7123***
	Max		***1.7295***	***11.8673***	***13.2348***	***0.0271***	***0.9167***	***0.5830***

MAX DAILY	**81.83**	**59.54**	**66.38**	**0.14**	**5.63**	**3.47**
Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	Yes	No	No	No	No	No

Regional Construction Emissions Worksheet: Phase 2

Demolition Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Fugitive Dust					1.172	0.1775
	Off-Road	2.8395	21.4679	24.8781	0.0393	1.3145	1.2908
	Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**2.4865**	**1.4682**
Offsite							
	Hauling	0.1771	5.8311	1.2921	0.016	0.3491	0.1091
	Vendor	7.11E-03	0.2127	0.0557	5.20E-04	0.013	4.44E-03
	Worker	0.092	0.0655	0.8757	2.36E-03	0.2079	0.0567
	Total	**0.2763**	**6.1093**	**2.2235**	**0.0189**	**0.57**	**0.1702**
TOTAL		***3.1158***	***27.5772***	***27.1016***	***0.0582***	***3.0565***	***1.6384***

Demolition							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
	Fugitive Dust					1.172	0.1775
	Off-Road	2.8395	21.4679	24.8781	0.0393	1.3145	1.2908
	Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**2.4865**	**1.4682**
Offsite							
	Hauling	0.1814	5.9065	1.3732	0.0157	0.3735	0.1153
	Vendor	7.44E-03	0.2127	0.0615	5.00E-04	0.0138	4.66E-03
	Worker	0.1022	0.0725	0.802	2.22E-03	0.2254	0.061
	Total	**0.2911**	**6.1917**	**2.2367**	**0.0185**	**0.6127**	**0.1809**
TOTAL		***3.1306***	***27.6596***	***27.1148***	***0.0578***	***3.0992***	***1.6491***

Site Preparation Summer

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020**						
	Fugitive Dust						0.0118	1.79E-03
	Off-Road		1.5401	14.8331	14.4608	0.0205	0.9425	0.8679
	Total		**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.9543**	**0.8697**
Offsite								
	Hauling		0.3057	10.0639	2.2301	0.0276	0.6024	0.1883
	Vendor		7.11E-03	0.2127	0.0557	5.20E-04	0.013	4.44E-03
	Worker		0.0828	0.0589	0.7881	2.13E-03	0.1871	0.051
	Total		**0.3957**	**10.3356**	**3.0739**	**0.0303**	**0.8026**	**0.2437**
TOTAL			***1.9358***	***25.1687***	***17.5347***	***0.0508***	***1.7569***	***1.1134***

Site Preparation Winter

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020**						
	Fugitive Dust						0.0118	1.79E-03
	Off-Road		1.5401	14.8331	14.4608	0.0205	0.9425	0.8679
	Total		**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.9543**	**0.8697**
Offsite								
	Hauling		0.3132	10.1942	2.37	0.0272	0.6029	0.1887
	Vendor		7.44E-03	0.2127	0.0615	5.00E-04	0.013	4.46E-03
	Worker		0.092	0.0652	0.7218	2.00E-03	0.1871	0.051
	Total		**0.4126**	**10.4721**	**3.1533**	**0.0297**	**0.8031**	**0.2442**
TOTAL			***1.9527***	***25.3052***	***17.6141***	***0.0502***	***1.7574***	***1.1139***

Building Construction Summer

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Off-Road		3.1584	31.5861	29.2764	0.0539	1.5975	1.5038
Total		**3.1584**	**31.5861**	**29.2764**	**0.0539**	**1.5975**	**1.5038**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.2988	8.9353	2.3411	2.18E-02	0.5453	0.1866
Worker		0.8744	0.622	8.3191	2.24E-02	1.9753	0.5388
Total		**1.1731**	**9.5573**	**10.6602**	**0.0442**	**2.5207**	**0.7254**
TOTAL		***4.3315***	***41.1434***	***39.9366***	***0.0981***	***4.1182***	***2.2292***

Building Construction Winter

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020**						
Off-Road		3.1584	31.5861	29.2764	0.0539	1.5975	1.5038
Total		**3.1584**	**31.5861**	**29.2764**	**0.0539**	**1.5975**	**1.5038**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.3123	8.9334	2.582	2.12E-02	0.546	0.1872
Worker		0.9709	0.6887	7.6192	2.11E-02	1.9753	0.5388
Total		**1.2833**	**9.6221**	**10.2012**	**0.0423**	**2.5214**	**0.726**
TOTAL		***4.4417***	***41.2082***	***39.4776***	***0.0962***	***4.1189***	***2.2298***

Building Construction Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Off-Road		2.895	28.7691	29.0092	0.054	1.3889	1.3078
Total		**2.895**	**28.7691**	**29.0092**	**0.054**	**1.3889**	**1.3078**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.2553	8.1555	2.1321	2.16E-02	0.52	0.1623
Worker		0.8145	0.5598	7.6527	2.17E-02	1.9747	0.5383
Total		**1.0698**	**8.7153**	**9.7848**	**0.0433**	**2.4947**	**0.7006**
TOTAL		***3.9648***	***37.4844***	***38.7940***	***0.0973***	***3.8836***	***2.0084***

Building Construction Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Off-Road		2.895	28.7691	29.0092	0.054	1.3889	1.3078
Total		**2.895**	**28.7691**	**29.0092**	**0.054**	**1.3889**	**1.3078**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0.268	8.1387	2.3585	2.10E-02	0.5205	0.1628
Worker		0.906	0.6197	6.9969	2.05E-02	1.9747	0.5383
Total		**1.174**	**8.7583**	**9.3553**	**0.0415**	**2.4953**	**0.7011**
TOTAL		***4.0690***	***37.5274***	***38.3645***	***0.0955***	***3.8842***	***2.0089***

Architectural Coating Summer							
Onsite	**2021**						
Archit. Coating		47.7797				0	0
Off-Road		3.1376	21.8848	26.0516	4.26E-02	1.3487	1.3487
Total		**50.9173**	**21.8848**	**26.0516**	**4.26E-02**	**1.3487**	**1.3487**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0	0	0	0.00E+00	0	0
Worker		0.1629	0.112	1.5305	4.34E-03	0.4282	0.1158
Total		**0.1629**	**0.112**	**1.5305**	**4.34E-03**	**0.4282**	**0.1158**
TOTAL		***51.0802***	***21.9968***	***27.5821***	***0.0469***	***1.7769***	***1.4645***

Painting and Building Overlap		**55.0450**	**59.4812**	**66.3761**	**0.1442**	**5.6605**	**3.4729**

Architectural Coating Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Archit. Coating		47.7797				0	0
Off-Road		3.1376	21.8848	26.0516	4.26E-02	1.3487	1.3487
Total		**50.9173**	**21.8848**	**26.0516**	**4.26E-02**	**1.3487**	**1.3487**
Offsite							
Hauling		0	0	0	0	0	0
Vendor		0	0	0	0.00E+00	0	0
Worker		0.1812	0.1239	1.3994	4.09E-03	0.4282	0.1158
Total		**0.1812**	**0.1239**	**1.3994**	**4.09E-03**	**0.4282**	**0.1158**
TOTAL		***51.0985***	***22.0087***	***27.4510***	***0.0467***	***1.7769***	***1.4645***
Painting and Building Overlap		**55.1675**	**59.5361**	**65.8155**	**0.1422**	**5.6611**	**3.4734**

Temporary Portables Removal Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Off-Road		0.4129	4.8493	1.9829	5.77E-03	0.1969	0.1811
Total		**0.4129**	**4.8493**	**1.9829**	**5.77E-03**	**0.1969**	**0.1811**
Offsite							
Hauling		0.0104	0.3338	0.0783	9.70E-04	0.0602	1.61E-02
Vendor		0	0	0	0	0	0
Worker		0.8145	0.5598	7.6527	0.0217	3.6549	0.9507
Total		**0.8248**	**0.8936**	**7.731**	**2.27E-02**	**3.7151**	**9.67E-01**
TOTAL		***1.2377***	***5.7429***	***9.7139***	***0.0285***	***3.9120***	***1.1479***

Temporary Portables Removal Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021**						
Off-Road		0.4129	4.8493	1.9829	5.77E-03	0.1969	0.1811
Total		**0.4129**	**4.8493**	**1.9829**	**5.77E-03**	**0.1969**	**0.1811**
Offsite							
Hauling		0.0106	0.3379	0.083	9.50E-04	0.0603	1.62E-02
Vendor		0	0	0	0	0	0
Worker		0.906	0.6197	6.9969	0.0205	3.6549	0.9507
Total		**0.9166**	**0.9576**	**7.0799**	**2.14E-02**	**3.7152**	**9.67E-01**
TOTAL		***1.3295***	***5.8069***	***9.0628***	***0.0272***	***3.9121***	***1.1479***

Temporary Portables Removal Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2022**						
Off-Road		0.373	4.1843	1.8923	5.77E-03	0.1737	0.1598
Total		**0.373**	**4.1843**	**1.8923**	**5.77E-03**	**0.1737**	**0.1598**
Offsite							
Hauling		9.87E-03	0.3101	0.0775	9.60E-04	0.0736	1.93E-02
Vendor		0	0	0	0	0	0
Worker		0.7629	0.5057	7.0605	0.021	3.6544	0.9502
Total		**7.73E-01**	**0.8158**	**7.1379**	**2.19E-02**	**3.7279**	**9.70E-01**
TOTAL		***1.1458***	***5.0001***	***9.0302***	***0.0277***	***3.9016***	***1.1293***

Temporary Portables Removal Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2022**						
Off-Road		0.373	4.1843	1.8923	5.77E-03	0.1737	0.1598
Total		**0.373**	**4.1843**	**1.8923**	**5.77E-03**	**0.1737**	**0.1598**
Offsite							
Hauling		0.0101	0.3136	0.082	9.40E-04	0.0736	1.93E-02
Vendor		0	0	0	0	0	0
Worker		0.8509	0.5596	6.4444	0.0197	3.6544	0.9502
Total		**0.861**	**0.8733**	**6.5263**	**2.07E-02**	**3.728**	**9.70E-01**
TOTAL		***1.2340***	***5.0576***	***8.4186***	***0.0265***	***3.9017***	***1.1293***

Paving Summer								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2021**						
	Off-Road		1.2803	11.2564	11.7726	0.0192	0.5811	0.5438
	Paving		0.3686				0	0
	Total		**1.6489**	**11.2564**	**11.7726**	**0.0192**	**0.5811**	**0.5438**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0547	1.7476	0.4569	4.63E-03	0.1114	0.0348
	Worker		0.1286	0.0884	1.2083	3.43E-03	0.3118	0.085
	Total		**0.1833**	**1.836**	**1.6652**	**8.06E-03**	**0.4232**	**0.1198**
TOTAL			***1.8322***	***13.0924***	***13.4378***	***0.0273***	***1.0043***	***0.6636***
Paving + Portable Installation Overlap			***3.0699***	***18.8353***	***23.1517***	***0.0557***	***4.9163***	***1.8115***

Paving Winter								
			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2021**						
	Off-Road		1.2803	11.2564	11.7726	0.0192	0.5811	0.5438
	Paving		0.3686				0	0
	Total		**1.6489**	**11.2564**	**11.7726**	**0.0192**	**0.5811**	**0.5438**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0574	1.744	0.5054	4.50E-03	0.1115	0.0349
	Worker		0.1431	0.0978	1.1048	3.23E-03	0.3118	0.085
	Total		**0.2005**	**1.8418**	**1.6102**	**7.73E-03**	**0.4233**	**0.1199**
TOTAL			***1.8494***	***13.0982***	***13.3828***	***0.0269***	***1.0044***	***0.6637***
Paving + Portable Installation Overlap			***3.1789***	***18.9051***	***22.4456***	***0.0541***	***4.9165***	***1.8116***

Paving Summer							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2022**						
	Off-Road	1.1727	10.1215	11.6877	0.0192	0.4939	0.4636
	Paving	0.3686				0	0
	Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**	**0.4939**	**0.4636**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0514	1.6619	0.4323	4.58E-03	0.111	0.0344
	Worker	0.1205	0.0798	1.1148	3.31E-03	0.3117	0.0849
	Total	**0.1718**	**1.7418**	**1.5471**	**7.89E-03**	**0.4227**	**0.1193**
TOTAL		***1.7130***	***11.8633***	***13.2348***	***0.0271***	***0.9166***	***0.5829***
Paving + Portable Installation Overlap		***2.8588***	***16.8634***	***22.2650***	***0.0548***	***4.8182***	***1.7122***

Paving Winter							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2022**						
	Off-Road	1.1727	10.1215	11.6877	0.0192	0.4939	0.4636
	Paving	0.3686				0	0
	Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**	**0.4939**	**0.4636**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0539	1.6574	0.4784	4.46E-03	0.1111	0.0345
	Worker	0.1344	0.0884	1.0175	3.11E-03	0.3117	0.0849
	Total	**0.1883**	**1.7458**	**1.4959**	**7.57E-03**	**0.4228**	**0.1194**
TOTAL		***1.7295***	***11.8673***	***13.1836***	***0.0268***	***0.9167***	***0.5830***
Paving + Portable Installation Overlap		***2.9635***	***16.9249***	***21.6022***	***0.0532***	***4.8184***	***1.7123***

MAX DAILY	**55.17**	**59.54**	**66.38**	**0.14**	**5.66**	**3.47**
Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

Regional Construction Emissions Worksheet: Phase 2

Demolition Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
	Fugitive Dust			1.172	0.1775
	Off-Road	21.4679	24.8781	1.3145	1.2908
	Total	**21.4679**	**24.8781**	**2.4865**	**1.4682**

Demolition					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
	Fugitive Dust			1.172	0.1775
	Off-Road	21.4679	24.8781	1.3145	1.2908
	Total	**21.4679**	**24.8781**	**2.4865**	**1.4682**
	Onsite Max	***21.47***	***24.88***	***2.49***	***1.47***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Site Preparation Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
	Fugitive Dust			0.0118	1.79E-03
	Off-Road	14.8331	14.4608	0.9425	0.8679
	Total	**14.8331**	**14.4608**	**0.9543**	**0.8697**

Site Preparation Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
	Fugitive Dust			0.0118	1.79E-03
	Off-Road	14.8331	14.4608	0.9425	0.8679
	Total	**14.8331**	**14.4608**	**0.9543**	**0.8697**
	Onsite Max	***14.83***	***14.46***	***0.95***	***0.87***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Building Construction Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
Off-Road		31.5861	29.2764	1.5975	1.5038
Total		**31.5861**	**29.2764**	**1.5975**	**1.5038**

Building Construction Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2020**				
Off-Road		31.5861	29.2764	1.5975	1.5038
Total		**31.5861**	**29.2764**	**1.5975**	**1.5038**
	Onsite Max	***31.59***	***29.28***	***1.60***	***1.50***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Building Construction Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2021**				
Off-Road		28.7691	29.0092	1.3889	1.3078
Total		**28.7691**	**29.0092**	**1.3889**	**1.3078**

Building Construction Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2021**				
Off-Road		28.7691	29.0092	1.3889	1.3078
Total		**28.7691**	**29.0092**	**1.3889**	**1.3078**
	Onsite Max	***28.77***	***29.01***	***1.39***	***1.31***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Architectural Coating Summer					
Onsite	**2021**				
Archit. Coating				0	0
Off-Road		21.8848	26.0516	1.3487	1.3487
Total		**21.8848**	**26.0516**	**1.3487**	**1.3487**
Onsite Overlap		**50.6539**	**55.0608**	**2.7376**	**2.6565**

Architectural Coating Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2021**				
Archit. Coating				0	0
Off-Road		21.8848	26.0516	1.3487	1.3487
Total		**21.8848**	**26.0516**	**1.3487**	**1.3487**
Onsite Overlap		**50.6539**	**55.0608**	**2.7376**	**2.6565**
	Onsite Max	***50.65***	***55.06***	***2.74***	***2.66***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Temporary Portables Removal Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2021**				
Off-Road		4.8493	1.9829	0.1969	0.1811
Total		**4.8493**	**1.9829**	**0.1969**	**0.1811**

Temporary Portables Removal Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2021**				
Off-Road		4.8493	1.9829	0.1969	0.1811
Total		**4.8493**	**1.9829**	**0.1969**	**0.1811**

Temporary Portables Removal Summer						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2022**				
	Off-Road		4.1843	1.8923	0.1737	0.1598
	Total		**4.1843**	**1.8923**	**0.1737**	**0.1598**

Temporary Portables Removal Winter						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2022**				
	Off-Road		4.1843	1.8923	0.1737	0.1598
	Total		**4.1843**	**1.8923**	**0.1737**	**0.1598**

Paving Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2021**				
Off-Road		11.2564	11.7726	0.5811	0.5438
Paving				0	0
Total		**11.2564**	**11.7726**	**0.5811**	**0.5438**
Overlap with Temporary Portables Removal		***16.1057***	***13.7555***	***0.7780***	***0.7249***

Paving Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2021**				
Off-Road		11.2564	11.7726	0.5811	0.5438
Paving				0	0
Total		**11.2564**	**11.7726**	**0.5811**	**0.5438**
Overlap with Temporary Portables Removal		***16.1057***	***13.7555***	***0.7780***	***0.7249***
	Onsite Max	***16.11***	***13.76***	***0.78***	***0.72***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

Paving Summer					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2022**				
	Off-Road	10.1215	11.6877	0.4939	0.4636
	Paving			0	0
	Total	**10.1215**	**11.6877**	**0.4939**	**0.4636**
Overlap with Temporary Portables Removal		***14.3058***	***13.5800***	***0.6676***	***0.6234***

Paving Winter					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2022**				
	Off-Road	10.1215	11.6877	0.4939	0.4636
	Paving			0	0
	Total	**10.1215**	**11.6877**	**0.4939**	**0.4636**
Overlap with Temporary Portables Removal		***14.3058***	***13.5800***	***0.6676***	***0.6234***
	Onsite Max	***14.31***	***13.58***	***0.67***	***0.62***
	<=1-Acre LSTs	***80***	***498***	***4***	***3***
	Exceeds LST?	***No***	***No***	***No***	***No***

GHG Emissions Inventory

Proposed Project Buildout

	$MTCO_2e$ Total*	
2019	753	
2020	635	
2021	1,124	
2022	47	
Total Construction	**2,559**	
Amortized Construction Emissions**	**85**	$MTCO_2e$/Year
SCAQMD Bright-Line Screening Threshold	3,000	$MTCO_2e$/Year
Exceed Threshold?	**No**	

* $MTCO_2e$=metric tons of carbon dioxide equivalent.

** Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD. 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2.

Construction Localized Significance Thresholds: 1-Acre or Less

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)
7	1.00	25	82

Source Receptor	East San Fernando Valley	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	8	1	0.5
NOx	**80**	Graders	0.5	0.0625	0	0	0
CO	**498**	Dozers	0.5	0.0625	0	0	0
PM10	**4.00**	Scrapers	1	0.125	0	0	0
PM2.5	**3.00**					**Acres**	0.50

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	80	81	94	122	191
	1	80	81	94	122	191
		80	81	94	122	191
CO	1	498	732	1158	2227	7267
	1	498	732	1158	2227	7267
		498	732	1158	2227	7267
PM10	1	4	13	26	54	136
	1	4	13	26	54	136
		4	13	26	54	136
PM2.5	1	3	4	8	18	68
	1	3	4	8	18	68
		3	4	8	18	68

East San Fernando Valley

1.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	80	81	94	122	191
CO	498	732	1158	2227	7267
PM10	4	13	26	54	136
PM2.5	3	4	8	18	68

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
7	1	7	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Poly High School

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	134.33	1000sqft	3.08	134,334.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2021
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Vehicle Trips - See CalEEMod Assumptions

Area Coating - .

Water And Wastewater - See CalEEMod Assumptions

Solid Waste - CalEEMod Assumptions

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	18.00	44.00
tblConstructionPhase	NumDays	230.00	44.00
tblConstructionPhase	NumDays	230.00	259.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	18.00	43.00
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	PhaseEndDate	10/30/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	7/4/2019	3/16/2019
tblConstructionPhase	PhaseEndDate	7/1/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	8/31/2020	6/30/2020
tblConstructionPhase	PhaseStartDate	9/1/2020	3/1/2020
tblConstructionPhase	PhaseStartDate	5/4/2019	1/15/2019
tblConstructionPhase	PhaseStartDate	7/5/2019	5/6/2019
tblConstructionPhase	PhaseStartDate	7/2/2020	5/1/2020
tblConstructionPhase	PhaseStartDate	3/2/2019	3/4/2019
tblGrading	MaterialExported	0.00	11,025.00
tblLandUse	BuildingSpaceSquareFeet	134,330.00	134,334.00
tblLandUse	LandUseSquareFeet	134,330.00	134,334.00
tblOffRoadEquipment	HorsePower	84.00	9.00

tblOffRoadEquipment	HorsePower	85.00	80.00
tblOffRoadEquipment	HorsePower	65.00	8.00
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.48	0.50
tblOffRoadEquipment	LoadFactor	0.78	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.43
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021

tblSolidWaste	SolidWasteGenerationRate	174.63	0.00
tblTripsAndVMT	HaulingTripNumber	565.00	904.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	HaulingTripNumber	1,378.00	1,575.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblWater	IndoorWaterUseRate	4,460,379.29	0.00
tblWater	OutdoorWaterUseRate	11,469,546.75	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.4466	4.5485	3.7774	8.3400e-003	0.1770	0.2121	0.3891	0.0406	0.1999	0.2405	0.0000	749.8839	749.8839	0.1436	0.0000	753.4741
2020	0.8164	1.8752	1.7569	3.6600e-003	0.0476	0.0871	0.1347	0.0129	0.0821	0.0950	0.0000	318.7175	318.7175	0.0663	0.0000	320.3740
Maximum	**0.8164**	**4.5485**	**3.7774**	**8.3400e-003**	**0.1770**	**0.2121**	**0.3891**	**0.0406**	**0.1999**	**0.2405**	**0.0000**	**749.8839**	**749.8839**	**0.1436**	**0.0000**	**753.4741**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.4466	4.5485	3.7774	8.3400e-003	0.1416	0.2121	0.3538	0.0352	0.1999	0.2351	0.0000	749.8833	749.8833	0.1436	0.0000	753.4735
2020	0.8164	1.8752	1.7569	3.6600e-003	0.0476	0.0871	0.1347	0.0129	0.0821	0.0950	0.0000	318.7172	318.7172	0.0663	0.0000	320.3737
Maximum	**0.8164**	**4.5485**	**3.7774**	**8.3400e-003**	**0.1416**	**0.2121**	**0.3538**	**0.0352**	**0.1999**	**0.2351**	**0.0000**	**749.8833**	**749.8833**	**0.1436**	**0.0000**	**753.4735**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**15.75**	**0.00**	**6.75**	**10.01**	**0.00**	**1.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2019**	**3-31-2019**	0.8262	0.8262
2	**4-1-2019**	**6-30-2019**	1.1822	1.1822
3	**7-1-2019**	**9-30-2019**	1.3787	1.3787
4	**10-1-2019**	**12-31-2019**	1.3807	1.3807
5	**1-1-2020**	**3-31-2020**	1.5953	1.5953
6	**4-1-2020**	**6-30-2020**	1.0798	1.0798
		Highest	1.5953	1.5953

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	3/1/2019	5	44	
2	Site Preparation	Site Preparation	3/4/2019	5/3/2019	5	45	
3	Portable Installation	Building Construction	1/15/2019	3/16/2019	5	44	
4	Building Construction	Building Construction	5/6/2019	4/30/2020	5	259	
5	Paving	Paving	5/1/2020	6/30/2020	5	43	
6	Architectural Coating	Architectural Coating	3/1/2020	4/30/2020	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 201,501; Non-Residential Outdoor: 67,167; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.50
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	80	0.38
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Site Preparation	Trenchers	1	8.00	78	0.50
Portable Installation	Cranes	1	8.00	231	0.29
Portable Installation	Excavators	0	8.00	158	0.38
Portable Installation	Forklifts	0	8.00	89	0.20
Portable Installation	Generator Sets	0	8.00	84	0.74
Portable Installation	Graders	0	8.00	187	0.41
Portable Installation	Rubber Tired Dozers	0	8.00	247	0.40
Portable Installation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Portable Installation	Welders	0	8.00	46	0.45
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Generator Sets	0	8.00	9	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	6.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Forklifts	3	8.00	89	0.20

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	904.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,575.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Portable Installation	1	56.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	56.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0612	0.0000	0.0612	9.2600e-003	0.0000	9.2600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0455	0.3480	0.3673	5.8000e-004		0.0227	0.0227		0.0222	0.0222	0.0000	50.1860	50.1860	7.9600e-003	0.0000	50.3851
Total	**0.0455**	**0.3480**	**0.3673**	**5.8000e-004**	**0.0612**	**0.0227**	**0.0839**	**9.2600e-003**	**0.0222**	**0.0314**	**0.0000**	**50.1860**	**50.1860**	**7.9600e-003**	**0.0000**	**50.3851**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.2900e-003	0.1431	0.0304	3.6000e-004	7.7700e-003	5.1000e-004	8.2800e-003	2.1300e-003	4.9000e-004	2.6200e-003	0.0000	35.1966	35.1966	2.4800e-003	0.0000	35.2586
Vendor	1.9000e-004	5.2000e-003	1.4200e-003	1.0000e-005	2.8000e-004	3.0000e-005	3.1000e-004	8.0000e-005	3.0000e-005	1.1000e-004	0.0000	1.1003	1.1003	7.0000e-005	0.0000	1.1021
Worker	2.2000e-003	1.8400e-003	0.0200	5.0000e-005	4.8200e-003	4.0000e-005	4.8600e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	4.6348	4.6348	1.6000e-004	0.0000	4.6388
Total	**6.6800e-003**	**0.1501**	**0.0518**	**4.2000e-004**	**0.0129**	**5.8000e-004**	**0.0135**	**3.4900e-003**	**5.6000e-004**	**4.0500e-003**	**0.0000**	**40.9316**	**40.9316**	**2.7100e-003**	**0.0000**	**40.9995**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	3.9600e-003	0.0000	3.9600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0455	0.3480	0.3673	5.8000e-004		0.0227	0.0227		0.0222	0.0222	0.0000	50.1859	50.1859	7.9600e-003	0.0000	50.3850
Total	**0.0455**	**0.3480**	**0.3673**	**5.8000e-004**	**0.0262**	**0.0227**	**0.0488**	**3.9600e-003**	**0.0222**	**0.0261**	**0.0000**	**50.1859**	**50.1859**	**7.9600e-003**	**0.0000**	**50.3850**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.2900e-003	0.1431	0.0304	3.6000e-004	7.7700e-003	5.1000e-004	8.2800e-003	2.1300e-003	4.9000e-004	2.6200e-003	0.0000	35.1966	35.1966	2.4800e-003	0.0000	35.2586
Vendor	1.9000e-004	5.2000e-003	1.4200e-003	1.0000e-005	2.8000e-004	3.0000e-005	3.1000e-004	8.0000e-005	3.0000e-005	1.1000e-004	0.0000	1.1003	1.1003	7.0000e-005	0.0000	1.1021
Worker	2.2000e-003	1.8400e-003	0.0200	5.0000e-005	4.8200e-003	4.0000e-005	4.8600e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	4.6348	4.6348	1.6000e-004	0.0000	4.6388
Total	**6.6800e-003**	**0.1501**	**0.0518**	**4.2000e-004**	**0.0129**	**5.8000e-004**	**0.0135**	**3.4900e-003**	**5.6000e-004**	**4.0500e-003**	**0.0000**	**40.9316**	**40.9316**	**2.7100e-003**	**0.0000**	**40.9995**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2000e-004	0.0000	6.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3602	0.3270	4.6000e-004		0.0234	0.0234		0.0216	0.0216	0.0000	41.1072	41.1072	0.0129	0.0000	41.4286
Total	**0.0372**	**0.3602**	**0.3270**	**4.6000e-004**	**6.2000e-004**	**0.0234**	**0.0241**	**9.0000e-005**	**0.0216**	**0.0217**	**0.0000**	**41.1072**	**41.1072**	**0.0129**	**0.0000**	**41.4286**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.4800e-003	0.2492	0.0529	6.2000e-004	0.0135	8.9000e-004	0.0144	3.7200e-003	8.5000e-004	4.5700e-003	0.0000	61.3215	61.3215	4.3200e-003	0.0000	61.4296
Vendor	1.9000e-004	5.3200e-003	1.4500e-003	1.0000e-005	2.8000e-004	3.0000e-005	3.2000e-004	8.0000e-005	3.0000e-005	1.1000e-004	0.0000	1.1253	1.1253	8.0000e-005	0.0000	1.1272
Worker	2.0300e-003	1.6900e-003	0.0184	5.0000e-005	4.4400e-003	4.0000e-005	4.4800e-003	1.1800e-003	4.0000e-005	1.2100e-003	0.0000	4.2661	4.2661	1.5000e-004	0.0000	4.2698
Total	**9.7000e-003**	**0.2562**	**0.0728**	**6.8000e-004**	**0.0183**	**9.6000e-004**	**0.0192**	**4.9800e-003**	**9.2000e-004**	**5.8900e-003**	**0.0000**	**66.7129**	**66.7129**	**4.5500e-003**	**0.0000**	**66.8265**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0372	0.3602	0.3270	4.6000e-004		0.0234	0.0234		0.0216	0.0216	0.0000	41.1072	41.1072	0.0129	0.0000	41.4286
Total	**0.0372**	**0.3602**	**0.3270**	**4.6000e-004**	**2.7000e-004**	**0.0234**	**0.0237**	**4.0000e-005**	**0.0216**	**0.0216**	**0.0000**	**41.1072**	**41.1072**	**0.0129**	**0.0000**	**41.4286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.4800e-003	0.2492	0.0529	6.2000e-004	0.0135	8.9000e-004	0.0144	3.7200e-003	8.5000e-004	4.5700e-003	0.0000	61.3215	61.3215	4.3200e-003	0.0000	61.4296
Vendor	1.9000e-004	5.3200e-003	1.4500e-003	1.0000e-005	2.8000e-004	3.0000e-005	3.2000e-004	8.0000e-005	3.0000e-005	1.1000e-004	0.0000	1.1253	1.1253	8.0000e-005	0.0000	1.1272
Worker	2.0300e-003	1.6900e-003	0.0184	5.0000e-005	4.4400e-003	4.0000e-005	4.4800e-003	1.1800e-003	4.0000e-005	1.2100e-003	0.0000	4.2661	4.2661	1.5000e-004	0.0000	4.2698
Total	**9.7000e-003**	**0.2562**	**0.0728**	**6.8000e-004**	**0.0183**	**9.6000e-004**	**0.0192**	**4.9800e-003**	**9.2000e-004**	**5.8900e-003**	**0.0000**	**66.7129**	**66.7129**	**4.5500e-003**	**0.0000**	**66.8265**

3.4 Portable Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0111	0.1322	0.0505	1.3000e-004		5.6000e-003	5.6000e-003		5.1500e-003	5.1500e-003	0.0000	11.4003	11.4003	3.6100e-003	0.0000	11.4904
Total	**0.0111**	**0.1322**	**0.0505**	**1.3000e-004**		**5.6000e-003**	**5.6000e-003**		**5.1500e-003**	**5.1500e-003**	**0.0000**	**11.4003**	**11.4003**	**3.6100e-003**	**0.0000**	**11.4904**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.7000e-004	8.8600e-003	1.8800e-003	2.0000e-005	4.8000e-004	3.0000e-005	5.1000e-004	1.3000e-004	3.0000e-005	1.6000e-004	0.0000	2.1803	2.1803	1.5000e-004	0.0000	2.1842
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1700e-003	5.1400e-003	0.0559	1.4000e-004	0.0135	1.2000e-004	0.0136	3.5900e-003	1.1000e-004	3.7000e-003	0.0000	12.9774	12.9774	4.5000e-004	0.0000	12.9885
Total	**6.4400e-003**	**0.0140**	**0.0578**	**1.6000e-004**	**0.0140**	**1.5000e-004**	**0.0141**	**3.7200e-003**	**1.4000e-004**	**3.8600e-003**	**0.0000**	**15.1577**	**15.1577**	**6.0000e-004**	**0.0000**	**15.1727**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0111	0.1322	0.0505	1.3000e-004		5.6000e-003	5.6000e-003		5.1500e-003	5.1500e-003	0.0000	11.4002	11.4002	3.6100e-003	0.0000	11.4904
Total	**0.0111**	**0.1322**	**0.0505**	**1.3000e-004**		**5.6000e-003**	**5.6000e-003**		**5.1500e-003**	**5.1500e-003**	**0.0000**	**11.4002**	**11.4002**	**3.6100e-003**	**0.0000**	**11.4904**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.7000e-004	8.8600e-003	1.8800e-003	2.0000e-005	4.8000e-004	3.0000e-005	5.1000e-004	1.3000e-004	3.0000e-005	1.6000e-004	0.0000	2.1803	2.1803	1.5000e-004	0.0000	2.1842
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1700e-003	5.1400e-003	0.0559	1.4000e-004	0.0135	1.2000e-004	0.0136	3.5900e-003	1.1000e-004	3.7000e-003	0.0000	12.9774	12.9774	4.5000e-004	0.0000	12.9885
Total	**6.4400e-003**	**0.0140**	**0.0578**	**1.6000e-004**	**0.0140**	**1.5000e-004**	**0.0141**	**3.7200e-003**	**1.4000e-004**	**3.8600e-003**	**0.0000**	**15.1577**	**15.1577**	**6.0000e-004**	**0.0000**	**15.1727**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2942	2.9427	2.5428	4.6300e-003		0.1562	0.1562		0.1470	0.1470	0.0000	404.8408	404.8408	0.1050	0.0000	407.4653
Total	**0.2942**	**2.9427**	**2.5428**	**4.6300e-003**		**0.1562**	**0.1562**		**0.1470**	**0.1470**	**0.0000**	**404.8408**	**404.8408**	**0.1050**	**0.0000**	**407.4653**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0117	0.3251	0.0889	7.1000e-004	0.0173	2.0400e-003	0.0194	5.0000e-003	1.9600e-003	6.9600e-003	0.0000	68.8178	68.8178	4.5900e-003	0.0000	68.9326
Worker	0.0241	0.0201	0.2186	5.6000e-004	0.0528	4.6000e-004	0.0532	0.0140	4.3000e-004	0.0144	0.0000	50.7297	50.7297	1.7400e-003	0.0000	50.7733
Total	**0.0358**	**0.3452**	**0.3075**	**1.2700e-003**	**0.0701**	**2.5000e-003**	**0.0726**	**0.0190**	**2.3900e-003**	**0.0214**	**0.0000**	**119.5474**	**119.5474**	**6.3300e-003**	**0.0000**	**119.7059**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2942	2.9427	2.5428	4.6300e-003		0.1562	0.1562		0.1470	0.1470	0.0000	404.8403	404.8403	0.1050	0.0000	407.4648
Total	**0.2942**	**2.9427**	**2.5428**	**4.6300e-003**		**0.1562**	**0.1562**		**0.1470**	**0.1470**	**0.0000**	**404.8403**	**404.8403**	**0.1050**	**0.0000**	**407.4648**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0117	0.3251	0.0889	7.1000e-004	0.0173	2.0400e-003	0.0194	5.0000e-003	1.9600e-003	6.9600e-003	0.0000	68.8178	68.8178	4.5900e-003	0.0000	68.9326
Worker	0.0241	0.0201	0.2186	5.6000e-004	0.0528	4.6000e-004	0.0532	0.0140	4.3000e-004	0.0144	0.0000	50.7297	50.7297	1.7400e-003	0.0000	50.7733
Total	**0.0358**	**0.3452**	**0.3075**	**1.2700e-003**	**0.0701**	**2.5000e-003**	**0.0726**	**0.0190**	**2.3900e-003**	**0.0214**	**0.0000**	**119.5474**	**119.5474**	**6.3300e-003**	**0.0000**	**119.7059**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1374	1.3740	1.2735	2.3500e-003		0.0695	0.0695		0.0654	0.0654	0.0000	201.5155	201.5155	0.0529	0.0000	202.8371
Total	**0.1374**	**1.3740**	**1.2735**	**2.3500e-003**		**0.0695**	**0.0695**		**0.0654**	**0.0654**	**0.0000**	**201.5155**	**201.5155**	**0.0529**	**0.0000**	**202.8371**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0500e-003	0.1508	0.0408	3.6000e-004	8.7700e-003	7.0000e-004	9.4700e-003	2.5300e-003	6.7000e-004	3.2000e-003	0.0000	34.5809	34.5809	2.2000e-003	0.0000	34.6359
Worker	0.0113	9.0700e-003	0.1003	2.8000e-004	0.0267	2.3000e-004	0.0269	7.0900e-003	2.1000e-004	7.3000e-003	0.0000	24.8801	24.8801	7.8000e-004	0.0000	24.8997
Total	**0.0163**	**0.1599**	**0.1411**	**6.4000e-004**	**0.0355**	**9.3000e-004**	**0.0364**	**9.6200e-003**	**8.8000e-004**	**0.0105**	**0.0000**	**59.4610**	**59.4610**	**2.9800e-003**	**0.0000**	**59.5356**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1374	1.3740	1.2735	2.3500e-003		0.0695	0.0695		0.0654	0.0654	0.0000	201.5153	201.5153	0.0529	0.0000	202.8368
Total	**0.1374**	**1.3740**	**1.2735**	**2.3500e-003**		**0.0695**	**0.0695**		**0.0654**	**0.0654**	**0.0000**	**201.5153**	**201.5153**	**0.0529**	**0.0000**	**202.8368**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0500e-003	0.1508	0.0408	3.6000e-004	8.7700e-003	7.0000e-004	9.4700e-003	2.5300e-003	6.7000e-004	3.2000e-003	0.0000	34.5809	34.5809	2.2000e-003	0.0000	34.6359
Worker	0.0113	9.0700e-003	0.1003	2.8000e-004	0.0267	2.3000e-004	0.0269	7.0900e-003	2.1000e-004	7.3000e-003	0.0000	24.8801	24.8801	7.8000e-004	0.0000	24.8997
Total	**0.0163**	**0.1599**	**0.1411**	**6.4000e-004**	**0.0355**	**9.3000e-004**	**0.0364**	**9.6200e-003**	**8.8000e-004**	**0.0105**	**0.0000**	**59.4610**	**59.4610**	**2.9800e-003**	**0.0000**	**59.5356**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0292	0.2590	0.2541	4.1000e-004		0.0140	0.0140		0.0131	0.0131	0.0000	33.4503	33.4503	9.0900e-003	0.0000	33.6775
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0292**	**0.2590**	**0.2541**	**4.1000e-004**		**0.0140**	**0.0140**		**0.0131**	**0.0131**	**0.0000**	**33.4503**	**33.4503**	**9.0900e-003**	**0.0000**	**33.6775**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-003	0.0419	0.0114	1.0000e-004	2.4400e-003	2.0000e-004	2.6300e-003	7.0000e-004	1.9000e-004	8.9000e-004	0.0000	9.6141	9.6141	6.1000e-004	0.0000	9.6294
Worker	2.9800e-003	2.4000e-003	0.0266	7.0000e-005	7.0700e-003	6.0000e-005	7.1300e-003	1.8800e-003	6.0000e-005	1.9300e-003	0.0000	6.5877	6.5877	2.1000e-004	0.0000	6.5929
Total	**4.3800e-003**	**0.0443**	**0.0379**	**1.7000e-004**	**9.5100e-003**	**2.6000e-004**	**9.7600e-003**	**2.5800e-003**	**2.5000e-004**	**2.8200e-003**	**0.0000**	**16.2018**	**16.2018**	**8.2000e-004**	**0.0000**	**16.2223**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0292	0.2590	0.2541	4.1000e-004		0.0140	0.0140		0.0131	0.0131	0.0000	33.4503	33.4503	9.0900e-003	0.0000	33.6774
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0292**	**0.2590**	**0.2541**	**4.1000e-004**		**0.0140**	**0.0140**		**0.0131**	**0.0131**	**0.0000**	**33.4503**	**33.4503**	**9.0900e-003**	**0.0000**	**33.6774**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-003	0.0419	0.0114	1.0000e-004	2.4400e-003	2.0000e-004	2.6300e-003	7.0000e-004	1.9000e-004	8.9000e-004	0.0000	9.6141	9.6141	6.1000e-004	0.0000	9.6294
Worker	2.9800e-003	2.4000e-003	0.0266	7.0000e-005	7.0700e-003	6.0000e-005	7.1300e-003	1.8800e-003	6.0000e-005	1.9300e-003	0.0000	6.5877	6.5877	2.1000e-004	0.0000	6.5929
Total	**4.3800e-003**	**0.0443**	**0.0379**	**1.7000e-004**	**9.5100e-003**	**2.6000e-004**	**9.7600e-003**	**2.5800e-003**	**2.5000e-004**	**2.8200e-003**	**0.0000**	**16.2018**	**16.2018**	**8.2000e-004**	**0.0000**	**16.2223**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3300e-003	0.0370	0.0403	7.0000e-005		2.4400e-003	2.4400e-003		2.4400e-003	2.4400e-003	0.0000	5.6172	5.6172	4.3000e-004	0.0000	5.6280
Total	**0.6280**	**0.0370**	**0.0403**	**7.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.4400e-003**	**2.4400e-003**	**0.0000**	**5.6172**	**5.6172**	**4.3000e-004**	**0.0000**	**5.6280**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1200e-003	9.0000e-004	9.9600e-003	3.0000e-005	2.6500e-003	2.0000e-005	2.6700e-003	7.0000e-004	2.0000e-005	7.3000e-004	0.0000	2.4717	2.4717	8.0000e-005	0.0000	2.4736
Total	**1.1200e-003**	**9.0000e-004**	**9.9600e-003**	**3.0000e-005**	**2.6500e-003**	**2.0000e-005**	**2.6700e-003**	**7.0000e-004**	**2.0000e-005**	**7.3000e-004**	**0.0000**	**2.4717**	**2.4717**	**8.0000e-005**	**0.0000**	**2.4736**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6226					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3300e-003	0.0370	0.0403	7.0000e-005		2.4400e-003	2.4400e-003		2.4400e-003	2.4400e-003	0.0000	5.6172	5.6172	4.3000e-004	0.0000	5.6280
Total	**0.6280**	**0.0370**	**0.0403**	**7.0000e-005**		**2.4400e-003**	**2.4400e-003**		**2.4400e-003**	**2.4400e-003**	**0.0000**	**5.6172**	**5.6172**	**4.3000e-004**	**0.0000**	**5.6280**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1200e-003	9.0000e-004	9.9600e-003	3.0000e-005	2.6500e-003	2.0000e-005	2.6700e-003	7.0000e-004	2.0000e-005	7.3000e-004	0.0000	2.4717	2.4717	8.0000e-005	0.0000	2.4736
Total	**1.1200e-003**	**9.0000e-004**	**9.9600e-003**	**3.0000e-005**	**2.6500e-003**	**2.0000e-005**	**2.6700e-003**	**7.0000e-004**	**2.0000e-005**	**7.3000e-004**	**0.0000**	**2.4717**	**2.4717**	**8.0000e-005**	**0.0000**	**2.4736**

Poly High School

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	134.33	1000sqft	3.08	134,334.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2021
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Vehicle Trips - See CalEEMod Assumptions

Area Coating - .

Water And Wastewater - See CalEEMod Assumptions

Solid Waste - CalEEMod Assumptions

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	18.00	44.00
tblConstructionPhase	NumDays	230.00	44.00
tblConstructionPhase	NumDays	230.00	259.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	18.00	43.00
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	PhaseEndDate	10/30/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	7/4/2019	3/16/2019
tblConstructionPhase	PhaseEndDate	7/1/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	8/31/2020	6/30/2020
tblConstructionPhase	PhaseStartDate	9/1/2020	3/1/2020
tblConstructionPhase	PhaseStartDate	5/4/2019	1/15/2019
tblConstructionPhase	PhaseStartDate	7/5/2019	5/6/2019
tblConstructionPhase	PhaseStartDate	7/2/2020	5/1/2020
tblConstructionPhase	PhaseStartDate	3/2/2019	3/4/2019
tblGrading	MaterialExported	0.00	11,025.00
tblLandUse	BuildingSpaceSquareFeet	134,330.00	134,334.00
tblLandUse	LandUseSquareFeet	134,330.00	134,334.00
tblOffRoadEquipment	HorsePower	84.00	9.00

tblOffRoadEquipment	HorsePower	85.00	80.00
tblOffRoadEquipment	HorsePower	65.00	8.00
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.48	0.50
tblOffRoadEquipment	LoadFactor	0.78	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.43
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021

tblSolidWaste	SolidWasteGenerationRate	174.63	0.00
tblTripsAndVMT	HaulingTripNumber	565.00	904.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	HaulingTripNumber	1,378.00	1,575.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblWater	IndoorWaterUseRate	4,460,379.29	0.00
tblWater	OutdoorWaterUseRate	11,469,546.75	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.8336	38.1259	33.2499	0.0691	4.0242	1.8453	5.3428	0.7545	1.7371	2.0283	0.0000	6,760.5374	6,760.5374	1.4261	0.0000	6,796.1896
2020	32.1245	36.8932	34.9332	0.0731	0.9538	1.7307	2.6845	0.2576	1.6359	1.8935	0.0000	7,062.4246	7,062.4246	1.4403	0.0000	7,098.4313
Maximum	**32.1245**	**38.1259**	**34.9332**	**0.0731**	**4.0242**	**1.8453**	**5.3428**	**0.7545**	**1.7371**	**2.0283**	**0.0000**	**7,062.4246**	**7,062.4246**	**1.4403**	**0.0000**	**7,098.4313**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.8336	38.1259	33.2499	0.0691	2.4324	1.8453	3.7511	0.5135	1.7371	1.9621	0.0000	6,760.5374	6,760.5374	1.4261	0.0000	6,796.1896
2020	32.1245	36.8932	34.9332	0.0731	0.9538	1.7307	2.6845	0.2576	1.6359	1.8935	0.0000	7,062.4246	7,062.4246	1.4403	0.0000	7,098.4313
Maximum	**32.1245**	**38.1259**	**34.9332**	**0.0731**	**2.4324**	**1.8453**	**3.7511**	**0.5135**	**1.7371**	**1.9621**	**0.0000**	**7,062.4246**	**7,062.4246**	**1.4403**	**0.0000**	**7,098.4313**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.98**	**0.00**	**19.83**	**23.81**	**0.00**	**1.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	3/1/2019	5	44	
2	Site Preparation	Site Preparation	3/4/2019	5/3/2019	5	45	
3	Portable Installation	Building Construction	1/15/2019	3/16/2019	5	44	
4	Building Construction	Building Construction	5/6/2019	4/30/2020	5	259	
5	Paving	Paving	5/1/2020	6/30/2020	5	43	
6	Architectural Coating	Architectural Coating	3/1/2020	4/30/2020	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 201,501; Non-Residential Outdoor: 67,167; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.50
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	80	0.38
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Portable Installation	Cranes	1	8.00	231	0.29
Portable Installation	Excavators	0	8.00	158	0.38
Portable Installation	Forklifts	0	8.00	89	0.20
Portable Installation	Generator Sets	0	8.00	84	0.74
Portable Installation	Graders	0	8.00	187	0.41
Portable Installation	Rubber Tired Dozers	0	8.00	247	0.40
Portable Installation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Portable Installation	Welders	0	8.00	46	0.45
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Generator Sets	0	8.00	9	0.74
Building Construction	Pumps	1	8.00	84	0.74

Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	6.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Forklifts	3	8.00	89	0.20

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	904.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,575.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Portable Installation	1	56.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	56.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7804	0.0000	2.7804	0.4210	0.0000	0.4210			0.0000			0.0000
Off-Road	2.0685	15.8180	16.6948	0.0262		1.0307	1.0307		1.0079	1.0079		2,514.5723	2,514.5723	0.3990		2,524.5484
Total	**2.0685**	**15.8180**	**16.6948**	**0.0262**	**2.7804**	**1.0307**	**3.8111**	**0.4210**	**1.0079**	**1.4289**		**2,514.5723**	**2,514.5723**	**0.3990**		**2,524.5484**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1931	6.2927	1.3417	0.0164	0.3592	0.0231	0.3823	0.0985	0.0221	0.1206		1,776.1787	1,776.1787	0.1223		1,779.2368
Vendor	8.3100e-003	0.2315	0.0614	5.2000e-004	0.0128	1.4800e-003	0.0143	3.6900e-003	1.4100e-003	5.1000e-003		55.7629	55.7629	3.5700e-003		55.8523
Worker	0.0999	0.0734	0.9643	2.4400e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		242.5906	242.5906	8.3300e-003		242.7989
Total	**0.3013**	**6.5976**	**2.3674**	**0.0194**	**0.5956**	**0.0265**	**0.6221**	**0.1614**	**0.0253**	**0.1867**		**2,074.5322**	**2,074.5322**	**0.1342**		**2,077.8879**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1886	0.0000	1.1886	0.1800	0.0000	0.1800			0.0000			0.0000
Off-Road	2.0685	15.8180	16.6948	0.0262		1.0307	1.0307		1.0079	1.0079	0.0000	2,514.5723	2,514.5723	0.3990		2,524.5484
Total	**2.0685**	**15.8180**	**16.6948**	**0.0262**	**1.1886**	**1.0307**	**2.2193**	**0.1800**	**1.0079**	**1.1878**	**0.0000**	**2,514.5723**	**2,514.5723**	**0.3990**		**2,524.5484**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1931	6.2927	1.3417	0.0164	0.3592	0.0231	0.3823	0.0985	0.0221	0.1206		1,776.1787	1,776.1787	0.1223		1,779.2368
Vendor	8.3100e-003	0.2315	0.0614	5.2000e-004	0.0128	1.4800e-003	0.0143	3.6900e-003	1.4100e-003	5.1000e-003		55.7629	55.7629	3.5700e-003		55.8523
Worker	0.0999	0.0734	0.9643	2.4400e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		242.5906	242.5906	8.3300e-003		242.7989
Total	**0.3013**	**6.5976**	**2.3674**	**0.0194**	**0.5956**	**0.0265**	**0.6221**	**0.1614**	**0.0253**	**0.1867**		**2,074.5322**	**2,074.5322**	**0.1342**		**2,077.8879**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0277	0.0000	0.0277	4.2000e-003	0.0000	4.2000e-003			0.0000			0.0000
Off-Road	1.6539	16.0070	14.5327	0.0205		1.0420	1.0420		0.9594	0.9594		2,013.9098	2,013.9098	0.6299		2,029.6560
Total	**1.6539**	**16.0070**	**14.5327**	**0.0205**	**0.0277**	**1.0420**	**1.0697**	**4.2000e-003**	**0.9594**	**0.9636**		**2,013.9098**	**2,013.9098**	**0.6299**		**2,029.6560**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3289	10.7199	2.2856	0.0280	0.6119	0.0393	0.6513	0.1677	0.0376	0.2054		3,025.7911	3,025.7911	0.2084		3,031.0007
Vendor	8.3100e-003	0.2315	0.0614	5.2000e-004	0.0128	1.4800e-003	0.0143	3.6900e-003	1.4100e-003	5.1000e-003		55.7629	55.7629	3.5700e-003		55.8523
Worker	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	**0.4271**	**11.0175**	**3.2149**	**0.0307**	**0.8259**	**0.0426**	**0.8685**	**0.2248**	**0.0406**	**0.2654**		**3,299.8856**	**3,299.8856**	**0.2195**		**3,305.3720**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0118	0.0000	0.0118	1.7900e-003	0.0000	1.7900e-003			0.0000			0.0000
Off-Road	1.6539	16.0070	14.5327	0.0205		1.0420	1.0420		0.9594	0.9594	0.0000	2,013.9098	2,013.9098	0.6299		2,029.6560
Total	**1.6539**	**16.0070**	**14.5327**	**0.0205**	**0.0118**	**1.0420**	**1.0538**	**1.7900e-003**	**0.9594**	**0.9612**	**0.0000**	**2,013.9098**	**2,013.9098**	**0.6299**		**2,029.6560**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3289	10.7199	2.2856	0.0280	0.6119	0.0393	0.6513	0.1677	0.0376	0.2054		3,025.7911	3,025.7911	0.2084		3,031.0007
Vendor	8.3100e-003	0.2315	0.0614	5.2000e-004	0.0128	1.4800e-003	0.0143	3.6900e-003	1.4100e-003	5.1000e-003		55.7629	55.7629	3.5700e-003		55.8523
Worker	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	**0.4271**	**11.0175**	**3.2149**	**0.0307**	**0.8259**	**0.0426**	**0.8685**	**0.2248**	**0.0406**	**0.2654**		**3,299.8856**	**3,299.8856**	**0.2195**		**3,305.3720**

3.4 Portable Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5040	6.0070	2.2930	5.7700e-003		0.2546	0.2546		0.2343	0.2343		571.2106	571.2106	0.1807		575.7287
Total	**0.5040**	**6.0070**	**2.2930**	**5.7700e-003**		**0.2546**	**0.2546**		**0.2343**	**0.2343**		**571.2106**	**571.2106**	**0.1807**		**575.7287**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0120	0.3898	0.0831	1.0200e-003	0.0223	1.4300e-003	0.0237	6.1000e-003	1.3700e-003	7.4700e-003		110.0288	110.0288	7.5800e-003		110.2182
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2798	0.2056	2.7001	6.8200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		679.2536	679.2536	0.0233		679.8369
Total	**0.2917**	**0.5954**	**2.7832**	**7.8400e-003**	**0.6482**	**6.8300e-003**	**0.6550**	**0.1721**	**6.3400e-003**	**0.1785**		**789.2824**	**789.2824**	**0.0309**		**790.0551**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5040	6.0070	2.2930	5.7700e-003		0.2546	0.2546		0.2343	0.2343	0.0000	571.2106	571.2106	0.1807		575.7287
Total	**0.5040**	**6.0070**	**2.2930**	**5.7700e-003**		**0.2546**	**0.2546**		**0.2343**	**0.2343**	**0.0000**	**571.2106**	**571.2106**	**0.1807**		**575.7287**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0120	0.3898	0.0831	1.0200e-003	0.0223	1.4300e-003	0.0237	6.1000e-003	1.3700e-003	7.4700e-003		110.0288	110.0288	7.5800e-003		110.2182
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2798	0.2056	2.7001	6.8200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		679.2536	679.2536	0.0233		679.8369
Total	**0.2917**	**0.5954**	**2.7832**	**7.8400e-003**	**0.6482**	**6.8300e-003**	**0.6550**	**0.1721**	**6.3400e-003**	**0.1785**		**789.2824**	**789.2824**	**0.0309**		**790.0551**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4208	34.2170	29.5671	0.0539		1.8163	1.8163		1.7095	1.7095		5,189.0770	5,189.0770	1.3456		5,222.7165
Total	**3.4208**	**34.2170**	**29.5671**	**0.0539**		**1.8163**	**1.8163**		**1.7095**	**1.7095**		**5,189.0770**	**5,189.0770**	**1.3456**		**5,222.7165**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1330	3.7034	0.9827	8.3600e-003	0.2049	0.0236	0.2285	0.0590	0.0226	0.0816		892.2068	892.2068	0.0572		893.6362
Worker	0.2798	0.2056	2.7001	6.8200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		679.2536	679.2536	0.0233		679.8369
Total	**0.4127**	**3.9090**	**3.6828**	**0.0152**	**0.8308**	**0.0290**	**0.8598**	**0.2250**	**0.0276**	**0.2526**		**1,571.4604**	**1,571.4604**	**0.0805**		**1,573.4731**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4208	34.2170	29.5671	0.0539		1.8163	1.8163		1.7095	1.7095	0.0000	5,189.0770	5,189.0770	1.3456		5,222.7165
Total	**3.4208**	**34.2170**	**29.5671**	**0.0539**		**1.8163**	**1.8163**		**1.7095**	**1.7095**	**0.0000**	**5,189.0770**	**5,189.0770**	**1.3456**		**5,222.7165**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1330	3.7034	0.9827	8.3600e-003	0.2049	0.0236	0.2285	0.0590	0.0226	0.0816		892.2068	892.2068	0.0572		893.6362
Worker	0.2798	0.2056	2.7001	6.8200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		679.2536	679.2536	0.0233		679.8369
Total	**0.4127**	**3.9090**	**3.6828**	**0.0152**	**0.8308**	**0.0290**	**0.8598**	**0.2250**	**0.0276**	**0.2526**		**1,571.4604**	**1,571.4604**	**0.0805**		**1,573.4731**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1584	31.5861	29.2764	0.0539		1.5975	1.5975		1.5038	1.5038		5,106.5019	5,106.5019	1.3395		5,139.9903
Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**		**1.5975**	**1.5975**		**1.5038**	**1.5038**		**5,106.5019**	**5,106.5019**	**1.3395**		**5,139.9903**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1138	3.4039	0.8919	8.3000e-003	0.2049	0.0160	0.2209	0.0590	0.0153	0.0743		886.4790	886.4790	0.0541		887.8314
Worker	0.2577	0.1833	2.4519	6.6100e-003	0.6260	5.2300e-003	0.6312	0.1660	4.8200e-003	0.1708		658.6232	658.6232	0.0208		659.1423
Total	**0.3715**	**3.5873**	**3.3438**	**0.0149**	**0.8308**	**0.0213**	**0.8521**	**0.2250**	**0.0202**	**0.2451**		**1,545.1022**	**1,545.1022**	**0.0749**		**1,546.9738**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1584	31.5861	29.2764	0.0539		1.5975	1.5975		1.5038	1.5038	0.0000	5,106.5019	5,106.5019	1.3395		5,139.9903
Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**		**1.5975**	**1.5975**		**1.5038**	**1.5038**	**0.0000**	**5,106.5019**	**5,106.5019**	**1.3395**		**5,139.9903**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1138	3.4039	0.8919	8.3000e-003	0.2049	0.0160	0.2209	0.0590	0.0153	0.0743		886.4790	886.4790	0.0541		887.8314
Worker	0.2577	0.1833	2.4519	6.6100e-003	0.6260	5.2300e-003	0.6312	0.1660	4.8200e-003	0.1708		658.6232	658.6232	0.0208		659.1423
Total	**0.3715**	**3.5873**	**3.3438**	**0.0149**	**0.8308**	**0.0213**	**0.8521**	**0.2250**	**0.0202**	**0.2451**		**1,545.1022**	**1,545.1022**	**0.0749**		**1,546.9738**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3599	12.0472	11.8187	0.0192		0.6500	0.6500		0.6072	0.6072		1,715.0061	1,715.0061	0.4659		1,726.6541
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**		**0.6500**	**0.6500**		**0.6072**	**0.6072**		**1,715.0061**	**1,715.0061**	**0.4659**		**1,726.6541**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0640	1.9147	0.5017	4.6700e-003	0.1152	9.0100e-003	0.1243	0.0332	8.6200e-003	0.0418		498.6445	498.6445	0.0304		499.4052
Worker	0.1381	0.0982	1.3135	3.5400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		352.8339	352.8339	0.0111		353.1120
Total	**0.2021**	**2.0129**	**1.8152**	**8.2100e-003**	**0.4506**	**0.0118**	**0.4624**	**0.1221**	**0.0112**	**0.1333**		**851.4783**	**851.4783**	**0.0416**		**852.5171**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3599	12.0472	11.8187	0.0192		0.6500	0.6500		0.6072	0.6072	0.0000	1,715.0061	1,715.0061	0.4659		1,726.6541
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**		**0.6500**	**0.6500**		**0.6072**	**0.6072**	**0.0000**	**1,715.0061**	**1,715.0061**	**0.4659**		**1,726.6541**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0640	1.9147	0.5017	4.6700e-003	0.1152	9.0100e-003	0.1243	0.0332	8.6200e-003	0.0418		498.6445	498.6445	0.0304		499.4052
Worker	0.1381	0.0982	1.3135	3.5400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		352.8339	352.8339	0.0111		353.1120
Total	**0.2021**	**2.0129**	**1.8152**	**8.2100e-003**	**0.4506**	**0.0118**	**0.4624**	**0.1221**	**0.0112**	**0.1333**		**851.4783**	**851.4783**	**0.0416**		**852.5171**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3017					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**28.5439**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0360	0.4816	1.3000e-003	0.1230	1.0300e-003	0.1240	0.0326	9.5000e-004	0.0336		129.3724	129.3724	4.0800e-003		129.4744
Total	**0.0506**	**0.0360**	**0.4816**	**1.3000e-003**	**0.1230**	**1.0300e-003**	**0.1240**	**0.0326**	**9.5000e-004**	**0.0336**		**129.3724**	**129.3724**	**4.0800e-003**		**129.4744**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3017					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**28.5439**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0360	0.4816	1.3000e-003	0.1230	1.0300e-003	0.1240	0.0326	9.5000e-004	0.0336		129.3724	129.3724	4.0800e-003		129.4744
Total	**0.0506**	**0.0360**	**0.4816**	**1.3000e-003**	**0.1230**	**1.0300e-003**	**0.1240**	**0.0326**	**9.5000e-004**	**0.0336**		**129.3724**	**129.3724**	**4.0800e-003**		**129.4744**

Poly High School - Los Angeles-South Coast County, Winter

Poly High School

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	134.33	1000sqft	3.08	134,334.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2021
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Vehicle Trips - See CalEEMod Assumptions

Area Coating - .

Water And Wastewater - See CalEEMod Assumptions

Solid Waste - CalEEMod Assumptions

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	18.00	44.00
tblConstructionPhase	NumDays	230.00	44.00
tblConstructionPhase	NumDays	230.00	259.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	18.00	43.00
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	PhaseEndDate	10/30/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	7/4/2019	3/16/2019
tblConstructionPhase	PhaseEndDate	7/1/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	8/31/2020	6/30/2020
tblConstructionPhase	PhaseStartDate	9/1/2020	3/1/2020
tblConstructionPhase	PhaseStartDate	5/4/2019	1/15/2019
tblConstructionPhase	PhaseStartDate	7/5/2019	5/6/2019
tblConstructionPhase	PhaseStartDate	7/2/2020	5/1/2020
tblConstructionPhase	PhaseStartDate	3/2/2019	3/4/2019
tblGrading	MaterialExported	0.00	11,025.00
tblLandUse	BuildingSpaceSquareFeet	134,330.00	134,334.00
tblLandUse	LandUseSquareFeet	134,330.00	134,334.00
tblOffRoadEquipment	HorsePower	84.00	9.00

tblOffRoadEquipment	HorsePower	85.00	80.00
tblOffRoadEquipment	HorsePower	65.00	8.00
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.48	0.50
tblOffRoadEquipment	LoadFactor	0.78	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.43
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021

tblSolidWaste	SolidWasteGenerationRate	174.63	0.00
tblTripsAndVMT	HaulingTripNumber	565.00	904.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	HaulingTripNumber	1,378.00	1,575.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblWater	IndoorWaterUseRate	4,460,379.29	0.00
tblWater	OutdoorWaterUseRate	11,469,546.75	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.8696	38.1530	33.1281	0.0684	4.0242	1.8457	5.3433	0.7545	1.7374	2.0287	0.0000	6,696.7570	6,696.7570	1.4286	0.0000	6,732.4712
2020	32.1637	36.9160	34.7782	0.0724	0.9538	1.7310	2.6848	0.2576	1.6361	1.8937	0.0000	6,992.1586	6,992.1586	1.4424	0.0000	7,028.2179
Maximum	**32.1637**	**38.1530**	**34.7782**	**0.0724**	**4.0242**	**1.8457**	**5.3433**	**0.7545**	**1.7374**	**2.0287**	**0.0000**	**6,992.1586**	**6,992.1586**	**1.4424**	**0.0000**	**7,028.2179**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.8696	38.1530	33.1281	0.0684	2.4324	1.8457	3.7515	0.5135	1.7374	1.9624	0.0000	6,696.7570	6,696.7570	1.4286	0.0000	6,732.4712
2020	32.1637	36.9160	34.7782	0.0724	0.9538	1.7310	2.6848	0.2576	1.6361	1.8937	0.0000	6,992.1586	6,992.1586	1.4424	0.0000	7,028.2179
Maximum	**32.1637**	**38.1530**	**34.7782**	**0.0724**	**2.4324**	**1.8457**	**3.7515**	**0.5135**	**1.7374**	**1.9624**	**0.0000**	**6,992.1586**	**6,992.1586**	**1.4424**	**0.0000**	**7,028.2179**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.98**	**0.00**	**19.83**	**23.81**	**0.00**	**1.69**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	3/1/2019	5	44	
2	Site Preparation	Site Preparation	3/4/2019	5/3/2019	5	45	
3	Portable Installation	Building Construction	1/15/2019	3/16/2019	5	44	
4	Building Construction	Building Construction	5/6/2019	4/30/2020	5	259	
5	Paving	Paving	5/1/2020	6/30/2020	5	43	
6	Architectural Coating	Architectural Coating	3/1/2020	4/30/2020	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 201,501; Non-Residential Outdoor: 67,167; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.50
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	80	0.38
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Portable Installation	Cranes	1	8.00	231	0.29
Portable Installation	Excavators	0	8.00	158	0.38
Portable Installation	Forklifts	0	8.00	89	0.20
Portable Installation	Generator Sets	0	8.00	84	0.74
Portable Installation	Graders	0	8.00	187	0.41
Portable Installation	Rubber Tired Dozers	0	8.00	247	0.40
Portable Installation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Portable Installation	Welders	0	8.00	46	0.45
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Generator Sets	0	8.00	9	0.74

Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	6.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Forklifts	3	8.00	89	0.20

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	904.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,575.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Portable Installation	1	56.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	56.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7804	0.0000	2.7804	0.4210	0.0000	0.4210			0.0000			0.0000
Off-Road	2.0685	15.8180	16.6948	0.0262		1.0307	1.0307		1.0079	1.0079		2,514.5723	2,514.5723	0.3990		2,524.5484
Total	**2.0685**	**15.8180**	**16.6948**	**0.0262**	**2.7804**	**1.0307**	**3.8111**	**0.4210**	**1.0079**	**1.4289**		**2,514.5723**	**2,514.5723**	**0.3990**		**2,524.5484**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1979	6.3767	1.4323	0.0161	0.3592	0.0235	0.3827	0.0985	0.0225	0.1210		1,746.0548	1,746.0548	0.1270		1,749.2294
Vendor	8.6700e-003	0.2318	0.0677	5.1000e-004	0.0128	1.5000e-003	0.0143	3.6900e-003	1.4300e-003	5.1200e-003		54.2554	54.2554	3.8100e-003		54.3507
Worker	0.1108	0.0813	0.8850	2.2900e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		228.4262	228.4262	7.8600e-003		228.6226
Total	**0.3173**	**6.6898**	**2.3850**	**0.0189**	**0.5956**	**0.0270**	**0.6225**	**0.1614**	**0.0257**	**0.1872**		**2,028.7364**	**2,028.7364**	**0.1387**		**2,032.2028**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1886	0.0000	1.1886	0.1800	0.0000	0.1800			0.0000			0.0000
Off-Road	2.0685	15.8180	16.6948	0.0262		1.0307	1.0307		1.0079	1.0079	0.0000	2,514.5723	2,514.5723	0.3990		2,524.5484
Total	**2.0685**	**15.8180**	**16.6948**	**0.0262**	**1.1886**	**1.0307**	**2.2193**	**0.1800**	**1.0079**	**1.1878**	**0.0000**	**2,514.5723**	**2,514.5723**	**0.3990**		**2,524.5484**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1979	6.3767	1.4323	0.0161	0.3592	0.0235	0.3827	0.0985	0.0225	0.1210		1,746.0548	1,746.0548	0.1270		1,749.2294
Vendor	8.6700e-003	0.2318	0.0677	5.1000e-004	0.0128	1.5000e-003	0.0143	3.6900e-003	1.4300e-003	5.1200e-003		54.2554	54.2554	3.8100e-003		54.3507
Worker	0.1108	0.0813	0.8850	2.2900e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		228.4262	228.4262	7.8600e-003		228.6226
Total	**0.3173**	**6.6898**	**2.3850**	**0.0189**	**0.5956**	**0.0270**	**0.6225**	**0.1614**	**0.0257**	**0.1872**		**2,028.7364**	**2,028.7364**	**0.1387**		**2,032.2028**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0277	0.0000	0.0277	4.2000e-003	0.0000	4.2000e-003			0.0000			0.0000
Off-Road	1.6539	16.0070	14.5327	0.0205		1.0420	1.0420		0.9594	0.9594		2,013.9098	2,013.9098	0.6299		2,029.6560
Total	**1.6539**	**16.0070**	**14.5327**	**0.0205**	**0.0277**	**1.0420**	**1.0697**	**4.2000e-003**	**0.9594**	**0.9636**		**2,013.9098**	**2,013.9098**	**0.6299**		**2,029.6560**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3371	10.8630	2.4400	0.0275	0.6119	0.0401	0.6520	0.1677	0.0383	0.2061		2,974.4739	2,974.4739	0.2163		2,979.8820
Vendor	8.6700e-003	0.2318	0.0677	5.1000e-004	0.0128	1.5000e-003	0.0143	3.6900e-003	1.4300e-003	5.1200e-003		54.2554	54.2554	3.8100e-003		54.3507
Worker	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
Total	**0.4455**	**11.1679**	**3.3042**	**0.0301**	**0.8259**	**0.0433**	**0.8692**	**0.2248**	**0.0414**	**0.2662**		**3,234.3129**	**3,234.3129**	**0.2272**		**3,239.9930**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0118	0.0000	0.0118	1.7900e-003	0.0000	1.7900e-003			0.0000			0.0000
Off-Road	1.6539	16.0070	14.5327	0.0205		1.0420	1.0420		0.9594	0.9594	0.0000	2,013.9098	2,013.9098	0.6299		2,029.6560
Total	**1.6539**	**16.0070**	**14.5327**	**0.0205**	**0.0118**	**1.0420**	**1.0538**	**1.7900e-003**	**0.9594**	**0.9612**	**0.0000**	**2,013.9098**	**2,013.9098**	**0.6299**		**2,029.6560**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3371	10.8630	2.4400	0.0275	0.6119	0.0401	0.6520	0.1677	0.0383	0.2061		2,974.4739	2,974.4739	0.2163		2,979.8820
Vendor	8.6700e-003	0.2318	0.0677	5.1000e-004	0.0128	1.5000e-003	0.0143	3.6900e-003	1.4300e-003	5.1200e-003		54.2554	54.2554	3.8100e-003		54.3507
Worker	0.0997	0.0732	0.7965	2.0700e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
Total	**0.4455**	**11.1679**	**3.3042**	**0.0301**	**0.8259**	**0.0433**	**0.8692**	**0.2248**	**0.0414**	**0.2662**		**3,234.3129**	**3,234.3129**	**0.2272**		**3,239.9930**

3.4 Portable Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5040	6.0070	2.2930	5.7700e-003		0.2546	0.2546		0.2343	0.2343		571.2106	571.2106	0.1807		575.7287
Total	**0.5040**	**6.0070**	**2.2930**	**5.7700e-003**		**0.2546**	**0.2546**		**0.2343**	**0.2343**		**571.2106**	**571.2106**	**0.1807**		**575.7287**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0123	0.3950	0.0887	1.0000e-003	0.0223	1.4600e-003	0.0237	6.1000e-003	1.3900e-003	7.4900e-003		108.1627	108.1627	7.8700e-003		108.3593
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3101	0.2277	2.4779	6.4200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		639.5933	639.5933	0.0220		640.1433
Total	**0.3224**	**0.6227**	**2.5666**	**7.4200e-003**	**0.6482**	**6.8600e-003**	**0.6551**	**0.1721**	**6.3600e-003**	**0.1785**		**747.7560**	**747.7560**	**0.0299**		**748.5027**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5040	6.0070	2.2930	5.7700e-003		0.2546	0.2546		0.2343	0.2343	0.0000	571.2106	571.2106	0.1807		575.7287
Total	**0.5040**	**6.0070**	**2.2930**	**5.7700e-003**		**0.2546**	**0.2546**		**0.2343**	**0.2343**	**0.0000**	**571.2106**	**571.2106**	**0.1807**		**575.7287**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0123	0.3950	0.0887	1.0000e-003	0.0223	1.4600e-003	0.0237	6.1000e-003	1.3900e-003	7.4900e-003		108.1627	108.1627	7.8700e-003		108.3593
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3101	0.2277	2.4779	6.4200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		639.5933	639.5933	0.0220		640.1433
Total	**0.3224**	**0.6227**	**2.5666**	**7.4200e-003**	**0.6482**	**6.8600e-003**	**0.6551**	**0.1721**	**6.3600e-003**	**0.1785**		**747.7560**	**747.7560**	**0.0299**		**748.5027**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4208	34.2170	29.5671	0.0539		1.8163	1.8163		1.7095	1.7095		5,189.0770	5,189.0770	1.3456		5,222.7165
Total	**3.4208**	**34.2170**	**29.5671**	**0.0539**		**1.8163**	**1.8163**		**1.7095**	**1.7095**		**5,189.0770**	**5,189.0770**	**1.3456**		**5,222.7165**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1387	3.7083	1.0831	8.1400e-003	0.2049	0.0240	0.2289	0.0590	0.0230	0.0819		868.0868	868.0868	0.0610		869.6113
Worker	0.3101	0.2277	2.4779	6.4200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		639.5933	639.5933	0.0220		640.1433
Total	**0.4488**	**3.9360**	**3.5610**	**0.0146**	**0.8308**	**0.0294**	**0.8602**	**0.2250**	**0.0279**	**0.2529**		**1,507.6800**	**1,507.6800**	**0.0830**		**1,509.7546**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4208	34.2170	29.5671	0.0539		1.8163	1.8163		1.7095	1.7095	0.0000	5,189.0770	5,189.0770	1.3456		5,222.7165
Total	**3.4208**	**34.2170**	**29.5671**	**0.0539**		**1.8163**	**1.8163**		**1.7095**	**1.7095**	**0.0000**	**5,189.0770**	**5,189.0770**	**1.3456**		**5,222.7165**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1387	3.7083	1.0831	8.1400e-003	0.2049	0.0240	0.2289	0.0590	0.0230	0.0819		868.0868	868.0868	0.0610		869.6113
Worker	0.3101	0.2277	2.4779	6.4200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		639.5933	639.5933	0.0220		640.1433
Total	**0.4488**	**3.9360**	**3.5610**	**0.0146**	**0.8308**	**0.0294**	**0.8602**	**0.2250**	**0.0279**	**0.2529**		**1,507.6800**	**1,507.6800**	**0.0830**		**1,509.7546**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1584	31.5861	29.2764	0.0539		1.5975	1.5975		1.5038	1.5038		5,106.5019	5,106.5019	1.3395		5,139.9903
Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**		**1.5975**	**1.5975**		**1.5038**	**1.5038**		**5,106.5019**	**5,106.5019**	**1.3395**		**5,139.9903**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1190	3.4032	0.9836	8.0800e-003	0.2049	0.0163	0.2211	0.0590	0.0156	0.0746		862.2370	862.2370	0.0577		863.6784
Worker	0.2862	0.2030	2.2457	6.2300e-003	0.6260	5.2300e-003	0.6312	0.1660	4.8200e-003	0.1708		620.1554	620.1554	0.0196		620.6441
Total	**0.4052**	**3.6062**	**3.2293**	**0.0143**	**0.8308**	**0.0215**	**0.8523**	**0.2250**	**0.0204**	**0.2454**		**1,482.3924**	**1,482.3924**	**0.0772**		**1,484.3225**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1584	31.5861	29.2764	0.0539		1.5975	1.5975		1.5038	1.5038	0.0000	5,106.5019	5,106.5019	1.3395		5,139.9903
Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**		**1.5975**	**1.5975**		**1.5038**	**1.5038**	**0.0000**	**5,106.5019**	**5,106.5019**	**1.3395**		**5,139.9903**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1190	3.4032	0.9836	8.0800e-003	0.2049	0.0163	0.2211	0.0590	0.0156	0.0746		862.2370	862.2370	0.0577		863.6784
Worker	0.2862	0.2030	2.2457	6.2300e-003	0.6260	5.2300e-003	0.6312	0.1660	4.8200e-003	0.1708		620.1554	620.1554	0.0196		620.6441
Total	**0.4052**	**3.6062**	**3.2293**	**0.0143**	**0.8308**	**0.0215**	**0.8523**	**0.2250**	**0.0204**	**0.2454**		**1,482.3924**	**1,482.3924**	**0.0772**		**1,484.3225**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3599	12.0472	11.8187	0.0192		0.6500	0.6500		0.6072	0.6072		1,715.0061	1,715.0061	0.4659		1,726.6541
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**		**0.6500**	**0.6500**		**0.6072**	**0.6072**		**1,715.0061**	**1,715.0061**	**0.4659**		**1,726.6541**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0669	1.9143	0.5533	4.5400e-003	0.1152	9.1600e-003	0.1244	0.0332	8.7600e-003	0.0419		485.0083	485.0083	0.0324		485.8191
Worker	0.1533	0.1087	1.2030	3.3400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		332.2261	332.2261	0.0105		332.4879
Total	**0.2202**	**2.0231**	**1.7563**	**7.8800e-003**	**0.4506**	**0.0120**	**0.4625**	**0.1221**	**0.0113**	**0.1335**		**817.2344**	**817.2344**	**0.0429**		**818.3070**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3599	12.0472	11.8187	0.0192		0.6500	0.6500		0.6072	0.6072	0.0000	1,715.0061	1,715.0061	0.4659		1,726.6541
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**		**0.6500**	**0.6500**		**0.6072**	**0.6072**	**0.0000**	**1,715.0061**	**1,715.0061**	**0.4659**		**1,726.6541**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0669	1.9143	0.5533	4.5400e-003	0.1152	9.1600e-003	0.1244	0.0332	8.7600e-003	0.0419		485.0083	485.0083	0.0324		485.8191
Worker	0.1533	0.1087	1.2030	3.3400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		332.2261	332.2261	0.0105		332.4879
Total	**0.2202**	**2.0231**	**1.7563**	**7.8800e-003**	**0.4506**	**0.0120**	**0.4625**	**0.1221**	**0.0113**	**0.1335**		**817.2344**	**817.2344**	**0.0429**		**818.3070**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3017					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**28.5439**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0562	0.0399	0.4411	1.2200e-003	0.1230	1.0300e-003	0.1240	0.0326	9.5000e-004	0.0336		121.8162	121.8162	3.8400e-003		121.9122
Total	**0.0562**	**0.0399**	**0.4411**	**1.2200e-003**	**0.1230**	**1.0300e-003**	**0.1240**	**0.0326**	**9.5000e-004**	**0.0336**		**121.8162**	**121.8162**	**3.8400e-003**		**121.9122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.3017					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**28.5439**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0562	0.0399	0.4411	1.2200e-003	0.1230	1.0300e-003	0.1240	0.0326	9.5000e-004	0.0336		121.8162	121.8162	3.8400e-003		121.9122
Total	**0.0562**	**0.0399**	**0.4411**	**1.2200e-003**	**0.1230**	**1.0300e-003**	**0.1240**	**0.0326**	**9.5000e-004**	**0.0336**		**121.8162**	**121.8162**	**3.8400e-003**		**121.9122**

Poly High School Phase 2

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	176.43	1000sqft	4.05	176,430.00	0
Other Asphalt Surfaces	275.94	1000sqft	6.33	275,945.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Trips and VMT - See CalEEMod Assumptions File

Demolition -

Grading -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Vehicle Trips - CalEEMod Defaults

Water And Wastewater - CalEEMod Defaults

Solid Waste - See CalEEMod Defaults

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	300.00	259.00
tblConstructionPhase	NumDays	300.00	45.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	PhaseEndDate	5/4/2022	11/26/2021
tblConstructionPhase	PhaseEndDate	4/1/2022	1/28/2022
tblConstructionPhase	PhaseStartDate	4/2/2022	10/27/2021
tblConstructionPhase	PhaseStartDate	11/27/2021	11/29/2021
tblConstructionPhase	PhaseStartDate	1/29/2022	11/29/2021
tblGrading	MaterialExported	0.00	10,535.00
tblLandUse	BuildingSpaceSquareFeet	275,940.00	275,945.00
tblLandUse	LandUseSquareFeet	275,940.00	275,945.00
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	86.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	229.36	0.00
tblTripsAndVMT	HaulingTripNumber	545.00	872.00
tblTripsAndVMT	HaulingTripNumber	1,317.00	1,505.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	74.00	84.00
tblTripsAndVMT	VendorTripNumber	74.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00

tblWater	IndoorWaterUseRate	5,858,294.64	0.00
tblWater	OutdoorWaterUseRate	15,064,186.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1587	1.6218	1.4147	3.4500e-003	0.1195	0.0688	0.1883	0.0253	0.0655	0.0908	0.0000	313.1696	313.1696	0.0456	0.0000	314.3093
2021	1.4014	4.9383	5.1352	0.0126	0.3678	0.1935	0.5613	0.0987	0.1830	0.2817	0.0000	1,119.1045	1,119.1045	0.1759	0.0000	1,123.5012
2022	0.0286	0.1698	0.2178	5.4000e-004	0.0441	6.9100e-003	0.0510	0.0114	6.4500e-003	0.0178	0.0000	46.9634	46.9634	6.7700e-003	0.0000	47.1327
Maximum	**1.4014**	**4.9383**	**5.1352**	**0.0126**	**0.3678**	**0.1935**	**0.5613**	**0.0987**	**0.1830**	**0.2817**	**0.0000**	**1,119.1045**	**1,119.1045**	**0.1759**	**0.0000**	**1,123.5012**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1587	1.6218	1.4147	3.4500e-003	0.0810	0.0688	0.1498	0.0190	0.0655	0.0846	0.0000	313.1694	313.1694	0.0456	0.0000	314.3091
2021	1.4014	4.9382	5.1352	0.0126	0.3398	0.1935	0.5332	0.0918	0.1830	0.2748	0.0000	1,119.1037	1,119.1037	0.1759	0.0000	1,123.5004
2022	0.0286	0.1698	0.2178	5.4000e-004	0.0404	6.9100e-003	0.0473	0.0105	6.4500e-003	0.0169	0.0000	46.9634	46.9634	6.7700e-003	0.0000	47.1327
Maximum	**1.4014**	**4.9382**	**5.1352**	**0.0126**	**0.3398**	**0.1935**	**0.5332**	**0.0918**	**0.1830**	**0.2748**	**0.0000**	**1,119.1037**	**1,119.1037**	**0.1759**	**0.0000**	**1,123.5004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**13.20**	**0.00**	**8.76**	**10.36**	**0.00**	**3.59**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2020	10-31-2020	0.9705	0.9705
2	11-1-2020	1-31-2021	1.2580	1.2580
3	2-1-2021	4-30-2021	1.3206	1.3206
4	5-1-2021	7-31-2021	1.3619	1.3619
5	8-1-2021	10-31-2021	1.5417	1.5417
6	11-1-2021	1-31-2022	1.6249	1.6249
		Highest	1.6249	1.6249

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2020	9/30/2020	5	43	
2	Site Preparation	Site Preparation	10/1/2020	11/30/2020	5	43	
3	Building Construction	Building Construction	12/1/2020	11/26/2021	5	259	
4	Temporary Portables Removal	Building Construction	11/29/2021	1/28/2022	5	45	
5	Paving	Paving	11/29/2021	1/28/2022	5	45	
6	Architectural Coating	Architectural Coating	10/27/2021	11/26/2021	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 264,645; Non-Residential Outdoor: 88,215; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.48
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	85	0.78
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Temporary Portables Removal	Cranes	1	8.00	231	0.29
Temporary Portables Removal	Excavators	0	8.00	158	0.38
Temporary Portables Removal	Forklifts	0	8.00	89	0.20
Temporary Portables Removal	Generator Sets	0	8.00	84	0.74
Temporary Portables Removal	Graders	0	8.00	187	0.41
Temporary Portables Removal	Rubber Tired Dozers	0	8.00	247	0.40
Temporary Portables Removal	Scrapers	0	8.00	367	0.48
Temporary Portables Removal	Tractors/Loaders/Backhoes	0	7.00	97	0.37

Temporary Portables Removal	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Temporary Portables Removal	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	86.00	78	0.48
Building Construction	Forklifts	3	8.00	89	0.20

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	872.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,505.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	190.00	84.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Temporary Portables Removal	1	190.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0589	0.0000	0.0589	8.9200e-003	0.0000	8.9200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0611	0.4616	0.5349	8.5000e-004		0.0283	0.0283		0.0278	0.0278	0.0000	73.0476	73.0476	0.0103	0.0000	73.3057
Total	**0.0611**	**0.4616**	**0.5349**	**8.5000e-004**	**0.0589**	**0.0283**	**0.0872**	**8.9200e-003**	**0.0278**	**0.0367**	**0.0000**	**73.0476**	**73.0476**	**0.0103**	**0.0000**	**73.3057**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8500e-003	0.1295	0.0285	3.4000e-004	7.4900e-003	4.0000e-004	7.9000e-003	2.0600e-003	3.9000e-004	2.4400e-003	0.0000	33.6061	33.6061	2.3400e-003	0.0000	33.6646
Vendor	1.6000e-004	4.6600e-003	1.2600e-003	1.0000e-005	2.7000e-004	2.0000e-005	2.9000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0682	1.0682	7.0000e-005	0.0000	1.0699
Worker	1.9800e-003	1.6000e-003	0.0177	5.0000e-005	4.7100e-003	4.0000e-005	4.7500e-003	1.2500e-003	4.0000e-005	1.2900e-003	0.0000	4.3918	4.3918	1.4000e-004	0.0000	4.3953
Total	**5.9900e-003**	**0.1357**	**0.0475**	**4.0000e-004**	**0.0125**	**4.6000e-004**	**0.0129**	**3.3900e-003**	**4.5000e-004**	**3.8300e-003**	**0.0000**	**39.0661**	**39.0661**	**2.5500e-003**	**0.0000**	**39.1298**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0252	0.0000	0.0252	3.8200e-003	0.0000	3.8200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0611	0.4616	0.5349	8.5000e-004		0.0283	0.0283		0.0278	0.0278	0.0000	73.0476	73.0476	0.0103	0.0000	73.3056
Total	**0.0611**	**0.4616**	**0.5349**	**8.5000e-004**	**0.0252**	**0.0283**	**0.0535**	**3.8200e-003**	**0.0278**	**0.0316**	**0.0000**	**73.0476**	**73.0476**	**0.0103**	**0.0000**	**73.3056**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8500e-003	0.1295	0.0285	3.4000e-004	6.9900e-003	4.0000e-004	7.3900e-003	1.9300e-003	3.9000e-004	2.3200e-003	0.0000	33.6061	33.6061	2.3400e-003	0.0000	33.6646
Vendor	1.6000e-004	4.6600e-003	1.2600e-003	1.0000e-005	2.5000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.0682	1.0682	7.0000e-005	0.0000	1.0699
Worker	1.9800e-003	1.6000e-003	0.0177	5.0000e-005	4.3400e-003	4.0000e-005	4.3800e-003	1.1600e-003	4.0000e-005	1.2000e-003	0.0000	4.3918	4.3918	1.4000e-004	0.0000	4.3953
Total	**5.9900e-003**	**0.1357**	**0.0475**	**4.0000e-004**	**0.0116**	**4.6000e-004**	**0.0121**	**3.1600e-003**	**4.5000e-004**	**3.6100e-003**	**0.0000**	**39.0661**	**39.0661**	**2.5500e-003**	**0.0000**	**39.1298**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0000e-004	0.0000	6.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3189	0.3109	4.4000e-004		0.0203	0.0203		0.0187	0.0187	0.0000	38.4449	38.4449	0.0123	0.0000	38.7520
Total	**0.0331**	**0.3189**	**0.3109**	**4.4000e-004**	**6.0000e-004**	**0.0203**	**0.0209**	**9.0000e-005**	**0.0187**	**0.0188**	**0.0000**	**38.4449**	**38.4449**	**0.0123**	**0.0000**	**38.7520**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.6400e-003	0.2235	0.0493	5.9000e-004	0.0129	7.0000e-004	0.0136	3.5500e-003	6.6000e-004	4.2200e-003	0.0000	58.0014	58.0014	4.0400e-003	0.0000	58.1024
Vendor	1.6000e-004	4.6600e-003	1.2600e-003	1.0000e-005	2.7000e-004	2.0000e-005	2.9000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0682	1.0682	7.0000e-005	0.0000	1.0699
Worker	1.7900e-003	1.4400e-003	0.0159	4.0000e-005	4.2400e-003	4.0000e-005	4.2800e-003	1.1300e-003	3.0000e-005	1.1600e-003	0.0000	3.9526	3.9526	1.2000e-004	0.0000	3.9557
Total	**8.5900e-003**	**0.2296**	**0.0665**	**6.4000e-004**	**0.0174**	**7.6000e-004**	**0.0182**	**4.7600e-003**	**7.1000e-004**	**5.4800e-003**	**0.0000**	**63.0222**	**63.0222**	**4.2300e-003**	**0.0000**	**63.1280**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.5000e-004	0.0000	2.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3189	0.3109	4.4000e-004		0.0203	0.0203		0.0187	0.0187	0.0000	38.4448	38.4448	0.0123	0.0000	38.7520
Total	**0.0331**	**0.3189**	**0.3109**	**4.4000e-004**	**2.5000e-004**	**0.0203**	**0.0205**	**4.0000e-005**	**0.0187**	**0.0187**	**0.0000**	**38.4448**	**38.4448**	**0.0123**	**0.0000**	**38.7520**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.6400e-003	0.2235	0.0493	5.9000e-004	0.0121	7.0000e-004	0.0128	3.3400e-003	6.6000e-004	4.0000e-003	0.0000	58.0014	58.0014	4.0400e-003	0.0000	58.1024
Vendor	1.6000e-004	4.6600e-003	1.2600e-003	1.0000e-005	2.5000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.0682	1.0682	7.0000e-005	0.0000	1.0699
Worker	1.7900e-003	1.4400e-003	0.0159	4.0000e-005	3.9100e-003	4.0000e-005	3.9500e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.9526	3.9526	1.2000e-004	0.0000	3.9557
Total	**8.5900e-003**	**0.2296**	**0.0665**	**6.4000e-004**	**0.0162**	**7.6000e-004**	**0.0170**	**4.4600e-003**	**7.1000e-004**	**5.1700e-003**	**0.0000**	**63.0222**	**63.0222**	**4.2300e-003**	**0.0000**	**63.1280**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0363	0.3632	0.3367	6.2000e-004		0.0184	0.0184		0.0173	0.0173	0.0000	53.2742	53.2742	0.0140	0.0000	53.6236
Total	**0.0363**	**0.3632**	**0.3367**	**6.2000e-004**		**0.0184**	**0.0184**		**0.0173**	**0.0173**	**0.0000**	**53.2742**	**53.2742**	**0.0140**	**0.0000**	**53.6236**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-003	0.1047	0.0283	2.5000e-004	6.0800e-003	4.9000e-004	6.5700e-003	1.7600e-003	4.7000e-004	2.2200e-003	0.0000	23.9980	23.9980	1.5200e-003	0.0000	24.0361
Worker	0.0101	8.1300e-003	0.0899	2.5000e-004	0.0239	2.0000e-004	0.0242	6.3600e-003	1.9000e-004	6.5500e-003	0.0000	22.3165	22.3165	7.0000e-004	0.0000	22.3341
Total	**0.0136**	**0.1128**	**0.1183**	**5.0000e-004**	**0.0300**	**6.9000e-004**	**0.0307**	**8.1200e-003**	**6.6000e-004**	**8.7700e-003**	**0.0000**	**46.3145**	**46.3145**	**2.2200e-003**	**0.0000**	**46.3702**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0363	0.3632	0.3367	6.2000e-004		0.0184	0.0184		0.0173	0.0173	0.0000	53.2742	53.2742	0.0140	0.0000	53.6235
Total	**0.0363**	**0.3632**	**0.3367**	**6.2000e-004**		**0.0184**	**0.0184**		**0.0173**	**0.0173**	**0.0000**	**53.2742**	**53.2742**	**0.0140**	**0.0000**	**53.6235**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-003	0.1047	0.0283	2.5000e-004	5.7000e-003	4.9000e-004	6.1800e-003	1.6600e-003	4.7000e-004	2.1300e-003	0.0000	23.9980	23.9980	1.5200e-003	0.0000	24.0361
Worker	0.0101	8.1300e-003	0.0899	2.5000e-004	0.0221	2.0000e-004	0.0223	5.9000e-003	1.9000e-004	6.0900e-003	0.0000	22.3165	22.3165	7.0000e-004	0.0000	22.3341
Total	**0.0136**	**0.1128**	**0.1183**	**5.0000e-004**	**0.0278**	**6.9000e-004**	**0.0285**	**7.5600e-003**	**6.6000e-004**	**8.2200e-003**	**0.0000**	**46.3145**	**46.3145**	**2.2200e-003**	**0.0000**	**46.3702**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3416	3.3948	3.4231	6.3700e-003		0.1639	0.1639		0.1543	0.1543	0.0000	546.9423	546.9423	0.1428	0.0000	550.5120
Total	**0.3416**	**3.3948**	**3.4231**	**6.3700e-003**		**0.1639**	**0.1639**		**0.1543**	**0.1543**	**0.0000**	**546.9423**	**546.9423**	**0.1428**	**0.0000**	**550.5120**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0308	0.9782	0.2652	2.5200e-003	0.0624	1.9900e-003	0.0644	0.0180	1.9100e-003	0.0199	0.0000	244.3274	244.3274	0.0150	0.0000	244.7021
Worker	0.0965	0.0751	0.8478	2.4500e-003	0.2457	2.0200e-003	0.2477	0.0653	1.8700e-003	0.0671	0.0000	221.7152	221.7152	6.5200e-003	0.0000	221.8783
Total	**0.1273**	**1.0533**	**1.1130**	**4.9700e-003**	**0.3081**	**4.0100e-003**	**0.3121**	**0.0833**	**3.7800e-003**	**0.0871**	**0.0000**	**466.0426**	**466.0426**	**0.0215**	**0.0000**	**466.5804**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3416	3.3948	3.4231	6.3700e-003		0.1639	0.1639		0.1543	0.1543	0.0000	546.9416	546.9416	0.1428	0.0000	550.5113
Total	**0.3416**	**3.3948**	**3.4231**	**6.3700e-003**		**0.1639**	**0.1639**		**0.1543**	**0.1543**	**0.0000**	**546.9416**	**546.9416**	**0.1428**	**0.0000**	**550.5113**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0308	0.9782	0.2652	2.5200e-003	0.0585	1.9900e-003	0.0605	0.0170	1.9100e-003	0.0190	0.0000	244.3274	244.3274	0.0150	0.0000	244.7021
Worker	0.0965	0.0751	0.8478	2.4500e-003	0.2265	2.0200e-003	0.2285	0.0606	1.8700e-003	0.0624	0.0000	221.7152	221.7152	6.5200e-003	0.0000	221.8783
Total	**0.1273**	**1.0533**	**1.1130**	**4.9700e-003**	**0.2850**	**4.0100e-003**	**0.2890**	**0.0776**	**3.7800e-003**	**0.0814**	**0.0000**	**466.0426**	**466.0426**	**0.0215**	**0.0000**	**466.5804**

3.5 Temporary Portables Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.1600e-003	0.0606	0.0248	7.0000e-005		2.4600e-003	2.4600e-003		2.2600e-003	2.2600e-003	0.0000	6.3360	6.3360	2.0500e-003	0.0000	6.3872
Total	**5.1600e-003**	**0.0606**	**0.0248**	**7.0000e-005**		**2.4600e-003**	**2.4600e-003**		**2.2600e-003**	**2.2600e-003**	**0.0000**	**6.3360**	**6.3360**	**2.0500e-003**	**0.0000**	**6.3872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.3100e-003	1.0000e-003	1.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	1.1858	1.1858	8.0000e-005	0.0000	1.1879
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	7.9600e-003	0.0898	2.6000e-004	0.0486	2.1000e-004	0.0488	0.0125	2.0000e-004	0.0127	0.0000	23.4868	23.4868	6.9000e-004	0.0000	23.5041
Total	**0.0104**	**0.0123**	**0.0908**	**2.7000e-004**	**0.0494**	**2.2000e-004**	**0.0496**	**0.0127**	**2.1000e-004**	**0.0129**	**0.0000**	**24.6726**	**24.6726**	**7.7000e-004**	**0.0000**	**24.6919**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.1600e-003	0.0606	0.0248	7.0000e-005		2.4600e-003	2.4600e-003		2.2600e-003	2.2600e-003	0.0000	6.3360	6.3360	2.0500e-003	0.0000	6.3872
Total	**5.1600e-003**	**0.0606**	**0.0248**	**7.0000e-005**		**2.4600e-003**	**2.4600e-003**		**2.2600e-003**	**2.2600e-003**	**0.0000**	**6.3360**	**6.3360**	**2.0500e-003**	**0.0000**	**6.3872**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.3100e-003	1.0000e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.4000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	1.1858	1.1858	8.0000e-005	0.0000	1.1879
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	7.9600e-003	0.0898	2.6000e-004	0.0445	2.1000e-004	0.0447	0.0115	2.0000e-004	0.0117	0.0000	23.4868	23.4868	6.9000e-004	0.0000	23.5041
Total	**0.0104**	**0.0123**	**0.0908**	**2.7000e-004**	**0.0452**	**2.2000e-004**	**0.0455**	**0.0116**	**2.1000e-004**	**0.0119**	**0.0000**	**24.6726**	**24.6726**	**7.7000e-004**	**0.0000**	**24.6919**

3.5 Temporary Portables Removal - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.7300e-003	0.0418	0.0189	6.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.0696	5.0696	1.6400e-003	0.0000	5.1106
Total	**3.7300e-003**	**0.0418**	**0.0189**	**6.0000e-005**		**1.7400e-003**	**1.7400e-003**		**1.6000e-003**	**1.6000e-003**	**0.0000**	**5.0696**	**5.0696**	**1.6400e-003**	**0.0000**	**5.1106**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-004	3.2000e-003	7.9000e-004	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.9374	0.9374	6.0000e-005	0.0000	0.9390
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6700e-003	5.7500e-003	0.0662	2.0000e-004	0.0389	1.7000e-004	0.0390	9.9600e-003	1.5000e-004	0.0101	0.0000	18.1289	18.1289	5.0000e-004	0.0000	18.1414
Total	**7.7700e-003**	**8.9500e-003**	**0.0670**	**2.1000e-004**	**0.0397**	**1.8000e-004**	**0.0398**	**0.0102**	**1.6000e-004**	**0.0103**	**0.0000**	**19.0663**	**19.0663**	**5.6000e-004**	**0.0000**	**19.0804**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.7300e-003	0.0418	0.0189	6.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003	0.0000	5.0696	5.0696	1.6400e-003	0.0000	5.1106
Total	**3.7300e-003**	**0.0418**	**0.0189**	**6.0000e-005**		**1.7400e-003**	**1.7400e-003**		**1.6000e-003**	**1.6000e-003**	**0.0000**	**5.0696**	**5.0696**	**1.6400e-003**	**0.0000**	**5.1106**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-004	3.2000e-003	7.9000e-004	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.9374	0.9374	6.0000e-005	0.0000	0.9390
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6700e-003	5.7500e-003	0.0662	2.0000e-004	0.0356	1.7000e-004	0.0358	9.1600e-003	1.5000e-004	9.3200e-003	0.0000	18.1289	18.1289	5.0000e-004	0.0000	18.1414
Total	**7.7700e-003**	**8.9500e-003**	**0.0670**	**2.1000e-004**	**0.0363**	**1.8000e-004**	**0.0365**	**9.3400e-003**	**1.6000e-004**	**9.5100e-003**	**0.0000**	**19.0663**	**19.0663**	**5.6000e-004**	**0.0000**	**19.0804**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1407	0.1472	2.4000e-004		7.2600e-003	7.2600e-003		6.8000e-003	6.8000e-003	0.0000	19.4487	19.4487	5.2800e-003	0.0000	19.5808
Paving	4.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0206**	**0.1407**	**0.1472**	**2.4000e-004**		**7.2600e-003**	**7.2600e-003**		**6.8000e-003**	**6.8000e-003**	**0.0000**	**19.4487**	**19.4487**	**5.2800e-003**	**0.0000**	**19.5808**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-004	0.0222	6.0200e-003	6.0000e-005	1.4200e-003	5.0000e-005	1.4600e-003	4.1000e-004	4.0000e-005	4.5000e-004	0.0000	5.5462	5.5462	3.4000e-004	0.0000	5.5547
Worker	1.6100e-003	1.2600e-003	0.0142	4.0000e-005	4.1100e-003	3.0000e-005	4.1400e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.7084	3.7084	1.1000e-004	0.0000	3.7112
Total	**2.3100e-003**	**0.0235**	**0.0202**	**1.0000e-004**	**5.5300e-003**	**8.0000e-005**	**5.6000e-003**	**1.5000e-003**	**7.0000e-005**	**1.5700e-003**	**0.0000**	**9.2546**	**9.2546**	**4.5000e-004**	**0.0000**	**9.2659**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1407	0.1472	2.4000e-004		7.2600e-003	7.2600e-003		6.8000e-003	6.8000e-003	0.0000	19.4487	19.4487	5.2800e-003	0.0000	19.5808
Paving	4.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0206**	**0.1407**	**0.1472**	**2.4000e-004**		**7.2600e-003**	**7.2600e-003**		**6.8000e-003**	**6.8000e-003**	**0.0000**	**19.4487**	**19.4487**	**5.2800e-003**	**0.0000**	**19.5808**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-004	0.0222	6.0200e-003	6.0000e-005	1.3300e-003	5.0000e-005	1.3700e-003	3.9000e-004	4.0000e-005	4.3000e-004	0.0000	5.5462	5.5462	3.4000e-004	0.0000	5.5547
Worker	1.6100e-003	1.2600e-003	0.0142	4.0000e-005	3.7900e-003	3.0000e-005	3.8200e-003	1.0100e-003	3.0000e-005	1.0400e-003	0.0000	3.7084	3.7084	1.1000e-004	0.0000	3.7112
Total	**2.3100e-003**	**0.0235**	**0.0202**	**1.0000e-004**	**5.1200e-003**	**8.0000e-005**	**5.1900e-003**	**1.4000e-003**	**7.0000e-005**	**1.4700e-003**	**0.0000**	**9.2546**	**9.2546**	**4.5000e-004**	**0.0000**	**9.2659**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0117	0.1012	0.1169	1.9000e-004		4.9400e-003	4.9400e-003		4.6400e-003	4.6400e-003	0.0000	15.5670	15.5670	4.2300e-003	0.0000	15.6728
Paving	3.6900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0154**	**0.1012**	**0.1169**	**1.9000e-004**		**4.9400e-003**	**4.9400e-003**		**4.6400e-003**	**4.6400e-003**	**0.0000**	**15.5670**	**15.5670**	**4.2300e-003**	**0.0000**	**15.6728**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2000e-004	0.0169	4.5600e-003	5.0000e-005	1.1300e-003	3.0000e-005	1.1700e-003	3.3000e-004	3.0000e-005	3.6000e-004	0.0000	4.3980	4.3980	2.6000e-004	0.0000	4.4045
Worker	1.2100e-003	9.1000e-004	0.0105	3.0000e-005	3.2900e-003	3.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.8625	2.8625	8.0000e-005	0.0000	2.8644
Total	**1.7300e-003**	**0.0178**	**0.0150**	**8.0000e-005**	**4.4200e-003**	**6.0000e-005**	**4.4800e-003**	**1.2000e-003**	**5.0000e-005**	**1.2600e-003**	**0.0000**	**7.2604**	**7.2604**	**3.4000e-004**	**0.0000**	**7.2690**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0117	0.1012	0.1169	1.9000e-004		4.9400e-003	4.9400e-003		4.6400e-003	4.6400e-003	0.0000	15.5670	15.5670	4.2300e-003	0.0000	15.6727
Paving	3.6900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0154**	**0.1012**	**0.1169**	**1.9000e-004**		**4.9400e-003**	**4.9400e-003**		**4.6400e-003**	**4.6400e-003**	**0.0000**	**15.5670**	**15.5670**	**4.2300e-003**	**0.0000**	**15.6727**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2000e-004	0.0169	4.5600e-003	5.0000e-005	1.0600e-003	3.0000e-005	1.0900e-003	3.1000e-004	3.0000e-005	3.4000e-004	0.0000	4.3980	4.3980	2.6000e-004	0.0000	4.4045
Worker	1.2100e-003	9.1000e-004	0.0105	3.0000e-005	3.0300e-003	3.0000e-005	3.0600e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.8625	2.8625	8.0000e-005	0.0000	2.8644
Total	**1.7300e-003**	**0.0178**	**0.0150**	**8.0000e-005**	**4.0900e-003**	**6.0000e-005**	**4.1500e-003**	**1.1200e-003**	**5.0000e-005**	**1.1700e-003**	**0.0000**	**7.2604**	**7.2604**	**3.4000e-004**	**0.0000**	**7.2690**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8561					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0361	0.2517	0.2996	4.9000e-004		0.0155	0.0155		0.0155	0.0155	0.0000	42.0861	42.0861	2.8900e-003	0.0000	42.1583
Total	**0.8922**	**0.2517**	**0.2996**	**4.9000e-004**		**0.0155**	**0.0155**		**0.0155**	**0.0155**	**0.0000**	**42.0861**	**42.0861**	**2.8900e-003**	**0.0000**	**42.1583**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.4600e-003	0.0165	5.0000e-005	4.7900e-003	4.0000e-005	4.8300e-003	1.2700e-003	4.0000e-005	1.3100e-003	0.0000	4.3216	4.3216	1.3000e-004	0.0000	4.3248
Total	**1.8800e-003**	**1.4600e-003**	**0.0165**	**5.0000e-005**	**4.7900e-003**	**4.0000e-005**	**4.8300e-003**	**1.2700e-003**	**4.0000e-005**	**1.3100e-003**	**0.0000**	**4.3216**	**4.3216**	**1.3000e-004**	**0.0000**	**4.3248**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8561					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0361	0.2517	0.2996	4.9000e-004		0.0155	0.0155		0.0155	0.0155	0.0000	42.0861	42.0861	2.8900e-003	0.0000	42.1583
Total	**0.8922**	**0.2517**	**0.2996**	**4.9000e-004**		**0.0155**	**0.0155**		**0.0155**	**0.0155**	**0.0000**	**42.0861**	**42.0861**	**2.8900e-003**	**0.0000**	**42.1583**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.4600e-003	0.0165	5.0000e-005	4.4200e-003	4.0000e-005	4.4500e-003	1.1800e-003	4.0000e-005	1.2200e-003	0.0000	4.3216	4.3216	1.3000e-004	0.0000	4.3248
Total	**1.8800e-003**	**1.4600e-003**	**0.0165**	**5.0000e-005**	**4.4200e-003**	**4.0000e-005**	**4.4500e-003**	**1.1800e-003**	**4.0000e-005**	**1.2200e-003**	**0.0000**	**4.3216**	**4.3216**	**1.3000e-004**	**0.0000**	**4.3248**

Poly High School Phase 2

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	176.43	1000sqft	4.05	176,430.00	0
Other Asphalt Surfaces	275.94	1000sqft	6.33	275,945.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Trips and VMT - See CalEEMod Assumptions File

Demolition -

Grading -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Vehicle Trips - CalEEMod Defaults

Water And Wastewater - CalEEMod Defaults

Solid Waste - See CalEEMod Defaults

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	300.00	259.00
tblConstructionPhase	NumDays	300.00	45.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	PhaseEndDate	5/4/2022	11/26/2021
tblConstructionPhase	PhaseEndDate	4/1/2022	1/28/2022
tblConstructionPhase	PhaseStartDate	4/2/2022	10/27/2021
tblConstructionPhase	PhaseStartDate	11/27/2021	11/29/2021
tblConstructionPhase	PhaseStartDate	1/29/2022	11/29/2021
tblGrading	MaterialExported	0.00	10,535.00
tblLandUse	BuildingSpaceSquareFeet	275,940.00	275,945.00
tblLandUse	LandUseSquareFeet	275,940.00	275,945.00
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	86.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	229.36	0.00
tblTripsAndVMT	HaulingTripNumber	545.00	872.00
tblTripsAndVMT	HaulingTripNumber	1,317.00	1,505.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	74.00	84.00
tblTripsAndVMT	VendorTripNumber	74.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00

tblWater	IndoorWaterUseRate	5,858,294.64	0.00
tblWater	OutdoorWaterUseRate	15,064,186.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.3316	41.1434	39.9366	0.0982	3.3325	1.6573	4.6684	0.7181	1.5604	2.2785	0.0000	9,668.1238	9,668.1238	1.5520	0.0000	9,706.9236
2021	81.7107	59.4812	66.3761	0.1442	4.4852	2.7749	5.8612	1.1550	2.6914	3.5221	0.0000	14,048.8089	14,048.8089	1.8232	0.0000	14,094.3898
2022	2.8588	16.8634	22.2651	0.0548	4.5000	0.6909	5.1909	1.1586	0.6450	1.8036	0.0000	5,286.5319	5,286.5319	0.7489	0.0000	5,305.2537
Maximum	**81.7107**	**59.4812**	**66.3761**	**0.1442**	**4.5000**	**2.7749**	**5.8612**	**1.1586**	**2.6914**	**3.5221**	**0.0000**	**14,048.8089**	**14,048.8089**	**1.8232**	**0.0000**	**14,094.3898**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.3316	41.1434	39.9366	0.0982	2.4609	1.6573	4.1182	0.6688	1.5604	2.2292	0.0000	9,668.1238	9,668.1238	1.5520	0.0000	9,706.9236
2021	81.7107	59.4812	66.3761	0.1442	4.1139	2.7749	5.6273	1.0639	2.6914	3.4647	0.0000	14,048.8089	14,048.8089	1.8232	0.0000	14,094.3897
2022	2.8588	16.8634	22.2651	0.0548	4.1274	0.6909	4.8183	1.0672	0.6450	1.7121	0.0000	5,286.5319	5,286.5319	0.7489	0.0000	5,305.2537
Maximum	**81.7107**	**59.4812**	**66.3761**	**0.1442**	**4.1274**	**2.7749**	**5.6273**	**1.0672**	**2.6914**	**3.4647**	**0.0000**	**14,048.8089**	**14,048.8089**	**1.8232**	**0.0000**	**14,094.3897**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**13.12**	**0.00**	**7.36**	**7.65**	**0.00**	**2.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2020	9/30/2020	5	43	
2	Site Preparation	Site Preparation	10/1/2020	11/30/2020	5	43	
3	Building Construction	Building Construction	12/1/2020	11/26/2021	5	259	
4	Temporary Portables Removal	Building Construction	11/29/2021	1/28/2022	5	45	
5	Paving	Paving	11/29/2021	1/28/2022	5	45	
6	Architectural Coating	Architectural Coating	10/27/2021	11/26/2021	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 264,645; Non-Residential Outdoor: 88,215; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.48
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	85	0.78
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Temporary Portables Removal	Cranes	1	8.00	231	0.29

Temporary Portables Removal	Excavators	0	8.00	158	0.38
Temporary Portables Removal	Forklifts	0	8.00	89	0.20
Temporary Portables Removal	Generator Sets	0	8.00	84	0.74
Temporary Portables Removal	Graders	0	8.00	187	0.41
Temporary Portables Removal	Rubber Tired Dozers	0	8.00	247	0.40
Temporary Portables Removal	Scrapers	0	8.00	367	0.48
Temporary Portables Removal	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Temporary Portables Removal	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Temporary Portables Removal	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	86.00	78	0.48
Building Construction	Forklifts	3	8.00	89	0.20

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	872.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,505.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	190.00	84.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Temporary Portables Removal	1	190.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7416	0.0000	2.7416	0.4151	0.0000	0.4151			0.0000			0.0000
Off-Road	2.8395	21.4679	24.8781	0.0393		1.3145	1.3145		1.2908	1.2908		3,745.1741	3,745.1741	0.5292		3,758.4043
Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**2.7416**	**1.3145**	**4.0560**	**0.4151**	**1.2908**	**1.7059**		**3,745.1741**	**3,745.1741**	**0.5292**		**3,758.4043**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1771	5.8311	1.2921	0.0160	0.3546	0.0186	0.3732	0.0972	0.0178	0.1150		1,735.5473	1,735.5473	0.1181		1,738.5006
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0128	1.0000e-003	0.0138	3.6900e-003	9.6000e-004	4.6400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0920	0.0655	0.8757	2.3600e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		235.2226	235.2226	7.4200e-003		235.4080
Total	**0.2763**	**6.1093**	**2.2235**	**0.0189**	**0.5909**	**0.0215**	**0.6124**	**0.1602**	**0.0205**	**0.1807**		**2,026.1748**	**2,026.1748**	**0.1289**		**2,029.3981**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1720	0.0000	1.1720	0.1775	0.0000	0.1775			0.0000			0.0000
Off-Road	2.8395	21.4679	24.8781	0.0393		1.3145	1.3145		1.2908	1.2908	0.0000	3,745.1741	3,745.1741	0.5292		3,758.4043
Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**1.1720**	**1.3145**	**2.4865**	**0.1775**	**1.2908**	**1.4682**	**0.0000**	**3,745.1741**	**3,745.1741**	**0.5292**		**3,758.4043**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1771	5.8311	1.2921	0.0160	0.3304	0.0186	0.3491	0.0913	0.0178	0.1091		1,735.5473	1,735.5473	0.1181		1,738.5006
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0120	1.0000e-003	0.0130	3.4800e-003	9.6000e-004	4.4400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0920	0.0655	0.8757	2.3600e-003	0.2061	1.8700e-003	0.2079	0.0550	1.7200e-003	0.0567		235.2226	235.2226	7.4200e-003		235.4080
Total	**0.2763**	**6.1093**	**2.2235**	**0.0189**	**0.5485**	**0.0215**	**0.5700**	**0.1497**	**0.0205**	**0.1702**		**2,026.1748**	**2,026.1748**	**0.1289**		**2,029.3981**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0277	0.0000	0.0277	4.2000e-003	0.0000	4.2000e-003			0.0000			0.0000
Off-Road	1.5401	14.8331	14.4608	0.0205		0.9425	0.9425		0.8679	0.8679		1,971.0798	1,971.0798	0.6299		1,986.8277
Total	**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.0277**	**0.9425**	**0.9702**	**4.2000e-003**	**0.8679**	**0.8721**		**1,971.0798**	**1,971.0798**	**0.6299**		**1,986.8277**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3057	10.0639	2.2301	0.0276	0.6120	0.0321	0.6441	0.1678	0.0307	0.1985		2,995.4114	2,995.4114	0.2039		3,000.5085
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0128	1.0000e-003	0.0138	3.6900e-003	9.6000e-004	4.6400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.3957**	**10.3356**	**3.0739**	**0.0303**	**0.8260**	**0.0348**	**0.8608**	**0.2248**	**0.0332**	**0.2580**		**3,262.5166**	**3,262.5166**	**0.2139**		**3,267.8652**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0118	0.0000	0.0118	1.7900e-003	0.0000	1.7900e-003			0.0000			0.0000
Off-Road	1.5401	14.8331	14.4608	0.0205		0.9425	0.9425		0.8679	0.8679	0.0000	1,971.0798	1,971.0798	0.6299		1,986.8277
Total	**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.0118**	**0.9425**	**0.9543**	**1.7900e-003**	**0.8679**	**0.8697**	**0.0000**	**1,971.0798**	**1,971.0798**	**0.6299**		**1,986.8277**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3057	10.0639	2.2301	0.0276	0.5703	0.0321	0.6024	0.1575	0.0307	0.1883		2,995.4114	2,995.4114	0.2039		3,000.5085
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0120	1.0000e-003	0.0130	3.4800e-003	9.6000e-004	4.4400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.1855	1.6800e-003	0.1871	0.0495	1.5500e-003	0.0510		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.3957**	**10.3356**	**3.0739**	**0.0303**	**0.7678**	**0.0348**	**0.8026**	**0.2105**	**0.0332**	**0.2437**		**3,262.5166**	**3,262.5166**	**0.2139**		**3,267.8652**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1584	31.5861	29.2764	0.0539		1.5975	1.5975		1.5038	1.5038		5,106.5019	5,106.5019	1.3395		5,139.9903
Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**		**1.5975**	**1.5975**		**1.5038**	**1.5038**		**5,106.5019**	**5,106.5019**	**1.3395**		**5,139.9903**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2988	8.9353	2.3411	0.0218	0.5378	0.0421	0.5798	0.1548	0.0402	0.1951		2,327.0074	2,327.0074	0.1420		2,330.5575
Worker	0.8744	0.6220	8.3191	0.0224	2.1238	0.0178	2.1415	0.5632	0.0164	0.5796		2,234.6145	2,234.6145	0.0705		2,236.3758
Total	**1.1731**	**9.5573**	**10.6602**	**0.0442**	**2.6615**	**0.0598**	**2.7213**	**0.7181**	**0.0566**	**0.7747**		**4,561.6219**	**4,561.6219**	**0.2125**		**4,566.9332**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1584	31.5861	29.2764	0.0539		1.5975	1.5975		1.5038	1.5038	0.0000	5,106.5019	5,106.5019	1.3395		5,139.9903
Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**		**1.5975**	**1.5975**		**1.5038**	**1.5038**	**0.0000**	**5,106.5019**	**5,106.5019**	**1.3395**		**5,139.9903**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2988	8.9353	2.3411	0.0218	0.5033	0.0421	0.5453	0.1464	0.0402	0.1866		2,327.0074	2,327.0074	0.1420		2,330.5575
Worker	0.8744	0.6220	8.3191	0.0224	1.9576	0.0178	1.9753	0.5224	0.0164	0.5388		2,234.6145	2,234.6145	0.0705		2,236.3758
Total	**1.1731**	**9.5573**	**10.6602**	**0.0442**	**2.4609**	**0.0598**	**2.5207**	**0.6688**	**0.0566**	**0.7254**		**4,561.6219**	**4,561.6219**	**0.2125**		**4,566.9332**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8950	28.7691	29.0092	0.0540		1.3889	1.3889		1.3078	1.3078		5,109.3276	5,109.3276	1.3339		5,142.6741
Total	**2.8950**	**28.7691**	**29.0092**	**0.0540**		**1.3889**	**1.3889**		**1.3078**	**1.3078**		**5,109.3276**	**5,109.3276**	**1.3339**		**5,142.6741**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2553	8.1555	2.1321	0.0216	0.5378	0.0167	0.5545	0.1548	0.0160	0.1708		2,308.9973	2,308.9973	0.1360		2,312.3980
Worker	0.8145	0.5598	7.6527	0.0217	2.1238	0.0172	2.1409	0.5632	0.0158	0.5790		2,163.6627	2,163.6627	0.0638		2,165.2565
Total	**1.0698**	**8.7153**	**9.7848**	**0.0433**	**2.6615**	**0.0338**	**2.6954**	**0.7181**	**0.0318**	**0.7498**		**4,472.6600**	**4,472.6600**	**0.1998**		**4,477.6546**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8950	28.7691	29.0092	0.0540		1.3889	1.3889		1.3078	1.3078	0.0000	5,109.3276	5,109.3276	1.3339		5,142.6741
Total	**2.8950**	**28.7691**	**29.0092**	**0.0540**		**1.3889**	**1.3889**		**1.3078**	**1.3078**	**0.0000**	**5,109.3276**	**5,109.3276**	**1.3339**		**5,142.6741**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2553	8.1555	2.1321	0.0216	0.5033	0.0167	0.5200	0.1464	0.0160	0.1623		2,308.9973	2,308.9973	0.1360		2,312.3980
Worker	0.8145	0.5598	7.6527	0.0217	1.9576	0.0172	1.9747	0.5224	0.0158	0.5383		2,163.6627	2,163.6627	0.0638		2,165.2565
Total	**1.0698**	**8.7153**	**9.7848**	**0.0433**	**2.4609**	**0.0338**	**2.4947**	**0.6688**	**0.0318**	**0.7006**		**4,472.6600**	**4,472.6600**	**0.1998**		**4,477.6546**

3.5 Temporary Portables Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4129	4.8493	1.9829	5.7700e-003		0.1969	0.1969		0.1811	0.1811		558.7388	558.7388	0.1807		563.2565
Total	**0.4129**	**4.8493**	**1.9829**	**5.7700e-003**		**0.1969**	**0.1969**		**0.1811**	**0.1811**		**558.7388**	**558.7388**	**0.1807**		**563.2565**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0104	0.3338	0.0783	9.7000e-004	0.0645	1.0200e-003	0.0656	0.0165	9.8000e-004	0.0174		105.3355	105.3355	7.1500e-003		105.5143
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8145	0.5598	7.6527	0.0217	3.9701	0.0172	3.9872	1.0164	0.0158	1.0322		2,163.6627	2,163.6627	0.0638		2,165.2565
Total	**0.8248**	**0.8936**	**7.7310**	**0.0227**	**4.0346**	**0.0182**	**4.0528**	**1.0329**	**0.0168**	**1.0497**		**2,268.9983**	**2,268.9983**	**0.0709**		**2,270.7708**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4129	4.8493	1.9829	5.7700e-003		0.1969	0.1969		0.1811	0.1811	0.0000	558.7388	558.7388	0.1807		563.2565
Total	**0.4129**	**4.8493**	**1.9829**	**5.7700e-003**		**0.1969**	**0.1969**		**0.1811**	**0.1811**	**0.0000**	**558.7388**	**558.7388**	**0.1807**		**563.2565**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0104	0.3338	0.0783	9.7000e-004	0.0592	1.0200e-003	0.0602	0.0152	9.8000e-004	0.0161		105.3355	105.3355	7.1500e-003		105.5143
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8145	0.5598	7.6527	0.0217	3.6377	0.0172	3.6549	0.9348	0.0158	0.9507		2,163.6627	2,163.6627	0.0638		2,165.2565
Total	**0.8248**	**0.8936**	**7.7310**	**0.0227**	**3.6970**	**0.0182**	**3.7151**	**0.9500**	**0.0168**	**0.9668**		**2,268.9983**	**2,268.9983**	**0.0709**		**2,270.7708**

3.5 Temporary Portables Removal - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3730	4.1843	1.8923	5.7700e-003		0.1737	0.1737		0.1598	0.1598		558.8304	558.8304	0.1807		563.3488
Total	**0.3730**	**4.1843**	**1.8923**	**5.7700e-003**		**0.1737**	**0.1737**		**0.1598**	**0.1598**		**558.8304**	**558.8304**	**0.1807**		**563.3488**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	9.8700e-003	0.3101	0.0775	9.6000e-004	0.0794	8.9000e-004	0.0802	0.0201	8.5000e-004	0.0210		104.0897	104.0897	7.0400e-003		104.2657
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7629	0.5057	7.0605	0.0210	3.9701	0.0166	3.9867	1.0164	0.0153	1.0317		2,087.5534	2,087.5534	0.0576		2,088.9938
Total	**0.7728**	**0.8158**	**7.1379**	**0.0219**	**4.0494**	**0.0175**	**4.0670**	**1.0365**	**0.0162**	**1.0527**		**2,191.6431**	**2,191.6431**	**0.0647**		**2,193.2596**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3730	4.1843	1.8923	5.7700e-003		0.1737	0.1737		0.1598	0.1598	0.0000	558.8304	558.8304	0.1807		563.3488
Total	**0.3730**	**4.1843**	**1.8923**	**5.7700e-003**		**0.1737**	**0.1737**		**0.1598**	**0.1598**	**0.0000**	**558.8304**	**558.8304**	**0.1807**		**563.3488**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	9.8700e-003	0.3101	0.0775	9.6000e-004	0.0727	8.9000e-004	0.0736	0.0185	8.5000e-004	0.0193		104.0897	104.0897	7.0400e-003		104.2657
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7629	0.5057	7.0605	0.0210	3.6377	0.0166	3.6544	0.9348	0.0153	0.9502		2,087.5534	2,087.5534	0.0576		2,088.9938
Total	**0.7728**	**0.8158**	**7.1379**	**0.0219**	**3.7104**	**0.0175**	**3.7279**	**0.9533**	**0.0162**	**0.9695**		**2,191.6431**	**2,191.6431**	**0.0647**		**2,193.2596**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2803	11.2564	11.7726	0.0192		0.5811	0.5811		0.5438	0.5438		1,715.0804	1,715.0804	0.4659		1,726.7290
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6489**	**11.2564**	**11.7726**	**0.0192**		**0.5811**	**0.5811**		**0.5438**	**0.5438**		**1,715.0804**	**1,715.0804**	**0.4659**		**1,726.7290**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0547	1.7476	0.4569	4.6300e-003	0.1152	3.5700e-003	0.1188	0.0332	3.4200e-003	0.0366		494.7851	494.7851	0.0292		495.5139
Worker	0.1286	0.0884	1.2083	3.4300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		341.6310	341.6310	0.0101		341.8826
Total	**0.1833**	**1.8360**	**1.6652**	**8.0600e-003**	**0.4506**	**6.2800e-003**	**0.4569**	**0.1221**	**5.9200e-003**	**0.1280**		**836.4161**	**836.4161**	**0.0392**		**837.3965**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2803	11.2564	11.7726	0.0192		0.5811	0.5811		0.5438	0.5438	0.0000	1,715.0804	1,715.0804	0.4659		1,726.7290
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6489**	**11.2564**	**11.7726**	**0.0192**		**0.5811**	**0.5811**		**0.5438**	**0.5438**	**0.0000**	**1,715.0804**	**1,715.0804**	**0.4659**		**1,726.7290**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0547	1.7476	0.4569	4.6300e-003	0.1079	3.5700e-003	0.1114	0.0314	3.4200e-003	0.0348		494.7851	494.7851	0.0292		495.5139
Worker	0.1286	0.0884	1.2083	3.4300e-003	0.3091	2.7100e-003	0.3118	0.0825	2.5000e-003	0.0850		341.6310	341.6310	0.0101		341.8826
Total	**0.1833**	**1.8360**	**1.6652**	**8.0600e-003**	**0.4169**	**6.2800e-003**	**0.4232**	**0.1139**	**5.9200e-003**	**0.1198**		**836.4161**	**836.4161**	**0.0392**		**837.3965**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1727	10.1215	11.6877	0.0192		0.4939	0.4939		0.4636	0.4636		1,715.9702	1,715.9702	0.4662		1,727.6260
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**		**0.4939**	**0.4939**		**0.4636**	**0.4636**		**1,715.9702**	**1,715.9702**	**0.4662**		**1,727.6260**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0514	1.6619	0.4323	4.5800e-003	0.1152	3.1200e-003	0.1184	0.0332	2.9900e-003	0.0362		490.4746	490.4746	0.0282		491.1783
Worker	0.1205	0.0798	1.1148	3.3100e-003	0.3353	2.6200e-003	0.3380	0.0889	2.4200e-003	0.0914		329.6137	329.6137	9.1000e-003		329.8411
Total	**0.1718**	**1.7418**	**1.5471**	**7.8900e-003**	**0.4506**	**5.7400e-003**	**0.4563**	**0.1221**	**5.4100e-003**	**0.1275**		**820.0883**	**820.0883**	**0.0373**		**821.0194**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1727	10.1215	11.6877	0.0192		0.4939	0.4939		0.4636	0.4636	0.0000	1,715.9702	1,715.9702	0.4662		1,727.6260
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**		**0.4939**	**0.4939**		**0.4636**	**0.4636**	**0.0000**	**1,715.9702**	**1,715.9702**	**0.4662**		**1,727.6260**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0514	1.6619	0.4323	4.5800e-003	0.1079	3.1200e-003	0.1110	0.0314	2.9900e-003	0.0344		490.4746	490.4746	0.0282		491.1783
Worker	0.1205	0.0798	1.1148	3.3100e-003	0.3091	2.6200e-003	0.3117	0.0825	2.4200e-003	0.0849		329.6137	329.6137	9.1000e-003		329.8411
Total	**0.1718**	**1.7418**	**1.5471**	**7.8900e-003**	**0.4169**	**5.7400e-003**	**0.4227**	**0.1139**	**5.4100e-003**	**0.1193**		**820.0883**	**820.0883**	**0.0373**		**821.0194**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	74.4456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	3.1376	21.8848	26.0516	0.0426		1.3487	1.3487		1.3487	1.3487		4,034.0887	4,034.0887	0.2768		4,041.0098
Total	**77.5831**	**21.8848**	**26.0516**	**0.0426**		**1.3487**	**1.3487**		**1.3487**	**1.3487**		**4,034.0887**	**4,034.0887**	**0.2768**		**4,041.0098**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1629	0.1120	1.5305	4.3400e-003	0.4248	3.4300e-003	0.4282	0.1127	3.1600e-003	0.1158		432.7325	432.7325	0.0128		433.0513
Total	**0.1629**	**0.1120**	**1.5305**	**4.3400e-003**	**0.4248**	**3.4300e-003**	**0.4282**	**0.1127**	**3.1600e-003**	**0.1158**		**432.7325**	**432.7325**	**0.0128**		**433.0513**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	74.4456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	3.1376	21.8848	26.0516	0.0426		1.3487	1.3487		1.3487	1.3487	0.0000	4,034.0887	4,034.0887	0.2768		4,041.0098
Total	**77.5831**	**21.8848**	**26.0516**	**0.0426**		**1.3487**	**1.3487**		**1.3487**	**1.3487**	**0.0000**	**4,034.0887**	**4,034.0887**	**0.2768**		**4,041.0098**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1629	0.1120	1.5305	4.3400e-003	0.3915	3.4300e-003	0.3950	0.1045	3.1600e-003	0.1077		432.7325	432.7325	0.0128		433.0513
Total	**0.1629**	**0.1120**	**1.5305**	**4.3400e-003**	**0.3915**	**3.4300e-003**	**0.3950**	**0.1045**	**3.1600e-003**	**0.1077**		**432.7325**	**432.7325**	**0.0128**		**433.0513**

Poly High School Phase 2

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	176.43	1000sqft	4.05	176,430.00	0
Other Asphalt Surfaces	275.94	1000sqft	6.33	275,945.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Trips and VMT - See CalEEMod Assumptions File

Demolition -

Grading -

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Vehicle Trips - CalEEMod Defaults

Water And Wastewater - CalEEMod Defaults

Solid Waste - See CalEEMod Defaults

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	300.00	259.00
tblConstructionPhase	NumDays	300.00	45.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	PhaseEndDate	5/4/2022	11/26/2021
tblConstructionPhase	PhaseEndDate	4/1/2022	1/28/2022
tblConstructionPhase	PhaseStartDate	4/2/2022	10/27/2021
tblConstructionPhase	PhaseStartDate	11/27/2021	11/29/2021
tblConstructionPhase	PhaseStartDate	1/29/2022	11/29/2021
tblGrading	MaterialExported	0.00	10,535.00
tblLandUse	BuildingSpaceSquareFeet	275,940.00	275,945.00
tblLandUse	LandUseSquareFeet	275,940.00	275,945.00
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	86.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	229.36	0.00
tblTripsAndVMT	HaulingTripNumber	545.00	872.00
tblTripsAndVMT	HaulingTripNumber	1,317.00	1,505.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	74.00	84.00
tblTripsAndVMT	VendorTripNumber	74.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00

tblWater	IndoorWaterUseRate	5,858,294.64	0.00
tblWater	OutdoorWaterUseRate	15,064,186.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.4417	41.2082	39.4776	0.0963	3.3325	1.6580	4.6687	0.7181	1.5611	2.2791	0.0000	9,473.9728	9,473.9728	1.5572	0.0000	9,512.9029
2021	81.8333	59.5361	65.8155	0.1421	4.4852	2.7754	5.8617	1.1550	2.6919	3.5226	0.0000	13,833.8512	13,833.8512	1.8276	0.0000	13,879.5417
2022	2.9635	16.9249	21.6023	0.0532	4.5000	0.6910	5.1910	1.1586	0.6451	1.8037	0.0000	5,130.0704	5,130.0704	0.7469	0.0000	5,148.7428
Maximum	**81.8333**	**59.5361**	**65.8155**	**0.1421**	**4.5000**	**2.7754**	**5.8617**	**1.1586**	**2.6919**	**3.5226**	**0.0000**	**13,833.8512**	**13,833.8512**	**1.8276**	**0.0000**	**13,879.5417**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.4417	41.2082	39.4776	0.0963	2.4609	1.6580	4.1189	0.6688	1.5611	2.2299	0.0000	9,473.9728	9,473.9728	1.5572	0.0000	9,512.9029
2021	81.8333	59.5361	65.8155	0.1421	4.1139	2.7754	5.6278	1.0639	2.6919	3.4652	0.0000	13,833.8512	13,833.8512	1.8276	0.0000	13,879.5417
2022	2.9635	16.9249	21.6023	0.0532	4.1274	0.6910	4.8184	1.0672	0.6451	1.7122	0.0000	5,130.0704	5,130.0704	0.7469	0.0000	5,148.7428
Maximum	**81.8333**	**59.5361**	**65.8155**	**0.1421**	**4.1274**	**2.7754**	**5.6278**	**1.0672**	**2.6919**	**3.4652**	**0.0000**	**13,833.8512**	**13,833.8512**	**1.8276**	**0.0000**	**13,879.5417**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**13.12**	**0.00**	**7.36**	**7.65**	**0.00**	**2.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2020	9/30/2020	5	43	
2	Site Preparation	Site Preparation	10/1/2020	11/30/2020	5	43	
3	Building Construction	Building Construction	12/1/2020	11/26/2021	5	259	
4	Temporary Portables Removal	Building Construction	11/29/2021	1/28/2022	5	45	
5	Paving	Paving	11/29/2021	1/28/2022	5	45	
6	Architectural Coating	Architectural Coating	10/27/2021	11/26/2021	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 264,645; Non-Residential Outdoor: 88,215; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.48
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	85	0.78
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Temporary Portables Removal	Cranes	1	8.00	231	0.29
Temporary Portables Removal	Excavators	0	8.00	158	0.38
Temporary Portables Removal	Forklifts	0	8.00	89	0.20
Temporary Portables Removal	Generator Sets	0	8.00	84	0.74
Temporary Portables Removal	Graders	0	8.00	187	0.41
Temporary Portables Removal	Rubber Tired Dozers	0	8.00	247	0.40
Temporary Portables Removal	Scrapers	0	8.00	367	0.48
Temporary Portables Removal	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Temporary Portables Removal	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Temporary Portables Removal	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Architectural Coating	Air Compressors	1	86.00	78	0.48
Building Construction	Forklifts	3	8.00	89	0.20

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	872.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,505.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	190.00	84.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Temporary Portables Removal	1	190.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7416	0.0000	2.7416	0.4151	0.0000	0.4151			0.0000			0.0000
Off-Road	2.8395	21.4679	24.8781	0.0393		1.3145	1.3145		1.2908	1.2908		3,745.1741	3,745.1741	0.5292		3,758.4043
Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**2.7416**	**1.3145**	**4.0560**	**0.4151**	**1.2908**	**1.7059**		**3,745.1741**	**3,745.1741**	**0.5292**		**3,758.4043**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1814	5.9065	1.3732	0.0157	0.3546	0.0189	0.3735	0.0972	0.0181	0.1153		1,705.6605	1,705.6605	0.1224		1,708.7212
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0128	1.0200e-003	0.0138	3.6900e-003	9.7000e-004	4.6600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.1022	0.0725	0.8020	2.2200e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		221.4841	221.4841	6.9800e-003		221.6586
Total	**0.2911**	**6.1917**	**2.2367**	**0.0185**	**0.5909**	**0.0218**	**0.6127**	**0.1602**	**0.0208**	**0.1809**		**1,981.0344**	**1,981.0344**	**0.1330**		**1,984.3597**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1720	0.0000	1.1720	0.1775	0.0000	0.1775			0.0000			0.0000
Off-Road	2.8395	21.4679	24.8781	0.0393		1.3145	1.3145		1.2908	1.2908	0.0000	3,745.1741	3,745.1741	0.5292		3,758.4043
Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**1.1720**	**1.3145**	**2.4865**	**0.1775**	**1.2908**	**1.4682**	**0.0000**	**3,745.1741**	**3,745.1741**	**0.5292**		**3,758.4043**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1814	5.9065	1.3732	0.0157	0.3304	0.0189	0.3493	0.0913	0.0181	0.1094		1,705.6605	1,705.6605	0.1224		1,708.7212
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0120	1.0200e-003	0.0130	3.4800e-003	9.7000e-004	4.4600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.1022	0.0725	0.8020	2.2200e-003	0.2061	1.8700e-003	0.2079	0.0550	1.7200e-003	0.0567		221.4841	221.4841	6.9800e-003		221.6586
Total	**0.2911**	**6.1917**	**2.2367**	**0.0185**	**0.5485**	**0.0218**	**0.5703**	**0.1497**	**0.0208**	**0.1705**		**1,981.0344**	**1,981.0344**	**0.1330**		**1,984.3597**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0277	0.0000	0.0277	4.2000e-003	0.0000	4.2000e-003			0.0000			0.0000
Off-Road	1.5401	14.8331	14.4608	0.0205		0.9425	0.9425		0.8679	0.8679		1,971.0798	1,971.0798	0.6299		1,986.8277
Total	**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.0277**	**0.9425**	**0.9702**	**4.2000e-003**	**0.8679**	**0.8721**		**1,971.0798**	**1,971.0798**	**0.6299**		**1,986.8277**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3132	10.1942	2.3700	0.0272	0.6120	0.0326	0.6446	0.1678	0.0312	0.1990		2,943.8292	2,943.8292	0.2113		2,949.1117
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0128	1.0200e-003	0.0138	3.6900e-003	9.7000e-004	4.6600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.4126**	**10.4721**	**3.1533**	**0.0297**	**0.8260**	**0.0353**	**0.8613**	**0.2248**	**0.0337**	**0.2585**		**3,197.0547**	**3,197.0547**	**0.2212**		**3,202.5844**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0118	0.0000	0.0118	1.7900e-003	0.0000	1.7900e-003			0.0000			0.0000
Off-Road	1.5401	14.8331	14.4608	0.0205		0.9425	0.9425		0.8679	0.8679	0.0000	1,971.0798	1,971.0798	0.6299		1,986.8277
Total	**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.0118**	**0.9425**	**0.9543**	**1.7900e-003**	**0.8679**	**0.8697**	**0.0000**	**1,971.0798**	**1,971.0798**	**0.6299**		**1,986.8277**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3132	10.1942	2.3700	0.0272	0.5703	0.0326	0.6029	0.1575	0.0312	0.1887		2,943.8292	2,943.8292	0.2113		2,949.1117
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0120	1.0200e-003	0.0130	3.4800e-003	9.7000e-004	4.4600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.1855	1.6800e-003	0.1871	0.0495	1.5500e-003	0.0510		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.4126**	**10.4721**	**3.1533**	**0.0297**	**0.7678**	**0.0353**	**0.8031**	**0.2105**	**0.0337**	**0.2442**		**3,197.0547**	**3,197.0547**	**0.2212**		**3,202.5844**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1584	31.5861	29.2764	0.0539		1.5975	1.5975		1.5038	1.5038		5,106.5019	5,106.5019	1.3395		5,139.9903
Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**		**1.5975**	**1.5975**		**1.5038**	**1.5038**		**5,106.5019**	**5,106.5019**	**1.3395**		**5,139.9903**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3123	8.9334	2.5820	0.0212	0.5378	0.0427	0.5805	0.1548	0.0409	0.1957		2,263.3722	2,263.3722	0.1514		2,267.1559
Worker	0.9709	0.6887	7.6192	0.0211	2.1238	0.0178	2.1415	0.5632	0.0164	0.5796		2,104.0987	2,104.0987	0.0663		2,105.7567
Total	**1.2833**	**9.6221**	**10.2012**	**0.0423**	**2.6615**	**0.0605**	**2.7220**	**0.7181**	**0.0572**	**0.7753**		**4,367.4709**	**4,367.4709**	**0.2177**		**4,372.9126**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1584	31.5861	29.2764	0.0539		1.5975	1.5975		1.5038	1.5038	0.0000	5,106.5019	5,106.5019	1.3395		5,139.9903
Total	**3.1584**	**31.5861**	**29.2764**	**0.0539**		**1.5975**	**1.5975**		**1.5038**	**1.5038**	**0.0000**	**5,106.5019**	**5,106.5019**	**1.3395**		**5,139.9903**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3123	8.9334	2.5820	0.0212	0.5033	0.0427	0.5460	0.1464	0.0409	0.1872		2,263.3722	2,263.3722	0.1514		2,267.1559
Worker	0.9709	0.6887	7.6192	0.0211	1.9576	0.0178	1.9753	0.5224	0.0164	0.5388		2,104.0987	2,104.0987	0.0663		2,105.7567
Total	**1.2833**	**9.6221**	**10.2012**	**0.0423**	**2.4609**	**0.0605**	**2.5214**	**0.6688**	**0.0572**	**0.7260**		**4,367.4709**	**4,367.4709**	**0.2177**		**4,372.9126**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8950	28.7691	29.0092	0.0540		1.3889	1.3889		1.3078	1.3078		5,109.3276	5,109.3276	1.3339		5,142.6741
Total	**2.8950**	**28.7691**	**29.0092**	**0.0540**		**1.3889**	**1.3889**		**1.3078**	**1.3078**		**5,109.3276**	**5,109.3276**	**1.3339**		**5,142.6741**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2680	8.1387	2.3585	0.0210	0.5378	0.0172	0.5550	0.1548	0.0165	0.1713		2,245.7024	2,245.7024	0.1450		2,249.3268
Worker	0.9060	0.6197	6.9969	0.0205	2.1238	0.0172	2.1409	0.5632	0.0158	0.5790		2,037.2771	2,037.2771	0.0600		2,038.7758
Total	**1.1740**	**8.7583**	**9.3553**	**0.0415**	**2.6615**	**0.0344**	**2.6959**	**0.7181**	**0.0323**	**0.7503**		**4,282.9795**	**4,282.9795**	**0.2049**		**4,288.1026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8950	28.7691	29.0092	0.0540		1.3889	1.3889		1.3078	1.3078	0.0000	5,109.3276	5,109.3276	1.3339		5,142.6741
Total	**2.8950**	**28.7691**	**29.0092**	**0.0540**		**1.3889**	**1.3889**		**1.3078**	**1.3078**	**0.0000**	**5,109.3276**	**5,109.3276**	**1.3339**		**5,142.6741**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2680	8.1387	2.3585	0.0210	0.5033	0.0172	0.5205	0.1464	0.0165	0.1628		2,245.7024	2,245.7024	0.1450		2,249.3268
Worker	0.9060	0.6197	6.9969	0.0205	1.9576	0.0172	1.9747	0.5224	0.0158	0.5383		2,037.2771	2,037.2771	0.0600		2,038.7758
Total	**1.1740**	**8.7583**	**9.3553**	**0.0415**	**2.4609**	**0.0344**	**2.4953**	**0.6688**	**0.0323**	**0.7011**		**4,282.9795**	**4,282.9795**	**0.2049**		**4,288.1026**

3.5 Temporary Portables Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4129	4.8493	1.9829	5.7700e-003		0.1969	0.1969		0.1811	0.1811		558.7388	558.7388	0.1807		563.2565
Total	**0.4129**	**4.8493**	**1.9829**	**5.7700e-003**		**0.1969**	**0.1969**		**0.1811**	**0.1811**		**558.7388**	**558.7388**	**0.1807**		**563.2565**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0106	0.3379	0.0830	9.5000e-004	0.0645	1.0400e-003	0.0656	0.0165	1.0000e-003	0.0175		103.5108	103.5108	7.4000e-003		103.6958
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.9060	0.6197	6.9969	0.0205	3.9701	0.0172	3.9872	1.0164	0.0158	1.0322		2,037.2771	2,037.2771	0.0600		2,038.7758
Total	**0.9166**	**0.9576**	**7.0799**	**0.0214**	**4.0346**	**0.0182**	**4.0528**	**1.0329**	**0.0168**	**1.0497**		**2,140.7879**	**2,140.7879**	**0.0674**		**2,142.4716**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4129	4.8493	1.9829	5.7700e-003		0.1969	0.1969		0.1811	0.1811	0.0000	558.7388	558.7388	0.1807		563.2565
Total	**0.4129**	**4.8493**	**1.9829**	**5.7700e-003**		**0.1969**	**0.1969**		**0.1811**	**0.1811**	**0.0000**	**558.7388**	**558.7388**	**0.1807**		**563.2565**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0106	0.3379	0.0830	9.5000e-004	0.0592	1.0400e-003	0.0603	0.0152	1.0000e-003	0.0162		103.5108	103.5108	7.4000e-003		103.6958
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.9060	0.6197	6.9969	0.0205	3.6377	0.0172	3.6549	0.9348	0.0158	0.9507		2,037.2771	2,037.2771	0.0600		2,038.7758
Total	**0.9166**	**0.9576**	**7.0799**	**0.0214**	**3.6970**	**0.0182**	**3.7152**	**0.9500**	**0.0168**	**0.9668**		**2,140.7879**	**2,140.7879**	**0.0674**		**2,142.4716**

3.5 Temporary Portables Removal - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3730	4.1843	1.8923	5.7700e-003		0.1737	0.1737		0.1598	0.1598		558.8304	558.8304	0.1807		563.3488
Total	**0.3730**	**4.1843**	**1.8923**	**5.7700e-003**		**0.1737**	**0.1737**		**0.1598**	**0.1598**		**558.8304**	**558.8304**	**0.1807**		**563.3488**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0101	0.3136	0.0820	9.4000e-004	0.0794	9.0000e-004	0.0803	0.0201	8.6000e-004	0.0210		102.2705	102.2705	7.2800e-003		102.4526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8509	0.5596	6.4444	0.0197	3.9701	0.0166	3.9867	1.0164	0.0153	1.0317		1,965.6820	1,965.6820	0.0541		1,967.0351
Total	**0.8610**	**0.8733**	**6.5263**	**0.0207**	**4.0494**	**0.0175**	**4.0670**	**1.0365**	**0.0162**	**1.0527**		**2,067.9525**	**2,067.9525**	**0.0614**		**2,069.4876**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3730	4.1843	1.8923	5.7700e-003		0.1737	0.1737		0.1598	0.1598	0.0000	558.8304	558.8304	0.1807		563.3488
Total	**0.3730**	**4.1843**	**1.8923**	**5.7700e-003**		**0.1737**	**0.1737**		**0.1598**	**0.1598**	**0.0000**	**558.8304**	**558.8304**	**0.1807**		**563.3488**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0101	0.3136	0.0820	9.4000e-004	0.0727	9.0000e-004	0.0736	0.0185	8.6000e-004	0.0193		102.2705	102.2705	7.2800e-003		102.4526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8509	0.5596	6.4444	0.0197	3.6377	0.0166	3.6544	0.9348	0.0153	0.9502		1,965.6820	1,965.6820	0.0541		1,967.0351
Total	**0.8610**	**0.8733**	**6.5263**	**0.0207**	**3.7104**	**0.0175**	**3.7280**	**0.9533**	**0.0162**	**0.9695**		**2,067.9525**	**2,067.9525**	**0.0614**		**2,069.4876**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2803	11.2564	11.7726	0.0192		0.5811	0.5811		0.5438	0.5438		1,715.0804	1,715.0804	0.4659		1,726.7290
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6489**	**11.2564**	**11.7726**	**0.0192**		**0.5811**	**0.5811**		**0.5438**	**0.5438**		**1,715.0804**	**1,715.0804**	**0.4659**		**1,726.7290**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0574	1.7440	0.5054	4.5000e-003	0.1152	3.6900e-003	0.1189	0.0332	3.5300e-003	0.0367		481.2220	481.2220	0.0311		481.9986
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		321.6753	321.6753	9.4700e-003		321.9120
Total	**0.2005**	**1.8418**	**1.6102**	**7.7300e-003**	**0.4506**	**6.4000e-003**	**0.4570**	**0.1221**	**6.0300e-003**	**0.1281**		**802.8973**	**802.8973**	**0.0405**		**803.9106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2803	11.2564	11.7726	0.0192		0.5811	0.5811		0.5438	0.5438	0.0000	1,715.0804	1,715.0804	0.4659		1,726.7290
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6489**	**11.2564**	**11.7726**	**0.0192**		**0.5811**	**0.5811**		**0.5438**	**0.5438**	**0.0000**	**1,715.0804**	**1,715.0804**	**0.4659**		**1,726.7290**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0574	1.7440	0.5054	4.5000e-003	0.1079	3.6900e-003	0.1115	0.0314	3.5300e-003	0.0349		481.2220	481.2220	0.0311		481.9986
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3091	2.7100e-003	0.3118	0.0825	2.5000e-003	0.0850		321.6753	321.6753	9.4700e-003		321.9120
Total	**0.2005**	**1.8418**	**1.6102**	**7.7300e-003**	**0.4169**	**6.4000e-003**	**0.4233**	**0.1139**	**6.0300e-003**	**0.1199**		**802.8973**	**802.8973**	**0.0405**		**803.9106**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1727	10.1215	11.6877	0.0192		0.4939	0.4939		0.4636	0.4636		1,715.9702	1,715.9702	0.4662		1,727.6260
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**		**0.4939**	**0.4939**		**0.4636**	**0.4636**		**1,715.9702**	**1,715.9702**	**0.4662**		**1,727.6260**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0539	1.6574	0.4784	4.4600e-003	0.1152	3.2300e-003	0.1185	0.0332	3.0900e-003	0.0363		476.9465	476.9465	0.0300		477.6959
Worker	0.1344	0.0884	1.0175	3.1100e-003	0.3353	2.6200e-003	0.3380	0.0889	2.4200e-003	0.0914		310.3708	310.3708	8.5500e-003		310.5845
Total	**0.1883**	**1.7458**	**1.4959**	**7.5700e-003**	**0.4506**	**5.8500e-003**	**0.4564**	**0.1221**	**5.5100e-003**	**0.1276**		**787.3173**	**787.3173**	**0.0385**		**788.2804**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1727	10.1215	11.6877	0.0192		0.4939	0.4939		0.4636	0.4636	0.0000	1,715.9702	1,715.9702	0.4662		1,727.6260
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**		**0.4939**	**0.4939**		**0.4636**	**0.4636**	**0.0000**	**1,715.9702**	**1,715.9702**	**0.4662**		**1,727.6260**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0539	1.6574	0.4784	4.4600e-003	0.1079	3.2300e-003	0.1111	0.0314	3.0900e-003	0.0345		476.9465	476.9465	0.0300		477.6959
Worker	0.1344	0.0884	1.0175	3.1100e-003	0.3091	2.6200e-003	0.3117	0.0825	2.4200e-003	0.0849		310.3708	310.3708	8.5500e-003		310.5845
Total	**0.1883**	**1.7458**	**1.4959**	**7.5700e-003**	**0.4169**	**5.8500e-003**	**0.4228**	**0.1139**	**5.5100e-003**	**0.1194**		**787.3173**	**787.3173**	**0.0385**		**788.2804**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	74.4456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	3.1376	21.8848	26.0516	0.0426		1.3487	1.3487		1.3487	1.3487		4,034.0887	4,034.0887	0.2768		4,041.0098
Total	**77.5831**	**21.8848**	**26.0516**	**0.0426**		**1.3487**	**1.3487**		**1.3487**	**1.3487**		**4,034.0887**	**4,034.0887**	**0.2768**		**4,041.0098**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1812	0.1239	1.3994	4.0900e-003	0.4248	3.4300e-003	0.4282	0.1127	3.1600e-003	0.1158		407.4554	407.4554	0.0120		407.7552
Total	**0.1812**	**0.1239**	**1.3994**	**4.0900e-003**	**0.4248**	**3.4300e-003**	**0.4282**	**0.1127**	**3.1600e-003**	**0.1158**		**407.4554**	**407.4554**	**0.0120**		**407.7552**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	74.4456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	3.1376	21.8848	26.0516	0.0426		1.3487	1.3487		1.3487	1.3487	0.0000	4,034.0887	4,034.0887	0.2768		4,041.0098
Total	**77.5831**	**21.8848**	**26.0516**	**0.0426**		**1.3487**	**1.3487**		**1.3487**	**1.3487**	**0.0000**	**4,034.0887**	**4,034.0887**	**0.2768**		**4,041.0098**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1812	0.1239	1.3994	4.0900e-003	0.3915	3.4300e-003	0.3950	0.1045	3.1600e-003	0.1077		407.4554	407.4554	0.0120		407.7552
Total	**0.1812**	**0.1239**	**1.3994**	**4.0900e-003**	**0.3915**	**3.4300e-003**	**0.3950**	**0.1045**	**3.1600e-003**	**0.1077**		**407.4554**	**407.4554**	**0.0120**		**407.7552**

Poly High School Phase 2

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	176.43	1000sqft	4.05	176,430.00	0
Other Asphalt Surfaces	275.94	1000sqft	6.33	275,945.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Trips and VMT - See CalEEMod Assumptions File

Demolition -

Grading -

Architectural Coating - Mit Measure

Vehicle Trips - CalEEMod Defaults

Water And Wastewater - CalEEMod Defaults

Solid Waste - See CalEEMod Defaults

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	300.00	259.00
tblConstructionPhase	NumDays	300.00	45.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	10.00	43.00
tblGrading	MaterialExported	0.00	10,535.00
tblLandUse	BuildingSpaceSquareFeet	275,940.00	275,945.00
tblLandUse	LandUseSquareFeet	275,940.00	275,945.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	86.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	229.36	0.00
tblTripsAndVMT	HaulingTripNumber	545.00	872.00
tblTripsAndVMT	HaulingTripNumber	1,317.00	1,505.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	74.00	84.00
tblTripsAndVMT	VendorTripNumber	74.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblWater	IndoorWaterUseRate	5,858,294.64	0.00
tblWater	OutdoorWaterUseRate	15,064,186.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	3.8969	37.2163	36.3498	0.0935	3.3325	1.3659	4.6684	0.7181	1.3113	2.0104	0.0000	9,217.3577	9,217.3577	1.4062	0.0000	9,252.5128
2021	54.6544	55.9115	62.8267	0.1396	4.4852	2.5226	5.6088	1.1550	2.4592	3.2900	0.0000	13,598.0410	13,598.0410	1.6774	0.0000	13,639.9772
2022	2.8588	16.8634	22.2651	0.0548	4.5000	0.6909	5.1909	1.1586	0.6450	1.8036	0.0000	5,286.5319	5,286.5319	0.7489	0.0000	5,305.2537
Maximum	**54.6544**	**55.9115**	**62.8267**	**0.1396**	**4.5000**	**2.5226**	**5.6088**	**1.1586**	**2.4592**	**3.2900**	**0.0000**	**13,598.0410**	**13,598.0410**	**1.6774**	**0.0000**	**13,639.9772**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	3.8969	37.2163	36.3498	0.0935	2.6615	1.3659	4.0274	0.7181	1.3113	2.0104	0.0000	9,217.3577	9,217.3577	1.4062	0.0000	9,252.5128
2021	54.6544	55.9115	62.8267	0.1396	4.4852	2.5226	5.6088	1.1550	2.4592	3.2900	0.0000	13,598.0410	13,598.0410	1.6774	0.0000	13,639.9772
2022	2.8588	16.8634	22.2651	0.0548	4.5000	0.6909	5.1909	1.1586	0.6450	1.8036	0.0000	5,286.5319	5,286.5319	0.7489	0.0000	5,305.2537
Maximum	**54.6544**	**55.9115**	**62.8267**	**0.1396**	**4.5000**	**2.5226**	**5.6088**	**1.1586**	**2.4592**	**3.2900**	**0.0000**	**13,598.0410**	**13,598.0410**	**1.6774**	**0.0000**	**13,639.9772**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**5.45**	**0.00**	**4.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2020	9/30/2020	5	43	
2	Site Preparation	Site Preparation	10/1/2020	11/30/2020	5	43	
3	Building Construction	Building Construction	12/1/2020	11/26/2021	5	259	
4	Architectural Coating	Architectural Coating	10/27/2021	11/26/2021	5	23	
5	Temporary Portables Removal	Building Construction	11/29/2021	1/28/2022	5	45	
6	Paving	Paving	11/29/2021	1/28/2022	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 264,645; Non-Residential Outdoor: 88,215; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.48
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	85	0.78
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Site Preparation	Trenchers	1	8.00	78	0.50
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Temporary Portables Removal	Cranes	1	8.00	231	0.29
Temporary Portables Removal	Excavators	0	8.00	158	0.38
Temporary Portables Removal	Forklifts	0	8.00	89	0.20
Temporary Portables Removal	Generator Sets	0	8.00	84	0.74
Temporary Portables Removal	Graders	0	8.00	187	0.41
Temporary Portables Removal	Rubber Tired Dozers	0	8.00	247	0.40
Temporary Portables Removal	Scrapers	0	8.00	367	0.48
Temporary Portables Removal	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Temporary Portables Removal	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Temporary Portables Removal	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	86.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	872.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,505.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	190.00	84.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Temporary Portables Removal	1	190.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7416	0.0000	2.7416	0.4151	0.0000	0.4151			0.0000			0.0000
Off-Road	2.8395	21.4679	24.8781	0.0393		1.3145	1.3145		1.2908	1.2908		3,745.1741	3,745.1741	0.5292		3,758.4043
Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**2.7416**	**1.3145**	**4.0560**	**0.4151**	**1.2908**	**1.7059**		**3,745.1741**	**3,745.1741**	**0.5292**		**3,758.4043**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1771	5.8311	1.2921	0.0160	0.3546	0.0186	0.3732	0.0972	0.0178	0.1150		1,735.5473	1,735.5473	0.1181		1,738.5006
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0128	1.0000e-003	0.0138	3.6900e-003	9.6000e-004	4.6400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0920	0.0655	0.8757	2.3600e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		235.2226	235.2226	7.4200e-003		235.4080
Total	**0.2763**	**6.1093**	**2.2235**	**0.0189**	**0.5909**	**0.0215**	**0.6124**	**0.1602**	**0.0205**	**0.1807**		**2,026.1748**	**2,026.1748**	**0.1289**		**2,029.3981**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1720	0.0000	1.1720	0.1775	0.0000	0.1775			0.0000			0.0000
Off-Road	2.8395	21.4679	24.8781	0.0393		1.3145	1.3145		1.2908	1.2908	0.0000	3,745.1741	3,745.1741	0.5292		3,758.4043
Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**1.1720**	**1.3145**	**2.4865**	**0.1775**	**1.2908**	**1.4682**	**0.0000**	**3,745.1741**	**3,745.1741**	**0.5292**		**3,758.4043**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1771	5.8311	1.2921	0.0160	0.3546	0.0186	0.3732	0.0972	0.0178	0.1150		1,735.5473	1,735.5473	0.1181		1,738.5006
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0128	1.0000e-003	0.0138	3.6900e-003	9.6000e-004	4.6400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0920	0.0655	0.8757	2.3600e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		235.2226	235.2226	7.4200e-003		235.4080
Total	**0.2763**	**6.1093**	**2.2235**	**0.0189**	**0.5909**	**0.0215**	**0.6124**	**0.1602**	**0.0205**	**0.1807**		**2,026.1748**	**2,026.1748**	**0.1289**		**2,029.3981**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0277	0.0000	0.0277	4.2000e-003	0.0000	4.2000e-003			0.0000			0.0000
Off-Road	1.5401	14.8331	14.4608	0.0205		0.9425	0.9425		0.8679	0.8679		1,971.0798	1,971.0798	0.6299		1,986.8277
Total	**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.0277**	**0.9425**	**0.9702**	**4.2000e-003**	**0.8679**	**0.8721**		**1,971.0798**	**1,971.0798**	**0.6299**		**1,986.8277**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3057	10.0639	2.2301	0.0276	0.6120	0.0321	0.6441	0.1678	0.0307	0.1985		2,995.4114	2,995.4114	0.2039		3,000.5085
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0128	1.0000e-003	0.0138	3.6900e-003	9.6000e-004	4.6400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.3957**	**10.3356**	**3.0739**	**0.0303**	**0.8260**	**0.0348**	**0.8608**	**0.2248**	**0.0332**	**0.2580**		**3,262.5166**	**3,262.5166**	**0.2139**		**3,267.8652**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0118	0.0000	0.0118	1.7900e-003	0.0000	1.7900e-003			0.0000			0.0000
Off-Road	1.5401	14.8331	14.4608	0.0205		0.9425	0.9425		0.8679	0.8679	0.0000	1,971.0798	1,971.0798	0.6299		1,986.8277
Total	**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.0118**	**0.9425**	**0.9543**	**1.7900e-003**	**0.8679**	**0.8697**	**0.0000**	**1,971.0798**	**1,971.0798**	**0.6299**		**1,986.8277**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3057	10.0639	2.2301	0.0276	0.6120	0.0321	0.6441	0.1678	0.0307	0.1985		2,995.4114	2,995.4114	0.2039		3,000.5085
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0128	1.0000e-003	0.0138	3.6900e-003	9.6000e-004	4.6400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0828	0.0589	0.7881	2.1300e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		211.7003	211.7003	6.6700e-003		211.8672
Total	**0.3957**	**10.3356**	**3.0739**	**0.0303**	**0.8260**	**0.0348**	**0.8608**	**0.2248**	**0.0332**	**0.2580**		**3,262.5166**	**3,262.5166**	**0.2139**		**3,267.8652**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7237	27.6590	25.6897	0.0493		1.3061	1.3061		1.2357	1.2357		4,655.7358	4,655.7358	1.1938		4,685.5796
Total	**2.7237**	**27.6590**	**25.6897**	**0.0493**		**1.3061**	**1.3061**		**1.2357**	**1.2357**		**4,655.7358**	**4,655.7358**	**1.1938**		**4,685.5796**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2988	8.9353	2.3411	0.0218	0.5378	0.0421	0.5798	0.1548	0.0402	0.1951		2,327.0074	2,327.0074	0.1420		2,330.5575
Worker	0.8744	0.6220	8.3191	0.0224	2.1238	0.0178	2.1415	0.5632	0.0164	0.5796		2,234.6145	2,234.6145	0.0705		2,236.3758
Total	**1.1731**	**9.5573**	**10.6602**	**0.0442**	**2.6615**	**0.0598**	**2.7213**	**0.7181**	**0.0566**	**0.7747**		**4,561.6219**	**4,561.6219**	**0.2125**		**4,566.9332**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7237	27.6590	25.6897	0.0493		1.3061	1.3061		1.2357	1.2357	0.0000	4,655.7358	4,655.7358	1.1938		4,685.5796
Total	**2.7237**	**27.6590**	**25.6897**	**0.0493**		**1.3061**	**1.3061**		**1.2357**	**1.2357**	**0.0000**	**4,655.7358**	**4,655.7358**	**1.1938**		**4,685.5796**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2988	8.9353	2.3411	0.0218	0.5378	0.0421	0.5798	0.1548	0.0402	0.1951		2,327.0074	2,327.0074	0.1420		2,330.5575
Worker	0.8744	0.6220	8.3191	0.0224	2.1238	0.0178	2.1415	0.5632	0.0164	0.5796		2,234.6145	2,234.6145	0.0705		2,236.3758
Total	**1.1731**	**9.5573**	**10.6602**	**0.0442**	**2.6615**	**0.0598**	**2.7213**	**0.7181**	**0.0566**	**0.7747**		**4,561.6219**	**4,561.6219**	**0.2125**		**4,566.9332**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5045	25.1995	25.4597	0.0493		1.1366	1.1366		1.0756	1.0756		4,658.5597	4,658.5597	1.1881		4,688.2616
Total	**2.5045**	**25.1995**	**25.4597**	**0.0493**		**1.1366**	**1.1366**		**1.0756**	**1.0756**		**4,658.5597**	**4,658.5597**	**1.1881**		**4,688.2616**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2553	8.1555	2.1321	0.0216	0.5378	0.0167	0.5545	0.1548	0.0160	0.1708		2,308.9973	2,308.9973	0.1360		2,312.3980
Worker	0.8145	0.5598	7.6527	0.0217	2.1238	0.0172	2.1409	0.5632	0.0158	0.5790		2,163.6627	2,163.6627	0.0638		2,165.2565
Total	**1.0698**	**8.7153**	**9.7848**	**0.0433**	**2.6615**	**0.0338**	**2.6954**	**0.7181**	**0.0318**	**0.7498**		**4,472.6600**	**4,472.6600**	**0.1998**		**4,477.6546**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5045	25.1995	25.4597	0.0493		1.1366	1.1366		1.0756	1.0756	0.0000	4,658.5597	4,658.5597	1.1881		4,688.2616
Total	**2.5045**	**25.1995**	**25.4597**	**0.0493**		**1.1366**	**1.1366**		**1.0756**	**1.0756**	**0.0000**	**4,658.5597**	**4,658.5597**	**1.1881**		**4,688.2616**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2553	8.1555	2.1321	0.0216	0.5378	0.0167	0.5545	0.1548	0.0160	0.1708		2,308.9973	2,308.9973	0.1360		2,312.3980
Worker	0.8145	0.5598	7.6527	0.0217	2.1238	0.0172	2.1409	0.5632	0.0158	0.5790		2,163.6627	2,163.6627	0.0638		2,165.2565
Total	**1.0698**	**8.7153**	**9.7848**	**0.0433**	**2.6615**	**0.0338**	**2.6954**	**0.7181**	**0.0318**	**0.7498**		**4,472.6600**	**4,472.6600**	**0.1998**		**4,477.6546**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	47.7797					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	3.1376	21.8848	26.0516	0.0426		1.3487	1.3487		1.3487	1.3487		4,034.0887	4,034.0887	0.2768		4,041.0098
Total	**50.9173**	**21.8848**	**26.0516**	**0.0426**		**1.3487**	**1.3487**		**1.3487**	**1.3487**		**4,034.0887**	**4,034.0887**	**0.2768**		**4,041.0098**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1629	0.1120	1.5305	4.3400e-003	0.4248	3.4300e-003	0.4282	0.1127	3.1600e-003	0.1158		432.7325	432.7325	0.0128		433.0513
Total	**0.1629**	**0.1120**	**1.5305**	**4.3400e-003**	**0.4248**	**3.4300e-003**	**0.4282**	**0.1127**	**3.1600e-003**	**0.1158**		**432.7325**	**432.7325**	**0.0128**		**433.0513**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	47.7797					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	3.1376	21.8848	26.0516	0.0426		1.3487	1.3487		1.3487	1.3487	0.0000	4,034.0887	4,034.0887	0.2768		4,041.0098
Total	**50.9173**	**21.8848**	**26.0516**	**0.0426**		**1.3487**	**1.3487**		**1.3487**	**1.3487**	**0.0000**	**4,034.0887**	**4,034.0887**	**0.2768**		**4,041.0098**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1629	0.1120	1.5305	4.3400e-003	0.4248	3.4300e-003	0.4282	0.1127	3.1600e-003	0.1158		432.7325	432.7325	0.0128		433.0513
Total	**0.1629**	**0.1120**	**1.5305**	**4.3400e-003**	**0.4248**	**3.4300e-003**	**0.4282**	**0.1127**	**3.1600e-003**	**0.1158**		**432.7325**	**432.7325**	**0.0128**		**433.0513**

3.6 Temporary Portables Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4129	4.8493	1.9829	5.7700e-003		0.1969	0.1969		0.1811	0.1811		558.7388	558.7388	0.1807		563.2565
Total	**0.4129**	**4.8493**	**1.9829**	**5.7700e-003**		**0.1969**	**0.1969**		**0.1811**	**0.1811**		**558.7388**	**558.7388**	**0.1807**		**563.2565**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0104	0.3338	0.0783	9.7000e-004	0.0645	1.0200e-003	0.0656	0.0165	9.8000e-004	0.0174		105.3355	105.3355	7.1500e-003		105.5143
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8145	0.5598	7.6527	0.0217	3.9701	0.0172	3.9872	1.0164	0.0158	1.0322		2,163.6627	2,163.6627	0.0638		2,165.2565
Total	**0.8248**	**0.8936**	**7.7310**	**0.0227**	**4.0346**	**0.0182**	**4.0528**	**1.0329**	**0.0168**	**1.0497**		**2,268.9983**	**2,268.9983**	**0.0709**		**2,270.7708**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4129	4.8493	1.9829	5.7700e-003		0.1969	0.1969		0.1811	0.1811	0.0000	558.7388	558.7388	0.1807		563.2565
Total	**0.4129**	**4.8493**	**1.9829**	**5.7700e-003**		**0.1969**	**0.1969**		**0.1811**	**0.1811**	**0.0000**	**558.7388**	**558.7388**	**0.1807**		**563.2565**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0104	0.3338	0.0783	9.7000e-004	0.0645	1.0200e-003	0.0656	0.0165	9.8000e-004	0.0174		105.3355	105.3355	7.1500e-003		105.5143
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8145	0.5598	7.6527	0.0217	3.9701	0.0172	3.9872	1.0164	0.0158	1.0322		2,163.6627	2,163.6627	0.0638		2,165.2565
Total	**0.8248**	**0.8936**	**7.7310**	**0.0227**	**4.0346**	**0.0182**	**4.0528**	**1.0329**	**0.0168**	**1.0497**		**2,268.9983**	**2,268.9983**	**0.0709**		**2,270.7708**

3.6 Temporary Portables Removal - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3730	4.1843	1.8923	5.7700e-003		0.1737	0.1737		0.1598	0.1598		558.8304	558.8304	0.1807		563.3488
Total	**0.3730**	**4.1843**	**1.8923**	**5.7700e-003**		**0.1737**	**0.1737**		**0.1598**	**0.1598**		**558.8304**	**558.8304**	**0.1807**		**563.3488**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	9.8700e-003	0.3101	0.0775	9.6000e-004	0.0794	8.9000e-004	0.0802	0.0201	8.5000e-004	0.0210		104.0897	104.0897	7.0400e-003		104.2657
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7629	0.5057	7.0605	0.0210	3.9701	0.0166	3.9867	1.0164	0.0153	1.0317		2,087.5534	2,087.5534	0.0576		2,088.9938
Total	**0.7728**	**0.8158**	**7.1379**	**0.0219**	**4.0494**	**0.0175**	**4.0670**	**1.0365**	**0.0162**	**1.0527**		**2,191.6431**	**2,191.6431**	**0.0647**		**2,193.2596**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3730	4.1843	1.8923	5.7700e-003		0.1737	0.1737		0.1598	0.1598	0.0000	558.8304	558.8304	0.1807		563.3488
Total	**0.3730**	**4.1843**	**1.8923**	**5.7700e-003**		**0.1737**	**0.1737**		**0.1598**	**0.1598**	**0.0000**	**558.8304**	**558.8304**	**0.1807**		**563.3488**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	9.8700e-003	0.3101	0.0775	9.6000e-004	0.0794	8.9000e-004	0.0802	0.0201	8.5000e-004	0.0210		104.0897	104.0897	7.0400e-003		104.2657
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7629	0.5057	7.0605	0.0210	3.9701	0.0166	3.9867	1.0164	0.0153	1.0317		2,087.5534	2,087.5534	0.0576		2,088.9938
Total	**0.7728**	**0.8158**	**7.1379**	**0.0219**	**4.0494**	**0.0175**	**4.0670**	**1.0365**	**0.0162**	**1.0527**		**2,191.6431**	**2,191.6431**	**0.0647**		**2,193.2596**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2803	11.2564	11.7726	0.0192		0.5811	0.5811		0.5438	0.5438		1,715.0804	1,715.0804	0.4659		1,726.7290
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6489**	**11.2564**	**11.7726**	**0.0192**		**0.5811**	**0.5811**		**0.5438**	**0.5438**		**1,715.0804**	**1,715.0804**	**0.4659**		**1,726.7290**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0547	1.7476	0.4569	4.6300e-003	0.1152	3.5700e-003	0.1188	0.0332	3.4200e-003	0.0366		494.7851	494.7851	0.0292		495.5139
Worker	0.1286	0.0884	1.2083	3.4300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		341.6310	341.6310	0.0101		341.8826
Total	**0.1833**	**1.8360**	**1.6652**	**8.0600e-003**	**0.4506**	**6.2800e-003**	**0.4569**	**0.1221**	**5.9200e-003**	**0.1280**		**836.4161**	**836.4161**	**0.0392**		**837.3965**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2803	11.2564	11.7726	0.0192		0.5811	0.5811		0.5438	0.5438	0.0000	1,715.0804	1,715.0804	0.4659		1,726.7290
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6489**	**11.2564**	**11.7726**	**0.0192**		**0.5811**	**0.5811**		**0.5438**	**0.5438**	**0.0000**	**1,715.0804**	**1,715.0804**	**0.4659**		**1,726.7290**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0547	1.7476	0.4569	4.6300e-003	0.1152	3.5700e-003	0.1188	0.0332	3.4200e-003	0.0366		494.7851	494.7851	0.0292		495.5139
Worker	0.1286	0.0884	1.2083	3.4300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		341.6310	341.6310	0.0101		341.8826
Total	**0.1833**	**1.8360**	**1.6652**	**8.0600e-003**	**0.4506**	**6.2800e-003**	**0.4569**	**0.1221**	**5.9200e-003**	**0.1280**		**836.4161**	**836.4161**	**0.0392**		**837.3965**

3.7 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1727	10.1215	11.6877	0.0192		0.4939	0.4939		0.4636	0.4636		1,715.9702	1,715.9702	0.4662		1,727.6260
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**		**0.4939**	**0.4939**		**0.4636**	**0.4636**		**1,715.9702**	**1,715.9702**	**0.4662**		**1,727.6260**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0514	1.6619	0.4323	4.5800e-003	0.1152	3.1200e-003	0.1184	0.0332	2.9900e-003	0.0362		490.4746	490.4746	0.0282		491.1783
Worker	0.1205	0.0798	1.1148	3.3100e-003	0.3353	2.6200e-003	0.3380	0.0889	2.4200e-003	0.0914		329.6137	329.6137	9.1000e-003		329.8411
Total	**0.1718**	**1.7418**	**1.5471**	**7.8900e-003**	**0.4506**	**5.7400e-003**	**0.4563**	**0.1221**	**5.4100e-003**	**0.1275**		**820.0883**	**820.0883**	**0.0373**		**821.0194**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1727	10.1215	11.6877	0.0192		0.4939	0.4939		0.4636	0.4636	0.0000	1,715.9702	1,715.9702	0.4662		1,727.6260
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**		**0.4939**	**0.4939**		**0.4636**	**0.4636**	**0.0000**	**1,715.9702**	**1,715.9702**	**0.4662**		**1,727.6260**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0514	1.6619	0.4323	4.5800e-003	0.1152	3.1200e-003	0.1184	0.0332	2.9900e-003	0.0362		490.4746	490.4746	0.0282		491.1783
Worker	0.1205	0.0798	1.1148	3.3100e-003	0.3353	2.6200e-003	0.3380	0.0889	2.4200e-003	0.0914		329.6137	329.6137	9.1000e-003		329.8411
Total	**0.1718**	**1.7418**	**1.5471**	**7.8900e-003**	**0.4506**	**5.7400e-003**	**0.4563**	**0.1221**	**5.4100e-003**	**0.1275**		**820.0883**	**820.0883**	**0.0373**		**821.0194**

Poly High School

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	134.33	1000sqft	3.08	134,334.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2021
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - Mit Measure

Vehicle Trips - See CalEEMod Assumptions

Area Coating - .

Water And Wastewater - See CalEEMod Assumptions

Solid Waste - CalEEMod Assumptions

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	18.00	44.00
tblConstructionPhase	NumDays	230.00	44.00
tblConstructionPhase	NumDays	230.00	259.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	18.00	43.00
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	PhaseEndDate	10/30/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	7/4/2019	3/16/2019
tblConstructionPhase	PhaseEndDate	7/1/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	3/1/2019	3/2/2019
tblConstructionPhase	PhaseEndDate	8/31/2020	6/30/2020
tblConstructionPhase	PhaseStartDate	9/1/2020	3/1/2020
tblConstructionPhase	PhaseStartDate	5/4/2019	1/15/2019
tblConstructionPhase	PhaseStartDate	7/5/2019	5/6/2019
tblConstructionPhase	PhaseStartDate	7/2/2020	5/1/2020
tblConstructionPhase	PhaseStartDate	3/2/2019	3/4/2019
tblGrading	MaterialExported	0.00	11,025.00
tblLandUse	BuildingSpaceSquareFeet	134,330.00	134,334.00

tblLandUse	LandUseSquareFeet	134,330.00	134,334.00
tblOffRoadEquipment	HorsePower	84.00	9.00
tblOffRoadEquipment	HorsePower	85.00	80.00
tblOffRoadEquipment	HorsePower	65.00	8.00
tblOffRoadEquipment	LoadFactor	0.48	0.50
tblOffRoadEquipment	LoadFactor	0.78	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.43
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Portable Installation
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Portable Installation
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Portable Installation
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	174.63	0.00
tblTripsAndVMT	HaulingTripNumber	565.00	904.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	HaulingTripNumber	1,378.00	1,575.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00

tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblWater	IndoorWaterUseRate	4,460,379.29	0.00
tblWater	OutdoorWaterUseRate	11,469,546.75	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.3509	33.8040	29.6214	0.0648	4.0242	1.5117	5.3428	0.7545	1.4302	2.0283	0.0000	6,674.2883	6,674.2883	1.2803	0.0000	6,700.8118
2020	21.0766	32.9661	31.3465	0.0685	0.9538	1.4393	2.3931	0.2576	1.3678	1.6254	0.0000	6,611.6585	6,611.6585	1.2945	0.0000	6,644.0205
Maximum	**21.0766**	**33.8040**	**31.3465**	**0.0685**	**4.0242**	**1.5117**	**5.3428**	**0.7545**	**1.4302**	**2.0283**	**0.0000**	**6,674.2883**	**6,674.2883**	**1.2945**	**0.0000**	**6,700.8118**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.3509	33.8040	29.6214	0.0648	2.4324	1.5117	3.7511	0.5135	1.4302	1.7873	0.0000	6,674.2883	6,674.2883	1.2803	0.0000	6,700.8118
2020	21.0766	32.9661	31.3465	0.0685	0.9538	1.4393	2.3931	0.2576	1.3678	1.6254	0.0000	6,611.6585	6,611.6585	1.2945	0.0000	6,644.0205
Maximum	**21.0766**	**33.8040**	**31.3465**	**0.0685**	**2.4324**	**1.5117**	**3.7511**	**0.5135**	**1.4302**	**1.7873**	**0.0000**	**6,674.2883**	**6,674.2883**	**1.2945**	**0.0000**	**6,700.8118**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.98**	**0.00**	**20.58**	**23.81**	**0.00**	**6.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	3/2/2019	5	44	
2	Site Preparation	Site Preparation	3/4/2019	5/3/2019	5	45	
3	Portable Installation	Building Construction	1/15/2019	3/16/2019	5	44	
4	Building Construction	Building Construction	5/6/2019	4/30/2020	5	259	
5	Paving	Paving	5/1/2020	6/30/2020	5	43	
6	Architectural Coating	Architectural Coating	3/1/2020	4/30/2020	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 201,501; Non-Residential Outdoor: 67,167; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.50
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	80	0.38
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Portable Installation	Cranes	1	8.00	231	0.29
Portable Installation	Excavators	0	8.00	158	0.38
Portable Installation	Forklifts	0	8.00	89	0.20
Portable Installation	Generator Sets	0	8.00	84	0.74
Portable Installation	Graders	0	8.00	187	0.41
Portable Installation	Rubber Tired Dozers	0	8.00	247	0.40
Portable Installation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Portable Installation	Welders	0	8.00	46	0.45
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	0	8.00	9	0.74
Building Construction	Pumps	1	8.00	84	0.74

Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	6.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	904.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,575.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Portable Installation	1	56.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	56.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7804	0.0000	2.7804	0.4210	0.0000	0.4210			0.0000			0.0000
Off-Road	2.0685	15.8180	16.6948	0.0262		1.0307	1.0307		1.0079	1.0079		2,514.5723	2,514.5723	0.3990		2,524.5484
Total	**2.0685**	**15.8180**	**16.6948**	**0.0262**	**2.7804**	**1.0307**	**3.8111**	**0.4210**	**1.0079**	**1.4289**		**2,514.5723**	**2,514.5723**	**0.3990**		**2,524.5484**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1931	6.2927	1.3417	0.0164	0.3592	0.0231	0.3823	0.0985	0.0221	0.1206		1,776.1787	1,776.1787	0.1223		1,779.2368
Vendor	8.3100e-003	0.2315	0.0614	5.2000e-004	0.0128	1.4800e-003	0.0143	3.6900e-003	1.4100e-003	5.1000e-003		55.7629	55.7629	3.5700e-003		55.8523
Worker	0.0999	0.0734	0.9643	2.4400e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		242.5906	242.5906	8.3300e-003		242.7989
Total	**0.3013**	**6.5976**	**2.3674**	**0.0194**	**0.5956**	**0.0265**	**0.6221**	**0.1614**	**0.0253**	**0.1867**		**2,074.5322**	**2,074.5322**	**0.1342**		**2,077.8879**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1886	0.0000	1.1886	0.1800	0.0000	0.1800			0.0000			0.0000
Off-Road	2.0685	15.8180	16.6948	0.0262		1.0307	1.0307		1.0079	1.0079	0.0000	2,514.5723	2,514.5723	0.3990		2,524.5484
Total	**2.0685**	**15.8180**	**16.6948**	**0.0262**	**1.1886**	**1.0307**	**2.2193**	**0.1800**	**1.0079**	**1.1878**	**0.0000**	**2,514.5723**	**2,514.5723**	**0.3990**		**2,524.5484**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1931	6.2927	1.3417	0.0164	0.3592	0.0231	0.3823	0.0985	0.0221	0.1206		1,776.1787	1,776.1787	0.1223		1,779.2368
Vendor	8.3100e-003	0.2315	0.0614	5.2000e-004	0.0128	1.4800e-003	0.0143	3.6900e-003	1.4100e-003	5.1000e-003		55.7629	55.7629	3.5700e-003		55.8523
Worker	0.0999	0.0734	0.9643	2.4400e-003	0.2236	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		242.5906	242.5906	8.3300e-003		242.7989
Total	**0.3013**	**6.5976**	**2.3674**	**0.0194**	**0.5956**	**0.0265**	**0.6221**	**0.1614**	**0.0253**	**0.1867**		**2,074.5322**	**2,074.5322**	**0.1342**		**2,077.8879**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0277	0.0000	0.0277	4.2000e-003	0.0000	4.2000e-003			0.0000			0.0000
Off-Road	1.6539	16.0070	14.5327	0.0205		1.0420	1.0420		0.9594	0.9594		2,013.9098	2,013.9098	0.6299		2,029.6560
Total	**1.6539**	**16.0070**	**14.5327**	**0.0205**	**0.0277**	**1.0420**	**1.0697**	**4.2000e-003**	**0.9594**	**0.9636**		**2,013.9098**	**2,013.9098**	**0.6299**		**2,029.6560**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3289	10.7199	2.2856	0.0280	0.6119	0.0393	0.6513	0.1677	0.0376	0.2054		3,025.7911	3,025.7911	0.2084		3,031.0007
Vendor	8.3100e-003	0.2315	0.0614	5.2000e-004	0.0128	1.4800e-003	0.0143	3.6900e-003	1.4100e-003	5.1000e-003		55.7629	55.7629	3.5700e-003		55.8523
Worker	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	**0.4271**	**11.0175**	**3.2149**	**0.0307**	**0.8259**	**0.0426**	**0.8685**	**0.2248**	**0.0406**	**0.2654**		**3,299.8856**	**3,299.8856**	**0.2195**		**3,305.3720**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0118	0.0000	0.0118	1.7900e-003	0.0000	1.7900e-003			0.0000			0.0000
Off-Road	1.6539	16.0070	14.5327	0.0205		1.0420	1.0420		0.9594	0.9594	0.0000	2,013.9098	2,013.9098	0.6299		2,029.6560
Total	**1.6539**	**16.0070**	**14.5327**	**0.0205**	**0.0118**	**1.0420**	**1.0538**	**1.7900e-003**	**0.9594**	**0.9612**	**0.0000**	**2,013.9098**	**2,013.9098**	**0.6299**		**2,029.6560**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3289	10.7199	2.2856	0.0280	0.6119	0.0393	0.6513	0.1677	0.0376	0.2054		3,025.7911	3,025.7911	0.2084		3,031.0007
Vendor	8.3100e-003	0.2315	0.0614	5.2000e-004	0.0128	1.4800e-003	0.0143	3.6900e-003	1.4100e-003	5.1000e-003		55.7629	55.7629	3.5700e-003		55.8523
Worker	0.0899	0.0661	0.8679	2.1900e-003	0.2012	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		218.3315	218.3315	7.5000e-003		218.5190
Total	**0.4271**	**11.0175**	**3.2149**	**0.0307**	**0.8259**	**0.0426**	**0.8685**	**0.2248**	**0.0406**	**0.2654**		**3,299.8856**	**3,299.8856**	**0.2195**		**3,305.3720**

3.4 Portable Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5040	6.0070	2.2930	5.7700e-003		0.2546	0.2546		0.2343	0.2343		571.2106	571.2106	0.1807		575.7287
Total	**0.5040**	**6.0070**	**2.2930**	**5.7700e-003**		**0.2546**	**0.2546**		**0.2343**	**0.2343**		**571.2106**	**571.2106**	**0.1807**		**575.7287**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0120	0.3898	0.0831	1.0200e-003	0.0223	1.4300e-003	0.0237	6.1000e-003	1.3700e-003	7.4700e-003		110.0288	110.0288	7.5800e-003		110.2182
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2798	0.2056	2.7001	6.8200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		679.2536	679.2536	0.0233		679.8369
Total	**0.2917**	**0.5954**	**2.7832**	**7.8400e-003**	**0.6482**	**6.8300e-003**	**0.6550**	**0.1721**	**6.3400e-003**	**0.1785**		**789.2824**	**789.2824**	**0.0309**		**790.0551**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5040	6.0070	2.2930	5.7700e-003		0.2546	0.2546		0.2343	0.2343	0.0000	571.2106	571.2106	0.1807		575.7287
Total	**0.5040**	**6.0070**	**2.2930**	**5.7700e-003**		**0.2546**	**0.2546**		**0.2343**	**0.2343**	**0.0000**	**571.2106**	**571.2106**	**0.1807**		**575.7287**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0120	0.3898	0.0831	1.0200e-003	0.0223	1.4300e-003	0.0237	6.1000e-003	1.3700e-003	7.4700e-003		110.0288	110.0288	7.5800e-003		110.2182
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2798	0.2056	2.7001	6.8200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		679.2536	679.2536	0.0233		679.8369
Total	**0.2917**	**0.5954**	**2.7832**	**7.8400e-003**	**0.6482**	**6.8300e-003**	**0.6550**	**0.1721**	**6.3400e-003**	**0.1785**		**789.2824**	**789.2824**	**0.0309**		**790.0551**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9382	29.8950	25.9386	0.0492		1.4827	1.4827		1.4026	1.4026		4,728.2965	4,728.2965	1.1998		4,758.2914
Total	**2.9382**	**29.8950**	**25.9386**	**0.0492**		**1.4827**	**1.4827**		**1.4026**	**1.4026**		**4,728.2965**	**4,728.2965**	**1.1998**		**4,758.2914**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1330	3.7034	0.9827	8.3600e-003	0.2049	0.0236	0.2285	0.0590	0.0226	0.0816		892.2068	892.2068	0.0572		893.6362
Worker	0.2798	0.2056	2.7001	6.8200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		679.2536	679.2536	0.0233		679.8369
Total	**0.4127**	**3.9090**	**3.6828**	**0.0152**	**0.8308**	**0.0290**	**0.8598**	**0.2250**	**0.0276**	**0.2526**		**1,571.4604**	**1,571.4604**	**0.0805**		**1,573.4731**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9382	29.8950	25.9386	0.0492		1.4827	1.4827		1.4026	1.4026	0.0000	4,728.2965	4,728.2965	1.1998		4,758.2914
Total	**2.9382**	**29.8950**	**25.9386**	**0.0492**		**1.4827**	**1.4827**		**1.4026**	**1.4026**	**0.0000**	**4,728.2965**	**4,728.2965**	**1.1998**		**4,758.2914**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1330	3.7034	0.9827	8.3600e-003	0.2049	0.0236	0.2285	0.0590	0.0226	0.0816		892.2068	892.2068	0.0572		893.6362
Worker	0.2798	0.2056	2.7001	6.8200e-003	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		679.2536	679.2536	0.0233		679.8369
Total	**0.4127**	**3.9090**	**3.6828**	**0.0152**	**0.8308**	**0.0290**	**0.8598**	**0.2250**	**0.0276**	**0.2526**		**1,571.4604**	**1,571.4604**	**0.0805**		**1,573.4731**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7237	27.6590	25.6897	0.0493		1.3061	1.3061		1.2357	1.2357		4,655.7358	4,655.7358	1.1938		4,685.5796
Total	**2.7237**	**27.6590**	**25.6897**	**0.0493**		**1.3061**	**1.3061**		**1.2357**	**1.2357**		**4,655.7358**	**4,655.7358**	**1.1938**		**4,685.5796**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1138	3.4039	0.8919	8.3000e-003	0.2049	0.0160	0.2209	0.0590	0.0153	0.0743		886.4790	886.4790	0.0541		887.8314
Worker	0.2577	0.1833	2.4519	6.6100e-003	0.6260	5.2300e-003	0.6312	0.1660	4.8200e-003	0.1708		658.6232	658.6232	0.0208		659.1423
Total	**0.3715**	**3.5873**	**3.3438**	**0.0149**	**0.8308**	**0.0213**	**0.8521**	**0.2250**	**0.0202**	**0.2451**		**1,545.1022**	**1,545.1022**	**0.0749**		**1,546.9738**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7237	27.6590	25.6897	0.0493		1.3061	1.3061		1.2357	1.2357	0.0000	4,655.7358	4,655.7358	1.1938		4,685.5796
Total	**2.7237**	**27.6590**	**25.6897**	**0.0493**		**1.3061**	**1.3061**		**1.2357**	**1.2357**	**0.0000**	**4,655.7358**	**4,655.7358**	**1.1938**		**4,685.5796**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1138	3.4039	0.8919	8.3000e-003	0.2049	0.0160	0.2209	0.0590	0.0153	0.0743		886.4790	886.4790	0.0541		887.8314
Worker	0.2577	0.1833	2.4519	6.6100e-003	0.6260	5.2300e-003	0.6312	0.1660	4.8200e-003	0.1708		658.6232	658.6232	0.0208		659.1423
Total	**0.3715**	**3.5873**	**3.3438**	**0.0149**	**0.8308**	**0.0213**	**0.8521**	**0.2250**	**0.0202**	**0.2451**		**1,545.1022**	**1,545.1022**	**0.0749**		**1,546.9738**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3599	12.0472	11.8187	0.0192		0.6500	0.6500		0.6072	0.6072		1,715.0061	1,715.0061	0.4659		1,726.6541
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**		**0.6500**	**0.6500**		**0.6072**	**0.6072**		**1,715.0061**	**1,715.0061**	**0.4659**		**1,726.6541**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0640	1.9147	0.5017	4.6700e-003	0.1152	9.0100e-003	0.1243	0.0332	8.6200e-003	0.0418		498.6445	498.6445	0.0304		499.4052
Worker	0.1381	0.0982	1.3135	3.5400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		352.8339	352.8339	0.0111		353.1120
Total	**0.2021**	**2.0129**	**1.8152**	**8.2100e-003**	**0.4506**	**0.0118**	**0.4624**	**0.1221**	**0.0112**	**0.1333**		**851.4783**	**851.4783**	**0.0416**		**852.5171**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3599	12.0472	11.8187	0.0192		0.6500	0.6500		0.6072	0.6072	0.0000	1,715.0061	1,715.0061	0.4659		1,726.6541
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3599**	**12.0472**	**11.8187**	**0.0192**		**0.6500**	**0.6500**		**0.6072**	**0.6072**	**0.0000**	**1,715.0061**	**1,715.0061**	**0.4659**		**1,726.6541**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0640	1.9147	0.5017	4.6700e-003	0.1152	9.0100e-003	0.1243	0.0332	8.6200e-003	0.0418		498.6445	498.6445	0.0304		499.4052
Worker	0.1381	0.0982	1.3135	3.5400e-003	0.3353	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		352.8339	352.8339	0.0111		353.1120
Total	**0.2021**	**2.0129**	**1.8152**	**8.2100e-003**	**0.4506**	**0.0118**	**0.4624**	**0.1221**	**0.0112**	**0.1333**		**851.4783**	**851.4783**	**0.0416**		**852.5171**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.6886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**17.9308**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0360	0.4816	1.3000e-003	0.1230	1.0300e-003	0.1240	0.0326	9.5000e-004	0.0336		129.3724	129.3724	4.0800e-003		129.4744
Total	**0.0506**	**0.0360**	**0.4816**	**1.3000e-003**	**0.1230**	**1.0300e-003**	**0.1240**	**0.0326**	**9.5000e-004**	**0.0336**		**129.3724**	**129.3724**	**4.0800e-003**		**129.4744**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.6886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**17.9308**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0506	0.0360	0.4816	1.3000e-003	0.1230	1.0300e-003	0.1240	0.0326	9.5000e-004	0.0336		129.3724	129.3724	4.0800e-003		129.4744
Total	**0.0506**	**0.0360**	**0.4816**	**1.3000e-003**	**0.1230**	**1.0300e-003**	**0.1240**	**0.0326**	**9.5000e-004**	**0.0336**		**129.3724**	**129.3724**	**4.0800e-003**		**129.4744**

Poly High School Phase 2

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	176.43	1000sqft	4.05	176,430.00	0
Other Asphalt Surfaces	275.94	1000sqft	6.33	275,945.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions File

Trips and VMT - See CalEEMod Assumptions File

Demolition -

Grading -

Architectural Coating - Mit Measure

Vehicle Trips - CalEEMod Defaults

Water And Wastewater - CalEEMod Defaults

Solid Waste - See CalEEMod Defaults

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	300.00	259.00
tblConstructionPhase	NumDays	300.00	45.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	10.00	43.00
tblGrading	MaterialExported	0.00	10,535.00
tblLandUse	BuildingSpaceSquareFeet	275,940.00	275,945.00
tblLandUse	LandUseSquareFeet	275,940.00	275,945.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	86.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	229.36	0.00
tblTripsAndVMT	HaulingTripNumber	545.00	872.00
tblTripsAndVMT	HaulingTripNumber	1,317.00	1,505.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	74.00	84.00
tblTripsAndVMT	VendorTripNumber	74.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblWater	IndoorWaterUseRate	5,858,294.64	0.00
tblWater	OutdoorWaterUseRate	15,064,186.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.0070	37.2811	35.8909	0.0916	3.3325	1.3666	4.6687	0.7181	1.3115	2.0110	0.0000	9,023.2067	9,023.2067	1.4114	0.0000	9,058.4922
2021	54.7769	55.9665	62.2660	0.1375	4.4852	2.5231	5.6094	1.1550	2.4598	3.2905	0.0000	13,383.0833	13,383.0833	1.6818	0.0000	13,425.1291
2022	2.9635	16.9249	21.6023	0.0532	4.5000	0.6910	5.1910	1.1586	0.6451	1.8037	0.0000	5,130.0704	5,130.0704	0.7469	0.0000	5,148.7428
Maximum	**54.7769**	**55.9665**	**62.2660**	**0.1375**	**4.5000**	**2.5231**	**5.6094**	**1.1586**	**2.4598**	**3.2905**	**0.0000**	**13,383.0833**	**13,383.0833**	**1.6818**	**0.0000**	**13,425.1291**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.0070	37.2811	35.8909	0.0916	2.6615	1.3666	4.0281	0.7181	1.3115	2.0110	0.0000	9,023.2067	9,023.2067	1.4114	0.0000	9,058.4922
2021	54.7769	55.9665	62.2660	0.1375	4.4852	2.5231	5.6094	1.1550	2.4598	3.2905	0.0000	13,383.0833	13,383.0833	1.6818	0.0000	13,425.1291
2022	2.9635	16.9249	21.6023	0.0532	4.5000	0.6910	5.1910	1.1586	0.6451	1.8037	0.0000	5,130.0704	5,130.0704	0.7469	0.0000	5,148.7428
Maximum	**54.7769**	**55.9665**	**62.2660**	**0.1375**	**4.5000**	**2.5231**	**5.6094**	**1.1586**	**2.4598**	**3.2905**	**0.0000**	**13,383.0833**	**13,383.0833**	**1.6818**	**0.0000**	**13,425.1291**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**5.45**	**0.00**	**4.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2020	9/30/2020	5	43	
2	Site Preparation	Site Preparation	10/1/2020	11/30/2020	5	43	
3	Building Construction	Building Construction	12/1/2020	11/26/2021	5	259	
4	Architectural Coating	Architectural Coating	10/27/2021	11/26/2021	5	23	
5	Temporary Portables Removal	Building Construction	11/29/2021	1/28/2022	5	45	
6	Paving	Paving	11/29/2021	1/28/2022	5	45	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 264,645; Non-Residential Outdoor: 88,215; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.48
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	85	0.78
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Site Preparation	Trenchers	1	8.00	78	0.50
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Temporary Portables Removal	Cranes	1	8.00	231	0.29
Temporary Portables Removal	Excavators	0	8.00	158	0.38
Temporary Portables Removal	Forklifts	0	8.00	89	0.20
Temporary Portables Removal	Generator Sets	0	8.00	84	0.74
Temporary Portables Removal	Graders	0	8.00	187	0.41
Temporary Portables Removal	Rubber Tired Dozers	0	8.00	247	0.40
Temporary Portables Removal	Scrapers	0	8.00	367	0.48
Temporary Portables Removal	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Temporary Portables Removal	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Temporary Portables Removal	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	86.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	872.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,505.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	190.00	84.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Temporary Portables Removal	1	190.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7416	0.0000	2.7416	0.4151	0.0000	0.4151			0.0000			0.0000
Off-Road	2.8395	21.4679	24.8781	0.0393		1.3145	1.3145		1.2908	1.2908		3,745.1741	3,745.1741	0.5292		3,758.4043
Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**2.7416**	**1.3145**	**4.0560**	**0.4151**	**1.2908**	**1.7059**		**3,745.1741**	**3,745.1741**	**0.5292**		**3,758.4043**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1814	5.9065	1.3732	0.0157	0.3546	0.0189	0.3735	0.0972	0.0181	0.1153		1,705.6605	1,705.6605	0.1224		1,708.7212
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0128	1.0200e-003	0.0138	3.6900e-003	9.7000e-004	4.6600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.1022	0.0725	0.8020	2.2200e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		221.4841	221.4841	6.9800e-003		221.6586
Total	**0.2911**	**6.1917**	**2.2367**	**0.0185**	**0.5909**	**0.0218**	**0.6127**	**0.1602**	**0.0208**	**0.1809**		**1,981.0344**	**1,981.0344**	**0.1330**		**1,984.3597**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1720	0.0000	1.1720	0.1775	0.0000	0.1775			0.0000			0.0000
Off-Road	2.8395	21.4679	24.8781	0.0393		1.3145	1.3145		1.2908	1.2908	0.0000	3,745.1741	3,745.1741	0.5292		3,758.4043
Total	**2.8395**	**21.4679**	**24.8781**	**0.0393**	**1.1720**	**1.3145**	**2.4865**	**0.1775**	**1.2908**	**1.4682**	**0.0000**	**3,745.1741**	**3,745.1741**	**0.5292**		**3,758.4043**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1814	5.9065	1.3732	0.0157	0.3546	0.0189	0.3735	0.0972	0.0181	0.1153		1,705.6605	1,705.6605	0.1224		1,708.7212
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0128	1.0200e-003	0.0138	3.6900e-003	9.7000e-004	4.6600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.1022	0.0725	0.8020	2.2200e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		221.4841	221.4841	6.9800e-003		221.6586
Total	**0.2911**	**6.1917**	**2.2367**	**0.0185**	**0.5909**	**0.0218**	**0.6127**	**0.1602**	**0.0208**	**0.1809**		**1,981.0344**	**1,981.0344**	**0.1330**		**1,984.3597**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0277	0.0000	0.0277	4.2000e-003	0.0000	4.2000e-003			0.0000			0.0000
Off-Road	1.5401	14.8331	14.4608	0.0205		0.9425	0.9425		0.8679	0.8679		1,971.0798	1,971.0798	0.6299		1,986.8277
Total	**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.0277**	**0.9425**	**0.9702**	**4.2000e-003**	**0.8679**	**0.8721**		**1,971.0798**	**1,971.0798**	**0.6299**		**1,986.8277**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3132	10.1942	2.3700	0.0272	0.6120	0.0326	0.6446	0.1678	0.0312	0.1990		2,943.8292	2,943.8292	0.2113		2,949.1117
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0128	1.0200e-003	0.0138	3.6900e-003	9.7000e-004	4.6600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.4126**	**10.4721**	**3.1533**	**0.0297**	**0.8260**	**0.0353**	**0.8613**	**0.2248**	**0.0337**	**0.2585**		**3,197.0547**	**3,197.0547**	**0.2212**		**3,202.5844**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0118	0.0000	0.0118	1.7900e-003	0.0000	1.7900e-003			0.0000			0.0000
Off-Road	1.5401	14.8331	14.4608	0.0205		0.9425	0.9425		0.8679	0.8679	0.0000	1,971.0798	1,971.0798	0.6299		1,986.8277
Total	**1.5401**	**14.8331**	**14.4608**	**0.0205**	**0.0118**	**0.9425**	**0.9543**	**1.7900e-003**	**0.8679**	**0.8697**	**0.0000**	**1,971.0798**	**1,971.0798**	**0.6299**		**1,986.8277**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3132	10.1942	2.3700	0.0272	0.6120	0.0326	0.6446	0.1678	0.0312	0.1990		2,943.8292	2,943.8292	0.2113		2,949.1117
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0128	1.0200e-003	0.0138	3.6900e-003	9.7000e-004	4.6600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.0920	0.0652	0.7218	2.0000e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		199.3357	199.3357	6.2800e-003		199.4927
Total	**0.4126**	**10.4721**	**3.1533**	**0.0297**	**0.8260**	**0.0353**	**0.8613**	**0.2248**	**0.0337**	**0.2585**		**3,197.0547**	**3,197.0547**	**0.2212**		**3,202.5844**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7237	27.6590	25.6897	0.0493		1.3061	1.3061		1.2357	1.2357		4,655.7358	4,655.7358	1.1938		4,685.5796
Total	**2.7237**	**27.6590**	**25.6897**	**0.0493**		**1.3061**	**1.3061**		**1.2357**	**1.2357**		**4,655.7358**	**4,655.7358**	**1.1938**		**4,685.5796**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3123	8.9334	2.5820	0.0212	0.5378	0.0427	0.5805	0.1548	0.0409	0.1957		2,263.3722	2,263.3722	0.1514		2,267.1559
Worker	0.9709	0.6887	7.6192	0.0211	2.1238	0.0178	2.1415	0.5632	0.0164	0.5796		2,104.0987	2,104.0987	0.0663		2,105.7567
Total	**1.2833**	**9.6221**	**10.2012**	**0.0423**	**2.6615**	**0.0605**	**2.7220**	**0.7181**	**0.0572**	**0.7753**		**4,367.4709**	**4,367.4709**	**0.2177**		**4,372.9126**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7237	27.6590	25.6897	0.0493		1.3061	1.3061		1.2357	1.2357	0.0000	4,655.7358	4,655.7358	1.1938		4,685.5796
Total	**2.7237**	**27.6590**	**25.6897**	**0.0493**		**1.3061**	**1.3061**		**1.2357**	**1.2357**	**0.0000**	**4,655.7358**	**4,655.7358**	**1.1938**		**4,685.5796**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3123	8.9334	2.5820	0.0212	0.5378	0.0427	0.5805	0.1548	0.0409	0.1957		2,263.3722	2,263.3722	0.1514		2,267.1559
Worker	0.9709	0.6887	7.6192	0.0211	2.1238	0.0178	2.1415	0.5632	0.0164	0.5796		2,104.0987	2,104.0987	0.0663		2,105.7567
Total	**1.2833**	**9.6221**	**10.2012**	**0.0423**	**2.6615**	**0.0605**	**2.7220**	**0.7181**	**0.0572**	**0.7753**		**4,367.4709**	**4,367.4709**	**0.2177**		**4,372.9126**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5045	25.1995	25.4597	0.0493		1.1366	1.1366		1.0756	1.0756		4,658.5597	4,658.5597	1.1881		4,688.2616
Total	**2.5045**	**25.1995**	**25.4597**	**0.0493**		**1.1366**	**1.1366**		**1.0756**	**1.0756**		**4,658.5597**	**4,658.5597**	**1.1881**		**4,688.2616**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2680	8.1387	2.3585	0.0210	0.5378	0.0172	0.5550	0.1548	0.0165	0.1713		2,245.7024	2,245.7024	0.1450		2,249.3268
Worker	0.9060	0.6197	6.9969	0.0205	2.1238	0.0172	2.1409	0.5632	0.0158	0.5790		2,037.2771	2,037.2771	0.0600		2,038.7758
Total	**1.1740**	**8.7583**	**9.3553**	**0.0415**	**2.6615**	**0.0344**	**2.6959**	**0.7181**	**0.0323**	**0.7503**		**4,282.9795**	**4,282.9795**	**0.2049**		**4,288.1026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5045	25.1995	25.4597	0.0493		1.1366	1.1366		1.0756	1.0756	0.0000	4,658.5597	4,658.5597	1.1881		4,688.2616
Total	**2.5045**	**25.1995**	**25.4597**	**0.0493**		**1.1366**	**1.1366**		**1.0756**	**1.0756**	**0.0000**	**4,658.5597**	**4,658.5597**	**1.1881**		**4,688.2616**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2680	8.1387	2.3585	0.0210	0.5378	0.0172	0.5550	0.1548	0.0165	0.1713		2,245.7024	2,245.7024	0.1450		2,249.3268
Worker	0.9060	0.6197	6.9969	0.0205	2.1238	0.0172	2.1409	0.5632	0.0158	0.5790		2,037.2771	2,037.2771	0.0600		2,038.7758
Total	**1.1740**	**8.7583**	**9.3553**	**0.0415**	**2.6615**	**0.0344**	**2.6959**	**0.7181**	**0.0323**	**0.7503**		**4,282.9795**	**4,282.9795**	**0.2049**		**4,288.1026**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	47.7797					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	3.1376	21.8848	26.0516	0.0426		1.3487	1.3487		1.3487	1.3487		4,034.0887	4,034.0887	0.2768		4,041.0098
Total	**50.9173**	**21.8848**	**26.0516**	**0.0426**		**1.3487**	**1.3487**		**1.3487**	**1.3487**		**4,034.0887**	**4,034.0887**	**0.2768**		**4,041.0098**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1812	0.1239	1.3994	4.0900e-003	0.4248	3.4300e-003	0.4282	0.1127	3.1600e-003	0.1158		407.4554	407.4554	0.0120		407.7552
Total	**0.1812**	**0.1239**	**1.3994**	**4.0900e-003**	**0.4248**	**3.4300e-003**	**0.4282**	**0.1127**	**3.1600e-003**	**0.1158**		**407.4554**	**407.4554**	**0.0120**		**407.7552**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	47.7797					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	3.1376	21.8848	26.0516	0.0426		1.3487	1.3487		1.3487	1.3487	0.0000	4,034.0887	4,034.0887	0.2768		4,041.0098
Total	**50.9173**	**21.8848**	**26.0516**	**0.0426**		**1.3487**	**1.3487**		**1.3487**	**1.3487**	**0.0000**	**4,034.0887**	**4,034.0887**	**0.2768**		**4,041.0098**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1812	0.1239	1.3994	4.0900e-003	0.4248	3.4300e-003	0.4282	0.1127	3.1600e-003	0.1158		407.4554	407.4554	0.0120		407.7552
Total	**0.1812**	**0.1239**	**1.3994**	**4.0900e-003**	**0.4248**	**3.4300e-003**	**0.4282**	**0.1127**	**3.1600e-003**	**0.1158**		**407.4554**	**407.4554**	**0.0120**		**407.7552**

3.6 Temporary Portables Removal - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4129	4.8493	1.9829	5.7700e-003		0.1969	0.1969		0.1811	0.1811		558.7388	558.7388	0.1807		563.2565
Total	**0.4129**	**4.8493**	**1.9829**	**5.7700e-003**		**0.1969**	**0.1969**		**0.1811**	**0.1811**		**558.7388**	**558.7388**	**0.1807**		**563.2565**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0106	0.3379	0.0830	9.5000e-004	0.0645	1.0400e-003	0.0656	0.0165	1.0000e-003	0.0175		103.5108	103.5108	7.4000e-003		103.6958
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.9060	0.6197	6.9969	0.0205	3.9701	0.0172	3.9872	1.0164	0.0158	1.0322		2,037.2771	2,037.2771	0.0600		2,038.7758
Total	**0.9166**	**0.9576**	**7.0799**	**0.0214**	**4.0346**	**0.0182**	**4.0528**	**1.0329**	**0.0168**	**1.0497**		**2,140.7879**	**2,140.7879**	**0.0674**		**2,142.4716**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4129	4.8493	1.9829	5.7700e-003		0.1969	0.1969		0.1811	0.1811	0.0000	558.7388	558.7388	0.1807		563.2565
Total	**0.4129**	**4.8493**	**1.9829**	**5.7700e-003**		**0.1969**	**0.1969**		**0.1811**	**0.1811**	**0.0000**	**558.7388**	**558.7388**	**0.1807**		**563.2565**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0106	0.3379	0.0830	9.5000e-004	0.0645	1.0400e-003	0.0656	0.0165	1.0000e-003	0.0175		103.5108	103.5108	7.4000e-003		103.6958
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.9060	0.6197	6.9969	0.0205	3.9701	0.0172	3.9872	1.0164	0.0158	1.0322		2,037.2771	2,037.2771	0.0600		2,038.7758
Total	**0.9166**	**0.9576**	**7.0799**	**0.0214**	**4.0346**	**0.0182**	**4.0528**	**1.0329**	**0.0168**	**1.0497**		**2,140.7879**	**2,140.7879**	**0.0674**		**2,142.4716**

3.6 Temporary Portables Removal - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3730	4.1843	1.8923	5.7700e-003		0.1737	0.1737		0.1598	0.1598		558.8304	558.8304	0.1807		563.3488
Total	**0.3730**	**4.1843**	**1.8923**	**5.7700e-003**		**0.1737**	**0.1737**		**0.1598**	**0.1598**		**558.8304**	**558.8304**	**0.1807**		**563.3488**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0101	0.3136	0.0820	9.4000e-004	0.0794	9.0000e-004	0.0803	0.0201	8.6000e-004	0.0210		102.2705	102.2705	7.2800e-003		102.4526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8509	0.5596	6.4444	0.0197	3.9701	0.0166	3.9867	1.0164	0.0153	1.0317		1,965.6820	1,965.6820	0.0541		1,967.0351
Total	**0.8610**	**0.8733**	**6.5263**	**0.0207**	**4.0494**	**0.0175**	**4.0670**	**1.0365**	**0.0162**	**1.0527**		**2,067.9525**	**2,067.9525**	**0.0614**		**2,069.4876**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3730	4.1843	1.8923	5.7700e-003		0.1737	0.1737		0.1598	0.1598	0.0000	558.8304	558.8304	0.1807		563.3488
Total	**0.3730**	**4.1843**	**1.8923**	**5.7700e-003**		**0.1737**	**0.1737**		**0.1598**	**0.1598**	**0.0000**	**558.8304**	**558.8304**	**0.1807**		**563.3488**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0101	0.3136	0.0820	9.4000e-004	0.0794	9.0000e-004	0.0803	0.0201	8.6000e-004	0.0210		102.2705	102.2705	7.2800e-003		102.4526
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8509	0.5596	6.4444	0.0197	3.9701	0.0166	3.9867	1.0164	0.0153	1.0317		1,965.6820	1,965.6820	0.0541		1,967.0351
Total	**0.8610**	**0.8733**	**6.5263**	**0.0207**	**4.0494**	**0.0175**	**4.0670**	**1.0365**	**0.0162**	**1.0527**		**2,067.9525**	**2,067.9525**	**0.0614**		**2,069.4876**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2803	11.2564	11.7726	0.0192		0.5811	0.5811		0.5438	0.5438		1,715.0804	1,715.0804	0.4659		1,726.7290
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6489**	**11.2564**	**11.7726**	**0.0192**		**0.5811**	**0.5811**		**0.5438**	**0.5438**		**1,715.0804**	**1,715.0804**	**0.4659**		**1,726.7290**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0574	1.7440	0.5054	4.5000e-003	0.1152	3.6900e-003	0.1189	0.0332	3.5300e-003	0.0367		481.2220	481.2220	0.0311		481.9986
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		321.6753	321.6753	9.4700e-003		321.9120
Total	**0.2005**	**1.8418**	**1.6102**	**7.7300e-003**	**0.4506**	**6.4000e-003**	**0.4570**	**0.1221**	**6.0300e-003**	**0.1281**		**802.8973**	**802.8973**	**0.0405**		**803.9106**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2803	11.2564	11.7726	0.0192		0.5811	0.5811		0.5438	0.5438	0.0000	1,715.0804	1,715.0804	0.4659		1,726.7290
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6489**	**11.2564**	**11.7726**	**0.0192**		**0.5811**	**0.5811**		**0.5438**	**0.5438**	**0.0000**	**1,715.0804**	**1,715.0804**	**0.4659**		**1,726.7290**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0574	1.7440	0.5054	4.5000e-003	0.1152	3.6900e-003	0.1189	0.0332	3.5300e-003	0.0367		481.2220	481.2220	0.0311		481.9986
Worker	0.1431	0.0978	1.1048	3.2300e-003	0.3353	2.7100e-003	0.3380	0.0889	2.5000e-003	0.0914		321.6753	321.6753	9.4700e-003		321.9120
Total	**0.2005**	**1.8418**	**1.6102**	**7.7300e-003**	**0.4506**	**6.4000e-003**	**0.4570**	**0.1221**	**6.0300e-003**	**0.1281**		**802.8973**	**802.8973**	**0.0405**		**803.9106**

3.7 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1727	10.1215	11.6877	0.0192		0.4939	0.4939		0.4636	0.4636		1,715.9702	1,715.9702	0.4662		1,727.6260
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**		**0.4939**	**0.4939**		**0.4636**	**0.4636**		**1,715.9702**	**1,715.9702**	**0.4662**		**1,727.6260**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0539	1.6574	0.4784	4.4600e-003	0.1152	3.2300e-003	0.1185	0.0332	3.0900e-003	0.0363		476.9465	476.9465	0.0300		477.6959
Worker	0.1344	0.0884	1.0175	3.1100e-003	0.3353	2.6200e-003	0.3380	0.0889	2.4200e-003	0.0914		310.3708	310.3708	8.5500e-003		310.5845
Total	**0.1883**	**1.7458**	**1.4959**	**7.5700e-003**	**0.4506**	**5.8500e-003**	**0.4564**	**0.1221**	**5.5100e-003**	**0.1276**		**787.3173**	**787.3173**	**0.0385**		**788.2804**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1727	10.1215	11.6877	0.0192		0.4939	0.4939		0.4636	0.4636	0.0000	1,715.9702	1,715.9702	0.4662		1,727.6260
Paving	0.3686					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5412**	**10.1215**	**11.6877**	**0.0192**		**0.4939**	**0.4939**		**0.4636**	**0.4636**	**0.0000**	**1,715.9702**	**1,715.9702**	**0.4662**		**1,727.6260**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0539	1.6574	0.4784	4.4600e-003	0.1152	3.2300e-003	0.1185	0.0332	3.0900e-003	0.0363		476.9465	476.9465	0.0300		477.6959
Worker	0.1344	0.0884	1.0175	3.1100e-003	0.3353	2.6200e-003	0.3380	0.0889	2.4200e-003	0.0914		310.3708	310.3708	8.5500e-003		310.5845
Total	**0.1883**	**1.7458**	**1.4959**	**7.5700e-003**	**0.4506**	**5.8500e-003**	**0.4564**	**0.1221**	**5.5100e-003**	**0.1276**		**787.3173**	**787.3173**	**0.0385**		**788.2804**

Poly High School

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	134.33	1000sqft	3.08	134,334.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	12			**Operational Year**	2021
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See CalEEMod Assumptions

Construction Phase - See CalEEMod Assumptions

Off-road Equipment -

Off-road Equipment - See CalEEMod Assumptions File

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Off-road Equipment - See CalEEMod Assumptions

Trips and VMT - See CalEEMod Assumptions

Demolition -

Grading -

Architectural Coating - Mit Measure

Vehicle Trips - See CalEEMod Assumptions

Area Coating - .

Water And Wastewater - See CalEEMod Assumptions

Solid Waste - CalEEMod Assumptions

Construction Off-road Equipment Mitigation - See CalEEMod Assumptions

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	18.00	44.00
tblConstructionPhase	NumDays	230.00	44.00
tblConstructionPhase	NumDays	230.00	259.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	18.00	43.00
tblConstructionPhase	NumDays	5.00	45.00
tblConstructionPhase	PhaseEndDate	10/30/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	7/4/2019	3/16/2019
tblConstructionPhase	PhaseEndDate	7/1/2020	4/30/2020
tblConstructionPhase	PhaseEndDate	3/1/2019	3/2/2019
tblConstructionPhase	PhaseEndDate	8/31/2020	6/30/2020
tblConstructionPhase	PhaseStartDate	9/1/2020	3/1/2020
tblConstructionPhase	PhaseStartDate	5/4/2019	1/15/2019
tblConstructionPhase	PhaseStartDate	7/5/2019	5/6/2019
tblConstructionPhase	PhaseStartDate	7/2/2020	5/1/2020
tblConstructionPhase	PhaseStartDate	3/2/2019	3/4/2019
tblGrading	MaterialExported	0.00	11,025.00
tblLandUse	BuildingSpaceSquareFeet	134,330.00	134,334.00

tblLandUse	LandUseSquareFeet	134,330.00	134,334.00
tblOffRoadEquipment	HorsePower	84.00	9.00
tblOffRoadEquipment	HorsePower	85.00	80.00
tblOffRoadEquipment	HorsePower	65.00	8.00
tblOffRoadEquipment	LoadFactor	0.48	0.50
tblOffRoadEquipment	LoadFactor	0.78	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.43
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Portable Installation
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Portable Installation
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Portable Installation
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	174.63	0.00
tblTripsAndVMT	HaulingTripNumber	565.00	904.00
tblTripsAndVMT	HaulingTripNumber	0.00	56.00
tblTripsAndVMT	HaulingTripNumber	1,378.00	1,575.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	22.00	32.00
tblTripsAndVMT	VendorTripNumber	0.00	18.00

tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblWater	IndoorWaterUseRate	4,460,379.29	0.00
tblWater	OutdoorWaterUseRate	11,469,546.75	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.3869	33.8310	29.4996	0.0	4.0242	1.5121	5.3433	0.7545	1.4305	2.0287	0.0000	6,567.1891	6,567.1891	1.2828	0.0000	6,593.8804
2020	21.1159	32.9889	31.1915	0.0	0.9500	1.4395	2.3933	0.2576	1.3680	1.6256	0.0000	6,541.3925	6,541.3925	1.2966	0.0000	6,573.8071
Maximum	**21.1159**	**33.8310**	**31.1915**	**0.0**	**4.0242**	**1.5121**	**5.3433**	**0.7545**	**1.4305**	**2.0287**	**0.0000**	**6,567.1891**	**6,567.1891**	**1.2966**	**0.0000**	**6,593.8804**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.3869	33.8310	29.4996	0.0	2.4324	1.5121	3.7515	0.5135	1.4305	1.7877	0.0000	6,567.1891	6,567.1891	1.2828	0.0000	6,593.8804
2020	21.1159	32.9889	31.1915	0.0	0.9500	1.4395	2.3933	0.2576	1.3680	1.6256	0.0000	6,541.3925	6,541.3925	1.2966	0.0000	6,573.8071
Maximum	**21.1159**	**33.8310**	**31.1915**	**0.0**	**2.4324**	**1.5121**	**3.7515**	**0.5135**	**1.4305**	**1.7877**	**0.0000**	**6,567.1891**	**6,567.1891**	**1.2966**	**0.0000**	**6,593.8804**

	ROG	**NOx**	**CO**	**SO2**	**Fugi**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.9**	**0.00**	**20.57**	**23.81**	**0.00**	**6.60**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	3/2/2019	5	44	
2	Site Preparation	Site Preparation	3/4/2019	5/3/2019	5	45	
3	Portable Installation	Building Construction	1/15/2019	3/16/2019	5	44	
4	Building Construction	Building Construction	5/6/2019	4/30/2020	5	259	
5	Paving	Paving	5/1/2020	6/30/2020	5	43	
6	Architectural Coating	Architectural Coating	3/1/2020	4/30/2020	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 201,501; Non-Residential Outdoor: 67,167; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	2	8.00	78	0.50
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Crushing/Proc. Equipment	3	8.00	80	0.38
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Skid Steer Loaders	1	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Plate Compactors	1	8.00	8	0.43
Site Preparation	Rollers	2	8.00	80	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Trenchers	1	8.00	78	0.50
Portable Installation	Cranes	1	8.00	231	0.29
Portable Installation	Excavators	0	8.00	158	0.38
Portable Installation	Forklifts	0	8.00	89	0.20
Portable Installation	Generator Sets	0	8.00	84	0.74
Portable Installation	Graders	0	8.00	187	0.41
Portable Installation	Rubber Tired Dozers	0	8.00	247	0.40
Portable Installation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Portable Installation	Welders	0	8.00	46	0.45
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Cement and Mortar Mixers	5	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29

Building Construction	Generator Sets	0	8.00	9	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Rough Terrain Forklifts	4	8.00	100	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	8	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	6.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip	Vendor Trip Numb	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	2.00	904.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	1,575.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Portable Installation	1	56.00	0.00	56.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	56.00	32.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7804	0.0000	2.7804	0.4210	0.0000	0.4210			0.0000			0.0000
Off-Road	2.0685	15.8180	16.6948	0.0		1.0307	1.0307		1.0079	1.0079		2,514.5723	2,514.5723	0.3990		2,524.5484
Total	**2.0685**	**15.8180**	**16.6948**	**0.0**	**2.7804**	**1.0307**	**3.8111**	**0.4210**	**1.0079**	**1.4289**		**2,514.5723**	**2,514.5723**	**0.3990**		**2,524.5484**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1979	6.3767	1.4323	0.0	0.3593	0.0235	0.3827	0.0985	0.0225	0.1210		1,746.0548	1,746.0548	0.1270		1,749.2294
Vendor	8.6700e-003	0.2318	0.0677	5.1	0.0128	1.5000e-003	0.0143	3.6900e-003	1.4300e-003	5.1200e-003		54.2554	54.2554	3.8100e-003		54.3507
Worker	0.1108	0.0813	0.8850	2.0	0.2226	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		228.4262	228.4262	7.8600e-003		228.6226
Total	**0.3173**	**6.6898**	**2.3850**	**0.0**	**0.5956**	**0.0270**	**0.6225**	**0.1614**	**0.0257**	**0.1872**		**2,028.7364**	**2,028.7364**	**0.1387**		**2,032.2028**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1836	0.0000	1.1886	0.1800	0.0000	0.1800			0.0000			0.0000
Off-Road	2.0685	15.8180	16.6948	0.0		1.0307	1.0307		1.0079	1.0079	0.0000	2,514.5723	2,514.5723	0.3990		2,524.5484
Total	**2.0685**	**15.8180**	**16.6948**	**0.0**	**1.1836**	**1.0307**	**2.2193**	**0.1800**	**1.0079**	**1.1878**	**0.0000**	**2,514.5723**	**2,514.5723**	**0.3990**		**2,524.5484**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1979	6.3767	1.4323	0.0	0.3502	0.0235	0.3827	0.0985	0.0225	0.1210		1,746.0548	1,746.0548	0.1270		1,749.2294
Vendor	8.6700e-003	0.2318	0.0677	5.1	0.0126	1.5000e-003	0.0143	3.6900e-003	1.4300e-003	5.1200e-003		54.2554	54.2554	3.8100e-003		54.3507
Worker	0.1108	0.0813	0.8850	2.8	0.2226	1.9300e-003	0.2255	0.0593	1.7800e-003	0.0611		228.4262	228.4262	7.8600e-003		228.6226
Total	**0.3173**	**6.6898**	**2.3850**	**0.0**	**0.5956**	**0.0270**	**0.6225**	**0.1614**	**0.0257**	**0.1872**		**2,028.7364**	**2,028.7364**	**0.1387**		**2,032.2028**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0277	0.0000	0.0277	4.2000e-003	0.0000	4.2000e-003			0.0000			0.0000
Off-Road	1.6539	16.0070	14.5327	0		1.0420	1.0420		0.9594	0.9594		2,013.9098	2,013.9098	0.6299		2,029.6560
Total	**1.6539**	**16.0070**	**14.5327**	**0**	**0.0277**	**1.0420**	**1.0697**	**4.2000e-003**	**0.9594**	**0.9636**		**2,013.9098**	**2,013.9098**	**0.6299**		**2,029.6560**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3371	10.8630	2.4400	0	0.0401	0.0401	0.6520	0.1677	0.0383	0.2061		2,974.4739	2,974.4739	0.2163		2,979.8820
Vendor	8.6700e-003	0.2318	0.0677	5	0.0015	1.5000e-003	0.0143	3.6900e-003	1.4300e-003	5.1200e-003		54.2554	54.2554	3.8100e-003		54.3507
Worker	0.0997	0.0732	0.7965	2	0.0020	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
Total	**0.4455**	**11.1679**	**3.3042**	**0**	**0.0459**	**0.0433**	**0.8692**	**0.2248**	**0.0414**	**0.2662**		**3,234.3129**	**3,234.3129**	**0.2272**		**3,239.9930**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0118	0.0000	0.0118	1.7900e-003	0.0000	1.7900e-003			0.0000			0.0000
Off-Road	1.6539	16.0070	14.5327	0.0		1.0420	1.0420		0.9594	0.9594	0.0000	2,013.9098	2,013.9098	0.6299		2,029.6560
Total	**1.6539**	**16.0070**	**14.5327**	**0.0**	**0.0118**	**1.0420**	**1.0538**	**1.7900e-003**	**0.9594**	**0.9612**	**0.0000**	**2,013.9098**	**2,013.9098**	**0.6299**		**2,029.6560**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3371	10.8630	2.4400	0.0	0.6119	0.0401	0.6520	0.1677	0.0383	0.2061		2,974.4739	2,974.4739	0.2163		2,979.8820
Vendor	8.6700e-003	0.2318	0.0677	5.1	0.0138	1.5000e-003	0.0143	3.6900e-003	1.4300e-003	5.1200e-003		54.2554	54.2554	3.8100e-003		54.3507
Worker	0.0997	0.0732	0.7965	2.0	0.2019	1.7300e-003	0.2029	0.0534	1.6000e-003	0.0550		205.5836	205.5836	7.0700e-003		205.7604
Total	**0.4455**	**11.1679**	**3.3042**	**0.0**	**0.8259**	**0.0433**	**0.8692**	**0.2248**	**0.0414**	**0.2662**		**3,234.3129**	**3,234.3129**	**0.2272**		**3,239.9930**

3.4 Portable Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5040	6.0070	2.2930	5.7		0.2546	0.2546		0.2343	0.2343		571.2106	571.2106	0.1807		575.7287
Total	**0.5040**	**6.0070**	**2.2930**	**5.7**		**0.2546**	**0.2546**		**0.2343**	**0.2343**		**571.2106**	**571.2106**	**0.1807**		**575.7287**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0123	0.3950	0.0887	1.0	0.22	1.4600e-003	0.0237	6.1000e-003	1.3900e-003	7.4900e-003		108.1627	108.1627	7.8700e-003		108.3593
Vendor	0.0000	0.0000	0.0000	0.0	0.00	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3101	0.2277	2.4779	6.4	0.62	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		639.5933	639.5933	0.0220		640.1433
Total	**0.3224**	**0.6227**	**2.5666**	**7.4**	**0.64**	**6.8600e-003**	**0.6551**	**0.1721**	**6.3600e-003**	**0.1785**		**747.7560**	**747.7560**	**0.0299**		**748.5027**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5040	6.0070	2.2930	5.7		0.2546	0.2546		0.2343	0.2343	0.0000	571.2106	571.2106	0.1807		575.7287
Total	**0.5040**	**6.0070**	**2.2930**	**5.7**		**0.2546**	**0.2546**		**0.2343**	**0.2343**	**0.0000**	**571.2106**	**571.2106**	**0.1807**		**575.7287**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0123	0.3950	0.0887	1.0	0.02	1.4600e-003	0.0237	6.1000e-003	1.3900e-003	7.4900e-003		108.1627	108.1627	7.8700e-003		108.3593
Vendor	0.0000	0.0000	0.0000	0.0	0.00	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3101	0.2277	2.4779	6.1	0.62	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		639.5933	639.5933	0.0220		640.1433
Total	**0.3224**	**0.6227**	**2.5666**	**7.4**	**0.64**	**6.8600e-003**	**0.6551**	**0.1721**	**6.3600e-003**	**0.1785**		**747.7560**	**747.7560**	**0.0299**		**748.5027**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9382	29.8950	25.9386	0.0	1.4827	1.4827		1.4026	1.4026			4,728.2965	4,728.2965	1.1998		4,758.2914
Total	**2.9382**	**29.8950**	**25.9386**	**0.0**	**1.4827**	**1.4827**		**1.4026**	**1.4026**			**4,728.2965**	**4,728.2965**	**1.1998**		**4,758.2914**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1387	3.7083	1.0831	8.2040	0.0240	0.2289	0.0590	0.0230	0.0819			868.0868	868.0868	0.0610		869.6113
Worker	0.3101	0.2277	2.4779	6.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710			639.5933	639.5933	0.0220		640.1433
Total	**0.4488**	**3.9360**	**3.5610**	**0.8308**	**0.0294**	**0.8602**	**0.2250**	**0.0279**	**0.2529**			**1,507.6800**	**1,507.6800**	**0.0830**		**1,509.7546**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9382	29.8950	25.9386	0.0		1.4827	1.4827		1.4026	1.4026	0.0000	4,728.2965	4,728.2965	1.1998		4,758.2914
Total	**2.9382**	**29.8950**	**25.9386**	**0.0**		**1.4827**	**1.4827**		**1.4026**	**1.4026**	**0.0000**	**4,728.2965**	**4,728.2965**	**1.1998**		**4,758.2914**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1387	3.7083	1.0831	8.1	0.2040	0.0240	0.2289	0.0590	0.0230	0.0819		868.0868	868.0868	0.0610		869.6113
Worker	0.3101	0.2277	2.4779	6.1	0.6260	5.4000e-003	0.6314	0.1660	4.9700e-003	0.1710		639.5933	639.5933	0.0220		640.1433
Total	**0.4488**	**3.9360**	**3.5610**	**0.0**	**0.8308**	**0.0294**	**0.8602**	**0.2250**	**0.0279**	**0.2529**		**1,507.6800**	**1,507.6800**	**0.0830**		**1,509.7546**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7237	27.6590	25.6897	0.0		1.3061	1.3061		1.2357	1.2357		4,655.7358	4,655.7358	1.1938		4,685.5796
Total	**2.7237**	**27.6590**	**25.6897**	**0.0**		**1.3061**	**1.3061**		**1.2357**	**1.2357**		**4,655.7358**	**4,655.7358**	**1.1938**		**4,685.5796**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0	0.00	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1190	3.4032	0.9836	8.0	0.20	0.0163	0.2211	0.0590	0.0156	0.0746		862.2370	862.2370	0.0577		863.6784
Worker	0.2862	0.2030	2.2457	6.0	0.62	5.2300e-003	0.6312	0.1660	4.8200e-003	0.1708		620.1554	620.1554	0.0196		620.6441
Total	**0.4052**	**3.6062**	**3.2293**	**0.0**	**0.83**	**0.0215**	**0.8523**	**0.2250**	**0.0204**	**0.2454**		**1,482.3924**	**1,482.3924**	**0.0772**		**1,484.3225**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7237	27.6590	25.6897	0.0		1.3061	1.3061		1.2357	1.2357	0.0000	4,655.7358	4,655.7358	1.1938		4,685.5796
Total	**2.7237**	**27.6590**	**25.6897**	**0.0**		**1.3061**	**1.3061**		**1.2357**	**1.2357**	**0.0000**	**4,655.7358**	**4,655.7358**	**1.1938**		**4,685.5796**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0	0.00	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1190	3.4032	0.9836	8.0	0.20	0.0163	0.2211	0.0590	0.0156	0.0746		862.2370	862.2370	0.0577		863.6784
Worker	0.2862	0.2030	2.2457	6.0	0.62	5.2300e-003	0.6312	0.1660	4.8200e-003	0.1708		620.1554	620.1554	0.0196		620.6441
Total	**0.4052**	**3.6062**	**3.2293**	**0.0**	**0.83**	**0.0215**	**0.8523**	**0.2250**	**0.0204**	**0.2454**		**1,482.3924**	**1,482.3924**	**0.0772**		**1,484.3225**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3599	12.0472	11.8187	0.0		0.6500	0.6500		0.6072	0.6072		1,715.0061	1,715.0061	0.4659		1,726.6541
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3599**	**12.0472**	**11.8187**	**0.0**		**0.6500**	**0.6500**		**0.6072**	**0.6072**		**1,715.0061**	**1,715.0061**	**0.4659**		**1,726.6541**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitiv	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0669	1.9143	0.5533	4.1152		9.1600e-003	0.1244	0.0332	8.7600e-003	0.0419		485.0083	485.0083	0.0324		485.8191
Worker	0.1533	0.1087	1.2030	3.3359		2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915		332.2261	332.2261	0.0105		332.4879
Total	**0.2202**	**2.0231**	**1.7563**	**7.4511**		**0.0120**	**0.4625**	**0.1221**	**0.0113**	**0.1335**		**817.2344**	**817.2344**	**0.0429**		**818.3070**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3599	12.0472	11.8187	0		0.6500	0.6500		0.6072	0.6072	0.0000	1,715.0061	1,715.0061	0.4659		1,726.6541
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3599**	**12.0472**	**11.8187**	**0**		**0.6500**	**0.6500**		**0.6072**	**0.6072**	**0.0000**	**1,715.0061**	**1,715.0061**	**0.4659**		**1,726.6541**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0669	1.9143	0.5533	4	9.1600e-003	0.1244	0.0332	8.7600e-003	0.0419			485.0083	485.0083	0.0324		485.8191
Worker	0.1533	0.1087	1.2030	3	2.8000e-003	0.3381	0.0889	2.5800e-003	0.0915			332.2261	332.2261	0.0105		332.4879
Total	**0.2202**	**2.0231**	**1.7563**	**7**	**0.0120**	**0.4625**	**0.1221**	**0.0113**	**0.1335**			**817.2344**	**817.2344**	**0.0429**		**818.3070**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.6886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**17.9308**	**1.6838**	**1.8314**	**2.9**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0562	0.0399	0.4411	1.1223e-003		1.0300e-003	0.1240	0.0326	9.5000e-004	0.0336		121.8162	121.8162	3.8400e-003		121.9122
Total	**0.0562**	**0.0399**	**0.4411**	**1.1223e-003**		**1.0300e-003**	**0.1240**	**0.0326**	**9.5000e-004**	**0.0336**		**121.8162**	**121.8162**	**3.8400e-003**		**121.9122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.6886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**17.9308**	**1.6838**	**1.8314**	**2.9**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0562	0.0399	0.4411	1.12230		1.0300e-003	0.1240	0.0326	9.5000e-004	0.0336		121.8162	121.8162	3.8400e-003		121.9122
Total	**0.0562**	**0.0399**	**0.4411**	**1.12230**		**1.0300e-003**	**0.1240**	**0.0326**	**9.5000e-004**	**0.0336**		**121.8162**	**121.8162**	**3.8400e-003**		**121.9122**

Appendices

B.
Tree Health and Impact Assessment

Appendices

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Tree Health and Impact Assessment

FOR CONCEPT DESIGN PHASE, JOHN H. FRANCIS POLYTECHNIC HIGH SCHOOL

PREPARED BY

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ISA Qualified Tree Risk Assessor

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Member, California Native Plant Society

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INTRODUCTION

EXECUTIVE SUMMARY

LAUSD intends to undertake a comprehensive modernization project at John H. Francis Polytechnic High School that includes demolition, new construction, limited modernization and off-site utility improvements. The project proposes to remove existing structures and landscape that will impact existing tree resources.

The campus is located near an industrial area and adjacent to a busy freeway. It is recommended that canopy cover be increased as feasible for the health and comfort of both students and staff.

Healthy tree canopy in urban environments have multiple benefits[1]:

- INCREASE PERSONAL COMFORT. Average temperatures have risen 6 degrees F in the last 50 years. Trees directly improve air quality by reducing air temperature, blocking intense sun during the heat of the day, removing air pollutants and releasing cooling water vapor from their leaves.
- CLIMATE CHANGE MITIGATION. Trees reduce carbon in the atmosphere by holding carbon in their roots, stems and branches while releasing oxygen into the air. One acre of mature trees can absorb the amount of carbon released when you drive a car 26, 000 miles.
- DECREASE ENERGY CONSUMPTION. Shade building and paved surfaces thereby reducing energy usage. Trees can cool an area by up to 10 degrees F.
- IMPROVED QUALITY OF LIFE. Large mature trees can have a calming effect on children, provide habitat for wildlife, improve property values, and provide screening for privacy.
- PROTECT CHILDREN FROM SUNBURN. Trees can reduce sun exposure from UV-B radiation by about 50%.
- CAPTURE AND SAVE WATER. Large canopy trees can intercept rainfall and slowly allow it to percolate into the ground, reducing runoff into the storm drains and naturally recharging the groundwater table.

[1] Condensed from Top 22 Benefits of Trees at Tree people website at https://www.treepeople.org/resources/tree-benefits?gclid=CNmwh6yCgM4CFQtsfgodWKMBRw

ASSIGNMENT AND SUMMARIZED RESULTS

Rebecca Latta Consulting was retained to survey and assess all trees at Francis Polytechnic (PHS) and perform a conceptual tree impact assessment for proposed improvements. Each tree is tagged and measured. Tree locations and canopy are shown in the existing tree survey map. Then the concept map was layered with the existing tree map to create a preliminary tree impact map.

TREE IMPACTS SUMMARY TABLE	
Remove - Health/Structure	6
Remove - Construction conflicts/impacts	65
Neutral	67
Preserve	193
LA City Protected	2
Total	333

Based on our analysis of the conceptual plans, 65 trees on campus are may require removal for construction conflicts/impacts. An additional 6 trees are recommended for removal due to poor health and/or structure. **In total, 71 trees are recommended for removal.**

Currently 67 trees are listed as "Neutral". These trees appear healthy enough to survive low to moderate construction impacts. However, some trees may need root pruning to achieve desired grade. Installation of pavers and grading may require excavation and compaction of subgrade that would significantly impact tree roots. These impacts may increase the number of "Neutral" trees to be removed for the project.

The 193 trees listed as "Preserve" refer to trees with no anticipated construction impacts. These trees are recommended for preservation.

TREE SURVEY OVERVIEW

A total of 333 trees were surveyed on campus, 2 of which are protected trees: a coast live oak (*Quercus agrifolia*) by the track in the north corner of the school and an Oregon white oak (*Quercus garryana*) in the Senior Glade in the east corner of the school. 70 protected street trees adjacent to the campus were also surveyed.

There are at least 67 tree species on campus, of which the 20 most common are:

Common name	Tree Species	Count
Arizona ash	*Fraxinus velutina*	39
Mexican fan palm	*Washingtonia robusta*	38
Carrotwood	*Cupaniopsis anacardioides*	26
Olive	*Olea europaea*	22
Tipu tree	*Tipuana tipu*	20
Brazilian pepper tree	*Schinus terebinthifolius*	18
Canary Island pine	*Pinus canariensis*	13
Evergreen ash	*Fraxinus uhdei*	10
Chinese windmill palm	*Trachycarpus fortunei*	10
Lemon-scented gum	*Corymbia citriodora*	9
Queen palm	*Syagrus romanzoffianum*	8
Juniper	*Juniper chinensis*	7
Canary Island date palm	*Phoenix canariensis*	7
Costa Rican holly	*Olmediella betschleriana*	6
Lemon bottlebrush	*Callistemon citrinus*	5
Weeping bottlebrush	*Callistemon viminalis*	5
White mulberry	*Morus alba*	5
Aleppo pine	*Pinus halepensis*	5
Red ironbark	*Eucalyptus sideroxylon*	4
Southern magnolia	*Magnolia grandifolia*	4

There are 70 street trees that were also surveyed for the project. Three of the street trees were dead. 14 sites were vacant.

Common name	Tree Species	Count
Jacaranda	*Jacaranda mimosifolia*	34
Silk Tree	*Albizzia julibrissin*	27
Hong Kong Orchid	*Phaenera purpurea*	6
Dead		3
Total	**Street Trees**	**70**

PROTECTED TREES

According to the City of Los Angeles Protected Tree Ordinance No. 177404, any of the following Southern California native tree species, measuring at least 4 inches in cumulative diameter at 4.5 feet above grade (DBH) are protected:

(a) Any tree of the oak genus indigenous to California but excluding the scrub oak (*Quercus dumosa*)

(b) Southern California black walnut (*Juglans californica var. californica*)

(c) Western sycamore (*Platanus racemosa*)

(d) California Bay (*Umbellularia californica*)

METHODS

The trees were surveyed on May 15, 17, 22, 23, and 24, 2017. Our office conducted a basic visual assessment[2] for each tree affected by the project. Trees were measured at 54 inches from grade with a diameter tape using the American Forest Tree Measuring Guidelines. Canopies were measured in 4 cardinal directions and drawn on the site plans.

Each tree was assessed for defects such as depressions, nesting holes, structural defects, cavities, wounds, cracking bark, sap flow, insect damage, and deadwood. The inspection was conducted during daylight hours, under good weather conditions, and in light sufficient for detecting details such as surface decay and leaf color. The influence of adjacent trees and other factors affecting the growth of a subject tree, such as wires, cables, or nesting holes, were also taken into consideration when assessing tree condition.

[2] A basic visual assessment is a 360-degree inspection from the ground that includes collection of height and diameter measurements. Trees are assessed for structure. Binoculars may be used for a crown inspection, a mallet for sounding hollows, a probe for inspecting cavities, and other tools as needed to determine structural, disease or insect issues.

SURVEY RESULTS AND IMPACT ANALYSIS

TREE HEALTH GUIDELINES

A subjective alphabetical rating (e.g., "A" = best and "F" = worst) was assigned to rank the overall health of the tree(s). This rating is based on the aesthetic, structural and biological functions of the trees. Health ratings are defined as follows:

A – Excellent: Overall healthy appearance with good vigor, shoot growth, leaf color and size, minimal or no disease or insect infestation, no buried crowns (the area where roots join the stem was not covered with soil), good callus tissue formation, and limited or no fire damage.

B – Good: Less than 25% of overall health of tree affected by disease, stress, decay, insect infestation, or fire damage. Tree can have minor correctable defects that could be addressed with pruning or root crown excavations.

C – Fair: Between 25% and 50% of tree significantly affected by disease, stress, decay, insect infestation, or fire damage. Tree can have thinning canopy, circling or poorly developed roots, sunburned bark and borer damage. Tree may have defects, including internal wood decay, insect infestations, and root decay.

D – Struggling: More than 50% of overall health of tree affected by disease, stress, decay, insect infestation, or fire damage. In older trees, significant wood decay may be present.

F – Dead: Exhibits no signs of life or is not expected to recover.

SPECIFIC TREE REMOVAL RECOMMENDATIONS

The following trees have significant structural or health issues and are recommended for removal. Some of the following trees are also recommended for removal due to construction conflicts/impacts.

A. Tree #4: Brazilian Pepper Tree

This 23-inch diameter tree is located by the music building. The tree is in a permanent state of decline with a very thin canopy, severe trunk damage and decay, and a history of failure. Tree health rates a "D" on an A-F scale. Removal is recommended in 30 to 60 days.

B. Tree #20: Olive

This multi-trunked tree is located just north of the auditorium building. The tree is in a permanent state of decline with crown dieback, very little live wood, and a very thin canopy. Tree health rates a "D" on an A-F scale.

C. Tree #32: Costa Rican holly

This 1- inch diameter tree is located just east of the auditorium building. The tree's structure is severely compromised with live wood on 40% of trunk circumference. Tree health rates a "C+" on an A-F scale.

D. Tree #89: Arizona ash

This 12.5-inch diameter tree is located between buildings K and M. The tree has a very weak structure with a large cavity between severely codominant main branches. Tree health rates a "B-" on an A-F scale.

E. Tree #121: Persian silk tree

This 5.5-inch diameter tree is located by the driveway gate in the south portion of the agricultural area. The leaning tree has a damaged trunk and crown dieback. Tree health rates a "C" on an A-F scale.

F. Tree #158: Pine tree

This 18-inch diameter tree is located in the senior glade. The tree is in decline. Tree health rates a "D-" on an A-F scale.

G. Tree #173: Carrotwood

This 20-inch diameter tree is located in the senior glade. Tree structure is weak with extensive heartwood rot (Ganoderma applanatum) with conks at its base. Tree health rates a "B" on an A-F scale. Even though the leaves are green, the tree has potential for trunk failure.

H. Tree #211: Olive

This multi-trunked tree is located between the administration building and the library building. The tree is in a permanent state of decline with crown dieback, a very thin canopy, and poor structure. Tree health rates a "D+" on an A-F scale.

I. Tree #229: Brazilian pepper tree

This 18-inch diameter tree is located by the visitor parking lot entrance on Arleta Avenue. The tree is in a permanent state of decline with decay, split branches, and a very thin canopy. Tree health rates a "D+" on an A-F scale.

J. Tree #250: Brazilian pepper tree

This 16-inch diameter tree is located by the cafeteria. The tree is in a permanent state of decline with decay, a very thin canopy, and poor structure. Tree health rates a "D+" on an A-F scale.

K. Tree #251: Olive

This multi-trunked tree is located in the "polygon" just south of the cafeteria. The tree is in a permanent state of decline with decay, chlorotic leaves, and a very thin canopy. Tree health rates a "D+" on an A-F rating scale.

L. Tree #255: Olive

This multi-trunked tree is located in the west corner of the "polygon". The tree is in a permanent state of decline with epicormic shoots, a very thin canopy, and poor structure. Tree health rates a "D+" on an A-F rating scale.

TREE HEALTH AND STRUCTURE ISSUES

STRUCTURAL CONCERNS

ARIZONA ASH

Arizona ash trees (*Fraxinus velutina*) are a dominant species on the campus and are concentrated in the walkways between classrooms. Several of the trees have significant structural defects such as decay, wood borer damage, and codominant (same size) branches and have likely had these defects for many years.

Codominant branches are often weakly attached and have decay between them. This can result in failures where the two branches or trunks split apart. These trees should be inspected annually because they are in high use areas, and trees in poor condition should be phased out and replaced with new trees as feasible.

STRUCTURAL DECAY

The survey found trees with external signs of decay. Where decay was seen, it is noted in the detailed results from the tree survey. Trees can tolerate large amounts of internal decay without being rendered hazardous. Where decay is found, it may be necessary to take actions to reduce the load in the canopy as directed by an arborist who understands the biomechanics of tree failures. Further monitoring is recommended for trees with decay on a yearly basis by a qualified consulting arborist trained in risk assessment.

Types of structural decay include, but are not limited to cracks and bark fissures, open cavities, bark inclusions (localized), sunken bark, wound wood, and crown symptoms (dieback). These symptoms were found on trees on the property.

SOIL CONDITIONS

Tree health is directly related to soil health. There are many trees on campus in areas with compacted soil, which can be detrimental to root health. Compared to healthy soil, compacted soil contains less pore space needed for oxygen exchange, and is more difficult for roots to penetrate. Compacted soils also reduce the rate of water infiltration.

Much of the soil is also deficient in organic matter. Organic matter helps reduce compaction, improve drainage, provide nutrients to roots, and encourage beneficial soil organisms. Surface Mulches such as bark chips encourage beneficial fungus (such as *Trichoderma spp*.), retain moisture, suppress weeds, and improve soil structure. Mulch, leaves or other organic material encourage earthworm and microbial activity. Earthworms aerate and 'rototill' the soil, bringing nutrients to the roots.

High pH and soil chemistry imbalances may lead to poor plant performance. Some of these problems can be remedied by testing the soil and making adjustments in the chemical composition of the soil. Flooding irrigation events can move salts and other soluble elements out of the root zone and improve tree health.

The school sits atop an old landfill which could release methane and carbon dioxide into the soil. Small releases of gas over time can lead to leaf necrosis, dieback, and tree decline as the gases displace oxygen needed by roots in the soil. Methane can replace oxygen in the soil and cause anaerobic (lacking in oxygen) soil conditions often indicated by dark, sticky and septic-smelling soil.

Soil Improvement Recommendations:

1. Obtain a soil fertility test for soil in specific areas of campus that are to be planted. A complete analysis with Ph, salts, micro- and macro-nutrients is recommended. If salts are in issue, flush soils with flooding irrigation events. Recheck soils to make sure that soil chemistry has improved.

2. Check percolation to make sure the soil drains at least .5 inches/hr. If it does not, then steps need to be taken to improve water infiltration.

3. Obtain a report with the water quality for the site. The soil will take on the characteristics of the applied water.

4. It is recommended that a 4-inch thick layer of minimum 2-inch diameter bark chips be placed under the entire dripline of trees as feasible. Keep the mulch at least 6 inches away from tree trunks. The mulch protects the soil from heat and preserves and encourages feeder root growth.

5. If the area is going to be adjacent new structures the soil often must be compacted for engineering purposes around the new improvements. If these are landscape areas for new planting with no existing trees, the soil should be cross-ripped and decompacted to at least 2-3 feet as feasible. This will make a significant difference for the success of any new plantings. Landscape plants prefer soil compaction rates no greater than 65 to 75%.

INSECT AND DISEASE DESCRIPTIONS

ARMORED SCALE (GREEDY SCALE) - INSECT

These scale insects were found on the street trees and on-campus trees adjacent to the street. The plants may appear water stressed or drop leaves prematurely. The scale produces a sticky excrement called sooty mold. The honeydew product excreted by the scale attracts ants who protect the scale from their natural predators. Ant control is critical to scale control. A well timed application of horticultural oil in the dormant season or when scale crawlers are active from winter to early summer is recommended.

COTTONY CUSHIONY SCALE *(ICERYA PURCHASI)*



This scale insect is also infesting the street. It is more mobile than also key to managing this insect. A beetle (Rodolia cardinalis) can be



Close up of Armored Scale

trees on the street and adjacent to the armored scale. Ant control is natural predator, the vedalia used to control populations.



Whitish area on bark is cottony cushiony scale

EUCALYPTUS TORTOISE BEETLE (*TRACHYMELA SLOANEI)*

The Tortoise beetle is one of several leaf beetles from Australia that causes widespread damage to Eucalyptus trees across California. Notched leaves are the symptom of this insect. Well maintained and watered trees are usually able to tolerate leaf feeding. If treatment is desired, contact a licensed pest control advisor/applicator.

HEARTWOOD ROT (*GANODERMA SPP.)* - DISEASE

Ganoderma fungus causes a white rot or butt rot of hardwood trees and shrubs. It is common in local oak species. The presence of fruiting bodies usually indicates an advanced level of decay in the wood. The spores can land on open pruning wounds or other damaged plant tissue. Fruiting bodies or conks usually develop near the soil line or in the lower trunk. There two common types in La Canada Flintridge; the 'Artist's Conk' and the 'Varnish Conk'.

Heartwood rot on Coast live oak



XYLELLA (BACTERIAL BLIGHT) – DISEASE INSECT COMPLEX

Xylella, or bacterial blight, is caused by the bacterium *Xylella fastidiosa*. The bacterium clogs vascular tissue, causing branches and shoots to die. Large branches often wilt and die while adjacent branches appear healthy. The disease is often transmitted from plant to plant by the glassy-winged sharpshooter (*Homalodisca vitripennis*), an invasive sap-sucking insect. Treatments are available to retard the insect's spread, but the bacterial disease is difficult to treat once it is in the tree. There are no effective treatments for this disease. Keep trees vigorous through good water management and healthy soil conditions. Trees infected with the disease may die prematurely.

TREE PROTECTION MEASURES

These recommendations were developed to minimize any preventable construction related damage to the trees. It is important to preserve soil structure and fertility by physically protecting the soil from compaction and other maintenance activities that destroy fine roots**. I recommend that these preservation notes be copied and pasted onto the site plans along with arborist contact information.**

PROTECTIVE FENCING

Prior to any further construction activity, protective fencing should be installed at the approved limit of work or the edge of the Tree Protection Zone for protected trees. The fencing should remain in place until construction is complete. *A MEETING IS RECOMMMENDED WITH THE PROJECT ARBORIST AND THE CONSTRUCTION TEAM TO DETERMINE FENCING LOCATIONS PRIOR TO CONSTRUCTION.*

1. Provide a minimum of ¾ inch thick plywood joined together with metal clips over any bare dirt in the root zone of protected trees in areas where equipment needs to pass or where there is heavy foot/car traffic. This is to prevent compaction damage to roots.

2. Avoid mechanical injury and compaction to roots, root flares, trunks and branches. Break and lift off asphalt and concrete by hand or using small equipment under the dripline of any tree to be retained. A qualified arborist is recommended to be present to observe the area with the roots exposed, prior to undertaking any root pruning or grading.

3. Staging areas should be established before construction for materials and equipment. Washout areas should be provided for paint/stucco and concrete or other substances to contain the chemicals. These chemicals can harm tree roots. The washout and staging areas should be outside of the protected zone of protected trees and dripline of trees to be retained. The purpose is to limit preventable compaction to tree roots. Compaction reduces soil air space and limits gas exchange required for healthy tree growth.

4. Equipment should not idle under the driplines of trees to be preserved. Significant burn can occur to leaves and bark from exhaust and heat.

5. The tree/root protection zone should be irrigated sufficiently with clean, potable water to keep the tree in good health and vigor before, during and after construction. Trees should be soaked so that water reaches a depth of 2 to 3 feet and then allowed to dry out between watering.

6. Mulch in the form of bark chips is recommended for application over the surface of the soil to 4 inches deep to preserve moisture and improve soil condition.

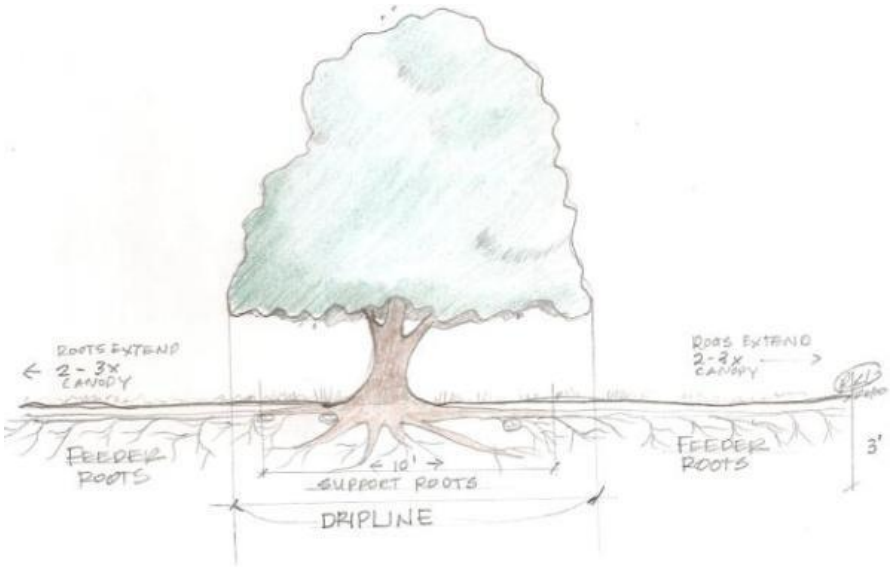
7. Trenching should occur prior to construction work to assess the impacts on the tree. This work is required to assess the size and volume of roots impacted by construction. Hand trench, keeping all roots 2” and greater intact.

8. If roots need to be cut it is recommended that the area be dug out and the roots cut back 1 to 2 inches behind the soil line. After the cut is made, recover the cut root with moist soil. The cut should be made with a sharpened, sterilized hand-pruning tool (not a chainsaw or sawzall).

    a. Roots should be pruned at the branch bark ridge, when possible. Indiscriminate cuts can cause vigorous resprouting toward hardscape.

    b. Extensive root loss can destabilize trees and cause them to go into decline. Removing large roots takes significant root mass and feeder roots. All root pruning is recommended for supervision by the project arborist.

    c. Wherever feasible, utility lines should be run outside the protected zone of trees. Any lines within the protected zone should be tunneled or run underneath existing roots rather than through them.



Tree root zone sketch

9. Trees should be pruned by qualified arborist using Best Management Pruning Practices (2008) part of ANZI A300 or equivalent. Trees should be inspected yearly and pruned as needed, not on a set schedule. More information is available at www.isa-arbor.com.

CAUTION: Removing too much foliage can weaken trees by depleting energy reserves and increasing susceptibility to insects and disease. Climbing spikes should not be used under any circumstances and are only acceptable for dead trees and climber rescue operations.

INSPECTION

Trees should be inspected on a periodic basis by a qualified tree consultant. The relative age, condition and targets under the tree should determine the inspection frequency. It is the responsibility of the property owner to establish and implement an appropriate inspection schedule based on the recommendation provided by a qualified arboricultural consultant.

Sincerely,

Rebecca Latta

Rebecca Latta
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ISA Certified Arborist WE4264A
ISA Tree Risk Assessment Qualified
Member, American Society of Consulting Arborists

Advisement:

The client is advised that should physical or biological concerns be evidenced for any specimen evaluated in a report, prudent further investigation, detailed analysis or remedial action may be required. Trees are living organisms that respond to environmental changes influencing the development, health and vigor of the specimen(s).

CERTIFICATE OF PERFORMANCE

I, Rebecca Latta certify that:

- I have personally inspected the trees described in this report and have accurately stated my findings. The extent of the evaluation is stated in the attached report;
- I have no current or future interest in the vegetation or the property that is the subject of the report and no bias with respect to the parties involved;
- The analysis, opinions, evaluation, investigation and conclusions have been prepared using accepted arboricultural practices;
- I performed the work myself and prepared the report and reviewed the report, except as specifically indicated in the report;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party nor the results if the assignment, attainment of stipulated results or the occurrence of any subsequent events.
- I further state that I am a member in good standing with American Society of Consulting Arborists and the International Society of Arboriculture. I have been involved in the practice of arboriculture and the care and study of trees for 25 years.

Signed: Rebecca Latta Date: June 12, 2017

APPENDIX ‘A’

DETAILED TREE SURVEY RESULT

TREE TABLE ABBREVIATION

ANTHR = ANTHRACNOSE

ARMIL = ARMILLARIA ROOT ROT SUSPECTED

CANK = CANKER

CHLOR = CHLOROTIC

CIR ROOT = CIRCLING ROOTS

CODOM = CODOMINANT LEADERS*

CPT SOIL = COMPACTED SOIL

CR DB = CROWN DIEBACK

CRK = CRACK

DK = DECAY

DWD = DEADWOOD

EPI = EPICORMIC SHOOTS

FL CUT = FLUSH CUT

HANG = HANGER

LMD = LAWNMOWER OR TRIMMER DAMAGE

MUM = MADE UP MULTI (THE "MULTI-TRUNKED" TREE MAY BE SEPARATE TREES)

PSHB = POLYPHAGOUS SHOT HOLE BORER

PWR = POWER LINES

RE FAIL = RECENT BRANCH FAILURE

SCALE = SCALE INSECTS

SCORCH = SCORCHED NEEDLES OR FOLIAGE

SOOT = SOOTY MOLD

STRIP = LION'S TAILED, CENTER STRIPPED

SYC BOR = SYCAMORE BORER

TOP = TOPPED

TORT BEETLE = EUCALYPTUS TORTOISE BEETLE

TR BUR = TRUNK BURIED**

TR INJ = TRUNK INJURY

VER BR = VERTICAL BRANCHES

VERT = VERTICILLIUM WILT SUSPECTED

WEEP = WEEPING SAP

XYLE = XYLELLA BACTERIAL BLIGHT SUSPECTE

* Codominant leaders, or trunks, are equally sized and both act like the tree's central leader. Codominant leaders may be weakly attached to each other due to narrow branch angles and included bark.

** Trunk buried means excess soil covers the anchor roots and lower part of the trunk. Trees with buried trunks are more susceptible to opportunistic pathogens (diseases) such as oak root rot (*Armillaria mellea*) and Phytophthora root rot (*Phytophthora spp*.), especially when the soil is continually wet.

*** Permanent state of decline refers to a slow, progressive, and permanent deterioration in tree health and structure.

TREE SURVEY TABLE

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
1	Brazilian pepper tree	*Schinus terebinthifolius*	23	B	25	CODOM, CPT SOIL, STUB, crossing branches, root sprouts, poor callus	Structural Prune	Remove - Construction conflicts/impacts
2	Brazilian pepper tree	*Schinus terebinthifolius*	23.5	C+	20	CODOM, CPT SOIL, poor callus, knots on trunk, 30 degree lean NE, uneven canopy		Remove - Construction conflicts/impacts
3	Brazilian pepper tree	*Schinus terebinthifolius*	23.5	B-	25	CODOM, CPT SOIL		Neutral
4	Brazilian pepper tree	*Schinus terebinthifolius*	23	D	20	CODOM, DK, TOP, permanent state of decline, DK on plane of lean, 15 degree lean N, history of failure	Remove	Remove - Construction conflicts/impacts
5	Brazilian pepper tree	*Schinus terebinthifolius*	22	C+	15	CODOM, DK, EPI, TOP, 15 degree lean N		Remove - Construction conflicts/impacts
6	Mexican fan palm	*Washingtonia robusta*	15	B	60	Planter, SPIKE		Neutral

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
7	Mexican fan palm	*Washingtonia robusta*	12	B	60	SPIKE		Neutral
8	Mexican fan palm	*Washingtonia robusta*	15	B	60	Planter, SPIKE		Neutral
9	Mexican fan palm	*Washingtonia robusta*	16.5	B	60	SPIKE		Remove - Construction conflicts/impacts
10	Mexican fan palm	*Washingtonia robusta*	16	B	60	SPIKE		Remove - Construction conflicts/impacts
11	Arizona ash	*Fraxinus velutina*	29.5	B-	40	CODOM w/ incl bark, DK, center-stripped, good new growth, rounded over, DK & cavity in trunk		Remove - Construction conflicts/impacts
12	Costa Rican holly	*Olmediella betschleriana*	10	B-	25	Old CANK on trunk w/rot on callus tissue, water sprouts		Remove - Construction conflicts/impacts
13	Costa Rican holly	*Olmediella betschleriana*	11	C+	20	CODOM, CANK on buttress roots + trunk		Remove - Construction conflicts/impacts
14	Costa Rican holly	*Olmediella betschleriana*	8.5	C	20	Spreading CANK on trunk, DK + small cavities in trunk		Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
15	Olive	*Olea europaea*	12, 10.5	C+	25	CODOM, DK, shallow cavities on trunk		Remove - Construction conflicts/impacts
16	Silver dollar tree	*Eucalyptus cinerea*	33	C	30	CODOM, TOP, TR BUR, CODOM w/ incl bark, PWR, frass pellets under bark, poor callus, old CANK on trunk	Structural Prune	Neutral
17	Lemon-scented gum	*Corymbia citriodora*	17	B-	30	CODOM, PWR, rounded over		Neutral
18	Lemon-scented gum	*Corymbia citriodora*	30	B	40	CODOM, CODOM w/ incl bark, PWR, rounded over	Structural Prune	Neutral
19	Southern magnolia	*Magnolia grandifolia*	14	B-	20	DK, EPI, DK with termites in trunk + scaffolds	Monitor yearly and prune deadwood	Neutral
20	Olive	*Olea europaea*	11.5, 9, 6	D	20	CODOM, CR DB, very thin, rounded over, nest, permanent state of decline	Remove	Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
21	Olive	*Olea europaea*	12, 9.5, 9.5	C+	20	CODOM with crack b/w trunks, DK in trunk, EPI, rounded over	Structural Prune	Remove - Construction conflicts/impacts
22	Brazilian pepper tree	*Schinus terebinthifolius*	20.5	C+	20	CODOM, DK in trunk, EPI, rounded over	Structural Prune	Remove - Construction conflicts/impacts
23	Brazilian pepper tree	*Schinus terebinthifolius*	16	C+	20	CODOM, DK in trunk, crossing branches, 30 degree lean W, previous branch failure	Structural Prune	Neutral
24	Brazilian pepper tree	*Schinus terebinthifolius*	21	B	25	CODOM, DK spots on trunk, old branches failure		Remove - Construction conflicts/impacts
25	Mexican fan palm	*Washingtonia robusta*	15	B-	60	SPIKE		Remove - Construction conflicts/impacts
26	Mexican fan palm	*Washingtonia robusta*	15	B-	60	SPIKE		Remove - Construction conflicts/impacts
27	Mexican fan palm	*Washingtonia robusta*	14	B-	60	SPIKE		Neutral
28	Mexican fan palm	*Washingtonia robusta*	14	B-	60	SPIKE		Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
29	Mexican fan palm	*Washingtonia robusta*	14	B-	60	SPIKE		Remove - Construction conflicts/impacts
30	Mexican fan palm	*Washingtonia robusta*	19	B-	60	SPIKE		Remove - Construction conflicts/impacts
31	Costa Rican holly	*Olmediella betschleriana*	11.5	C+	20	CANK on trunk and branches, CR DB, TR DB, WEEP		Remove - Construction conflicts/impacts
32	Costa Rican holly	*Olmediella betschleriana*	15	C+	20	CANK ~6' long, 40% of circumference has live wood	Remove	Remove - Construction conflicts/impacts
33	Costa Rican holly	*Olmediella betschleriana*	4.5, 4.5, 2.5, 2.5, 2	C-	15	CHLOR, TR BUR, nearby trenching l' from trunk	Structural Prune	Remove - Construction conflicts/impacts
34	Lemon-scented gum	*Corymbia citriodora*	21, 18	B	40	CODOM w/ incl bark, PWR, damaged buttress root		Neutral
35	Brazilian pepper tree	*Schinus terebinthifolius*	10.5, 8.5, 8.5, 6	B-	20	CODOM w/ incl bark, slightly turn		Neutral

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
36	Lemon-scented gum	*Corymbia citriodora*	23	B	45	CODOM, old SPIKE		Neutral
37	Southern magnolia	*Magnolia grandifolia*	17	B-	20	CODOM, DK in trunk bottom 4', previous center strip, decent callus	MONITOR YEARLY FOR CHANGE	Neutral
38	Southern magnolia	*Magnolia grandifolia*	11	C+	20	Possible DK, growing into pole at crown, decent callus		Neutral
39	Queensland bottle tree	*Brachychiton rupestris*	23.5	B	15	CHLOR (minor), TR BUR		Neutral
40	Arizona ash	*Fraxinus velutina*	16	B-	25	CODOM, DK at old cub, poor callus		Neutral
41	Arizona ash	*Fraxinus velutina*	18.5	B	30	CODOM, DK in trunk , DK at old cub, DK at old base, stub cuts, poor callus	Structural Prune	Neutral
42	Arizona ash	*Fraxinus velutina*	20	B	30	DK at old cuts, EPI, decent callus	Structural Prune	Neutral
43	Crape Myrtle	*Lagerstroemia indica*	6	B	15	LMD		Neutral

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
44	Tulip tree	*Liriodendron tulipifera*	3	C-	20	CHLOR, WEEP but don't suspect PSHB, LMD, SCORCH		Preserve
45	Tulip tree	*Liriodendron tulipifera*	5.5	C-	20	CHLOR, LMD, SCORCH, trunk almost girdled by hose		Remove - Construction conflicts/impacts
46	Tipu tree	*Tipuana tipu*	7.5	B-	20	CODOM, LMD, poor leaf color		Neutral
47	Tipu tree	*Tipuana tipu*	7.5	C+	20	LMD, poor leaf color, sapsucker		Preserve
48	Rotundiloba sweetgum	*Liquidambar styraciflua 'Rotundiloba'*	5	B-	15	LMD		Preserve
49	Tipu tree	*Tipuana tipu*	9.5	C+	20	CODOM, girdling root, thin, decent callus		Preserve
50	Tipu tree	*Tipuana tipu*	7.5	C+	20	CODOM w/ incl bark, LMD, growing into lawnmower guard		Preserve
51	Rotundiloba sweetgum	*Liquidambar styraciflua 'Rotundiloba'*	4, 2	B	15	DK in trunk, LMD, recent 1" branch failure, good callus		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
52	Tipu tree	*Tipuana tipu*	7	C+	20	CODOM w/ incl bark, TR BUR, thin, decent callus	Structural Prune	Preserve
53	Tipu tree	*Tipuana tipu*	8	B-	20	CODOM, LMD, sapsucker, circling root		Preserve
54	Rotundiloba sweetgum	*Liquidambar styraciflua 'Rotundiloba'*	3.5, 2	B	15	LMD, TR BUR		Preserve
55	Tipu tree	*Tipuana tipu*	10	B-	20	CODOM, LMD, sapsucker, circling root		Preserve
56	Tipu tree	*Tipuana tipu*	6	C+	20	CODOM, LMD	Structural Prune	Preserve
57	Rotundiloba sweetgum	*Liquidambar styraciflua 'Rotundiloba'*	4	B	15	TR BUR, recent branch failure		Preserve
58	Tipu tree	*Tipuana tipu*	9	B-	20	CODOM w/ incl bark, TR BUR, WEEP		Neutral
59	Tipu tree	*Tipuana tipu*	7.5	C+	20	CODOM, LMD, WEEP, thin		Remove - Construction conflicts/impacts
60	Tipu tree	*Tipuana tipu*	6.5	C	20	CODOM, LMD, WEEP, thin		Remove - Construction conflicts/impacts
61	Tulip tree	*Liriodendron tulipifera*	4	C-	25	CHLOR, DK in trunk, LMD, good callus		Neutral

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
62	Tipu tree	*Tipuana tipu*	7.5	C+	25	CODOM, LMD		Remove - Construction conflicts/impacts
63	Tipu tree	*Tipuana tipu*	8.5	C+	20	CODOM w/ incl bark, decent callus	Structural Prune	Remove - Construction conflicts/impacts
64	Tipu tree	*Tipuana tipu*	8.5	B	20	CODOM, LMD, sapsucker, growing into lawnmower guard		Neutral
65	Tipu tree	*Tipuana tipu*	7.5	B-	25	CODOM w/ incl bark, LMD, sapsucker		Neutral
66	Tipu tree	*Tipuana tipu*	8	B-	20	CODOM, decent callus, 30 degree lean SE		Neutral
67	Tipu tree	*Tipuana tipu*	6.5	B	25	CODOM, LMD	Structural Prune	Neutral
68	Silver dollar gum	*Eucalyptus polyanthemos*	11.5	C	40	thin, center-strip		Preserve
69	Empress tree	*Paulownia tomentosa*	5	B-	25	DK @ bark, EPI	Structural Prune	Preserve
70	Canary Island pine	*Pinus canariensis*	20	C+	60	thin		Preserve
71	Canary Island pine	*Pinus canariensis*	20.5	C+	60	EPI, thin		Neutral
72	Weeping bottlebrush	*Callistemon viminalis*	8.5	B	35	CODOM		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
73	Weeping bottlebrush	*Callistemon viminalis*	10.5	B	35	CODOM, previous scaffold failure		Preserve
74	Canary Island pine	*Pinus canariensis*	16	B-	40	CODOM w/ 2nd leader, EPI		Preserve
75	Canary Island pine	*Pinus canariensis*	13	B-	40	EPI		Preserve
76	Southern magnolia	*Magnolia grandifolia*	3.5	B-	15	SCORCH		Preserve
77	Arizona ash	*Fraxinus velutina*	13	B-	25	CODOM, EPI, Aphid on new growth, termites, wood borer damage		Preserve
78	Arizona ash	*Fraxinus velutina*	12	C+	25	CODOM, EPI, thin, termites, wood borer damage	Structural Prune	Preserve
79	Arizona ash	*Fraxinus velutina*	12	B-	15	CODOM, Extensive DK in scaffolds, termites, wood borer damage	Monitor and prune yearly	Preserve
80	Arizona ash	*Fraxinus velutina*	13	B-	20	CODOM w/ incl bark, extensive DK in scaffolds, termites, wood borer damage	Monitor and prune yearly	Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
81	Arizona ash	*Fraxinus velutina*	10	C	20	CODOM w/ incl bark, CR DB, DK in scaffolds, termites, wood borer damage	Monitor and prune yearly	Preserve
82	Arizona ash	*Fraxinus velutina*	20	B-	30	CODOM w ind bark, DK in scaffolds, stub cuts, termites, wood borer damage	Monitor and prune yearly	Preserve
83	Arizona ash	*Fraxinus velutina*	15.5	C+	30	CODOM, DK in trunk, termites, wood borer damage	Monitor and prune yearly	Preserve
84	Arizona ash	*Fraxinus velutina*	11	C+	20	CODOM, DK in scaffolds, termites, wood borer damage	Monitor and prune yearly	Preserve
85	Arizona ash	*Fraxinus velutina*	11	C	20	CODOM, DK in scaffolds and trunk, thin, fenced off, termites, wood borer damage	Monitor and prune yearly	Preserve
86	Arizona ash	*Fraxinus velutina*	14.5	C+	20	CODOM, DK in scaffolds, fenced off, termites, wood borer damage	Monitor and prune yearly	Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
87	Arizona ash	*Fraxinus velutina*	13.5	C+	20	CODOM, DK in scaffolds, fenced off, termites, wood borer damage	Monitor and prune yearly	Neutral
88	Arizona ash	*Fraxinus velutina*	18	C+	25	CODOM, DK in scaffolds, fenced off, termites, wood borer damage	Monitor and prune yearly	Neutral
89	Arizona ash	*Fraxinus velutina*	12.5	B-	20	CODOM, DK in scaffolds, large cavity, termites, wood borer damage	Remove	Remove - Health/Structure
90	Arizona ash	*Fraxinus velutina*	15	B-	20	CODOM w/ incl bark, DK in scaffolds, termites, wood borer damage	Monitor and prune yearly	Neutral
91	Arizona ash	*Fraxinus velutina*	9	C	15	CODOM, DK in scaffolds, TR BUR, termites, wood borer damage	Monitor and prune yearly	Neutral
92	Arizona ash	*Fraxinus velutina*	9	C-	15	CR DB, DK in scaffolds, termites, wood borer damage	Monitor and prune yearly	Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
93	Lemon-scented gum	*Corymbia citriodora*	28	C	70	CODOM, thin, leaky water pipe 6' from trunk		Preserve
94	Evergreen ash	*Fraxinus uhdei*	12	B-	25	CODOM, slightly thin		Preserve
95	White mulberry	*Morus alba*	6, 5	B+	20	CODOM trunks		Preserve
96	Evergreen ash	*Fraxinus uhdei*	20	B	40	CODOM		Preserve
97	Evergreen ash	*Fraxinus uhdei*	15.5	B	40	CODOM		Preserve
98	Queensland pittosporum	*Pittosporum rhombifolium*	8.5	D+	20	TR BUR, very thin		Preserve
99	Camphor tree	*Cinnamomum camphora*	15.5	C	20	CODOM, CR DB, TOP		Preserve
100	Evergreen ash	*Fraxinus uhdei*	23.5	B-	40	CODOM w/ incl bark		Preserve
101	Evergreen ash	*Fraxinus uhdei*	13.5	C-	20	SCORCH, TOP, lots of water-spouts, old damage at crown		Preserve
102	Evergreen ash	*Fraxinus uhdei*	17	C+	30	CODOM, old rot on trunk		Preserve
103	Honey locust	*Gleditsia triacanthos*	11	C	30	CODOM, old damage at crown		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
104	Swamp gum	*Eucalyptus rudis*	29	C+	50	CODOM w/ incl bark over parking lot, STRIP	Structural Prune	Preserve
105	Aleppo pine	*Pinus halepensis*	16	B-	40	CODOM		Preserve
106	Aleppo pine	*Pinus halepensis*	13	B-	40	CODOM		Preserve
107	Aleppo pine	*Pinus halepensis*	18	B	40	Twisting Trunk		Preserve
108	Aleppo pine	*Pinus halepensis*	12	B-	20	Old DK @ base opposite lean, 60 degree lean NE toward street		Preserve
109	Juniper	*Juniper chinensis*	9.5, 8.5	C+	20	CODOM w/ incl bark, STUB		Preserve
110	Juniper	*Juniper chinensis*	11.5, 10.5	C+	20	CODOM w/ incl bark, STUB		Preserve
111	Juniper	*Juniper chinensis*	7.5, 5	C+	15	CODOM, STUB		Preserve
112	Canary Island date palm	*Phoenix canariensis*	32	B-	30			Preserve
113	Canary Island date palm	*Phoenix canariensis*	27	B-	30			Preserve
114	Canary Island date palm	*Phoenix canariensis*	27.5	B-	30			Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
115	Canary Island date palm	*Phoenix canariensis*	30	C+	30	CHLOR		Preserve
116	Weeping bottlebrush	*Callistemon viminalis*	8.5	C+	25	CODOM, crossing branches	Light Structural Prune	Preserve
117	Weeping bottlebrush	*Callistemon viminalis*	10	C+	25	CODOM, crossing branches	Light Structural Prune	Preserve
118	Weeping bottlebrush	*Callistemon viminalis*	10	C+	25	CODOM, some DK in the trunk, recent scaffold failure, crossing branches	Light Structural Prune	Preserve
119	Arizona ash	*Fraxinus velutina*	17	B	30	CODOM w/ incl bark, DK on some branches, previous branch failure, trunk abuts wall		Preserve
120	Rubber tree	*Ficus elastica*	19, 5, 4.5	B	40	Root zone covered with black fabric, rubber tree, good new growth		Preserve
121	Persian silk tree	*Albizia julibrissin*	5.5	C	15	CR DB, CANK on trunk upper side likely sunburn-related, 30 degree lean toward street	Remove	Remove - Health/Structure

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
122	Silver dollar gum	*Eucalyptus Polyanthemos*	11	C	40	CODOM, TORT Beetle, thin, 15 degree lean East		Preserve
123	Silver dollar gum	*Eucalyptus Polyanthemos*	20, 17.5	B	40	CODOM, STUB, circling root		Preserve
124	White mulberry	*Morus alba*	16	B	40	CODOM, DK @ base but suspect only decayed bark, STUB		Preserve
125	Olive	*Olea europaea*	15, 9.5	C-	15	CODOM, DK, STUB, TOP		Preserve
126	Juniper	*Juniper chinensis*	18.5	C+	20			Preserve
127	Queen palm	*Syagrus romanzoffianum*	8.5	C+	20	CHLOR spots		Preserve
128	Queen palm	*Syagrus romanzoffianum*	10	C+	20	CHLOR spots		Preserve
129	Pindo palm	*Butia capitata*	13.5	B-	15			Preserve
130	Queen palm	*Syagrus romanzoffianum*	8	C+	20			Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
131	Mexican fan palm	*Washingtonia robusta*	14	B	30	Pittosporum undulatum growing from trunk		Preserve
132	Pindo palm	*Butia capitata*	23	B	20			Preserve
133	Mexican fan palm	*Washingtonia robusta*	16	B	50			Preserve
134	Guadalupe Palm	*Brahea edulis*	14	B	10			Preserve
135	Queen palm	*Syagrus romanzoffianum*	6.5	B-	10	CHLOR spots		Preserve
136	Queen palm	*Syagrus romanzoffianum*	10	B	30			Preserve
137	Queen palm	*Syagrus romanzoffianum*	8	B	30			Preserve
138	Queen palm	*Syagrus romanzoffianum*	9	B	30	Trunk damage		Preserve
139	Mexican fan palm	*Washingtonia robusta*	15	B	50			Preserve
140	Mexican fan palm	*Washingtonia robusta*	18.5	B	60	DK on trunk surface		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
141	Mexican fan palm	*Washingtonia robusta*	15	B	50			Preserve
142	Mexican fan palm	*Washingtonia robusta*	12.5	B	20			Preserve
143	Pindo palm	*Butia capitata*	19	B	15	Ficus growing out of trunk		Preserve
144	Mexican fan palm	*Washingtonia robusta*	14	B	50			Preserve
145	Mexican fan palm	*Washingtonia robusta*	12.5	B	50			Preserve
146	Mexican fan palm	*Washingtonia robusta*	14	B	50			Preserve
147	Tupidanthus	*Schefflera pueckleri*	4, 4, 3.5	B-	20	CODOM, STUB, TR BUR		Preserve
148	Juniper	*Juniper chinensis*	10.5, 7	C+	20	CODOM, DK, STUB, TOP		Preserve
149	Juniper	*Juniper chinensis*	8	C+	20	DK		Preserve
150	Juniper	*Juniper chinensis*	8.5	C+	20	30 degrees lean West		Preserve
151	Tupidanthus	*Schefflera pueckleri*	5, 4, 3.5, 3.5	B-	25	CODOM		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
152	Canary Island Pine	*Pinus canariensis*	23	C+	70	EPI		Preserve
153	Unknown species		7	B	25	CODOM		Preserve
154	Stone Pine	*Pinus pinea*	42.5	B-	75	CODOM, small amount of DK, TR BUR		Preserve
155	White mulberry	*Morus alba*	10	B	30	CODOM		Preserve
156	African fern pine	*Afrocarpus falcatus*	13.5	B-	40	CODOM w/ incl bark		Preserve
157	White mulberry	*Morus alba*	3.5	B	15	CODOM		Preserve
158	Pine	*Pinus sp.*	18	D-	45	most of canopy dead, permanent state of decline	Remove	Remove - Health/Structure
159	Unknown species		22	B-	40	CODOM, TR BUR, SCORCH		Preserve
160	Bunya-Bunya tree	*Araucaria bidwillii*	19.5	B	60	SPIKE, decent growth		Preserve
161	Canary Island date palm	*Phoenix canariensis*	23.5	B-	35	Ficus growing out of canopy		Preserve
162	Mexican fan palm	*Washingtonia robusta*	15.5	B-	40	SPIKE		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
163	Mexican fan palm	*Washingtonia robusta*	18.5	B	45	SPIKE		Preserve
164	Mexican fan palm	*Washingtonia robusta*	15	B	40	SPIKE		Preserve
165	Mexican fan palm	*Washingtonia robusta*	11	B	20	45 degree lean South		Preserve
166	California Fan Palm	*Washingtonia filifera*	31	B-	40	CHLOR spot		Preserve
167	Mexican fan palm	*Washingtonia robusta*	12	B	45	"kink" in trunk		Preserve
168	Queen palm	*Syagrus romanzoffianum*	9	B-	25	CHLOR spot, DK in trunk w/ 4' deep cavity		Preserve
169	Evergreen ash	*Fraxinus uhdei*	3.5	B-	20	SCORCH		Preserve
170	Evergreen ash	*Fraxinus uhdei*	21	B	45	CODOM		Preserve
171	Chinese elm	*Ulmus parvifolia*	12	B-	45	CODOM		Preserve
172	Floss silk tree	*Ceiba speciosa*	27	B-	40	CODOM, DK in trunk		Preserve
173	Carrotwood	*Cupaniopsis anacardioides*	20	B	35	Fungal conks at crown, heartwood rot, rotor sprinkler by trunk	Remove	Remove - Health/Structure

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
174	South African coral tree	*Erythrina caffra*	27, 19.5, 15	B-	45	CODOM trunks, STUB, good callus, 4' girdling root, growing over water pipe		Preserve
175	White mulberry	*Morus alba*	17.5	B-	40	CODOM, TOP, heartwood rot	Structural Prune	Preserve
176	Sweetgum	*Liquidambar styraciflua*	10.5	C-	40	TR BUR, thin	Pull plants away from base	Preserve
177	Tipu tree	*Tipuana tipu*	6.5	C+	40	scaffolds possibly w/ incl bark	Pull plants away from base	Preserve
178	Lacebark	*Brachychiton discolor*	19.5	C	40	very thin, rec pull plants away		Preserve
179	White sapote	Casimiroa edulis	6, 6	B-	25	CODOM, TR BUR, leaf stippling, sharpshooter on tree,		Preserve
180	Primrose tree	*Lagunaria patersonii*	14.5	B	40	CODOM		Preserve
181	Indian laurel fig	*Ficus microcarpa*	21.5	B-	55	STRIP, TR SPR, 20 degree lean South		Preserve
182	Tipu tree	*Tipuana tipu*	18.5	C+	40	CODOM w/ incl bark, trunk spray		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
183	Smooth-leaf elm	*Ulmus minor*	11	C-	40	CODOM, CR DB, trunk spray		Preserve
184	Tipu tree	*Tipuana tipu*	9, 7	C-	20	CODOM, CR DB, trunk spray		Preserve
185	South African wild plum	*Harpephyllum caffrum*	19.5	B+	40	CODOM, STUB, trunk spray, girdling roots		Preserve
186	Paperbark	*Melaleuca quinquenervia*	26	B	45	CODOM w/ incl bark, CPT Soil, TP SPR		Preserve
187	Lemon bottlebrush	*Callistemon citrinus*	8, 3	C+	15	CODOM, TR BUR		Preserve
188	Catalpa	*Catalpa spp.*	15.5	B-	20	DK in trunk, susp leaf feeding		Preserve
189	Marina madrone	*Arbutus marina*	3, 3, 2, 2, 2, 2, 2, 2, 2	B	10	CODOM		Preserve
190	Shiny xylosma	*Xylosma congesta*	5	B	15	DK @ base, STUB, TR BUR		Preserve
191	Smooth-leaf elm	*Ulmus minor*	22	C+	25	CODOM, CR DB, TOP		Preserve
192	Rusty-leaf fig	*Ficus rubiginosa*	32	B-	50	CODOM, STRIP		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
193	Silk oak	*Grevillea robusta*	18.5	B-	50	SPIKE		Preserve
194	Brazilian pepper tree	*Schinus terebinthifolius*	17.5	C-	30	CODOM, TR BUR, old scaffold failures, 30 degree lean NE		Preserve
195	Peruvian Pepper Tree	*Schinus molle*	12.5	B-	30			Preserve
196	Holly oak	*Quercus ilex*	18	B	50	CODOM		Preserve
197	Holly oak	*Quercus ilex*	17, 15	B	50	CODOM		Preserve
198	**Oregon white oak**	***Quercus garryana***	**17**	**C+**	**50**	**EPI, 10 degree lean SW**		**LA City Protected**
199	Unknown species		13	B	50			Preserve
200	Marina madrone	*Arbutus marina*	3.5 (taken at 2')	C+	8	LMD, inflexible ties		Remove - Construction conflicts/impacts
201	Marina madrone	*Arbutus marina*	3	C+	8	LMD, inflexible ties		Remove - Construction conflicts/impacts
202	Marina madrone	*Arbutus marina*	3.5	B-	8	LMD, inflexible ties		Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
203	Arizona ash	*Fraxinus velutina*	17	B-	20	CODOM, LMD		Neutral
204	Arizona ash	*Fraxinus velutina*	16	C+	20	CODOM, CR DB, DK in trunk		Remove - Construction conflicts/impacts
205	Arizona ash	*Fraxinus velutina*	14.5	C+	20	CODOM w/ incl bark		Remove - Construction conflicts/impacts
206	Arizona ash	*Fraxinus velutina*	12	C	15	CODOM, DK in trunk, EPI, TOP		Remove - Construction conflicts/impacts
207	Olive	*Olea europaea*	11.5, 10.5	B-	15	CODOM, DK in trunk with beetle		Remove - Construction conflicts/impacts
208	Olive	*Olea europaea*	14.5, 11.5, 8	B	20	CODOM, WEEP @ old **pruning** wound		Remove - Construction conflicts/impacts
209	Olive	*Olea europaea*	13, 9	B	20	WEEP on trunk and old **pruning** wounds but don't see entry holes		Neutral
210	Chinese windmill palm	*Trachycarpus fortunei*	6	B-	25			Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
211	Olive	*Olea europaea*	13, 8, 7	D+	20	CODOM, CR DB, EPI, TOP, suckers, permanent state of decline	Remove	Remove - Construction conflicts/impacts
212	Olive	*Olea europaea*	3.5, 3.5, 3.5, 1	B	15	CODOM, TR BUR, damage on trunk 2' high		Remove - Construction conflicts/impacts
213	Chinese windmill palm	*Trachycarpus fortunei*	8, 8	B-	13			Remove - Construction conflicts/impacts
214	Olive	*Olea europaea*	3, 3, 3, 2.5, 2.5	B	15	CODOM w/ incl bark, TR BUR		Remove - Construction conflicts/impacts
215	Chinese windmill palm	*Trachycarpus fortunei*	7, 6.5	B-	15			Remove - Construction conflicts/impacts
216	Chinese windmill palm	*Trachycarpus fortunei*	6.5	C+	18			Remove - Construction conflicts/impacts
217	Olive	*Olea europaea*	21	B	25	CODOM, DK in hollow trunk		Remove - Construction conflicts/impacts
218	Chinese windmill palm	*Trachycarpus fortunei*	8	C+	20	30 degree lean E		Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
219	Chinese windmill palm	*Trachycarpus fortunei*	6.5, 6	B	15			Remove - Construction conflicts/impacts
220	Olive	*Olea europaea*	5, 4, 3	B	15	CODOM		Remove - Construction conflicts/impacts
221	Olive	*Olea europaea*	6.5, 4.5	B	15	CODOM		Remove - Construction conflicts/impacts
222	Chinese windmill palm	*Trachycarpus fortunei*	7	B	15			Remove - Construction conflicts/impacts
223	Chinese windmill palm	*Trachycarpus fortunei*	9	B	15			Remove - Construction conflicts/impacts
224	Brazilian pepper tree	*Schinus terebinthifolius*	28.5	C+	35	CODOM, CR DB, TOP, recent 4" branch failure, bulbs in trunk		Neutral
225	Brazilian pepper tree	*Schinus terebinthifolius*	28.5	B-	30	CODOM, bulbs in trunk		Neutral
226	Carrotwood	*Cupaniopsis anacardioides*	5.5	B	20	CODOM, damage on scaffolds		Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
227	Brazilian pepper tree	*Schinus terebinthifolius*	28.5	B	25	CODOM, FL CUT	Structural Prune	Neutral
228	Brazilian pepper tree	*Schinus terebinthifolius*	25	C+	25	CODOM, split 4" branch	Structural Prune	Neutral
229	Brazilian pepper tree	*Schinus terebinthifolius*	18	D+	25	DK, TOP, decomposed granite soil, split branches, permanent state of decline	Remove	Remove - Construction conflicts/impacts
230	Evergreen ash	*Fraxinus uhdei*	30.5	B-	45	CODOM, some DK in scaffold		Neutral
231	Evergreen ash	*Fraxinus uhdei*	34	B+	40	CODOM, DK in trunk		Neutral
232	Arizona ash	*Fraxinus velutina*	16	B	25	CODOM w/ incl bark, hollow scaffolds	Monitor and prune yearly	Preserve
233	Arizona ash	*Fraxinus velutina*	13	B-	15	CODOM w/ incl bark, DK in scaffolds	Structural Prune	Preserve
234	Arizona ash	*Fraxinus velutina*	12	B-	15	large water spouts, termites in bark	Monitor and prune yearly	Preserve
235	Arizona ash	*Fraxinus velutina*	15.5	B-	20	DK in trunk, termites	Monitor and prune yearly	Preserve
236	Carrotwood	*Cupaniopsis anacardioides*	14	B	20	CODOM, good new growth		Preserve
237	Arizona ash	*Fraxinus velutina*	15.5	C+	20	CODOM, DK in trunk, TR BUR	Monitor and prune yearly	Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
238	Arizona ash	*Fraxinus velutina*	12.5	B	20	CODOM, DK in trunk, termites	Monitor and prune yearly	Preserve
239	Arizona ash	*Fraxinus velutina*	13.5	B-	20	CODOM, DK in trunk, termites	Monitor and prune yearly	Preserve
240	Chinese elm	*Ulmus parvifolia*	11	B	30	CODOM, old scaffold failure, decent callus		Preserve
241	Mexican fan palm	*Washingtonia robusta*	14.5, 14	B	45	CODOM		Preserve
242	Arizona ash	*Fraxinus velutina*	13.5	B-	25	CODOM, DK in trunk	Monitor and prune yearly	Preserve
243	Arizona ash	*Fraxinus velutina*	16.5	B	25	CODOM		Preserve
244	Arizona ash	*Fraxinus velutina*	17	B-	20	CODOM w/ incl bark, DK in trunk, termites	Monitor and prune yearly	Preserve
245	Arizona ash	*Fraxinus velutina*	12	B	15	DK in scaffold	Structural Prune	Preserve
246	Arizona ash	*Fraxinus velutina*	14	B	20	CODOM, DK in scaffold, TOP		Neutral
247	Arizona ash	*Fraxinus velutina*	17	B-	25	CODOM w/ incl bark, DK in scaffolds and trunk, termites	Monitor and prune yearly	Neutral
248	Brazilian pepper tree	*Schinus terebinthifolius*	19	B	25	CODOM		Neutral

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
249	Brazilian pepper tree	*Schinus terebinthifolius*	15	B-	20	CODOM, EPI		Remove - Construction conflicts/impacts
250	Brazilian pepper tree	*Schinus terebinthifolius*	16	D+	15	CODOM, DK in scaffolds, permanent state of decline	Remove	Remove - Construction conflicts/impacts
251	Olive	*olea europaea*	15, 14.5	D+	20	CODOM, CHLOR, DK in trunk, permanent state of decline	Remove	Remove - Health/Structure
252	Carrotwood	*Cupaniopsis anacardioides*	6	C+	15	STRIP		Neutral
253	Carrotwood	*Cupaniopsis anacardioides*	6.5	B-	15	CODOM, LMD, TR BUR		Neutral
254	Carrotwood	*Cupaniopsis anacardioides*	6	B	15	CODOM, CR DB, TR BUR, 3" split branch, susp mechanical damage on trunk		Neutral
255	Olive	*olea europaea*	16, 15, 11	D+	20	CODOM, EPI, STUB, permanent state of decline	Remove	Remove - Health/Structure
256	Chinese windmill palm	*Trachycarpus fortunei*	9, 9, 8.5	B	10			Neutral

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
257	Chinese windmill palm	*Trachycarpus fortunei*	11	B	10			Neutral
258	Olive	*Olea europaea*	12, 9, 8	C	25	CANK, CODOM, WEEP		Neutral
259	Mexican fan palm	*Washingtonia robusta*	19.5	B	60	SPIKE		Neutral
260	Mexican fan palm	*Washingtonia robusta*	19	B	60	SPIKE		Neutral
261	Mexican fan palm	*Washingtonia robusta*	17	B	50	SPIKE		Neutral
262	Mexican fan palm	*Washingtonia robusta*	16	B	60	SPIKE		Neutral
263	Carrotwood	*Cupaniopsis anacardioides*	7	B-	15	CANK, CODOM w/ incl bark, LMD		Neutral
264	Carrotwood	*Cupaniopsis anacardioides*	6	C-	15	CODOM, LMD, STRIP, unbalanced canopy, tie in branches		Neutral
265	Olive	*Olea europaea*	14, 8, 6	C-	20	CANK, CODOM, XYLE		Neutral
266	Carrotwood	*Cupaniopsis anacardioides*	7	C+	15	LMD, unbalanced canopy, susp mechanical tearing of branches		Neutral

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
267	Ornamental pear	*Pyrus calleryana*	9.5	B	20	CODOM w/ incl bark, TR BUR		Remove - Construction conflicts/impacts
268	Ornamental pear	*Pyrus calleryana*	9.5	B	20	CODOM w/ incl bark, old scaffold failure		Remove - Construction conflicts/impacts
269	River she-oak	*Casuarina cunninghamiana*	16.5	B	40	WEEP		Remove - Construction conflicts/impacts
270	Red Ironbark	*Eucalyptus sideroxylon*	20	B	40	Buttress root damage		Remove - Construction conflicts/impacts
271	River she-oak	*Casuarina cunninghamiana*	7	B	20	CODOM around removed trunk, EPI, WEEP	Monitor and prune yearly	Remove - Construction conflicts/impacts
272	River she-oak	*Casuarina cunninghamiana*	11.5	B-	30	CODOM around removed trunk, TOP, WEEP at base	Monitor and prune yearly	Remove - Construction conflicts/impacts
273	River she-oak	*Casuarina cunninghamiana*	15	B	40	CODOM, EPI, TOP, twisted trunk		Remove - Construction conflicts/impacts
274	Red Ironbark	*Eucalyptus sideroxylon*	28	B	35	CODOM, susp internal crack		Remove - Construction conflicts/impacts

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
275	Cockspur Coral	*Erythrina crista-galli*	24.5	C-	20	DK in scaffold and trunk, FL CUT, STUB, TOP, termites	Monitor and prune yearly	Remove - Construction conflicts/impacts
276	Carrotwood	*Cupaniopsis anacardioides*	17.5	B	25	CODOM, Buttress root damage, suckers		Neutral
277	Catalina cherry	*Prunus ilicifolia lyonii*	9	C	20	CODOM, CR DB		Neutral
278	Lemon bottlebrush	*Callistemon citrinus*	4.5, 4	B	15	CODOM, leans over parking lot		Neutral
279	Lemon bottlebrush	*Callistemon citrinus*	4	C+	15	CODOM, leans over parking lot		Neutral
280	Lemon bottlebrush	*Callistemon citrinus*	3.5, 3	B	15	Old CANK on the trunk, CODOM, leans over parking lot		Neutral
281	Lemon bottlebrush	*Callistemon citrinus*	5, 1.5	B	15	CODOM, leans over parking lot		Neutral
282	Date palm	*Phoenix dactylifera*	18	B	25			Preserve
283	Date palm	*Phoenix dactylifera*	15	B+	30			Neutral
284	Mexican fan palm	*Washingtonia robusta*	15.5	B	30			Neutral
285	Mexican fan palm	*Washingtonia robusta*	14.5	C+	35	CHLOR spots		Neutral

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
286	Mexican fan palm	*Washingtonia robusta*	26	B	30			Preserve
287	Mexican fan palm	*Washingtonia robusta*	18.5	B	35			Preserve
288	Mexican fan palm	*Washingtonia robusta*	14	B	40			Preserve
289	Mexican fan palm	*Washingtonia robusta*	10.5	B	35			Preserve
290	Mexican fan palm	*Washingtonia robusta*	14	B	45			Preserve
291	Persian silk tree	*Albizia julibrissin*	4	C+	10	CODOM		Preserve
292	Jacaranda	*Jacaranda mimosifolia*	7	C+	15	CODOM		Preserve
293	Aleppo pine	*Pinus halepensis*	15.5, 15.5	B	40	CODOM, raised canopy		Neutral
294	Red Ironbark	*Eucalyptus sideroxylon*	26.5	B	40	CODOM		Preserve
295	Red Ironbark	*Eucalyptus sideroxylon*	26.5	C-	40	CHLOR, CODOM, needs irrigation		Preserve
296	Canary Island Pine	*Pinus canariensis*	11	C	20	EPI, TR BUR		Preserve
297	Kurrajong	*Brachychiton populneus*	6.5	B	20	TR BUR, trunk touching #298		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
298	**Coast Live Oak**	***Quercus agrifolia***	**5.5, 5, 4.5, 4.5, 4, 3.5, 3.5, 3.5, 3.5, 3**	**B+**	**15**	**TR BUR, trunk touching #297, medium leaf size, medium leaf color**	**Install protective fencing at dripline + 5'**	**LA City Protected**
299	Canary Island Pine	*Pinus canariensis*	22.5	B-	40	CODOM		Preserve
300	Canary Island Pine	*Pinus canariensis*	18.5	B-	45	EPI		Preserve
301	Canary Island Pine	*Pinus canariensis*	14.5	B-	35	EPI, bent trunk, bulge on trunk, poor taper		Preserve
302	Canary Island Pine	*Pinus canariensis*	14.5	B-	40	EPI		Preserve
303	Canary Island Pine	*Pinus canariensis*	20.5	B-	55	TR BUR		Preserve
304	Canary Island Pine	*Pinus canariensis*	16.5	B-	45	EPI		Preserve
305	Mexican fan palm	*Washingtonia robusta*	17	B-	50			Preserve
306	Gold medallion tree	*Cassia leptophylla*	3.5	B	10			Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
307	Gold medallion tree	*Cassia leptophylla*	4	B	10			Preserve
308	Carrotwood	*Cupaniopsis anacardioides*	6.5	B-	15	CODOM, powdery mildew		Preserve
309	Carrotwood	*Cupaniopsis anacardioides*	6.5	B-	15	CODOM, CHLOR spots		Preserve
310	Carrotwood	*Cupaniopsis anacardioides*	6	C+	15	CODOM		Preserve
311	Carrotwood	*Cupaniopsis anacardioides*	5	C+	15	CODOM		Preserve
312	Carrotwood	*Cupaniopsis anacardioides*	5	B-	15	CODOM		Preserve
313	Carrotwood	*Cupaniopsis anacardioides*	4.5	B-	15	CODOM, powdery mildew		Preserve
314	Carrotwood	*Cupaniopsis anacardioides*	7.5	C+	20	CODOM		Preserve
315	Carrotwood	*Cupaniopsis anacardioides*	9	B	20	CODOM, powdery mildew		Preserve
316	Carrotwood	*Cupaniopsis anacardioides*	6	B	15	CODOM		Preserve
317	Olive	*Olea europaea*	5	B	15	CODOM		Preserve
318	Olive	*Olea europaea*	4, 2.5, 2, 1.5	B	15	CODOM, TR BUR,	remove stakes	Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
319	Olive	*Olea europaea*	4	B	15	CODOM, TR BUR,	remove stakes	Preserve
320	Carrotwood	*Cupaniopsis anacardioides*	4.5, 4, 4, 3.5, 3, 2.5	B-	15	CODOM w/ incl bark, powdery mildew		Preserve
321	Carrotwood	*Cupaniopsis anacardioides*	7	B	15	CODOM, powdery mildew		Preserve
322	Carrotwood	*Cupaniopsis anacardioides*	4, 3.5, 3, 3, 3, 2.5, 2.5, 1	B	20	CODOM		Preserve
323	Carrotwood	*Cupaniopsis anacardioides*	7	B	20	CODOM		Preserve
324	Lemon-scented gum	*Corymbia citriodora*	20	B+	55			Preserve
325	Carrotwood	*Cupaniopsis anacardioides*	5.5	B	15	CODOM		Preserve
326	Carrotwood	*Cupaniopsis anacardioides*	5.5	B	15	CODOM		Preserve
327	Olive	*Olea europaea*	4	B	15	CODOM		Preserve
328	Olive	*Olea europaea*	5	B	15	CODOM		Preserve
329	Carrotwood	*Cupaniopsis anacardioides*	8	B	15	CODOM		Preserve

Tree #	Common Name	Species	DBH* (in)	Health (A-F)	Height (ft)	Comments	Recommendations	Impact assessment
330	Lemon-scented gum	*Corymbia citriodora*	18	B+	50			Preserve
331	Lemon-scented gum	*Corymbia citriodora*	21.5	B	70			Preserve
332	Lemon-scented gum	*Corymbia citriodora*	24.5	B+	60			Preserve
333	Arizona ash	*Fraxinus velutina*	14.5	B	20	CODOM, DK in scaffold		Preserve

APPENDIX 'B'

EXISTING TREE SURVEY AND PRELIMINARY TREE IMPACT MAP

TREE SURVEY MAP (12 SHEETS TOTAL)

Tree Legend

- Protected oak trees (Indigenous *Quercus spp.*)
- Ash trees (*Fraxinus spp.*)
- Palm trees
- Carrot wood (*Cupaniopsis anacardioides*)
- Olive (*Olea europaea*)
- Tipu tree (*Tipuana tipu*)
- Eucalyptus and gum trees
- Brazilian pepper (*Schinus terebinthifolius*)
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Francis Polytechnic Senior High School
Preliminary Tree Survey
Surveyed May 2017
Rebecca Latta Consulting

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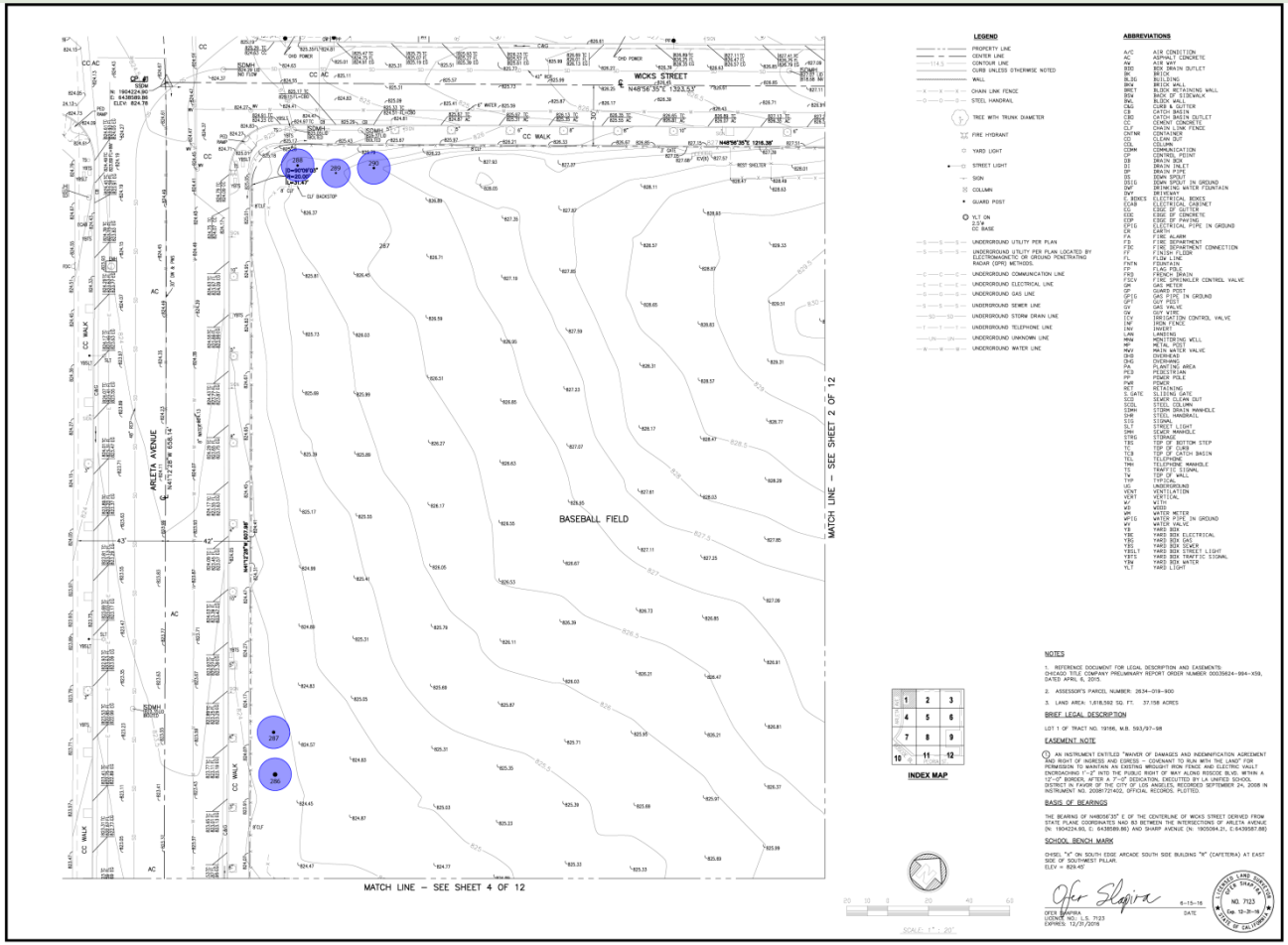

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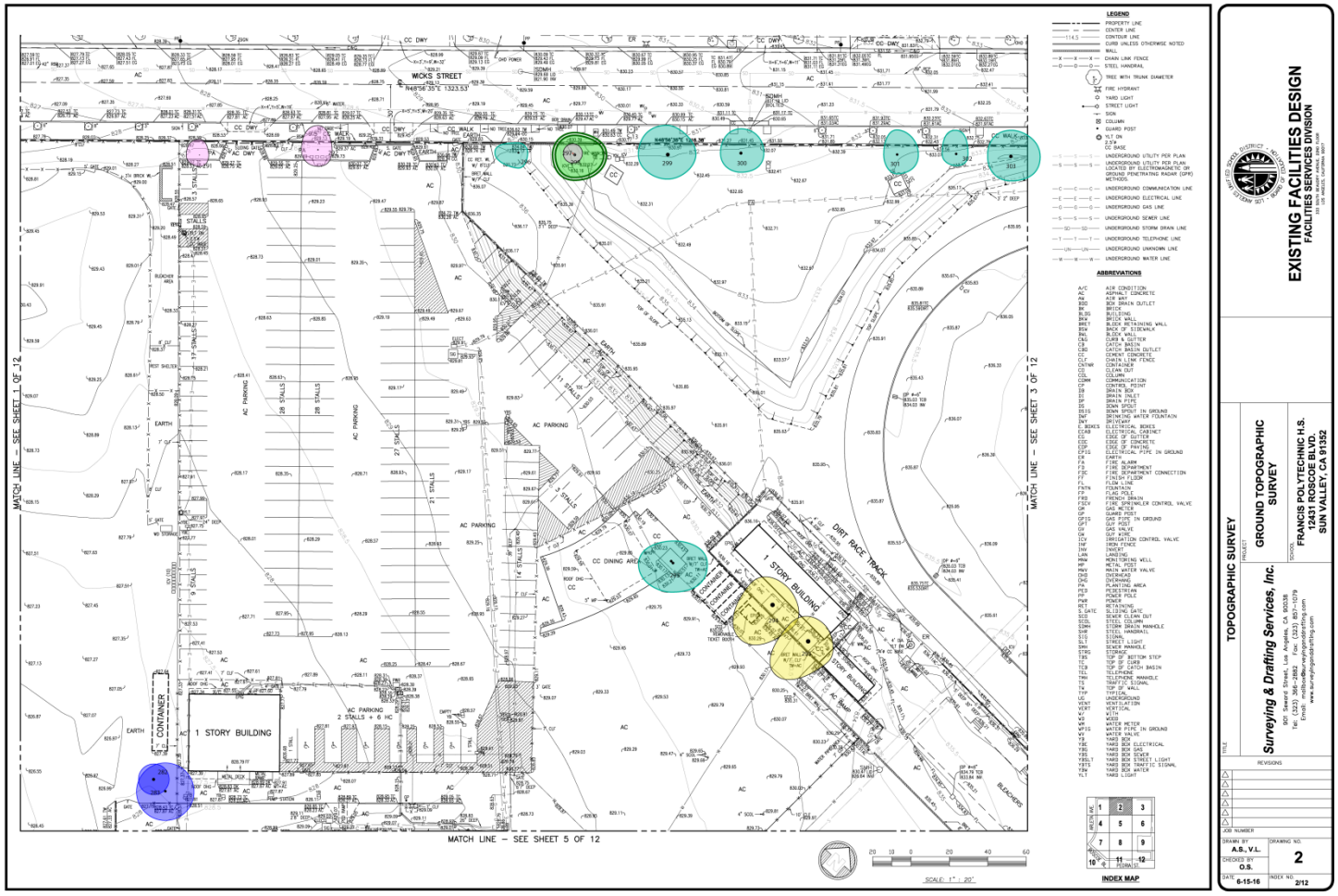

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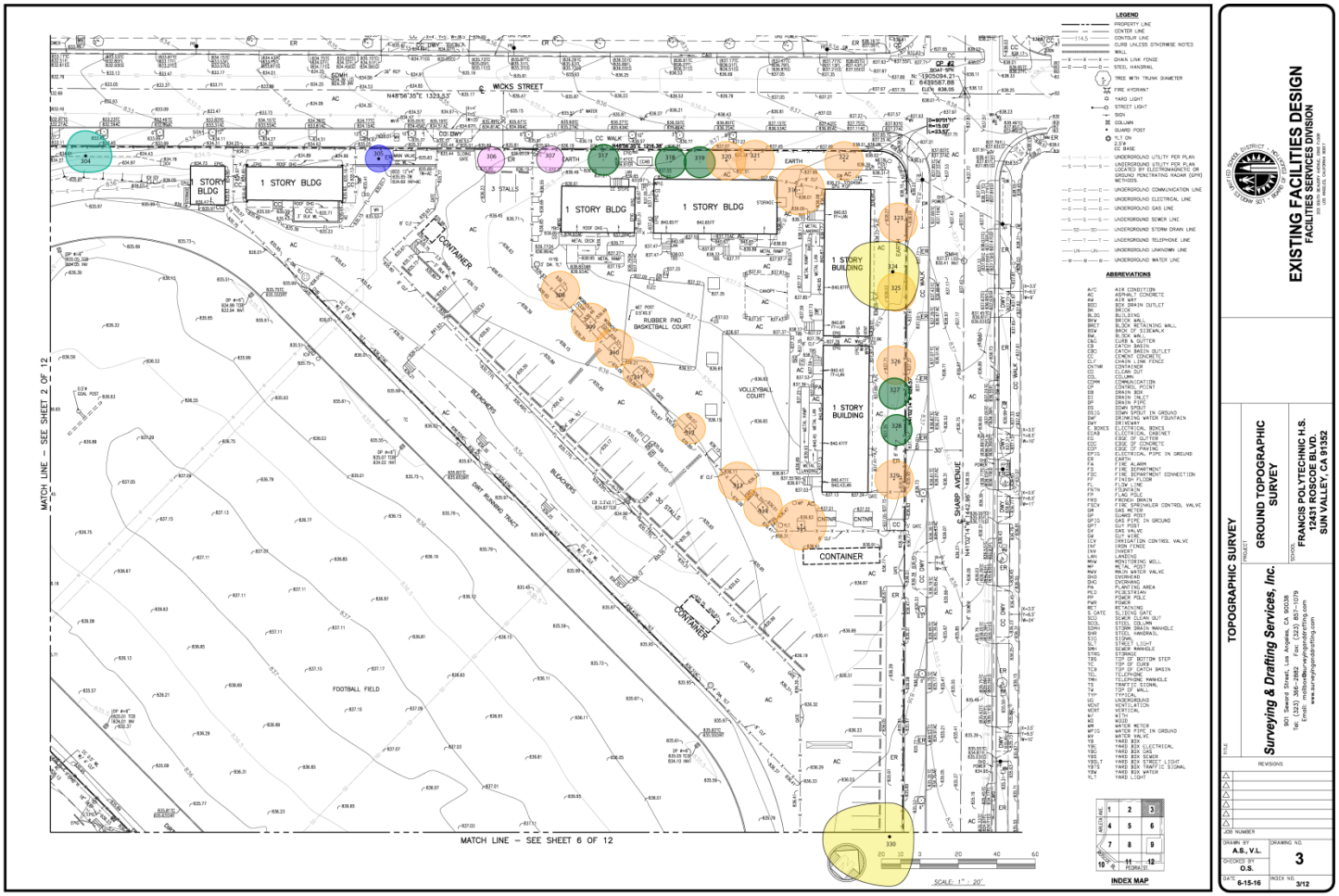

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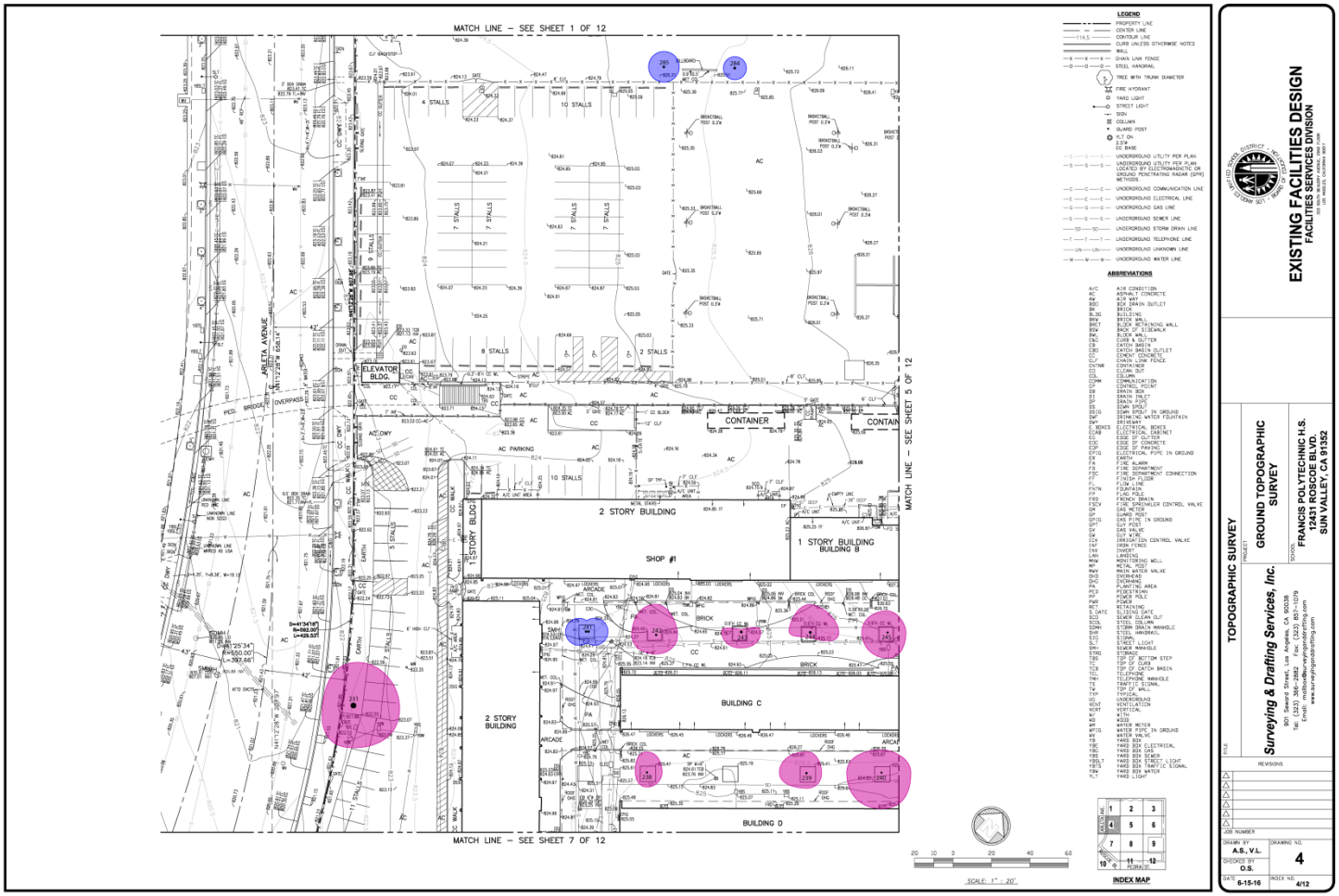

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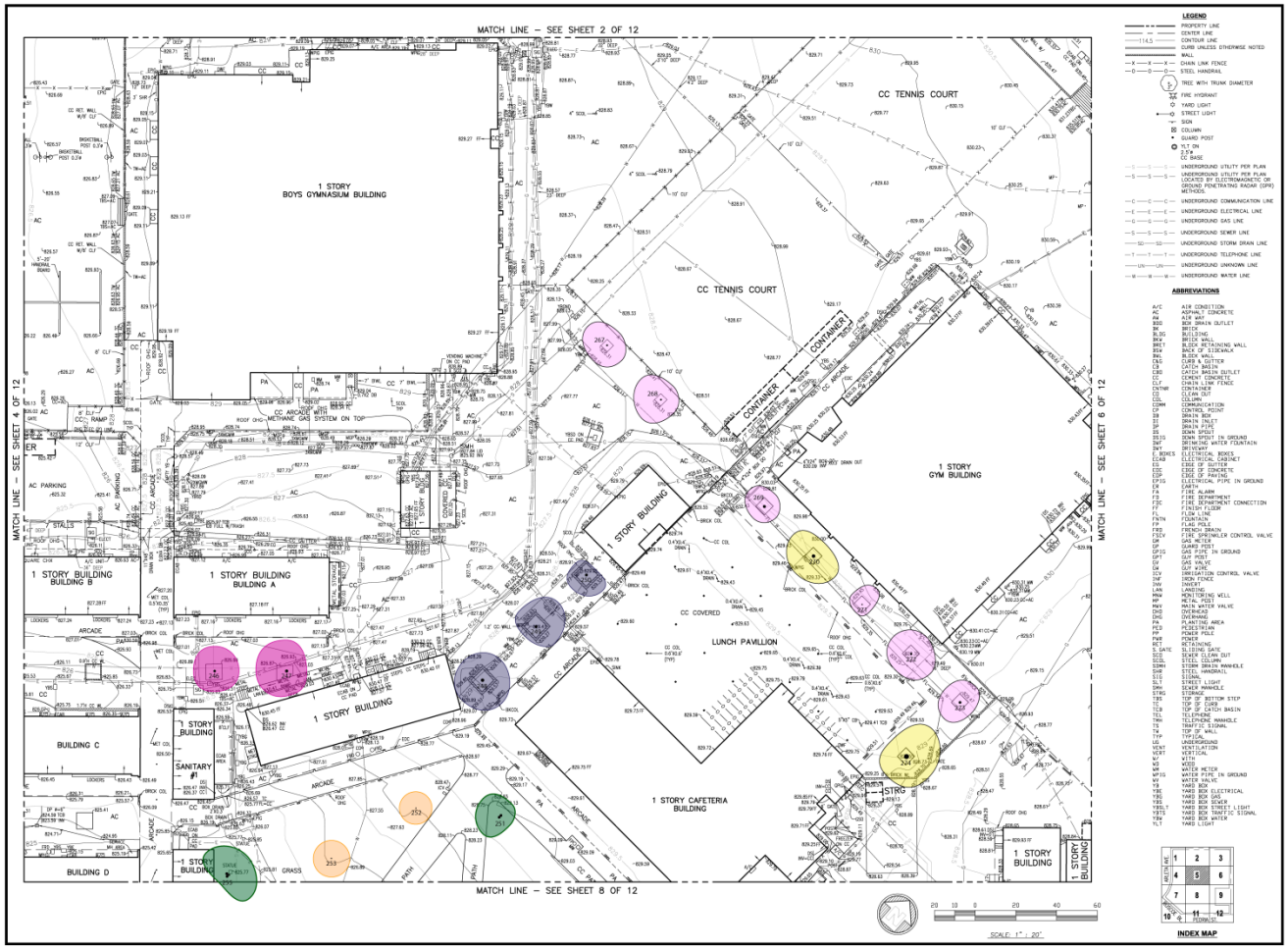

TOPOGRAPHIC SURVEY
GROUND TOPOGRAPHIC SURVEY
FRANCIS POLYTECHNIC H.S.
12844 FOOTHILL BLVD.
SUN VALLEY, CA 91352
Surveying & Drafting Services, Inc.
EXISTING FACILITIES DESIGN
FACILITIES SERVICES DIVISION
DRAWN BY: A.S., V.L.
CHECKED BY: O.S.
DATE: 6-15-16
DRAWING NO.: 5
INDEX NO.: 5/12

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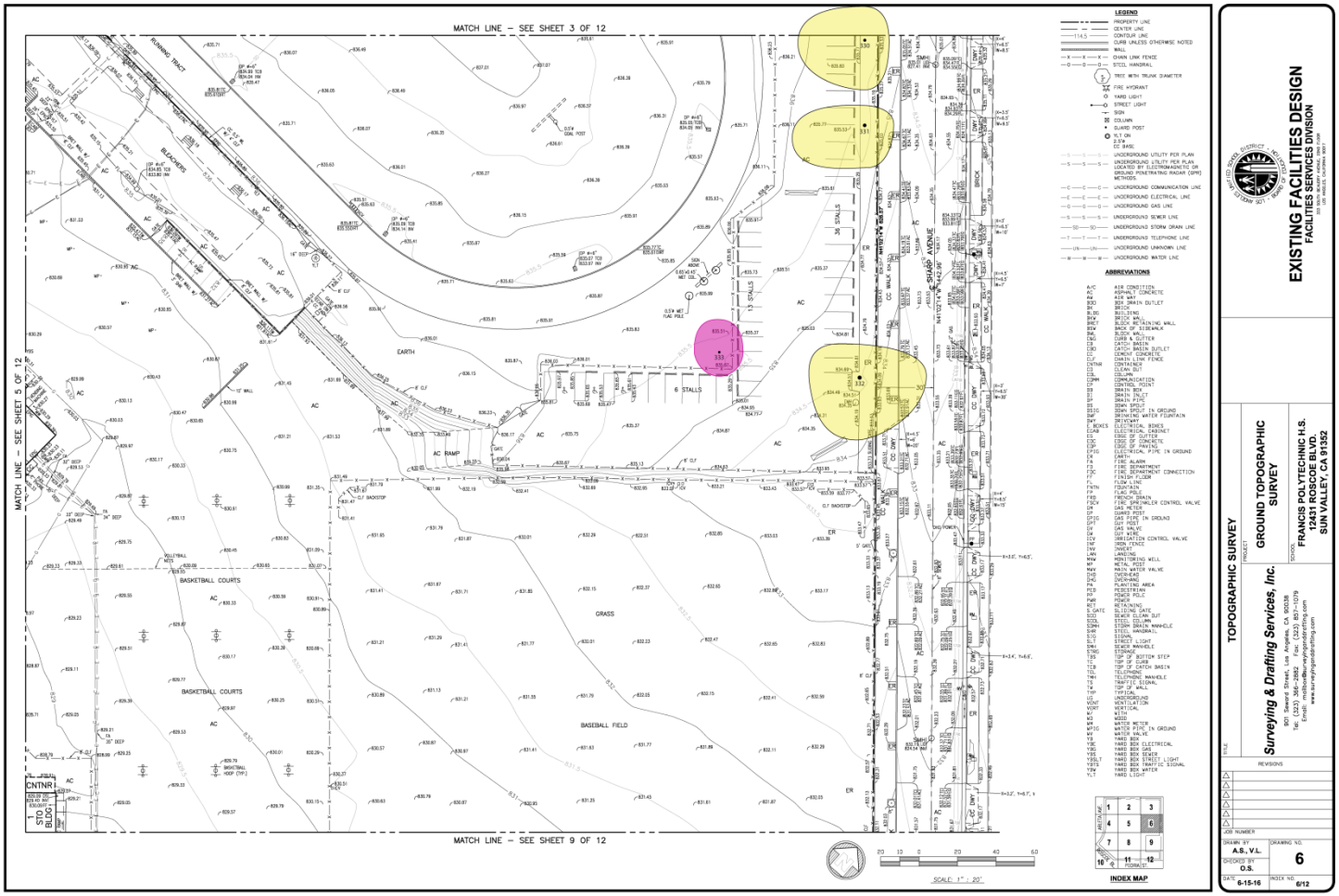

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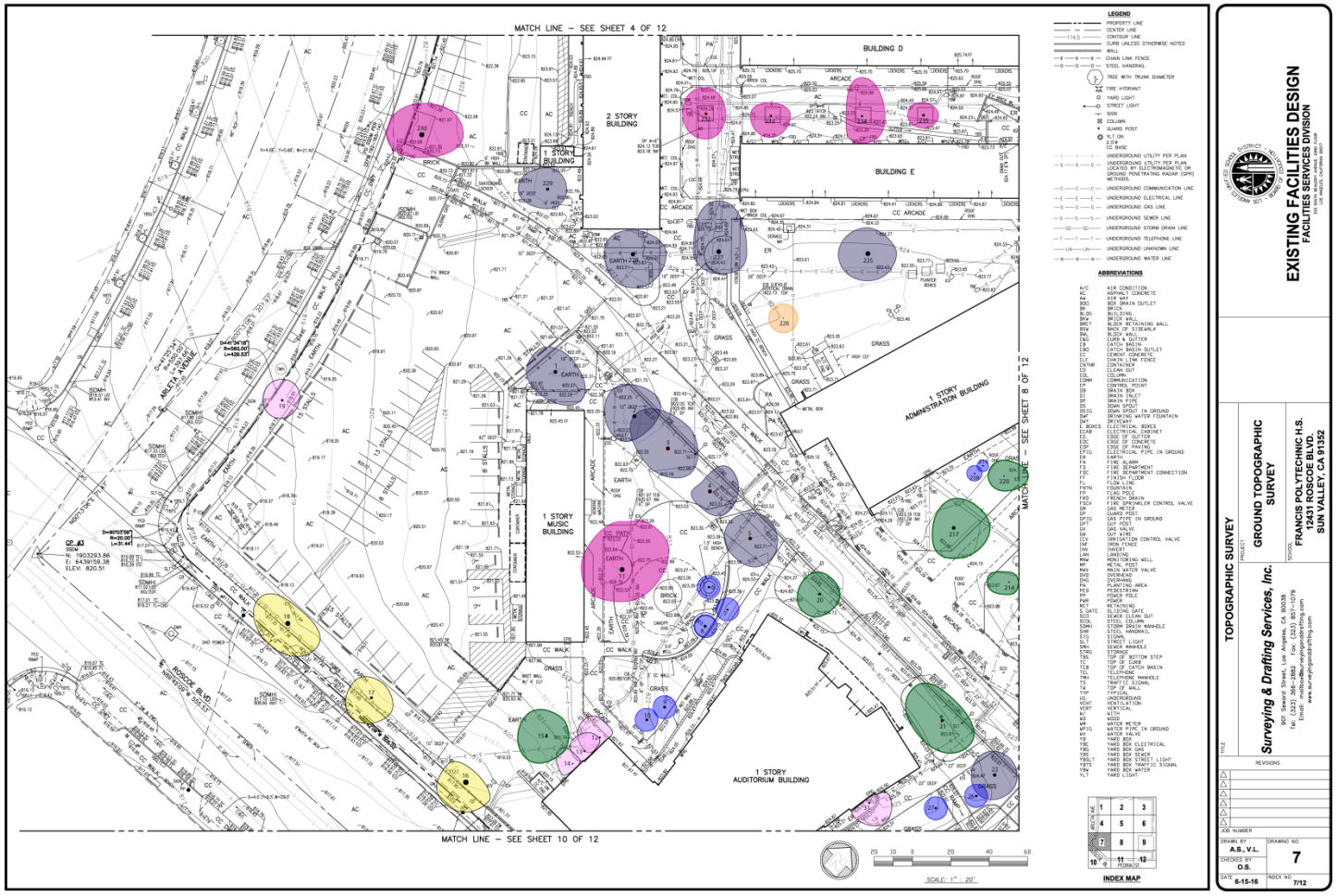

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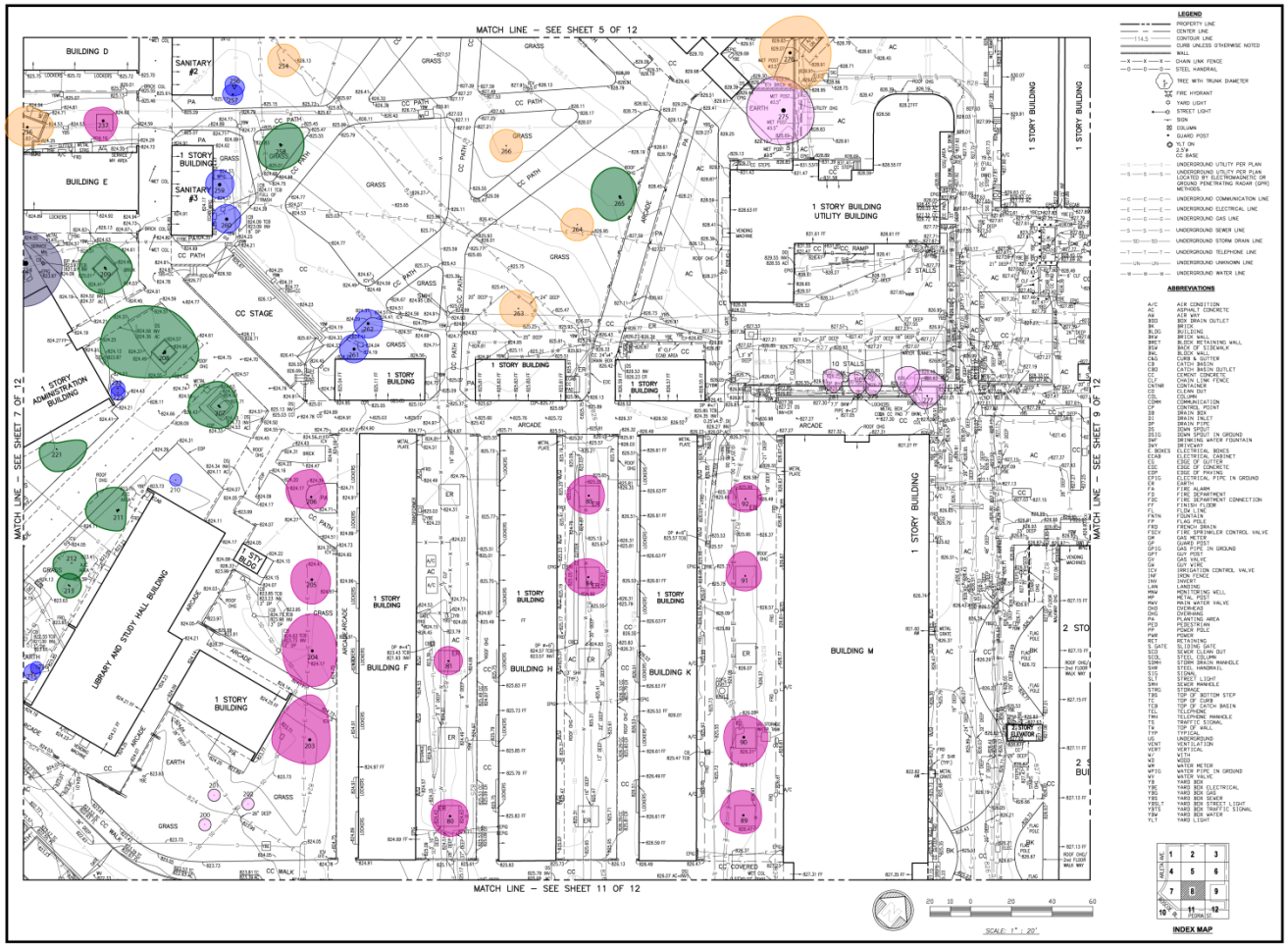

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REVISIONS

DRAWN BY: A.S., V.L.
CHECKED BY: O.S.
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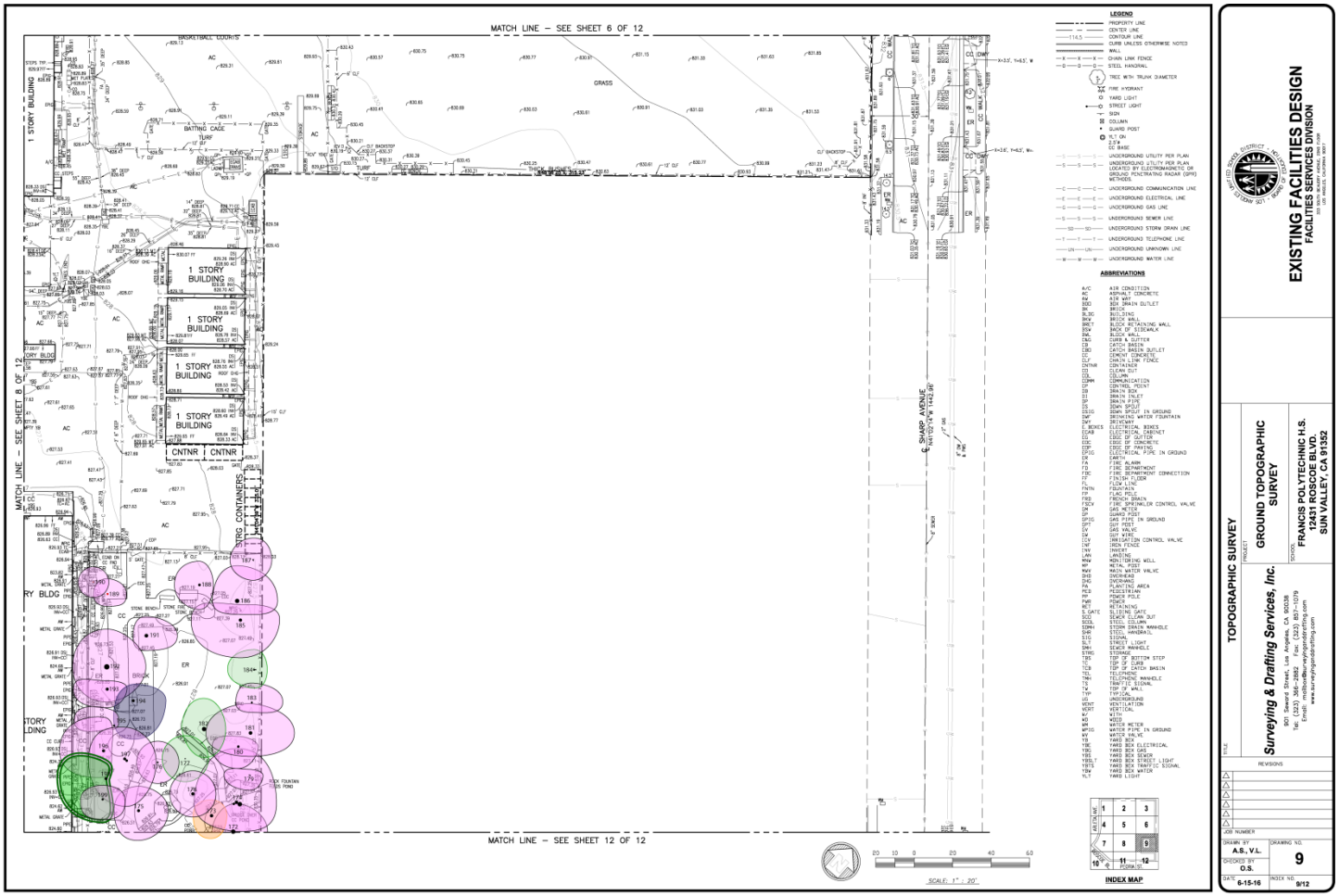

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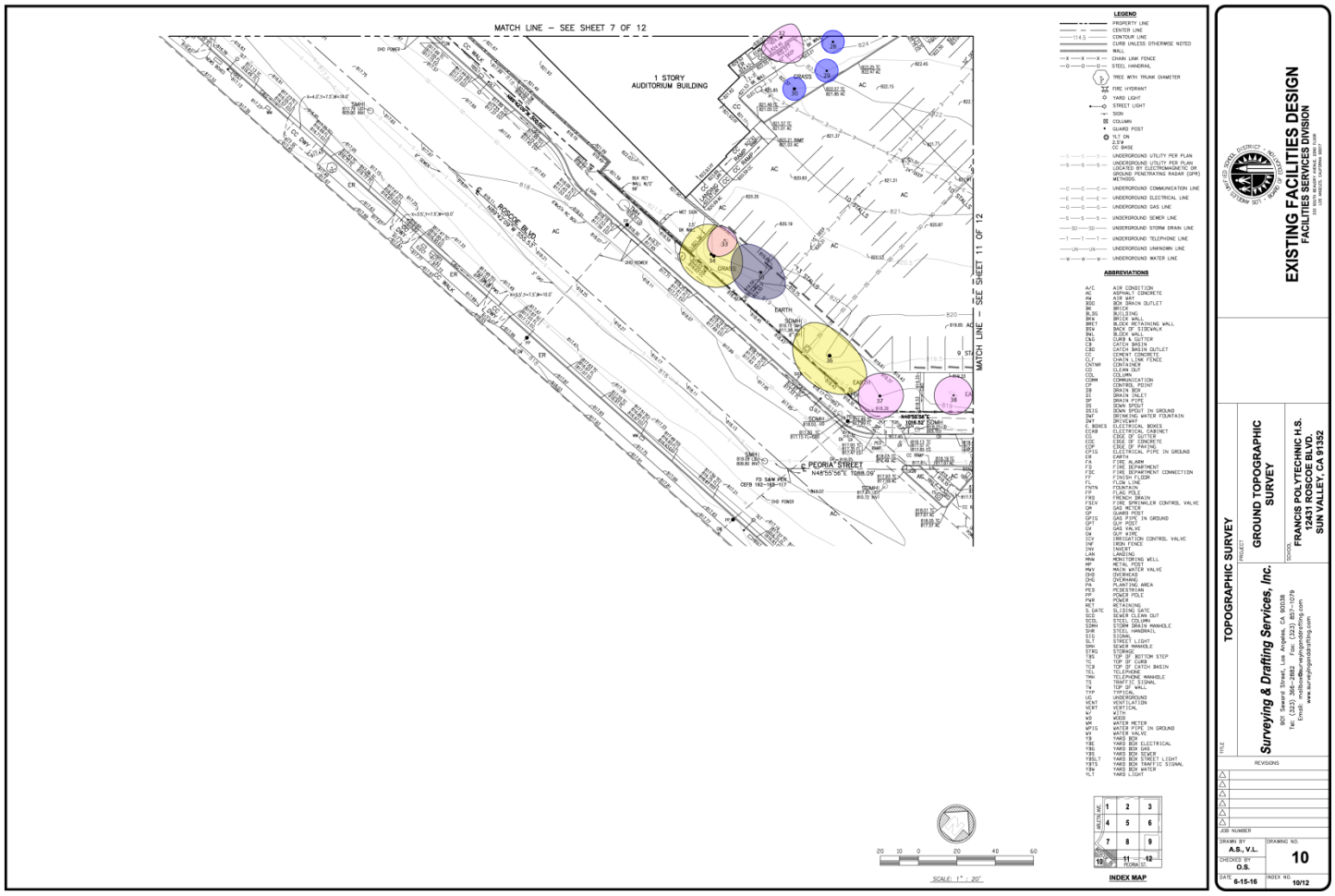
Rebecca Latta Consulting

Note: trunk locations of trees on property are based on topographic survey by Surveying & Drafting Services, Inc. dated June 15, 2016. Trunk locations of trees not on the topographic survey are visually estimated and highlighted in red. Tree canopies are measured in the field and have not been professionally surveyed by civil surveyors.



Tree Legend

- Protected oak trees (Indigenous *Quercus spp.*)
- Ash trees (*Fraxinus spp.*)
- Palm trees
- Carrot wood (*Cupaniopsis anacardioides*)
- Olive (*Olea europaea*)
- Tipu tree (*Tipuana tipu*)
- Eucalyptus and gum trees
- Brazilian pepper (*Schinus terebinthifolius*)
- Pine trees (*Pinus spp.*)
- Other trees

Francis Polytechnic Senior High School
Preliminary Tree Survey
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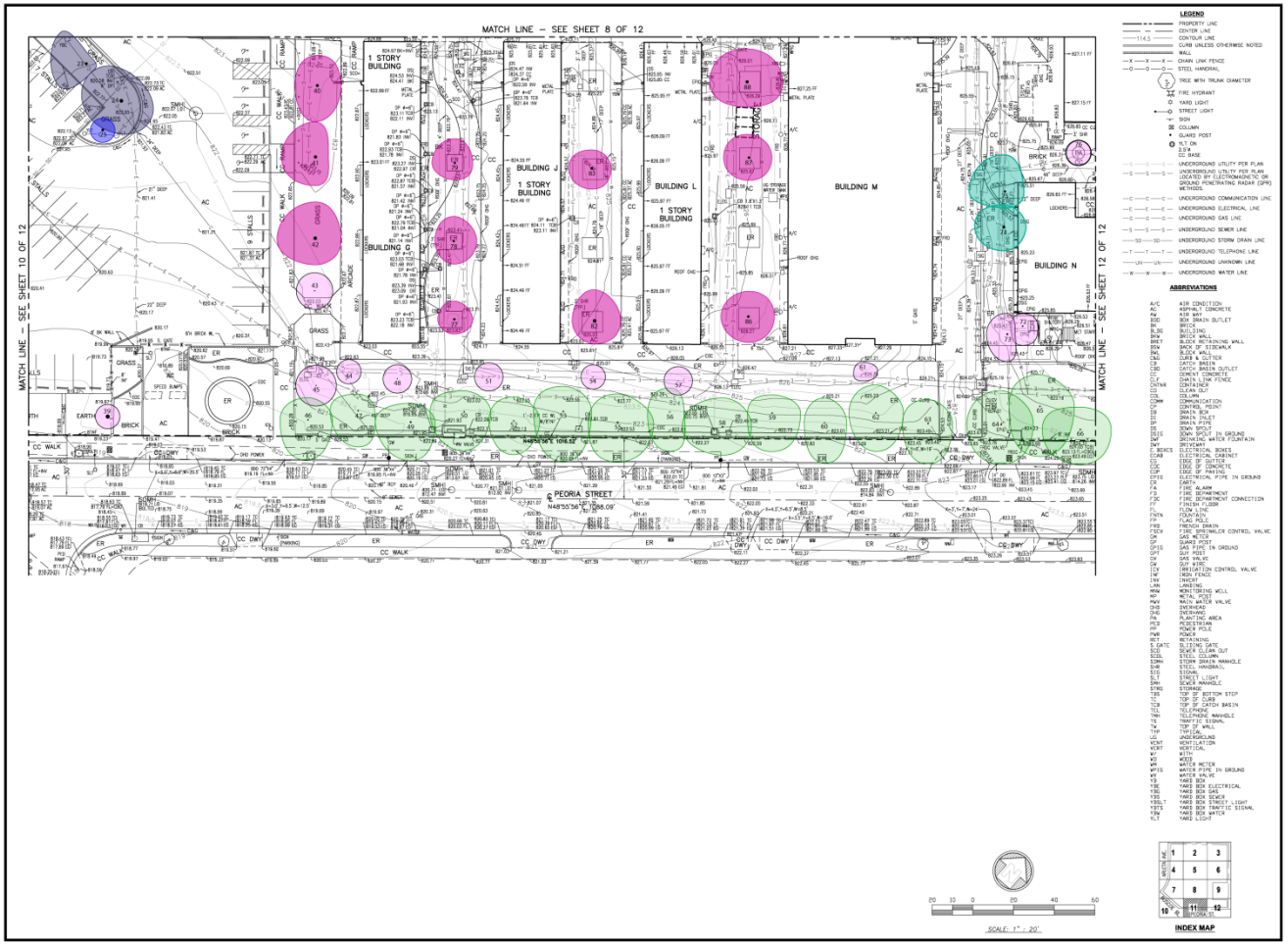

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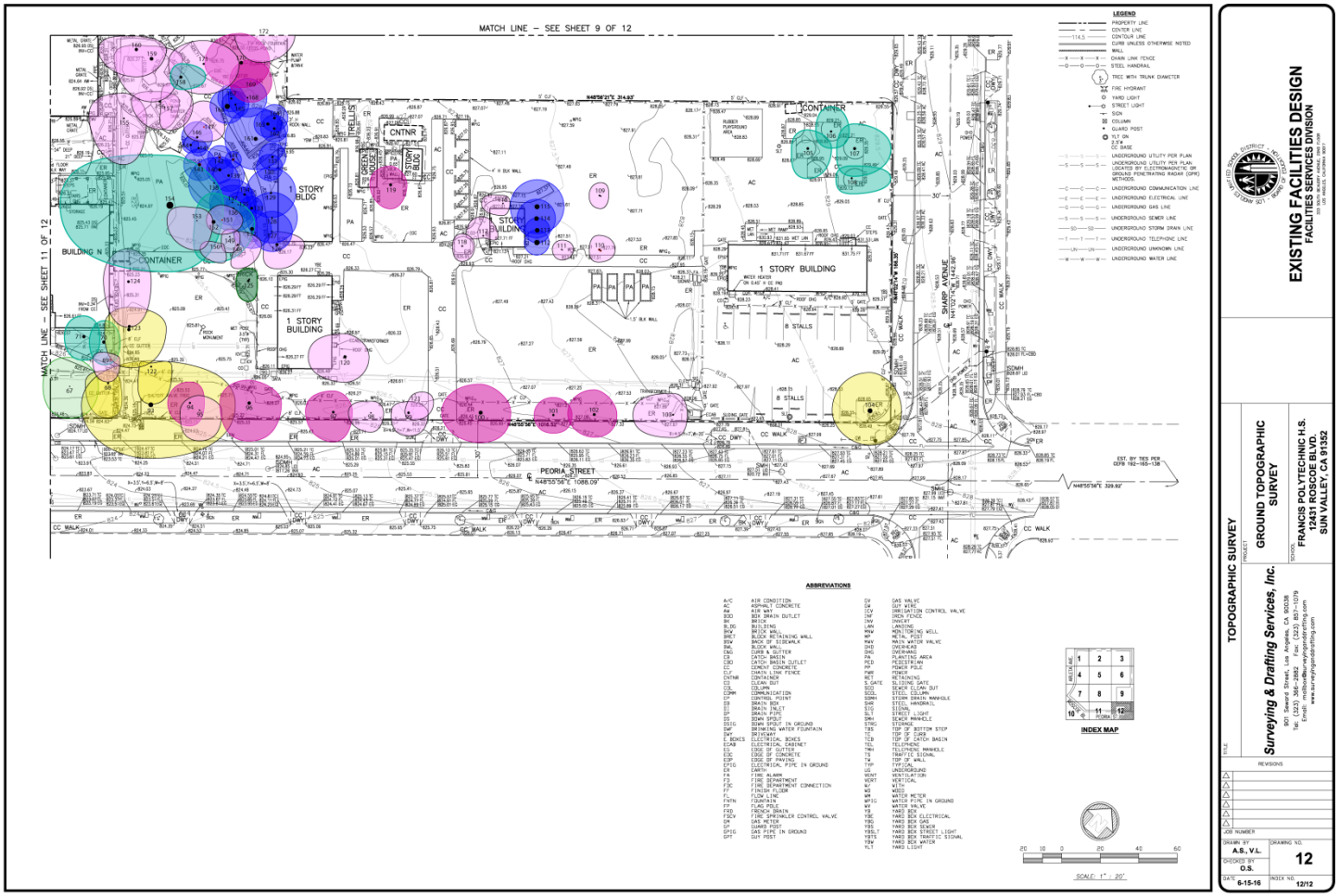


TREE IMPACTS MAP





#1: Brazilian pepper tree, close-up



#1: Brazilian pepper tree



#2: Brazilian pepper tree



#2: Brazilian pepper tree, knot



#3: Brazilian pepper tree



#4: Brazilian pepper tree



#4: Brazilian pepper tree, decay



#5: Brazilian pepper tree



#6-10: Mexican fan palm



#11: Arizona ash



#11: Arizona ash, decay



#12-13: Costa Rican holly



#12-14: Costa Rican Holly, #15: Olive



#12: Costa Rican holly, canker



#13: Costa Rican holly, canker



#14: Costa Rican holly, decay



#15: Olive



#15: Olive, decay



#16: Silver dollar eucalyptus tree



#16: Silver dollar tree, trunk damage



#17: Lemon-scented gum



#18: Lemon-scented gum



#19: Southern magnolia



#19: Southern magnolia



#20: Olive



#21: Olive



#21: Olive, codominant trunks



#22: Brazilian pepper



#22: Brazilian pepper, decay



#23: Brazilian pepper



#24: Brazilian pepper



#25-30: Mexican fan palm



#29: Mexican fan palm, spike wounds



#31: Costa Rican Holly



#32: Costa Rican Holly



#32: Costa Rican holly, decay



#33: Costa Rican Holly



#34: Lemon-scented gum



#35: Brazilian pepper tree



#36: Lemon-scented gum



#37: Southern magnolia



#37: Southern magnolia, trunk decay



#38: Southern magnolia



#39: Queensland bottle tree



#40: Arizona ash



#40: Arizona ash, codominant branches



#41: Arizona ash



#41: Arizona ash, codominance



#42: Arizona ash



#43: Crape myrtle



#44: Tulip tree



#45: Tulip tree, old hose girdling trunk



#46: Tipu tree



#47: Tipu tree



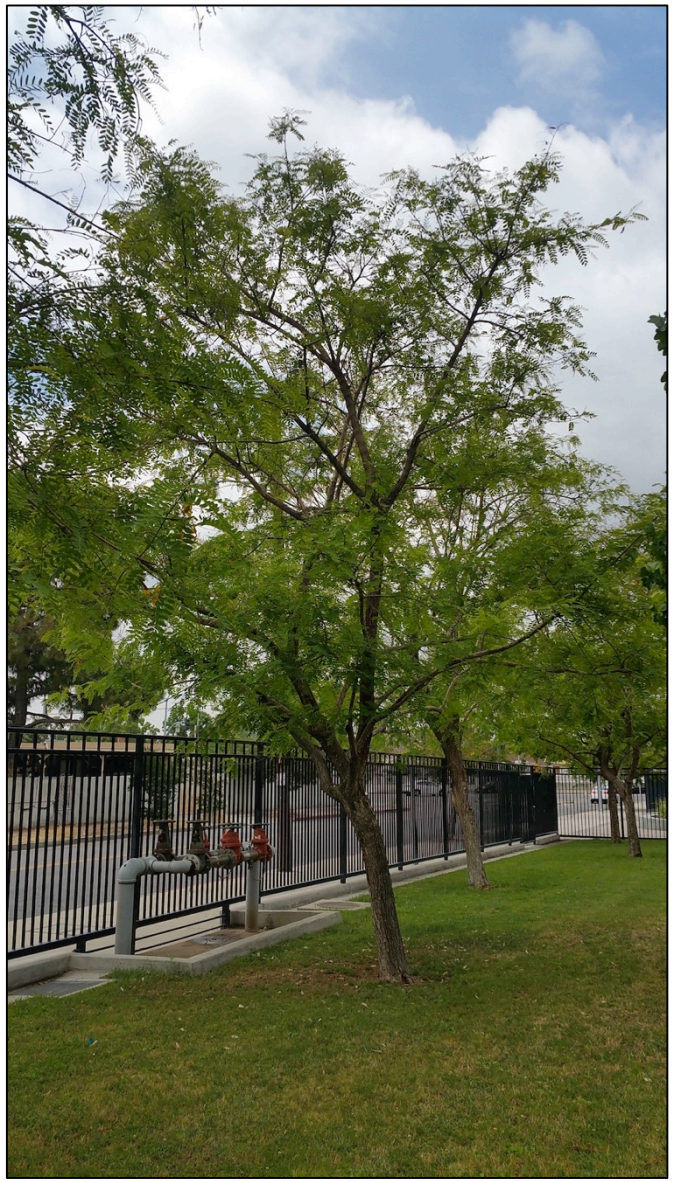
#48: Rotundiloba sweetgum



#48: Rotundiloba sweetgum, mechanical damage



#49: Tipu tree



#50: Tipu tree



#51: Rotundiloba sweetgum



#51: Rotundiloba sweetgum, 1” branch failure



#52: Tipu tree



#53: Tipu tree



#54: Rotundiloba sweetgum, (Google streetview, ©2017 Google)



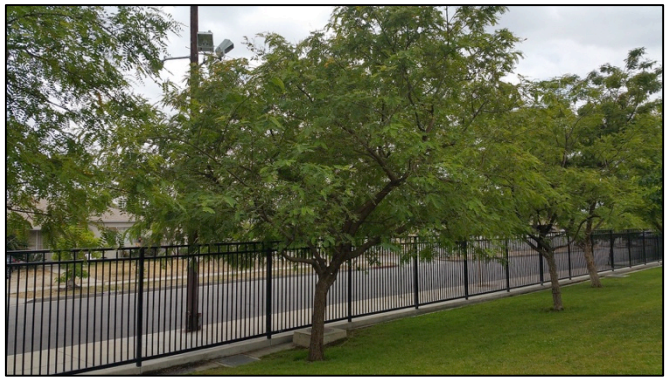
#55: Tipu tree



#56: Tipu tree



#57: Rotundiloba sweetgum



#58: Tipu tree



#59: Tipu tree



#60: Tipu tree



#61: Tulip tree



#62: Tipu tree



#63: Tipu tree



#64: Tipu tree



#65: Tipu tree



#66: Tipu tree



#67: Tipu tree



#68: Silver dollar gum



#69: Empress tree



#70, #71: Canary Island pine



#72, #73: Weeping bottlebrush



#74, #75: Canary Island pine



#76: Southern magnolia



#77: Arizona ash



#78: Arizona ash



#79: Arizona ash



#80: Arizona ash



#81: Arizona ash



#82: Arizona ash



#83: Arizona ash



#83: Arizona ash, termites



#84: Arizona ash



#85: Arizona ash



#86: Arizona ash



#87: Arizona ash



#88: Arizona ash



#89: Arizona ash



#89: Arizona ash, large cavity between branches may be a point of weakness.



#89: Arizona ash, wood borer and termite damage within the trunk



#90: Arizona ash



#91: Arizona ash



#92: Arizona ash



#93: Lemon-scented gum



#94: Evergreen ash



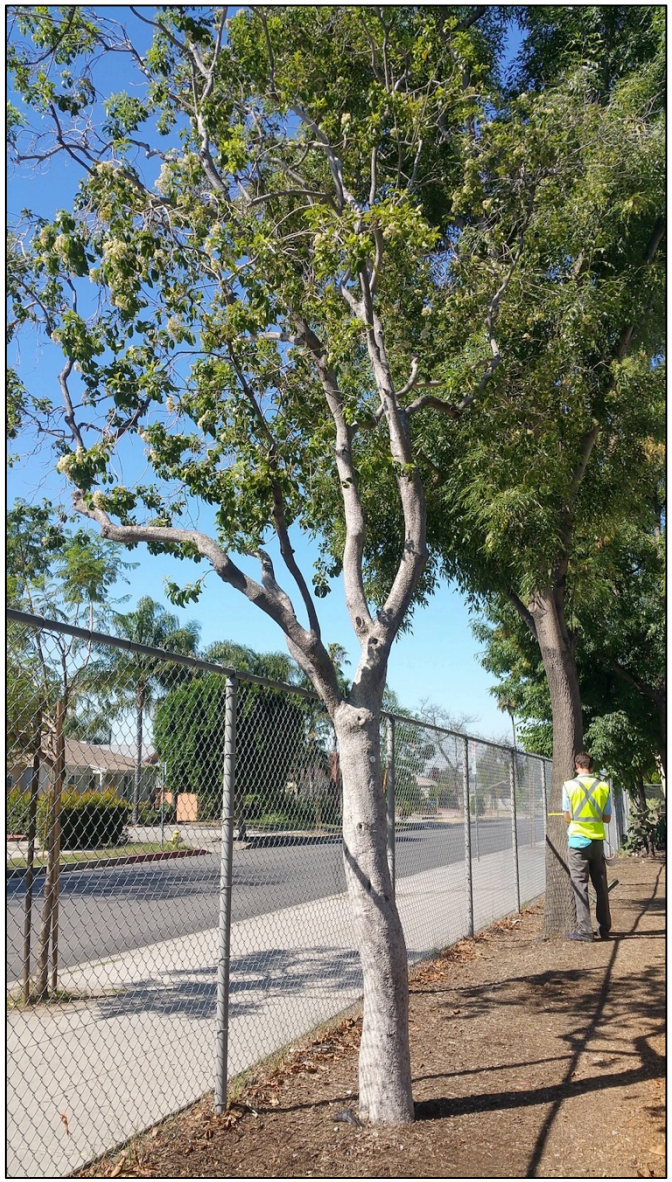
#95: White mulberry



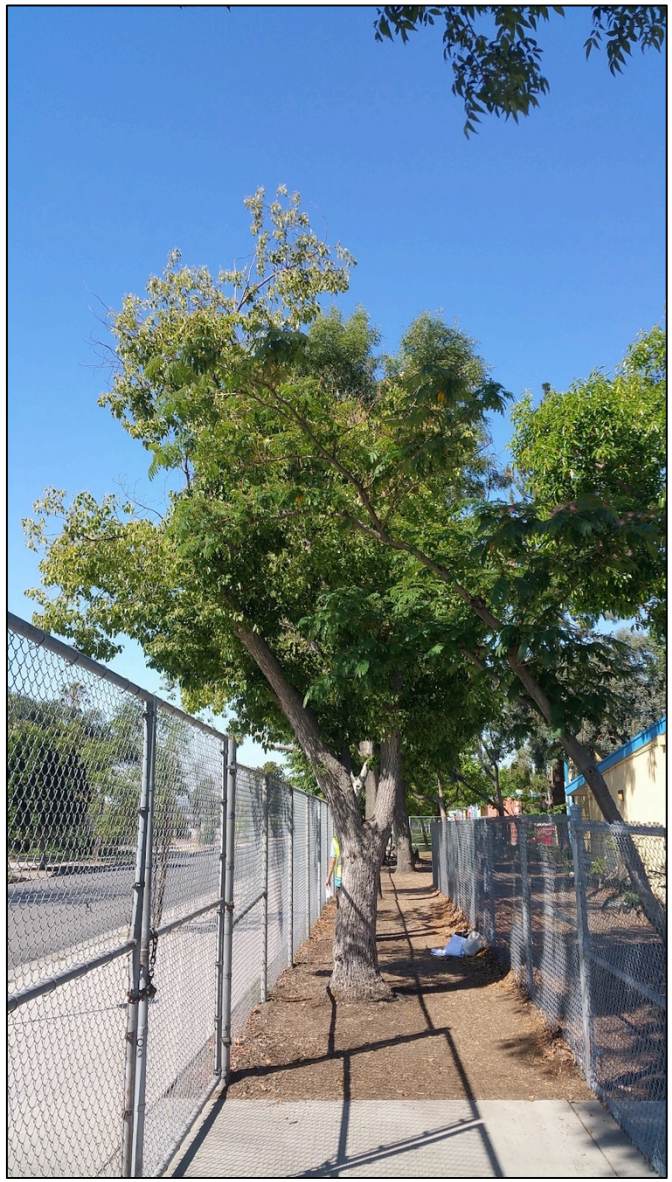
#96: Evergreen ash



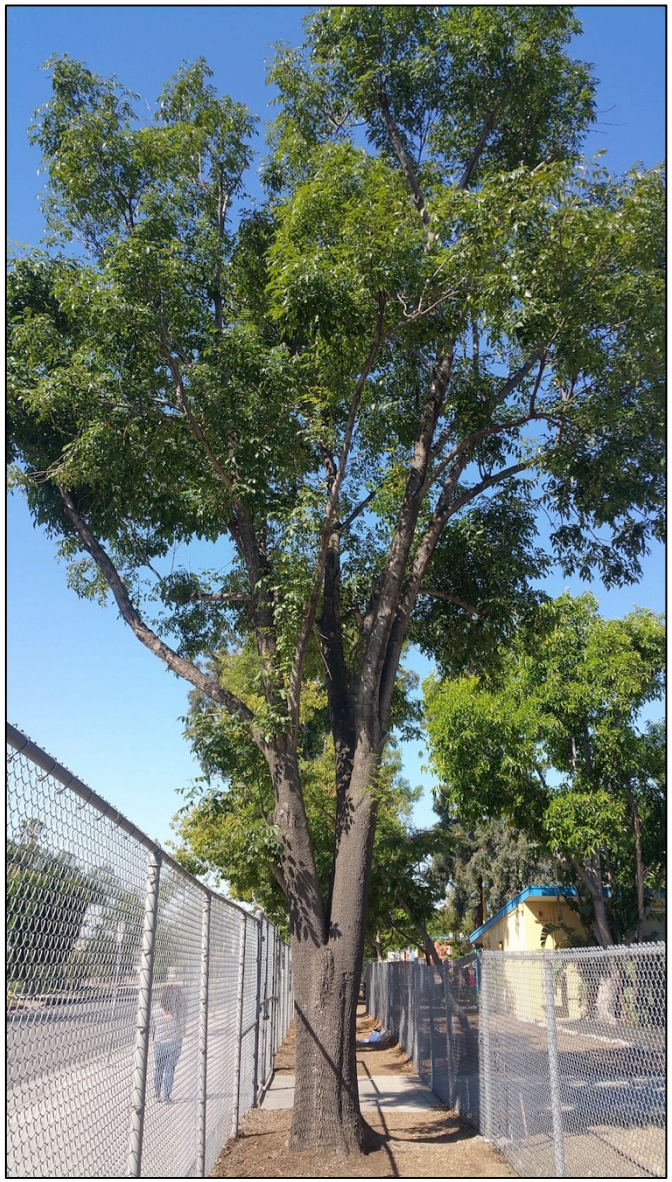
#97: Evergreen ash



#98: Queensland pittosporum



#99: Camphor tree



#100: Evergreen ash



#101: Evergreen ash



#102: Evergreen ash



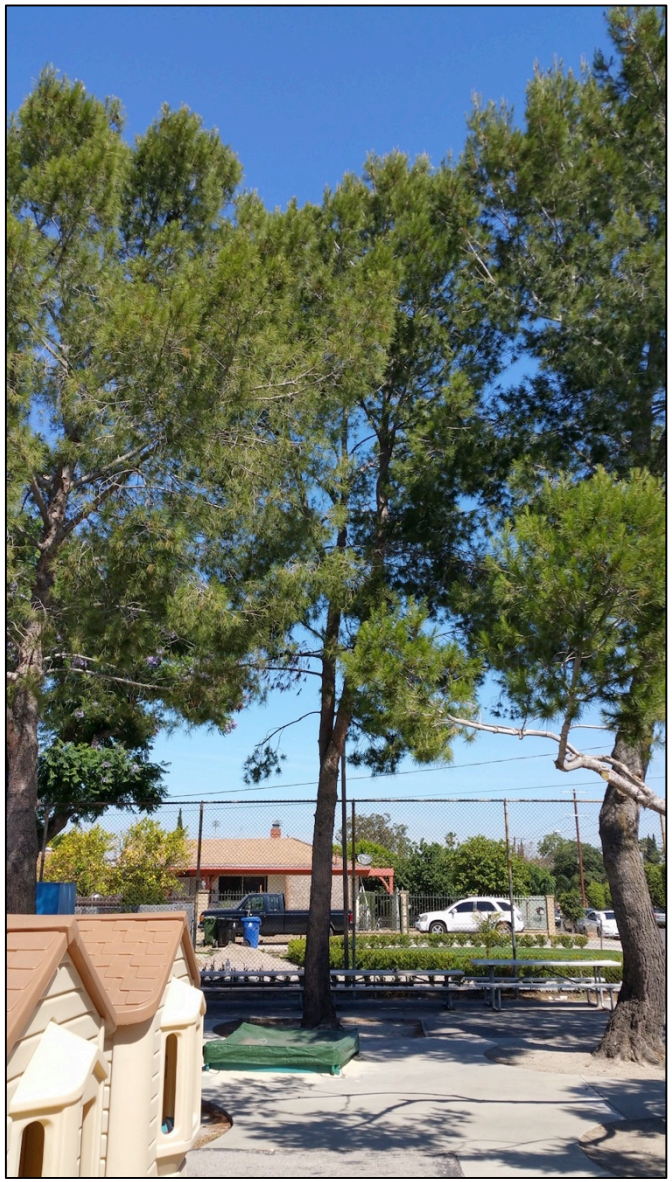
#103: Honey locust



#104: Swamp gum



#105: Aleppo pine



#106: Aleppo pine



#107: Aleppo pine



#108: Aleppo pine



#108: Aleppo pine, damage on lower trunk



#109: Juniper



#110: Juniper



#111: Juniper



#112-115: Canary Island date palm



#116: Weeping bottlebrush



#117: Weeping bottlebrush



#118: Juniper



#119: Arizona ash



#120: Rubber tree



#121: Persian silk tree



#121: Persian silk tree, trunk damage



#121: Persian silk tree, trunk damage



#122: Silver dollar gum



#123: Silver dollar gum



#124: White mulberry



#125: Olive



#129: Pindo palm



#130: Queen palm



#131: Mexican fan palm behind queen palm



#132: Pindo palm



#133: Mexican fan palm, #134: Guadalupe palm, #135-138: Queen palm, #139: Mexican fan palm



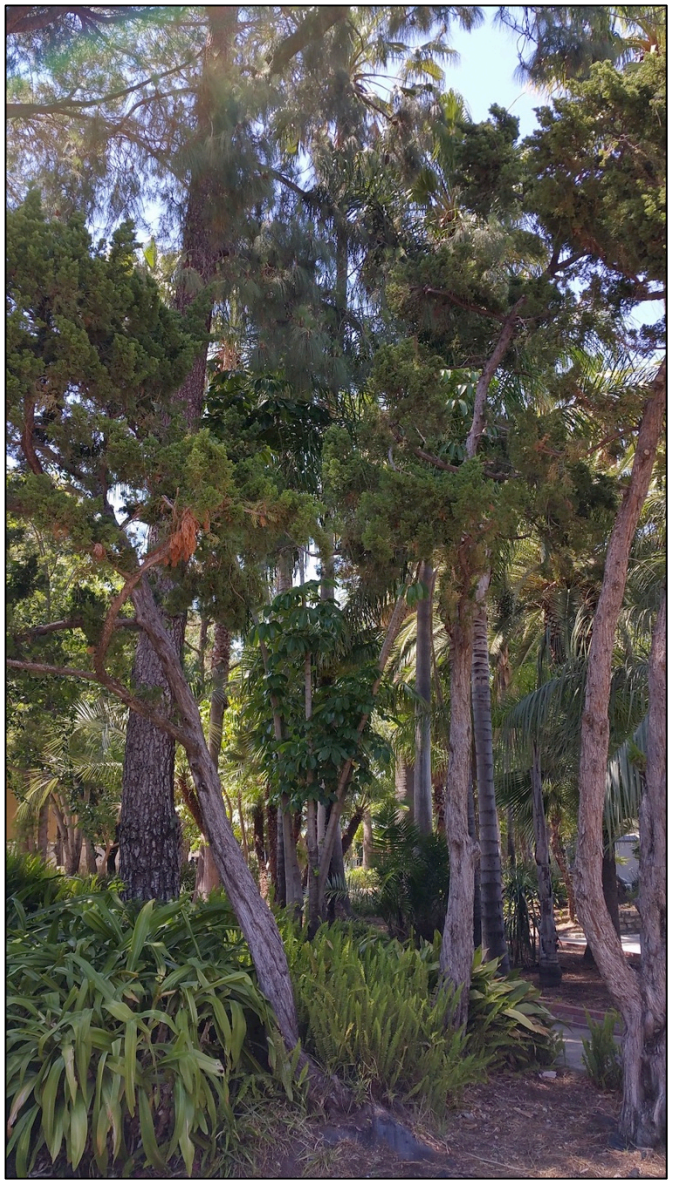
#140: Mexican fan palm, trunk damage



#143: Pindo palm, #144-146: Mexican fan palm



#147: Tupidanthus, #141-142: Mexican fan palm in the background



#148-150: Juniper



#151: Tupidanthus



#152: Canary Island pine



#153



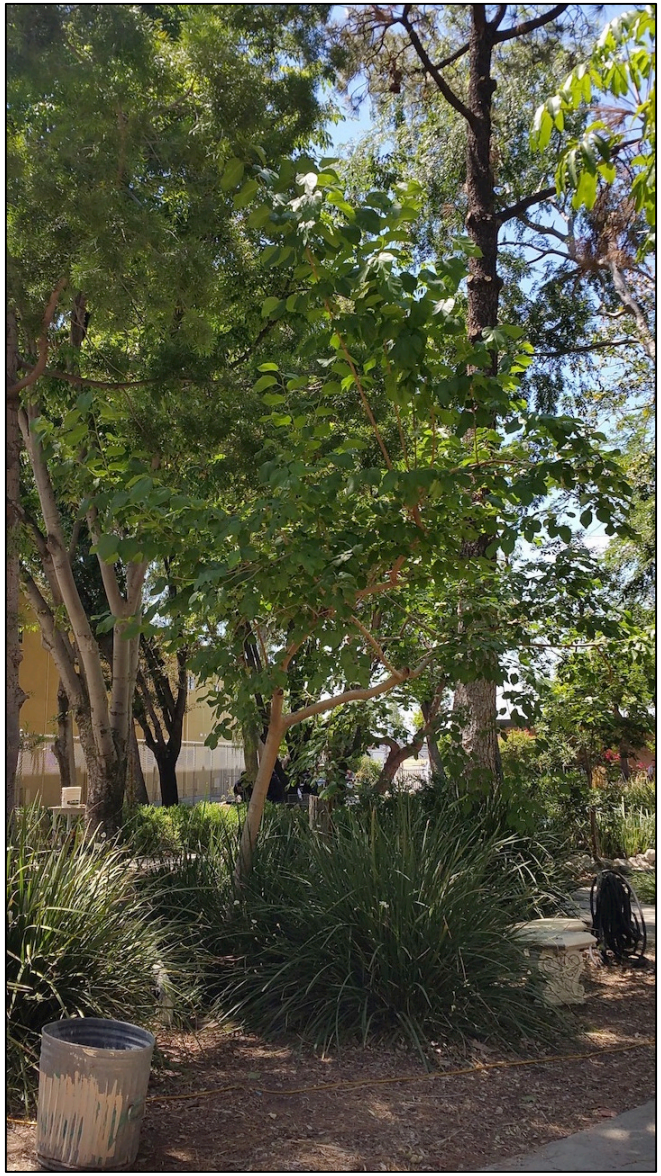
#154: Stone pine



#155: White mulberry



#156: African fern pine



#157: White mulberry



#158: Pine



#159



#160: Bunya-Bunya tree



#161: Canary Island date palm



#162-164: Mexican fan palms



#165: Mexican fan palm



#166: California fan palm



#167: Mexican fan palm



#168: Queen palm



#169: Evergreen ash



#170: Evergreen ash



#171: Chinese elm



#173: Carrotwood



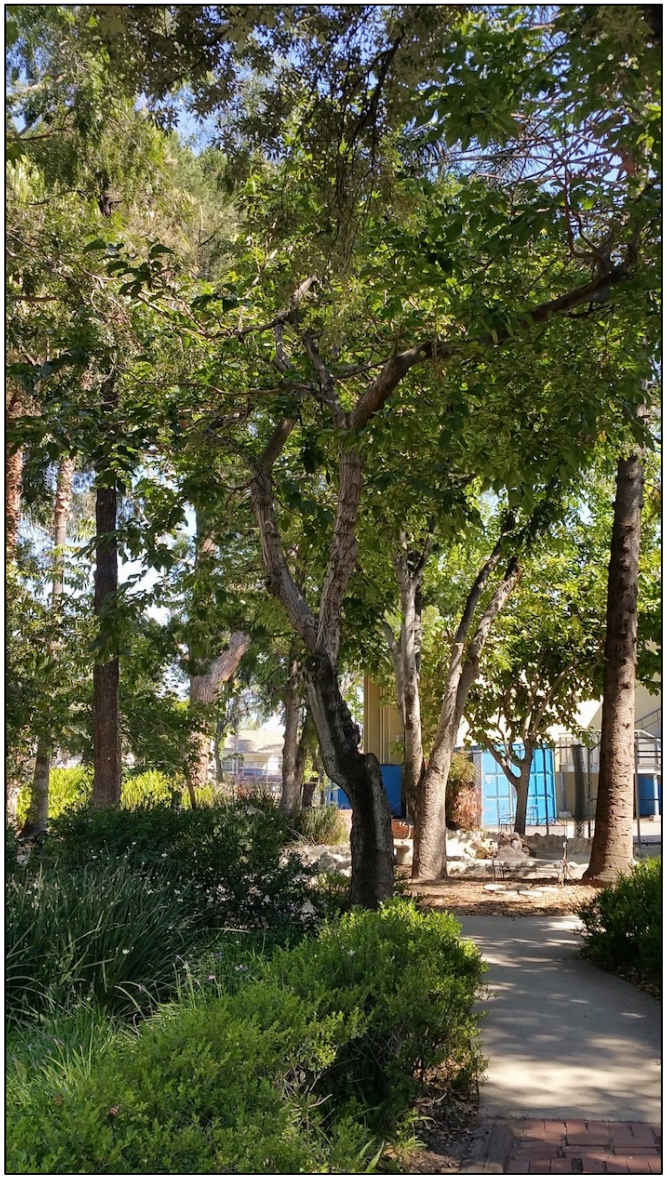
#173: Carrotwood, heartwood rot *Ganoderma applanatum* conk on trunk



#172: Floss silk tree (right), #174: South African coral tree (left)



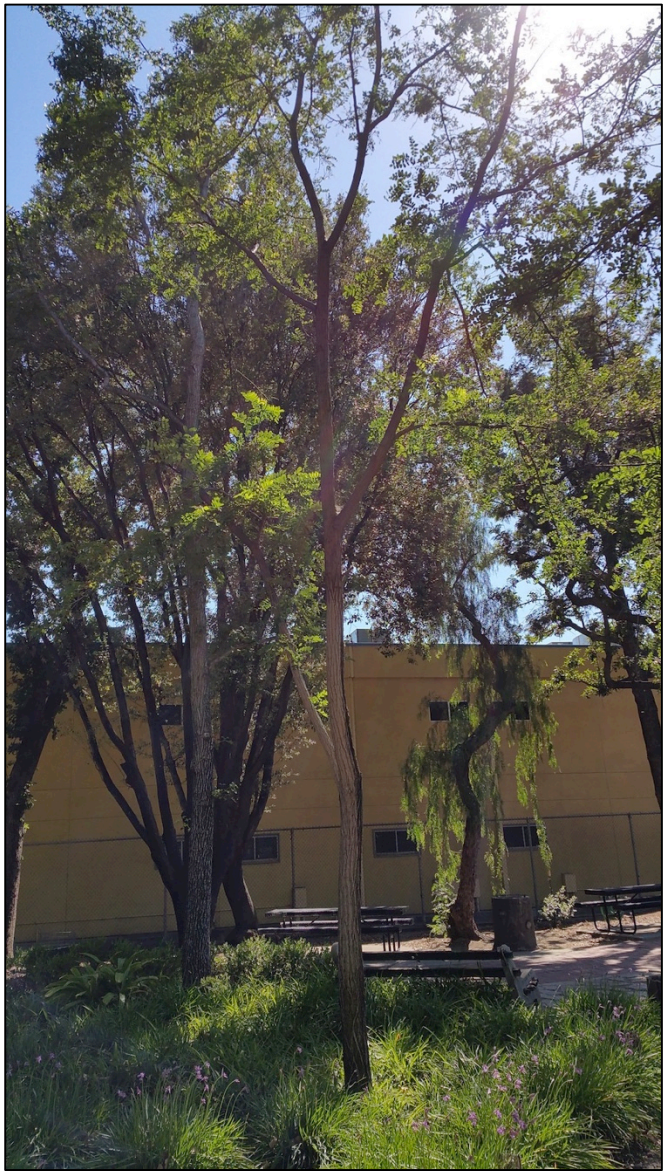
#174: South African coral tree, codominant trunks



#175: White mulberry



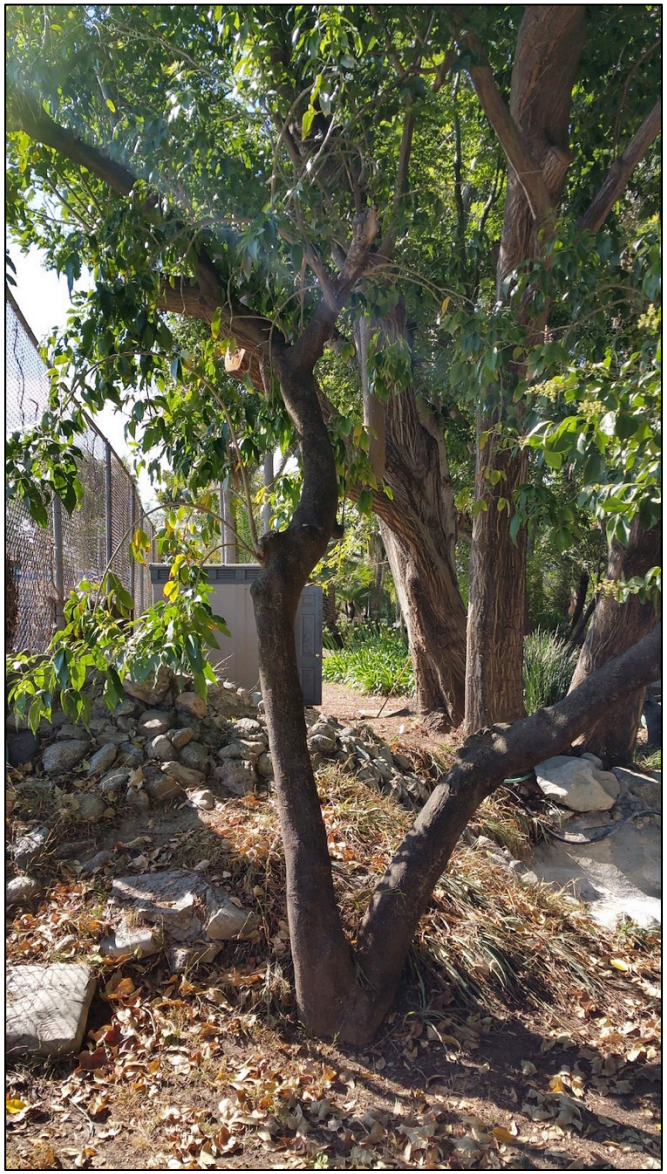
#176: Sweetgum



#177: Tipu tree



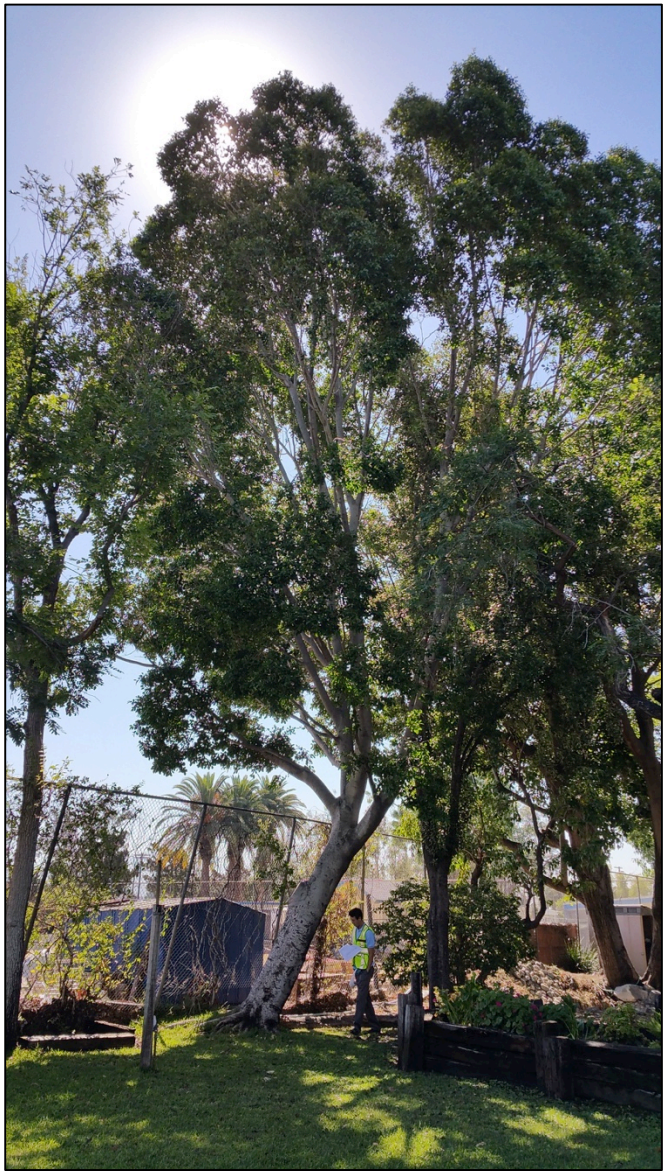
#178: Lacebark



#179: White sapote



#180: Primrose tree



#181: Indian laurel fig



#182: Tipu tree



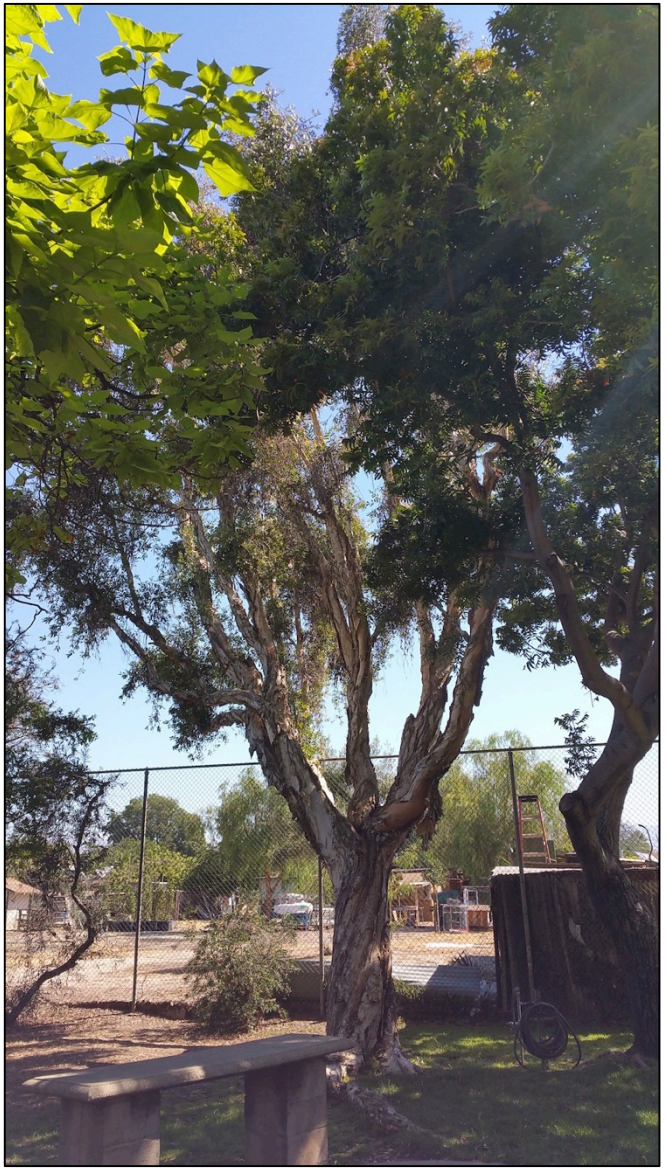
#183: Smooth-leaf elm



#184: Tipu tree



#185: South African wild plum



#186: Paperbark



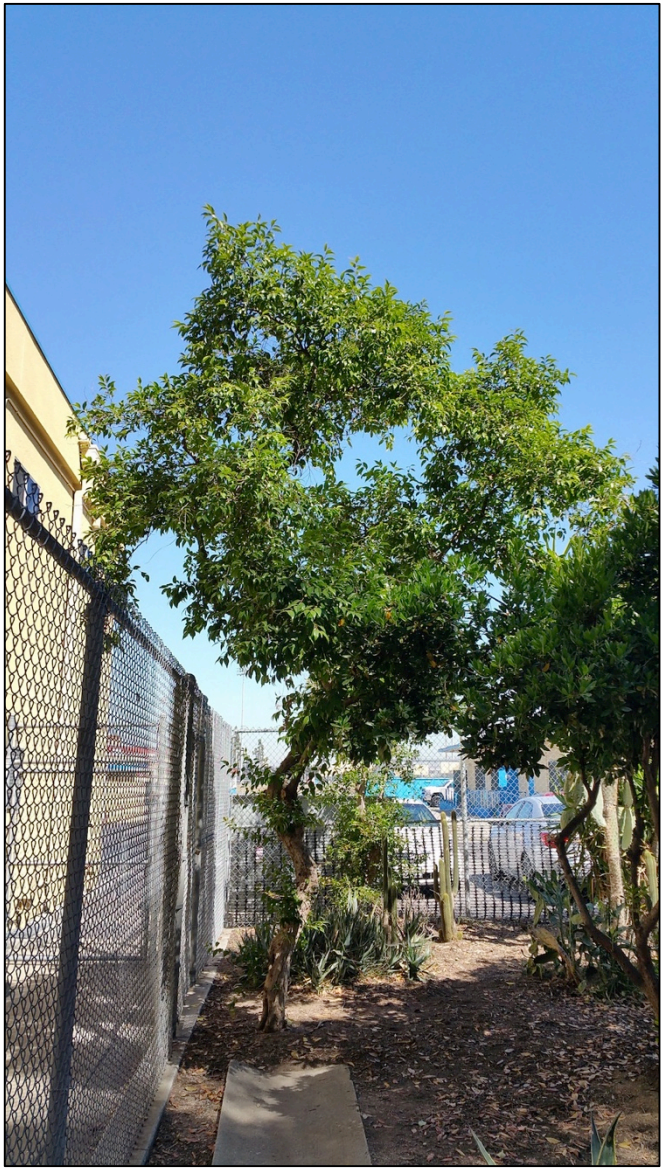
#187: Lemon bottlebrush



#188: Catalpa



#189: Marina madrone



#190: Shiny xylosma



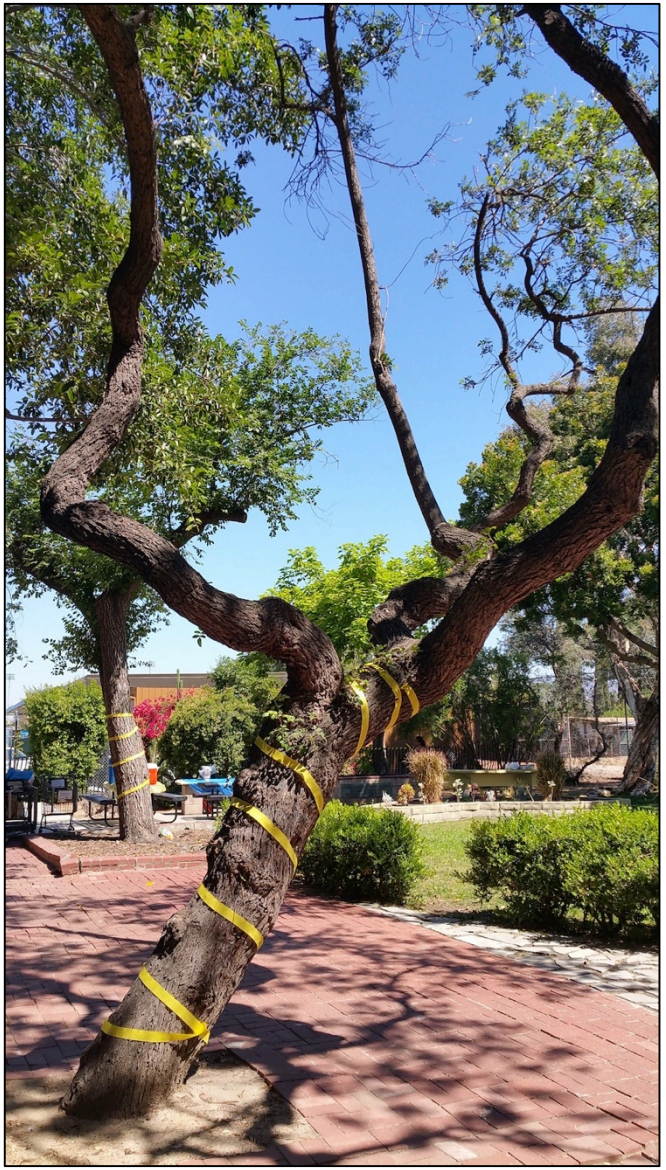
#191: Smooth-leaf elm



#192: Rusty-leaf fig



#193: Silk oak



#194: Brazilian pepper tree



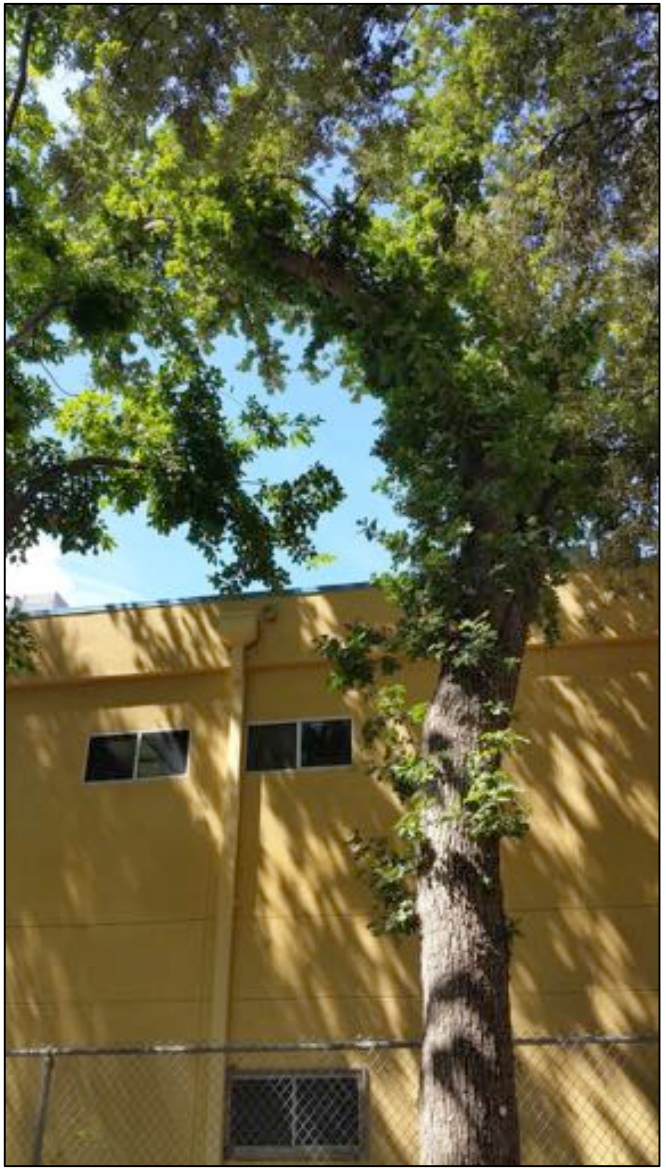
#195: Peruvian pepper tree



#196: Holly oak



#197: Holly oak



#198: Oregon white oak



#199



#200: Marina madrone



#201: Marina madrone



#202: Marina madrone



#203: Arizona ash



#204: Arizona ash



#205: Arizona ash



#206: Arizona ash



#207: Olive



#208: Olive



#209: Olive



#211: Olive



#212: Olive



#213: Chinese windmill palm



#214: Olive



#215, #216: Chinese windmill palm



#217: Olive



#218: Chinese windmill palm



#219: Chinese windmill palm



#220: Olive



#221: Olive



#224: Brazilian pepper tree



#225: Brazilian pepper tree



#226: Carrotwood



#227: Brazilian pepper tree



#228: Brazilian pepper tree



#229: Brazilian pepper tree



#230: Evergreen ash



#231: Evergreen ash



#232: Arizona ash



#233: Arizona ash



#234: Arizona ash



#235: Arizona ash



#236: Carrotwood



#237: Arizona ash



#238: Arizona ash



#239: Arizona ash



#240: Chinese elm



#241: Mexican fan palm



#242: Arizona ash



#243: Arizona ash



#244: Arizona ash



#245: Arizona ash



#246: Arizona ash



#247: Arizona ash



#248: Brazilian pepper tree



#249: Brazilian pepper tree



#250: Brazilian pepper tree



#251: Olive



#252: Carrotwood



#253: Carrotwood



#254: Carrotwood



#255: Olive



#256, #257: Chinese windmill palm



#258: Olive



#259: Mexican fan palm (right)



#260: Mexican fan palm (left)



#261, 262: Mexican fan palm



#263: Carrotwood



#264: Carrotwood



#265: Olive



#266: Carrotwood



#267: Ornamental pear



#268: Ornamental pear



#269: River she-oak



#270: Red ironbark



#271: River she-oak



#272: River she-oak



#275: Cockspur coral

#273: River she-oak



#276: Red iron bark

#274: Carrotwood





#277: Catalina cherry (left), #278: Lemon bottlebrush (right)



#278, 279, 280, 281: Lemon bottlebrush



#282, 283: Date palm



#284, 285: Mexican fan palm



#286: Mexican fan palm



#287: Mexican fan palm



#288, 289, 290: Mexican fan palm



#291: Persian silk tree



#292: Jacaranda



#293: Aleppo pine



#294: Red ironbark



#295: Red ironbark



#296: Canary Island pine



#297: Kurrajong (arrow), #298: Coast live oak



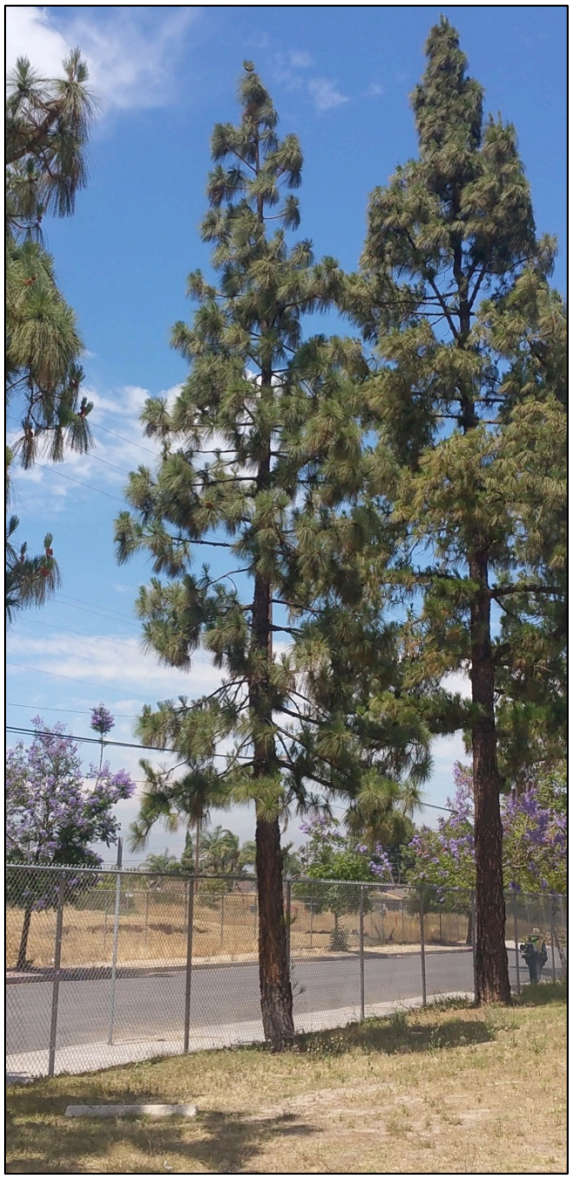
#299: Canary Island pine



#300: Canary Island pine



#301: Canary Island pine



#302: Canary Island pine



#303: Canary Island pine



#304: Canary Island pine



#305: Mexican fan palm



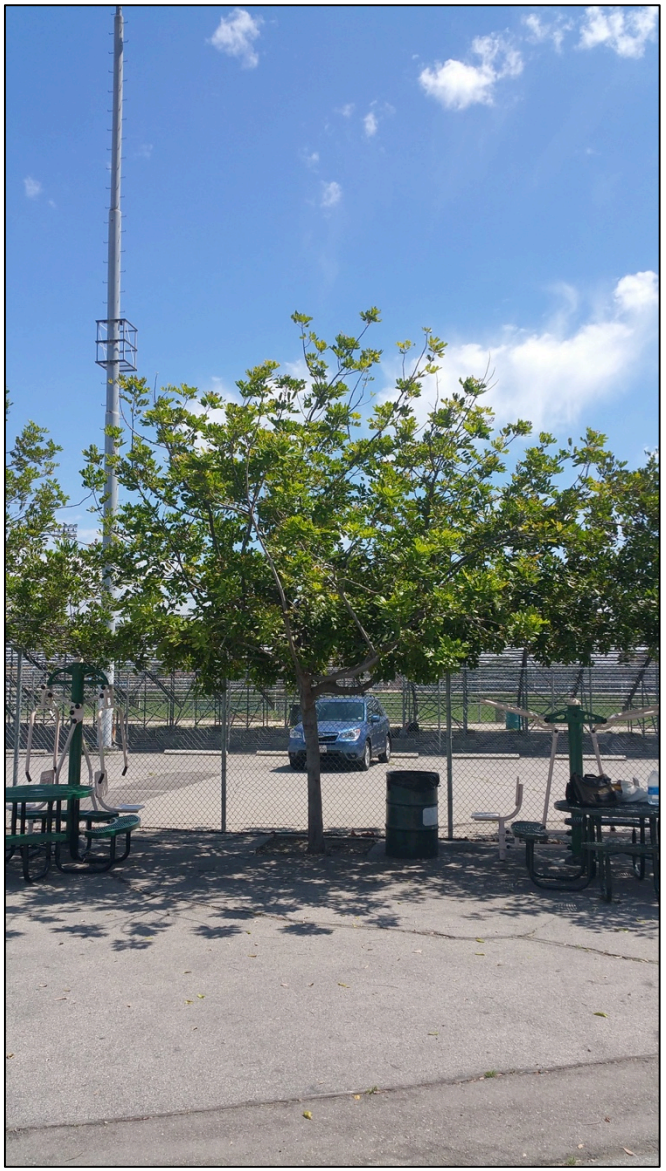
#306: Gold medallion tree



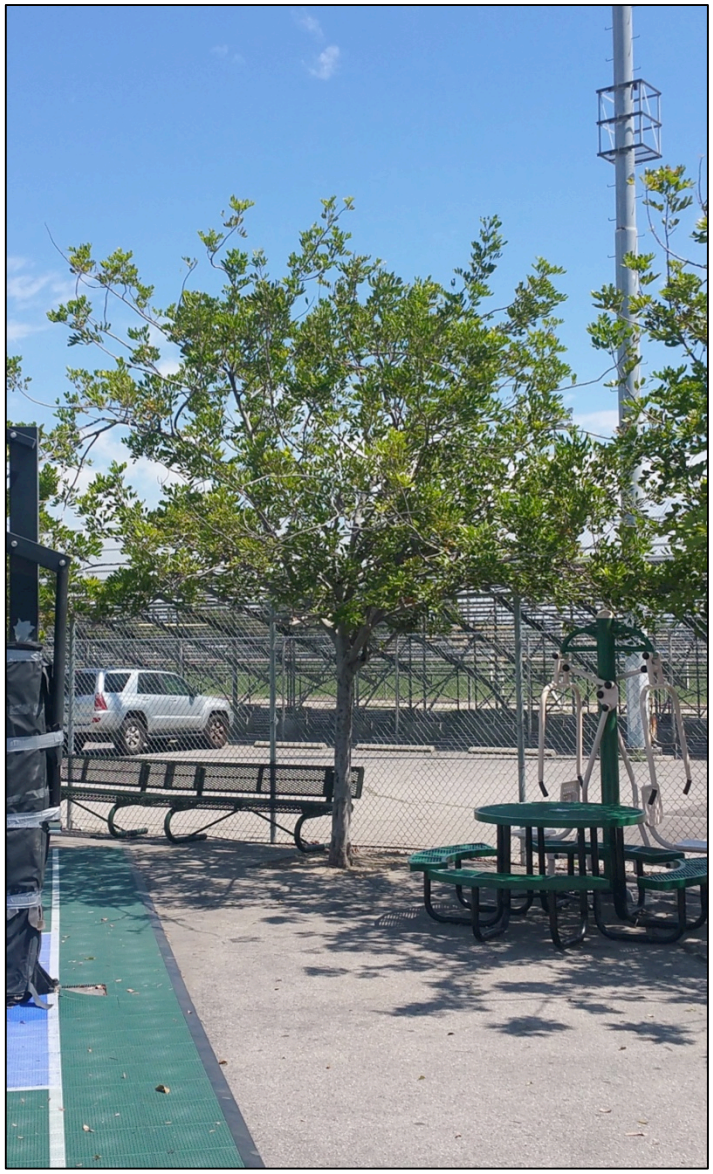
#307: Gold medallion tree



#308: Carrotwood



#309: Carrotwood



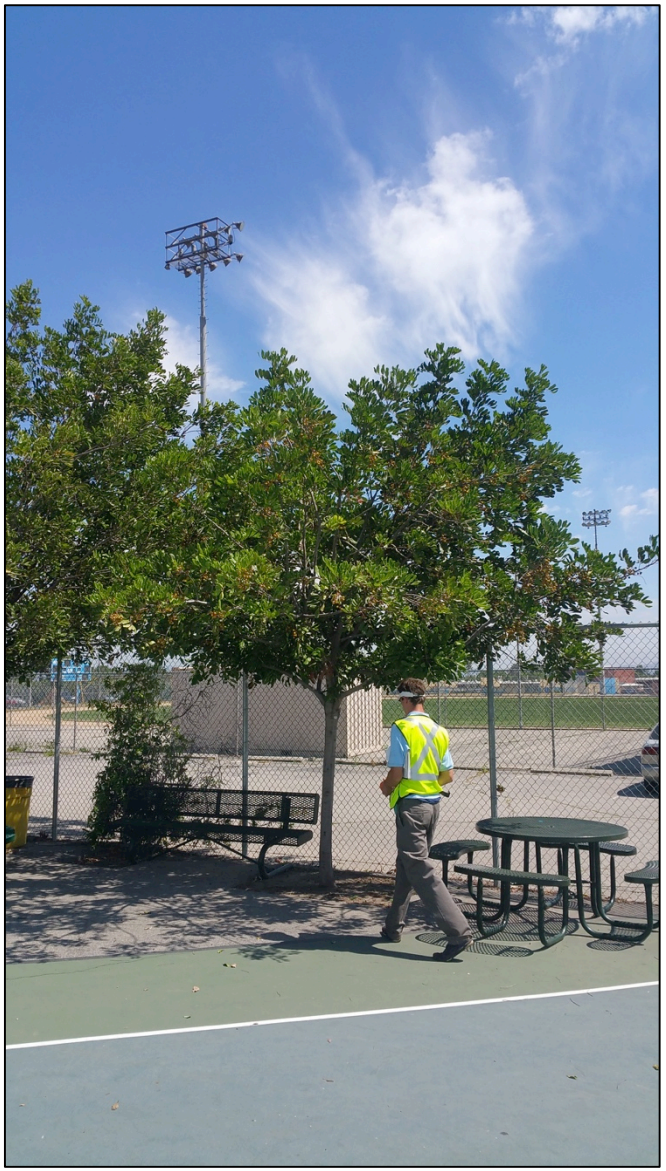
#310: Carrotwood



#311: Carrotwood



#312: Carrotwood



#313: Carrotwood



#314: Carrotwood



#315: Carrotwood



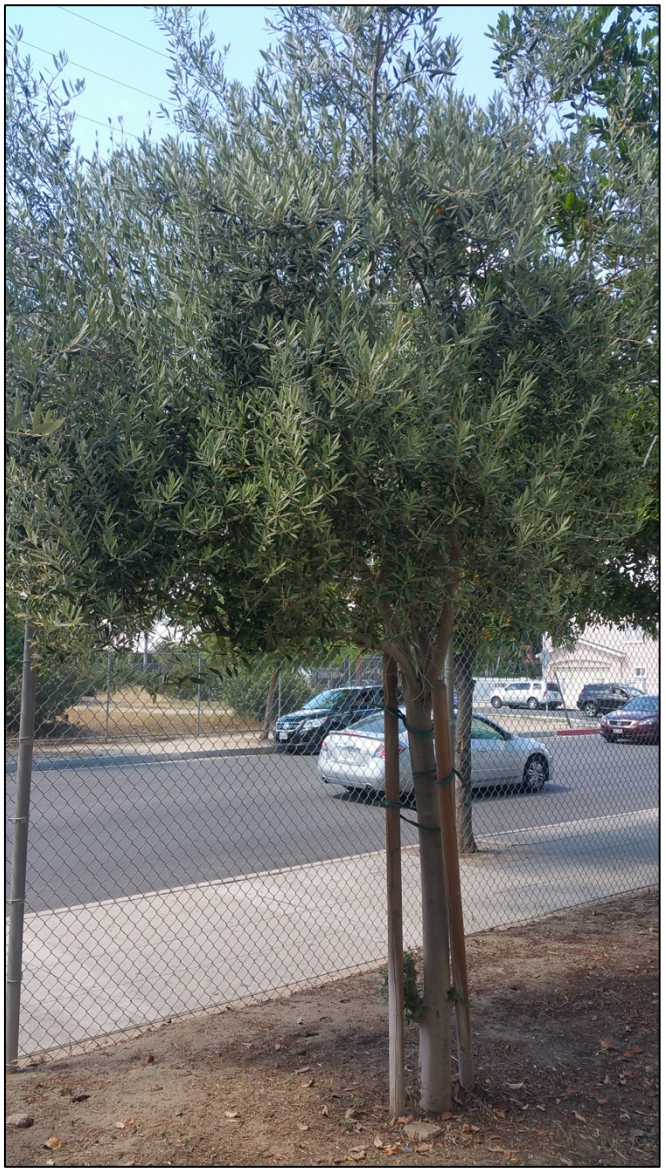
#316: Carrotwood



#317: Olive



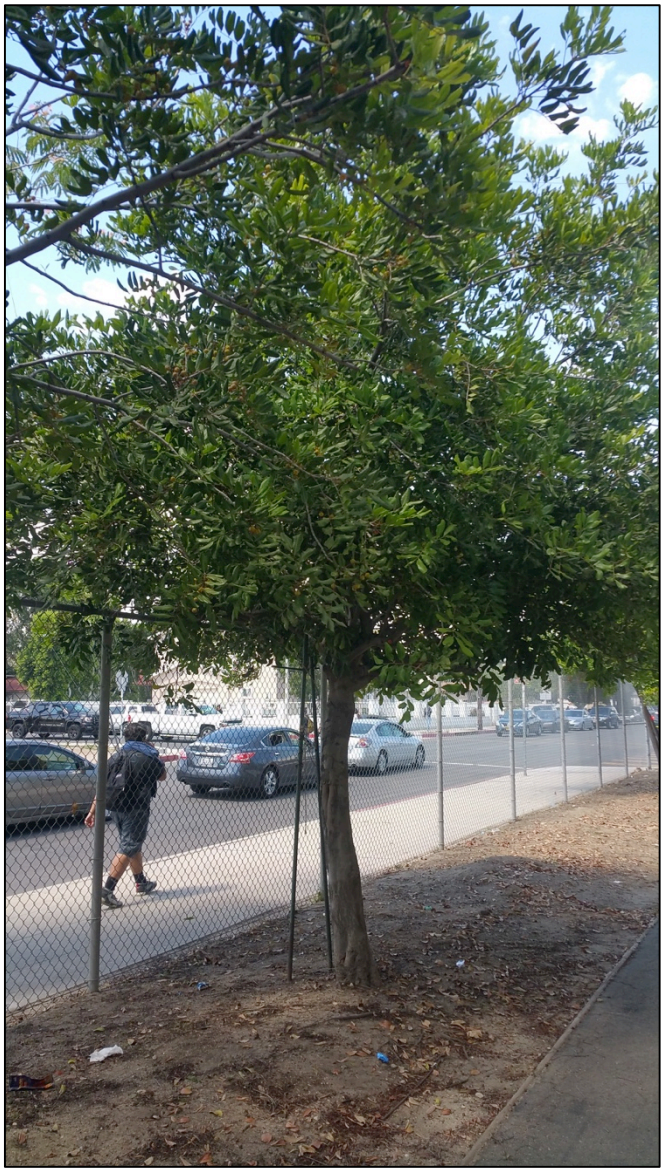
#318: Olive



#319: Olive



#320: Carrotwood



#321: Carrotwood



#322: Carrotwood



#323: Carrotwood



#324: Lemon-scented gum



#325: Carrotwood (Google Streetview, ©2017 Google)



#326: Carrotwood, #327-328: Olive, #329: Carrotwood (Google Streetview, ©2017 Google)



#330, 331, 332: Lemon-scented gum



#333: Arizona ash

Appendices

C-1.

LAUSD Historic Resources Survey Report

Appendices

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LOS ANGELES UNIFIED SCHOOL DISTRICT

HISTORIC RESOURCES SURVEY REPORT

Prepared by

Sapphos Environmental, Inc.
for the
Los Angeles Unified School District
Office of Environmental Health and Safety

June 2014

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Appendix B LAUSD Historic Context Statement, 1870 to 1969 (on CD)

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TABLE LIST

V-1 Grover Cleveland Senior High School 60




Figures 1 and 2. San Fernando Valley postwar schools: at left, Grover Cleveland Senior High School (1959), Charles Matcham & Stewart Granger and Associates, Reseda-West Van Nuys; at right, Chatsworth Senior High School (1963), Wilson & Associates, Chatsworth. Source: Sapphos Environmental, Inc., 2013.

EXECUTIVE SUMMARY

This report presents the results of a historic resources survey conducted for the Los Angeles Unified School District (LAUSD) by Sapphos Environmental, Inc. between October 2013 and February 2014. Debi Howell-Ardila, senior architectural historian, served as project manager, survey team lead, and principal author of the LAUSD Historic Resources Survey Report. Marilyn Novell, historic resources coordinator, contributed to fieldwork, research, data management, and documenting survey results on Department of Parks and Recreation forms. Carole Zellie, historic resources manager, provided oversight and input. All staff meet and/or exceed the Secretary of the Interior's Professional Qualifications Standards for architectural history. Gwenn Godek of the LAUSD Office of Environmental Health and Safety served as project administrator and manager.

This survey represents a first step in a district-wide historic resources survey of as-yet unevaluated LAUSD campuses and properties. The information compiled in this report, including the *LAUSD Historic Context Statement, 1870 to 1969*, is intended to provide the district with a basis for proactively identifying, documenting, and maintaining its historically significant school buildings and campuses in advance of district-wide redevelopment efforts.

Included in this survey were a total of 55 LAUSD campuses, which span the extent of the district (Figure 3, *Los Angeles Unified School District boundary*). At the time of the survey, all campuses were 45 years of age or older, with dates of construction ranging from the late 1940s through early 1970s; a majority had not been previously surveyed or evaluated. The survey sample included elementary, middle, and senior high schools, as well as several specialty facilities or campuses.

Of the 55 campuses surveyed, 14 campuses appear to be eligible for the National Register of Historic Places (NRHP) and/or the California Register of Historical Resources (CRHR). Eligible campuses are described in detail in Section 4, Survey Results, and documented on Department of Parks and Recreation (DPR) Primary and Building, Structure, and Object forms, which are included in Appendix A.

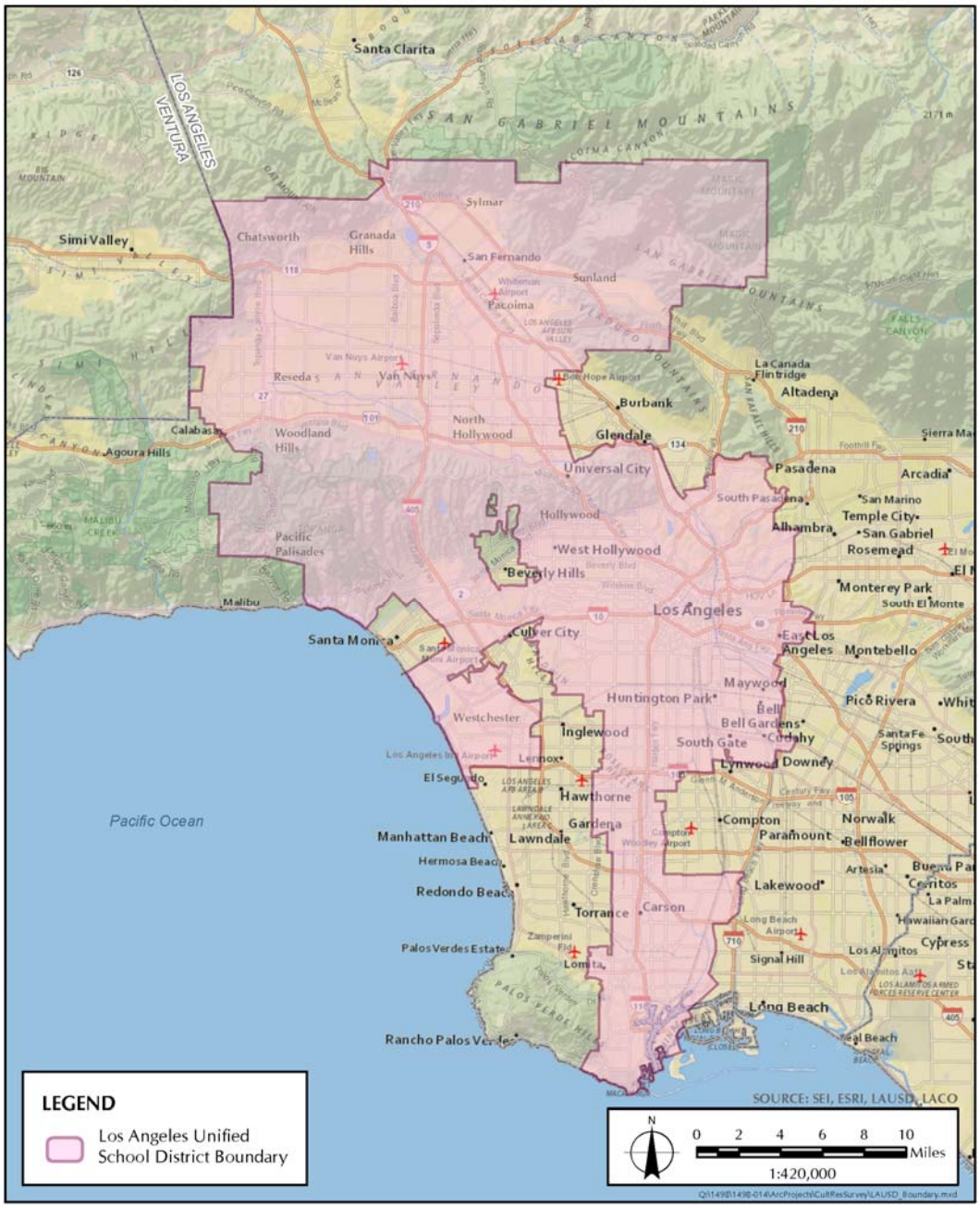


Figure 3. Los Angeles Unified School District boundary. Source: Sapphos Environmental, Inc., 2014.




Figures 4 and 5. Leapwood Avenue Elementary School (1962), Carson. Source: Sapphos Environmental, Inc., 2014.

I. INTRODUCTION

With nearly 800 campuses and a geographic span of over 700 square miles, LAUSD is the second largest public school system in the United States. The district includes all of incorporated Los Angeles, as well as unincorporated areas throughout Los Angeles County. LAUSD's northern portion spans the San Fernando Valley, including Granada Hills, Chatsworth, Reseda, Woodland Hills, Van Nuys, Sylmar, San Fernando, Pacoima, and Sunland. Along the west, LAUSD includes western Los Angeles, Pacific Palisades, Venice, and Westchester. Along the east, LAUSD borders Glendale, Monterey Park, Montebello, Commerce, Downey, and Long Beach. Within LAUSD, extending south from Los Angeles, are the communities of Vernon, Huntington Park, Maywood, Bell, South Gate, Gardena, and Carson. LAUSD's southernmost portion includes San Pedro, Lomita, and Rancho Palos Verdes.

Since its founding in 1872, LAUSD has commissioned, designed, and acquired a remarkable collection of buildings, campuses, and facilities. These properties reflect more than a century of social, architectural, and technological advances, as well as ongoing educational and curricular reform. Extant properties range from a wood-framed schoolhouse of the late nineteenth century to superblock campuses displaying Mid-Century Modern architectural styles.

In the early 2000s, in conjunction with the Getty Conservation Institute, LAUSD launched the district's first comprehensive Historic Resources Survey. This work resulted in findings of federal and/or state eligibility for 123 schools (local eligibility criteria were not included in these surveys; public schools are statutorily exempt in the California State Government Code from local landmark designation).[1] With a project scope focused primarily on the pre–World War II era, however, many postwar campuses were either not surveyed or not subject to context-driven evaluations. Since the 2001–2004 surveys, approximately 175 additional campuses have passed the 45-year mark, signaling the need for future evaluation. Another approximately 125 campuses constructed between 1945 and 1955 have been evaluated only at the reconnaissance level, and only from the public right-of-way.[2]

Project Description and Purpose

In advance of campus-wide redevelopment, LAUSD contracted with Sapphos Environmental, Inc. to provide historic resource consulting services to inform master planning efforts and environmental review pursuant to the California Environmental Quality Act (CEQA). The scope of work is three-fold:

1. Preparation of a comprehensive LAUSD Historic Context Statement;
2. Historic resource surveys of 55 campuses; and
3. Updating the LAUSD Historic Resources Inventory database.

The 55 campuses surveyed included school plants that have not yet been subject to historic resource evaluations due to age (i.e., schools built primarily between 1955 and 1969) and schools that were previously identified as warranting re-evaluation once they reached 45 years of age. These included: (1) 10 high schools; (2) 22 schools identified in the 2002 "Phase 2" Getty survey as warranting re-evaluation; and (3) 23 elementary and junior high schools.

Historic Resources and CEQA

In addition to helping inform master planning efforts for LAUSD, this Historic Resources Survey and report are designed to facilitate compliance with CEQA, which requires lead agencies to consider the potential effects of proposed projects on historic resources as defined by CEQA. CEQA identifies a historic resource as a property that is listed in—or is eligible for listing in—the NRHP, CRHR, or local registers. NRHP-listed properties are automatically included in the CRHR. The criteria for both are similar and described below, with the NRHP letter (A, B, C, and D) followed by the corresponding CRHR number (1, 2, 3, and 4). In keeping with the 2001–2004 LAUSD Historic Resources Surveys, local criteria were not included.[3]

Resources that may be eligible for listing include buildings, sites, structures, objects, and historic districts. To qualify as a historic resource under CEQA, a resource must be significant at the local, state, or national level under one or more of the following criteria:

A/1: For an association with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States (NRHP Criterion A; CRHR Criterion 1);

B/2: For an association with the lives of persons important to local, California, or national history (NRHP Criterion B; CRHR Criterion 2);

C/3: As an embodiment of the distinctive characteristics of a type, period, region, or method of construction, representative of the work of a master or high artistic values (NRHP Criterion C; CRHR Criterion 3); or

D/4: Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (NRHP Criterion D; CRHR Criterion 4).

There is no specific age threshold for CRHR eligibility; rather, the regulations specify that enough time must have passed for a property to be evaluated within its historic context.

Resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be recognizable as historic resources and to convey the reasons for their significance. It is possible that resources that may not retain sufficient integrity for listing in the NRHP may still be eligible for the CRHR. The evaluation of integrity is based on how a property's physical features and attributes tell the story of its historic significance. The NRHP has defined the following seven aspects of historic integrity: Location, Design, Setting, Materials, Workmanship, Feeling, and Association.[4]

Previous Historic Resources Surveys and Studies

The consultants reviewed past LAUSD property surveys, including the following three historic resource surveys, as well as one in-progress project:

(1) **Historic resource surveys following the 1994 Northridge Earthquake**
Conducted for the Federal Emergency Management Agency (FEMA) and carried out in support of compliance under Section 106 of the National Historic Preservation Act, these surveys identified approximately 39 out of 71 campuses surveyed as historic (i.e., eligible for listing in the NRHP or for designation under a local ordinance);

(2) **"Phase 1" Getty survey**
This 2001–2002 historic resource survey was funded through a Planning Grant from Preserve LA, a program of the J. Paul Getty Trust. The survey included approximately 190 campuses, with results incorporating and expanding on the 1994 FEMA survey; a database of 410 schools aged 45 years or older was prepared as part of the project;

(3) **"Phase 2" Getty survey**
This 2002–2004 expansion of Phase 1 considered approximately 220 campuses;

(4) **SurveyLA**
A multi-year, citywide historic resource survey, partially funded by the J. Paul Getty Trust and covering all of Los Angeles; led by the City of Los Angeles Office of Historic Resources, the project is in its final phase as of spring 2014. Numerous LAUSD properties appear to be eligible for federal, state, or local listing and are therefore presumed historic resources for the purposes of CEQA. Final results from SurveyLA will be incorporated into the California State Historic Resources Inventory.

Included in the compiled LAUSD Historic Resources Inventory prepared for this report are eligibility findings from the 2001–2004 Phase 1 and Phase 2 Getty surveys (i.e., all campuses found eligible for either the NRHP and/or the CRHR). Eligibility findings for LAUSD schools made through SurveyLA, which is in progress as of June 2014, are available through the City of Los Angeles Office of Historic Resources.[5]

II. SURVEY METHODS AND PROCEDURES

The survey process used by Sapphos Environmental, Inc. staff was based on recognized professional standards, including those recommended by the National Park Service and the California Office of Historic Preservation guided by California Historic Resources Status Codes. Proceeding in stages, the survey method was as follows:

1. Pre-field research on each campus;
2. Fieldwork, including on-campus site inspections;
3. Compilation of results, with data entered into a property list including Assessor's Parcel Number; address; principal dates of construction; architect, designer, and/or contractor, if known; and past and present evaluation results;
4. Analysis, with compiled data and results of site inspections studied and compared with applicable criteria as well as the findings of the LAUSD Historic Context Statement;
5. Evaluation/Designation, wherein each campus was found either eligible or not eligible and assigned a California Historic Resources Status Code indicating evaluation findings.

Before beginning survey work, Sapphos Environmental, Inc. completed a comprehensive Historic Context Statement to guide evaluations. The complete LAUSD Historic Context Statement is included in this report as Appendix B. Framed in accordance with the NRHP Multiple Property Documentation (MPD) approach, the LAUSD Historic Context Statement identifies themes of significance, property types, eligibility standards, and integrity thresholds for LAUSD school properties from the late nineteenth century through 1969. By using the MPD approach, properties sharing a given theme of significance are assessed consistently, in comparison with resources that share similar physical characteristics and historical associations. In this way, the Historic Context Statement was designed to provide a consistent framework for evaluations both for the current scope of work and future LAUSD historic resource surveys.

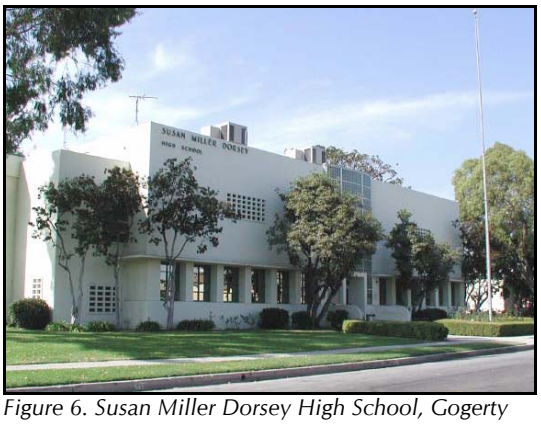


Figure 6. Susan Miller Dorsey High School, Gogerty and Noerenberg, Los Angeles (1937). Source: LAUSD.

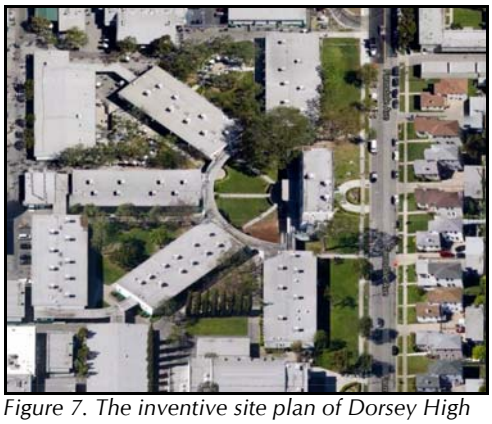


Figure 7. The inventive site plan of Dorsey High School. Source: Google Maps, 2013.

Survey results were incorporated into the LAUSD Historic Resource Inventory database; the inventory compiles 2013/2014 survey results with eligibility findings from the 2001–2004 Phase 1 and Phase 2 Getty surveys. The LAUSD Historic Resources Inventory prepared for this report is ArcGIS-compatible and designed for future use as an ArcGIS layer.

Campus-specific research incorporated a wide variety of sources, online databases and archives, as well as available print sources. Sapphos Environmental, Inc. staff investigated the origins and history of each school. This included research on architects, designers, or contractors involved in the school's design and construction; significant teachers, students, administrators, or other individuals who might have had an association with the school over time; and how the school reflected or fit within patterns of development, such as suburbanization, or significant events.

Staff members also reviewed and compiled data collected as part of LAUSD's Pre-Planning Surveys; relevant information was obtained from the Pre-Planning Surveys for all 55 campuses, including dates of construction, site maps, and plans.[6]

For site inspections, survey teams documented the principal buildings, structures, general character-defining features, and alterations. DPR Primary and Building, Structure, and Object forms were prepared for all campuses appearing to have either individual buildings or districts eligible for federal or state landmark designation. For potential historic districts, the identification of contributors and non-contributors was outside the scope of the current project, but is a suggested next step, as projects are proposed for school campuses including buildings, structures, related features, or historic districts appearing eligible for federal or state landmark designation and therefore qualifying as historic resources under CEQA.

Definitions of California Historic Resources Status Codes

The following are the California Historic Resources Status Codes assigned in the course of this survey and incorporated into the Historic Resources Inventory; codes also include eligibility findings from the 2001–2004 Phase 1 and Phase 2 Getty surveys:

1S/1D: Properties listed in the NRHP or CRHR either as individual resources (1S) or contributors to historic districts (1D).

2S/2D: Officially determined eligible for NRHP (and therefore also for the CRHR) as a single property or as a district contributor. As official evaluations, these codes were not modified during either the Phase 1 or Phase 2 studies.

3S: Appears individually eligible for the NRHP as a result of survey evaluation. These properties should also be understood as eligible for the CRHR.

3D: Appears eligible as a historic district for the NRHP as a result of survey evaluation. These properties should also be understood as eligible for the CRHR.

3CS: Appears individually eligible for the CRHR as a result of a survey evaluation.

3CD: Appears eligible for the CRHR as a potential historic district as a result of survey evaluation.

6Y: Officially determined ineligible for the NRHP.

6Z: Does not appear eligible for the NRHP or the CRHR, in the opinion of the surveyor.

Given that all codes from 1 to 5 denote properties eligible for either federal, state, or local listing, all codes from 1 to 5 correspond to properties considered to be historic resources for the purposes of CEQA.



Figure 8. Children at Vernon Avenue Junior High School, Los Angeles, circa 1925. Source: LAPL Photo Collection.

III. SUMMARY OF THE LAUSD HISTORIC CONTEXT STATEMENT

The complete *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*, follows this report as Appendix B. Prepared in accordance with the National Register Multiple Property Documentation approach, the study provided the survey team with a consistent, context-driven framework for evaluations of LAUSD campuses and buildings.[7]

To summarize, research conducted for the *Los Angeles Unified School District Historic Context* revealed four distinct periods and corresponding themes of significance:

(1) Founding Years, 1870s through 1909;
(2) Progressive Education Movement: Standardization and Expansion, 1910 to 1933;
(3) Era of Reform: Great Depression, Earthquake, and Early Experiments in the Modern, Functionalist School Plant, 1933 to 1944; and
(4) Educating the Baby Boom: Postwar Expansion and the Modern, Functionalist School Plant, 1945 to 1969.

Themes of significance associated with each era were developed, along with eligibility standards, character-defining features, and integrity thresholds. Additional sections describe the typical architectural styles of LAUSD schools, along with character-defining features for each, as well as a list of some of the leading architects and designers participating in the design of extant LAUSD schools and campuses. Given this survey's focus on unevaluated properties, constructed between the late 1940s and 1969, evaluations primarily drew upon the final era, from 1945 to 1969. The following section presents the applicable themes of significance, architectural style descriptions, and architects/designers corresponding to the era of 1945 to 1969.



Figure 9. Baldwin Hills Elementary School, Robert Alexander, architect, Los Angeles (1949–1951). Source: Getty Research Institute, Shulman Archives.



Figure 10. Early finger-plan school, Baldwin Hills Elementary School. Source: Google Maps, 2013.

CONTEXT: PUBLIC AND PRIVATE INSTITUTIONAL DEVELOPMENT | EDUCATION

THEME: LAUSD | EDUCATING THE BABY BOOM: THE POSTWAR MODERN FUNCTIONALIST SCHOOL PLANT, 1945–1969

By the 1950s, many of the design ideas considered experimental in the 1930s had matured and become the national standard for schools. Stylistically, schools might include some historicist detailing reflecting popular styles (such as Colonial Revival). However, overall, a unified campus design, building types and plans that accommodated a high degree of indoor-outdoor integration, ample outdoor spaces, and sheltered corridors marked the typology as the mature version of the functionalist school plant. The priority remained the creation of a domestic scale for schools. Campuses displayed a one-story massing for elementary schools, and up to two stories for middle and high schools. Site plans, which often featured a decentralized, pavilion–like layout, lacked the formality and monumentality that characterized earlier eras of school design.

School types expressive of these ideals include the finger-plan (1940s through 1950s) and cluster-plan (1950s), and variations on their basic themes. Combinations of these basic forms, which flexed according to available lot size and school enrollment, are also evident.

For LAUSD, the postwar years brought another round of reform as well as unprecedented expansion. Given the postwar classroom shortage, many campuses were constructed quickly, from standardized plans used district-wide, in designs that convey some of these ideas. The most intact and well-designed campuses among these, though, uniquely represent this era of reform and the midcentury modern school.

Property Type:	Institutional/Educational
Property Subtypes:	Elementary Schools, Junior High Schools, and High Schools
Period of Significance:	1945 to 1969
Area of Significance:	Education
Geographic Location:	Citywide; with concentrations in the San Fernando Valley and West Los Angeles
Area of Significance:	A/1

Eligibility Standards

- Clearly embodies the characteristics of a postwar modern functionalist school campus
- Displays a unified, functional site design, with buildings extending across the site and oriented in relation to outdoor spaces (courtyards, patios, outdoor play areas)
- One-story massing for elementary schools; up to two-stories for junior/high schools
- Classrooms, in detailing and plans, clearly express their function, with axial, finger-like wings, plentiful fenestration, and connections to the outdoors
- Retains most of the associative and character-defining features from the period of significance

Character-Defining Features | Buildings/Structures

- Building plans and site design clearly express their function; classroom wings often exhibit one-story "finger-like" wings, arranged on an axis
- Easily identifiable indoor-outdoor spaces, connections to classrooms through the incorporation of patios, courtyards, and outdoor canopied corridors
- One-story massing, particularly for elementary schools; up to two to three stories for junior and high schools
- Building types and plans expressive of postwar ideals in school design; these can include (1) finger-plan schools (usually in 1940s through 1950s); (2) cluster-plan schools (beginning in 1950s); and (3) variations and combinations of these typologies clearly expressive of the ideals for informality, indoor-outdoor connections, and zoned planning for the site
- Varying elevations might display differentiated window sizes and configurations, in order to tailor interior light to sun patterns and create cross-lit classrooms

Character-Defining Features | Campus/District

- Unified campus design includes most or all of the following attributes: lack of formality and monumentality; low massing (usually one story for classrooms and up to two stories for auditoriums/multipurpose rooms); strong geometric ordering of buildings and outdoor spaces; decentralized, pavilion-like layout; rational, function-

driven site design; buildings extend across the site; buildings are oriented to outdoor spaces (courtyards, patios, outdoor areas), purposeful indoor-outdoor integration

- Automobile traffic/drop-off areas separated from campus; linked to interior via extended canopied corridors
- Buildings often turn inward, toward green spaces, courtyards, and lawns
- Outdoor corridors, sheltered beneath simple canopies, forming links between the buildings of the campus
- Classrooms often consist of a series of axial, modular units
- An informal, domestic scale for the buildings and campus might be especially evident in elementary schools
- Swaths of patios, terraces, and plantings adjacent to and alternating with buildings
- Generous expanses of windows, including steel- and wood-framed multi-light windows, in awning and hopper casements, clerestories, and fixed panes
- Flat roof or broken-plane roof often used for lighting and acoustical issues
- Modular design, with a rhythmic, asymmetrical but balanced composition
- Usually displays a modern design idiom, usually either regional modernist (with use of native materials such as stone, brick, and wood siding and/or framing), International Style modernist, or, by the early 1960s, Late Modern (more expressive and sculptural)
- Some examples might include some degree of historicist detailing or styles popular in the postwar period (such as American Colonial Revival); these are less common than modernist examples
- May have been designed by a prominent architect of the period
- Often associated with post–World War II suburbanization and growth near major employment centers beyond the city periphery (such as the San Fernando Valley and southwest Los Angeles)
- Often built in residential neighborhoods on large expanses of land, with large areas devoted to landscape design and playing fields (in particular for high school campuses)

Integrity Considerations

- Retains most of the essential physical features from the period of significance
- School expansion and new construction over the years, in particular in the postwar period, might have resulted in the addition of in-fill buildings and structures in areas that were originally designed open spaces. Such new additions should not interfere with or serve as a visual impairment to the designed connections between buildings, in particular classroom wings, and adjacent outdoor patios and spaces.

- Many postwar schools were designed to be easily expandable as enrollment increased; the original site design and building types and plans should be readily discernible. If additional wings were added or the campus extended, the additions should be compatible with and visually subordinate to the original.
- Some materials may have been removed or altered
- Modern lighting and fencing of site acceptable
- Should retain integrity of Setting, Materials, Design, Workmanship, Feeling, and Association from its period of significance
- Addition of portable or permanent buildings after the period of significance acceptable as long as original campus design is intact

Comments: This theme would most often apply to a campus evaluated as a historic district. Individual buildings and/or campuses exhibiting distinctive design features might also qualify under Criteria C/3, as the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values.



Figure 11. The "East LA Blow Out," Lincoln High School, 16 September 1968. Students protested for "better schools for Mexican Americans. Sal Castro was a teacher there and spearheaded the movement." Source: LAPL, Herald-Examiner Collection, 00041327.

CONTEXT: PUBLIC AND PRIVATE INSTITUTIONAL DEVELOPMENT | EDUCATION

THEME: LAUSD AND THE CIVIL RIGHTS MOVEMENT, 1954–1980

This theme of significance begins with the filing of the landmark U.S. Supreme Court case *Brown v. The Board of Education Topeka, Kansas*. Although *Brown v. Board of Education* addressed state laws that did not exist in California—namely, laws allowing for racially segregated public schools—this case and the Civil Rights Movement helped generate and focus attention on related issues in Los Angeles. Issues touched on racial division and cultural identity, equal access, and how to create more balance and diversity in public schools. Signaling the end of this period of significance is the U.S. Supreme Court decision effectively ending mandatory school busing as a solution to racial imbalance in California's public schools. Although this issue continued to form part of the social context for LAUSD, this period captures an era of intense debate and activism on the part of community members, parents, politicians and jurists, as well as teachers and administrators.

A school eligible under this theme might be the site of significant integration initiatives, challenges, or community activities related to the Civil Rights Movement and school integration. This might include initiatives for equal access to schools and/or to employment opportunities in LAUSD schools.

In addition, a school might qualify under this theme for a long-term association with a figure who was significant in the Civil Rights Movement and school integration.

Property Type:	Institutional/Educational
Property Subtypes:	Elementary Schools, Junior High Schools, and High Schools
Period of Significance:	1954 to 1980
Area of Significance:	Education/Ethnic Heritage
Geographic Location:	Citywide
Area of Significance:	A/1 and/or B/2

Eligibility Standards

- Was constructed during the theme of significance
- Was the site of significant integration initiatives, challenges, or activities related to the Civil Rights Movement and school integration
- Directly reflects the movement for equal access to schools, through integration activities, events, or protests, and/or equal access to employment opportunities in LAUSD schools
- Has a well-established, long-term association with a figure who was significant in the Civil Rights Movement and school integration (eligibility under B/2)

Character-Defining Features

- Retains most of the associative and character-defining features from the period of significance

Integrity Considerations

- Retains integrity of Location, Design, Setting, Feeling, Association
- Some materials may have been removed or altered
- If there are multiple buildings on campus constructed during the period of significance, these should be evaluated as a potential historic district



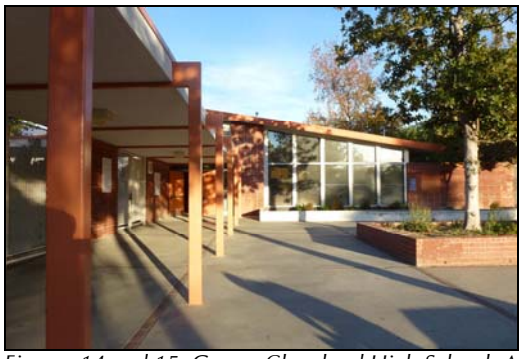

Figures 12 and 13. At left, Fernangeles Elementary School (1954), Sun Valley. At right, Parmelee Avenue Elementary School (1962), southeastern Los Angeles. Source: Sapphos Environmental, Inc., 2014.

ARCHITECTURAL STYLES

MID-CENTURY MODERNISM / REGIONAL MODERNISM (POST-1945)

Mid-Century Modernism, or Regional Modernism, represents a middle ground between the formal, machine-age aesthetic of the International Style and a regional idiom reflecting local precedent and identity. In the postwar period through the 1960s, as practiced in Southern California, Mid-Century Modernism took its cues from the region's first-generation modernist architects such as Richard Neutra, Rudolph Schindler, Gregory Ain, Frank Lloyd Wright, and Harwell Hamilton Harris. In the postwar period, second-generation practitioners such as Raphael Soriano, Whitney Smith, and A. Quincy Jones, among many others, established Los Angeles as a center for innovative architectural design and culture.

Mid-Century Modernism is characterized by an honest expression of structure and function, with little applied ornament. Aesthetic effect is achieved through an asymmetrical but balanced, rhythmic design composition, often expressed in modular post-and-beam construction. Whether wood or steel, post-and-beam construction allowed for open floor plans, ease of expansion, and generous expanses of glazing to heighten indoor-outdoor integration. Infill panels of wood or glass are common, with glazing often extending to the gable. Buildings are generally one to two-stories, with an emphasis on simple, geometric forms. Capped with low-pitched gabled or flat roofs, a Mid-Century Modern building often displays wide eaves and cantilevered canopies, supported on spider-leg or post supports. Sheathing materials vary, with wood, stucco, brick and stone, or steel-framing and glass. Windows are generally flush-mounted, with metal frames.




Figures 14 and 15. Grover Cleveland High School, Administration Building (left) and typical classroom wing (right), Matcham & Granger and Associates (1959), Reseda. Source: Sapphos Environmental, Inc., 2013.

This style was seen in postwar institutional and commercial buildings, as well as residences, from 1945 until circa 1975.

Typical Character-Defining Features

- Horizontal design composition and massing; generally one to two stories; simple, geometric volumes; flat or shed roof, often with wide, cantilevered overhangs
- Exterior materials include stucco, brick, or concrete; modular design and planning
- Simply treated, natural materials and excellent craftsmanship
- Direct expression of structural systems, often in wood or steel post-and-beam
- Lack of historicizing ornament
- Generous expanses of fenestration, including bands of grouped multi-light windows
- Extensive use of sheltered exterior corridors, with flat or slightly sloped roofs supported by posts, piers, or pipe columns

Mid-Century Modernism | Expressionistic/Organic Subtype

- A more dynamic Mid-Century Modernism: combines sculptural forms with basic geometric volumes; curved, sweeping wall surfaces; dynamic, expressionistic roof forms, including butterfly, folded plate or barrel vault roof forms

ARCHITECTS AND BUILDERS OF LAUSD PROPERTIES

Since the early years of LAUSD, the school buildings and campuses of LAUSD have been designed by some of the region's most prominent master architects as well as the district's own architectural department. The following architects and firms were responsible for numerous designs of extant buildings throughout the district, since the early twentieth century:

- Thornton Abell
- Ain, Johnson & Day (Gregory Ain, Joseph Johnson, and Alfred Day)
- Robert Evans Alexander
- Allison & Allison (David Clark Allison and James Edward Allison)
- John C. Austin
- Austin and Ashley (John C. Austin and Frederic Ashley)
- Austin, Field & Fry (John C. Austin, Robert Field, Jr., Charles Eugene Fry)
- Edwin Bergstrom
- Daniel, Mann, Johnson & Mendenhall, DMJM (Phillip Daniel, Arthur Mann, Kenneth Johnson, Irvan Mendenhall)
- Stiles O. Clements
- Roland Coate
- Edelman and Zimmerman
- Sidney Eisenshtat
- Henry L. Gogerty
- Heitschmidt & Thompson (Earl Heitschmidt and Whiting Thompson)
- Frank Hudson
- Hudson & Munsell
- Stewart S. Granger
- Myron Hunt
- Hunt & Chambers
- Hunt & Burns
- Gordon B. Kaufmann
- George Lindsey
- Marsh, Smith, & Powell (Norman Marsh, David Smith, and Herbert James Powell)
- A. C. Martin
- Matcham & Granger (Charles O. Matcham Sr. and Stewart S. Granger)
- Alfred S. Nibecker
- Richard Neutra
- C.E. Noerenberg and Johnson
- Parkinson and Parkinson
- Charles Plummer
- Alfred Rosenheim
- Sumner Spaulding
- Spaulding & Rex (Sumner Spaulding and John Rex)
- William Stockwell
- Whiting Thompson
- Walker and Eisen
- Adrian Wilson & Associates

IV. SURVEY RESULTS

As a result of the LAUSD Historic Resources Survey, 2013/2014, the following 14 of 55 LAUSD campuses were found to include properties that appear eligible for either the NRHP and/or the CRHR. These campuses therefore include one or more buildings, structures, and/or related features that are presumed historic resources for purposes of CEQA:

1. 156th Street Elementary School — Eligible for CRHR (3CD)
2. Castle Heights Elementary School — Eligible for CRHR (3CD)
3. Chatsworth Senior High School — Eligible for NRHP (3D)
4. Cleveland Senior High School — Eligible for NRHP (3D)
5. Colfax Avenue Elementary School — Eligible for CRHR (3CD)
6. Dodson Middle School — Eligible for CRHR (3CD)
7. Fernangeles Elementary School — Eligible for CRHR (3CD)
8. Leapwood Avenue Elementary School — Eligible for NRHP (3D)
9. Narbonne Senior High School — Eligible for CRHR (3CD)
10. Pacoima Middle School — Eligible for CRHR (3CD)
11. Palisades Senior High School — Eligible for NRHP (3D)
12. Parmelee Avenue Elementary School — Eligible for CRHR (3CD)
13. Topanga Charter Elementary School — Eligible for NRHP (3D)
14. Webster Middle School — Eligible for CRHR (3CD)

Properties found eligible for the National Register under Criteria A/1, as representing the ideals and design principals of LAUSD from the era, were highly exceptional examples of the school type, though minor alterations might have been noted. Properties found eligible for the California Register only under the same criteria were generally outstanding examples of the applicable school type but exhibited a higher number of alterations.

The following sections present: (1) an overall district map, as well as detailed area maps, showing survey results, and (2) a pictorial overview of all eligible and non-eligible campuses, including school name, address, dates of construction, architect/designer (if known), and evaluation findings. Section 5 provides a tabulated version of the updated LAUSD Historic Resources Inventory.

Mapped Results: District Overview and Area Maps

Below is a composite map of the study area showing all LAUSD campuses, with eligibility indicated for campuses evaluated in the Historic Resources Survey, 2013/2014. The subsequent pages present enlarged versions of each subdivision of the composite map.

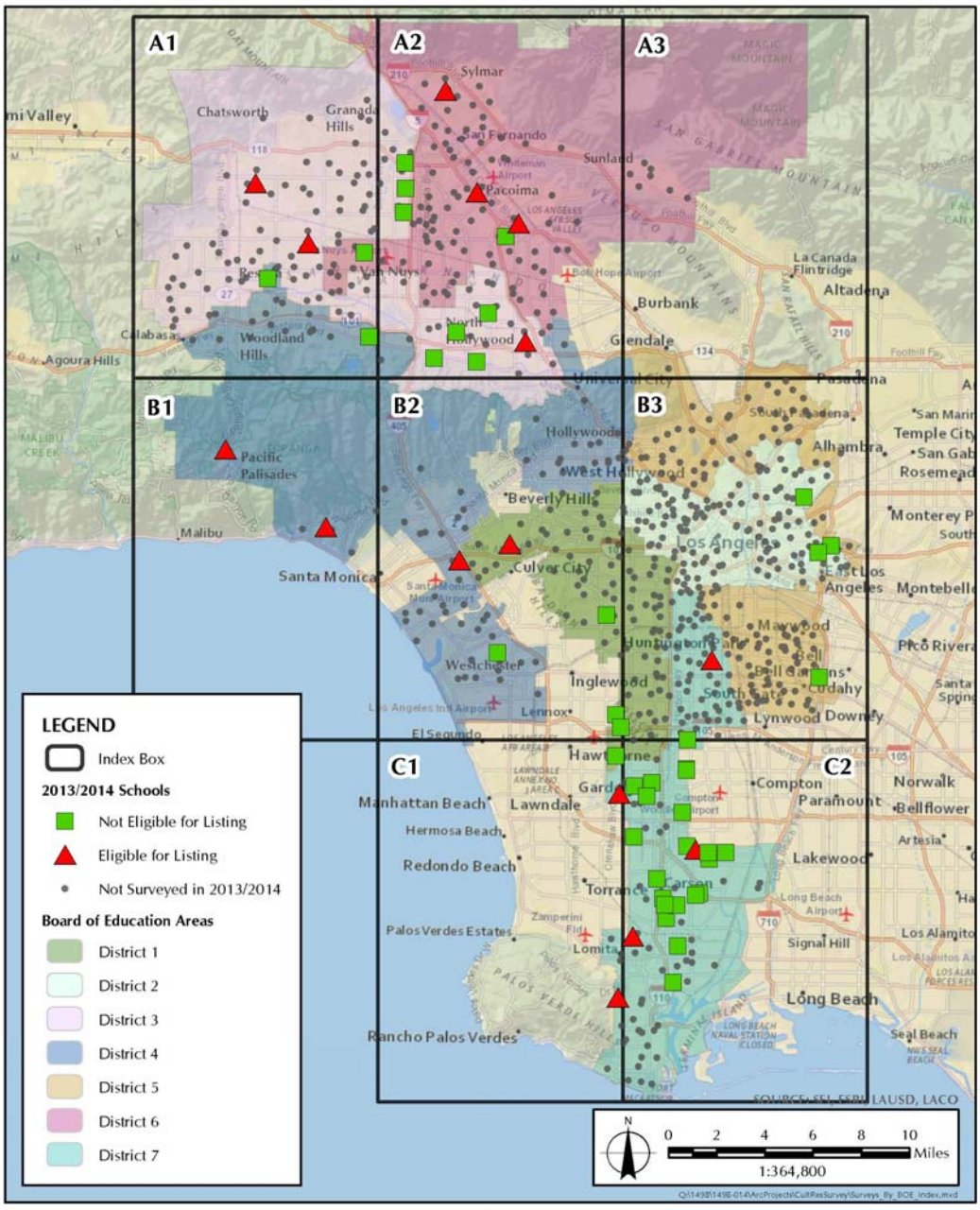


Figure 16a. District overview: Results of Los Angeles Unified School District Historic Resources Survey, 2013/2014. Source: Sapphos Environmental, Inc., 2014.

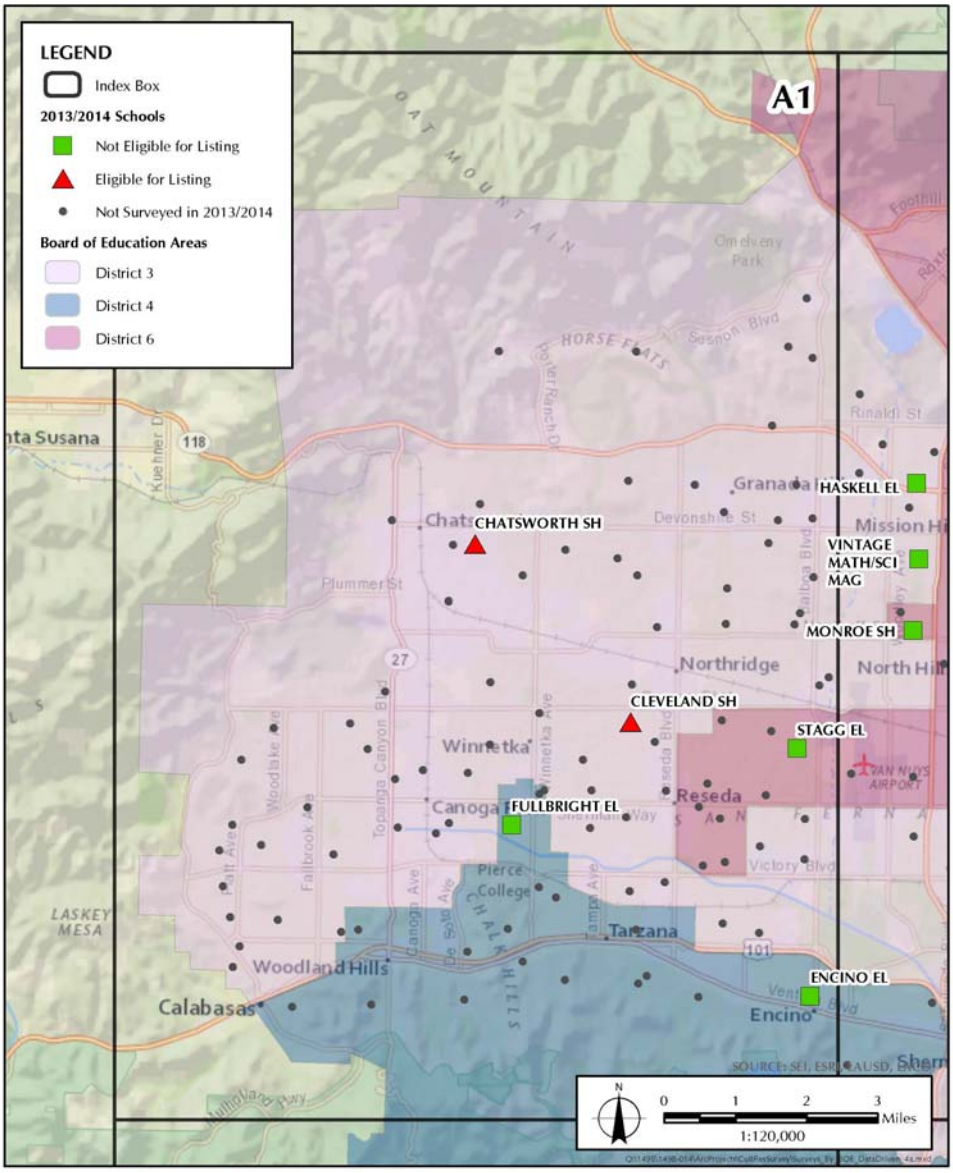


Figure 16b. Results, Map A1 (San Fernando Valley), Los Angeles Unified School District Historic Resources Survey, 2013/2014. Source: Sapphos Environmental, Inc., 2014.

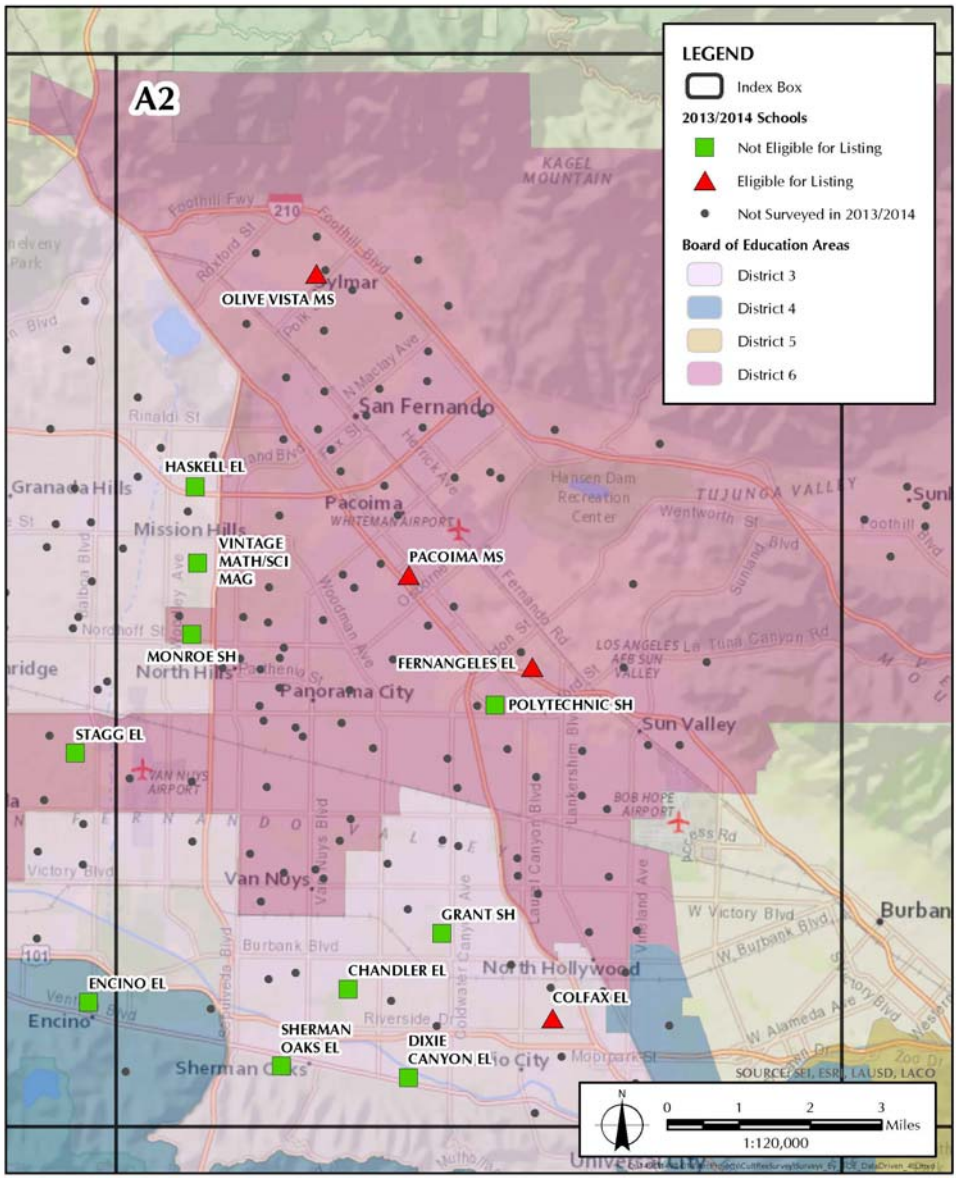


Figure 16c. Results, Map A2 (San Fernando Valley), Los Angeles Unified School District Historic Resources Survey, 2013/2014. Source: Sapphos Environmental, Inc., 2014.

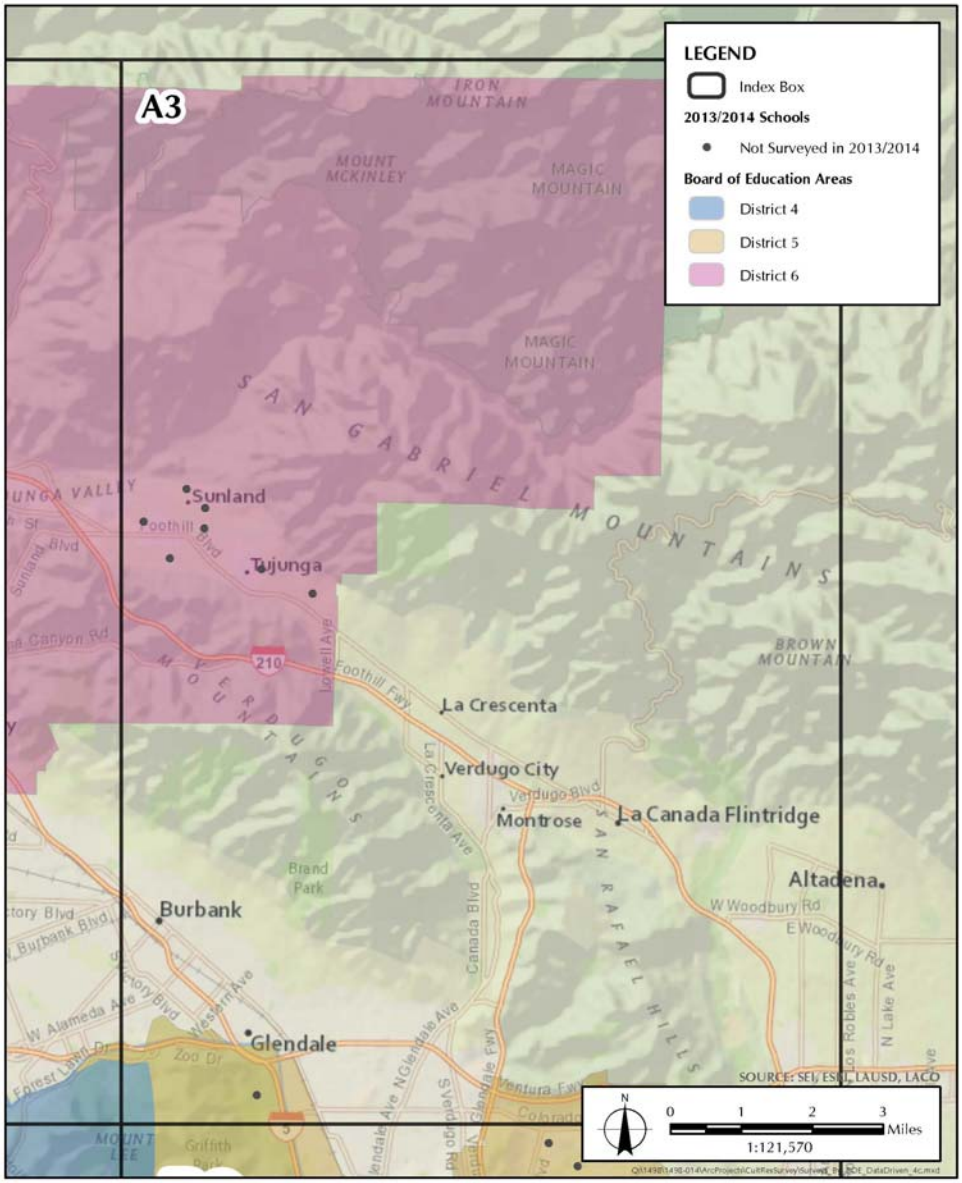


Figure 16d. Results, Map A3 (San Fernando Valley), Los Angeles Unified School District Historic Resources Survey, 2013/2014. Source: Sapphos Environmental, Inc., 2014.

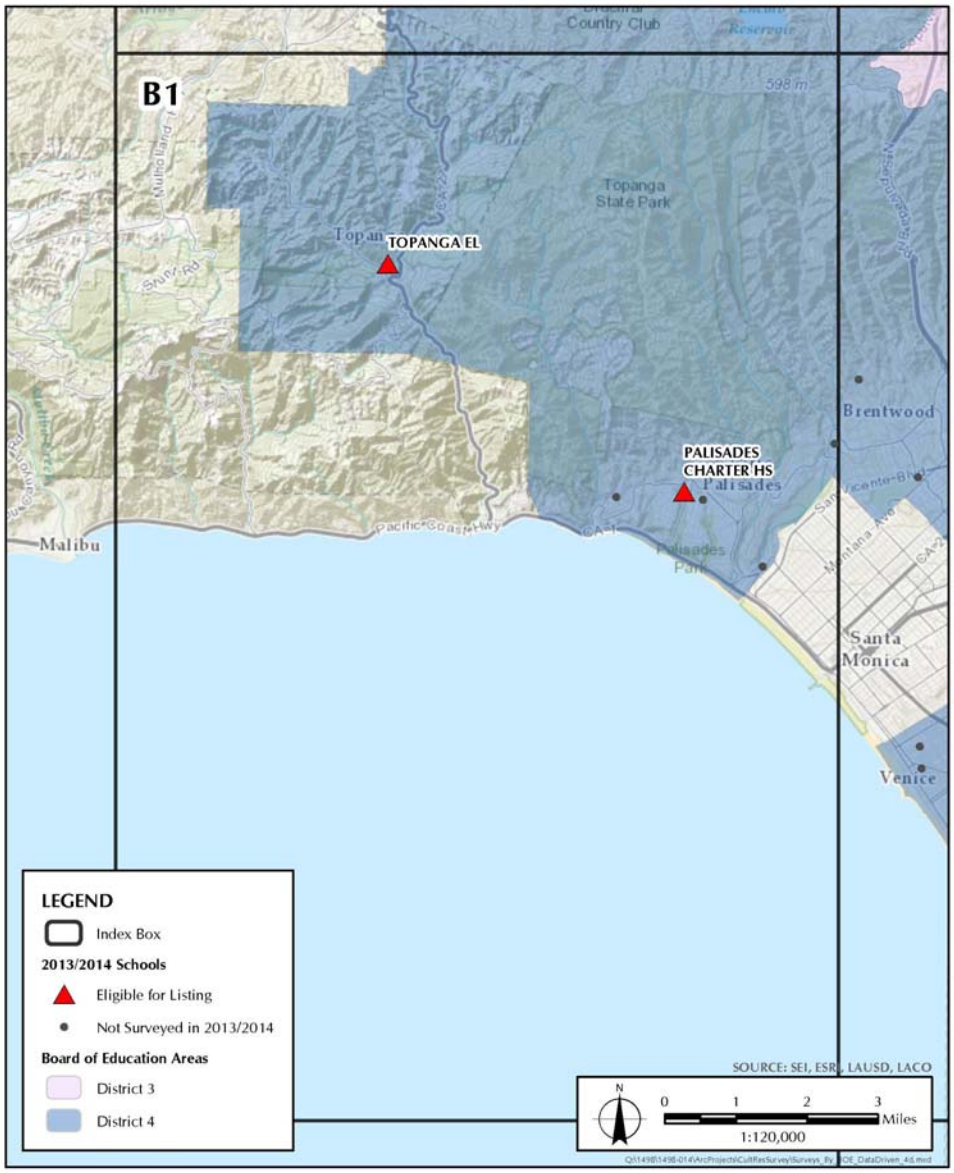


Figure 16e. Results, Map B1 (Topanga, Pacific Palisades), Los Angeles Unified School District Historic Resources Survey, 2013/2014. Source: Sapphos Environmental, Inc., 2014.

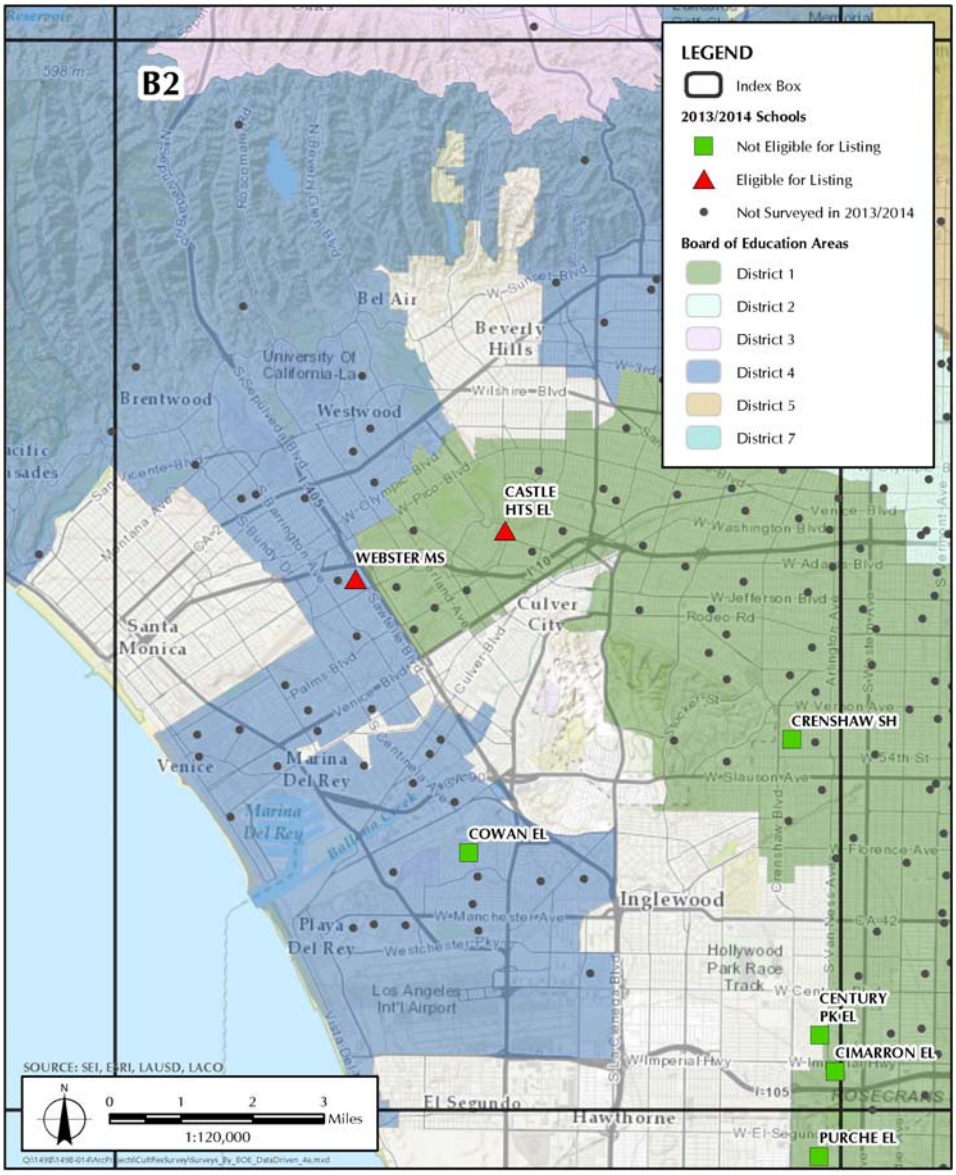


Figure 16f. Results, Map B2 (West Los Angeles), Los Angeles Unified School District Historic Resources Survey, 2013/2014. Source: Sapphos Environmental, Inc., 2014.

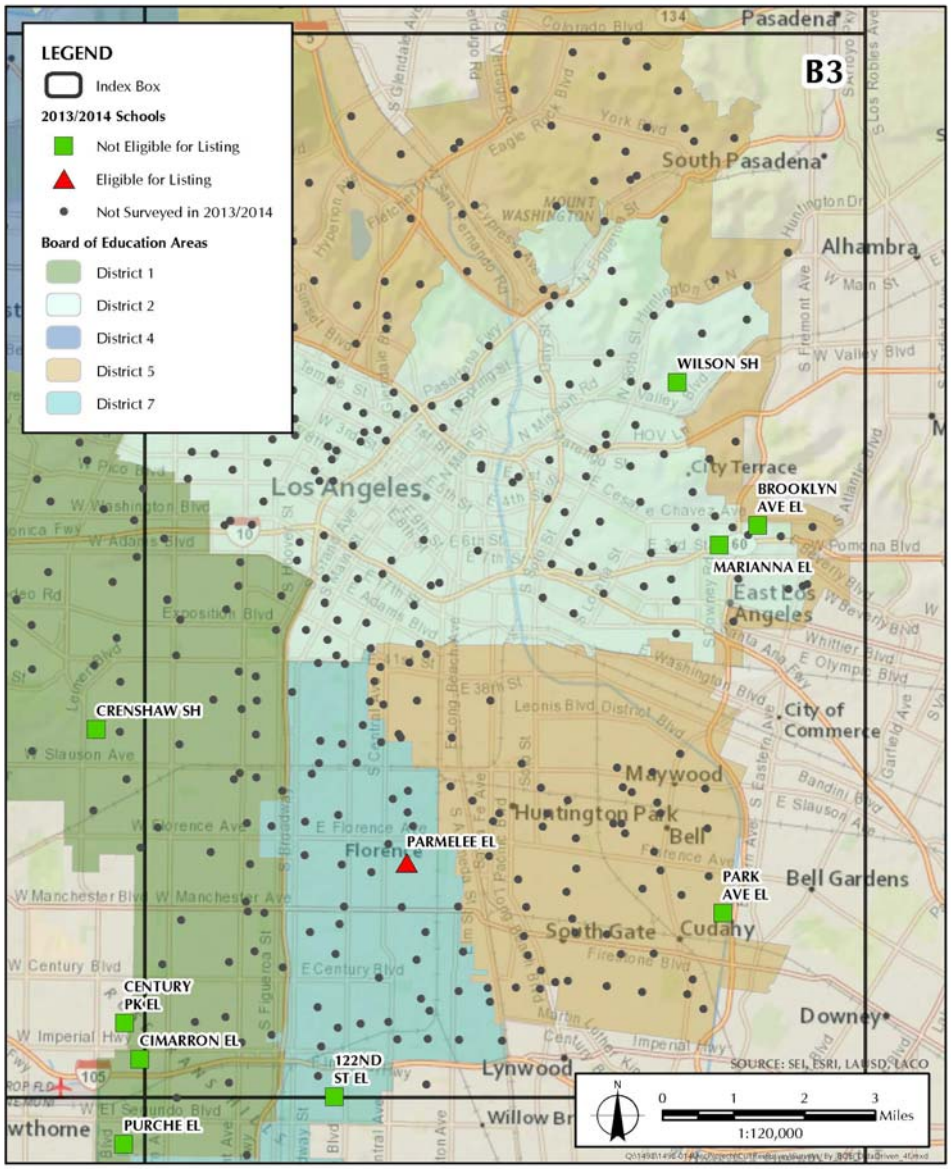


Figure 16g. Results, Map B3 (Central Los Angeles), Los Angeles Unified School District Historic Resources Survey, 2013/2014. Source: Sapphos Environmental, Inc., 2014.

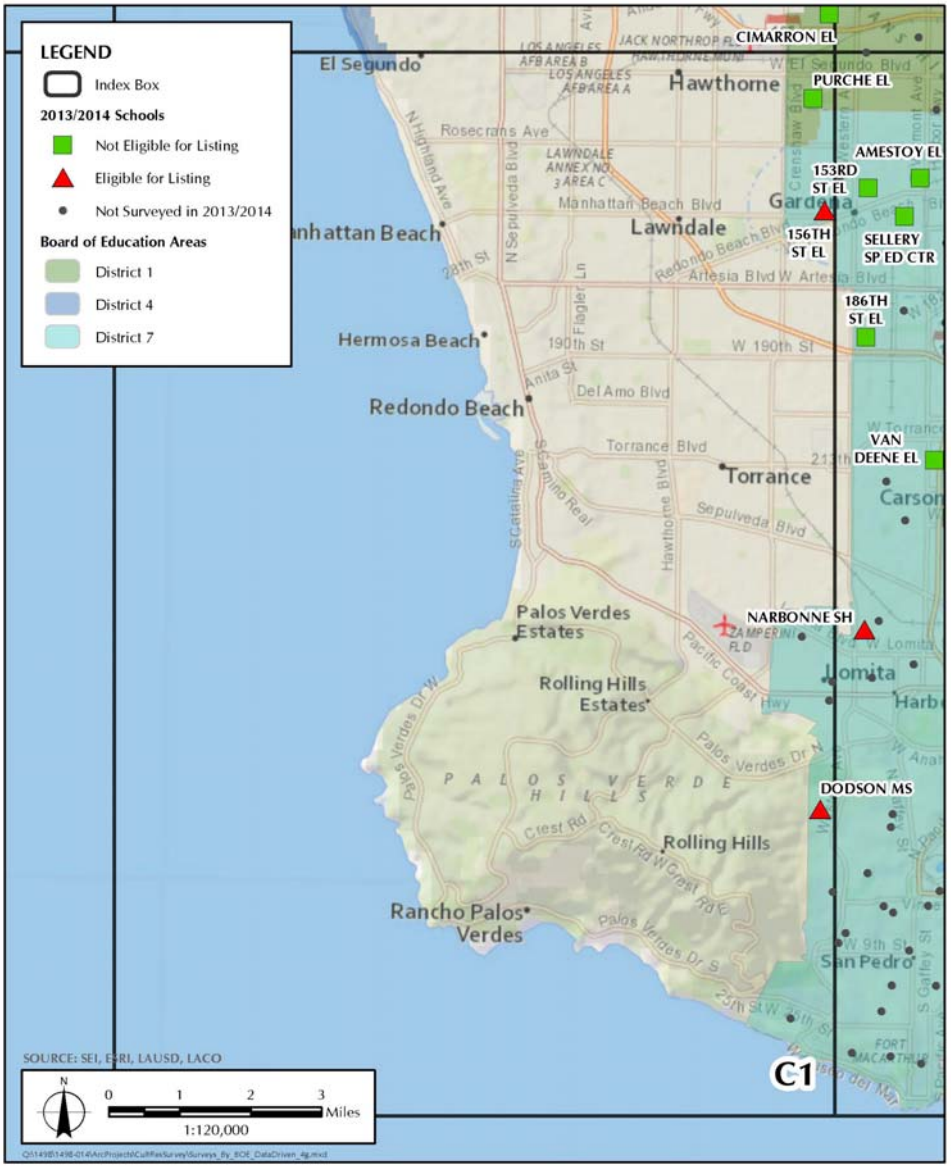


Figure 16h. Results, Map C1 (Palos Verdes, San Pedro), Los Angeles Unified School District Historic Resources Survey, 2013/2014. Source: Sapphos Environmental, Inc., 2014.

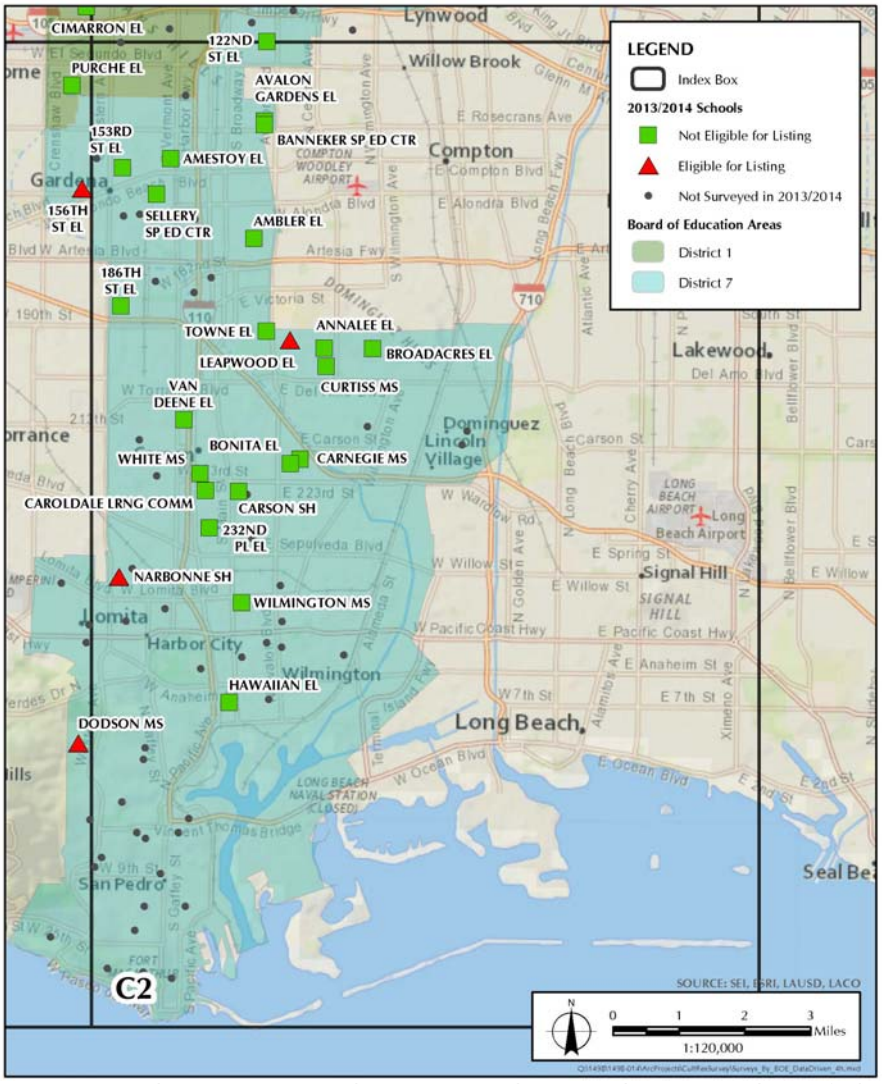


Figure 16i. Results, Map C2 (San Pedro, Carson, South Los Angeles), Los Angeles Unified School District Historic Resources Survey, 2013/2014. Source: Sapphos Environmental, Inc., 2014.

ELIGIBLE CAMPUSES: OVERVIEW




School Name: 156th Street Elementary School
Address: 2100 West 156th Street, Gardena
Date(s) of Construction: 1953
Architect/Designer: Unknown
Eligibility Criteria: CRHR 1
CHR Status Code: 3CD

Notes: Campus core appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent and intact example of the standardized finger-plan school used throughout LAUSD in the postwar period. Exemplifies LAUSD design principles of the era. CRHR eligible only (due to alterations).




School Name: Castle Heights Elementary School
Address: 9755 Cattaraugus Avenue, Los Angeles
Date(s) of Construction: 1951
Architect/Designer: Unknown
Eligibility Criteria: CRHR 1
CHR Status Code: 3CD

Notes: Campus core appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Castle Heights Elementary School is an excellent example of a postwar indoor-outdoor LAUSD campus. Exemplifies LAUSD design principles of the postwar era.




School Name: Chatsworth Senior High School
Address: 10027 Lurline Avenue, Chatsworth
Date(s) of Construction: 1963
Architect/Designer: Unknown
Eligibility Criteria: NRHP 1, 3; CRHR A, C
CHR Status Code: 3D

Notes: The campus core appears eligible as a historic district under Criteria A/1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, intact example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. Also eligible as a historic district under Criteria C/3, as an excellent example of Mid-Century Modern design applied to institutional architecture. Some alterations, but intact and exceptional example that is eligible for the NRHP and CRHR.




School Name: Cleveland Senior High School
Address: 8140 Vanalden Avenue, Reseda
Date(s) of Construction: 1959–1960
Architect/Designer: Matcham and Granger & Associates
Eligibility Criteria: NRHP 1, 3; CRHR, A, C
CHR Status Code: 3D

Notes: The campus core appears eligible as a historic district under the NRHP and CRHR Criteria A/1, in the context of institutional architecture/educational facilities in Los Angeles. As an intact, indoor-outdoor finger- and cluster-plan school, Cleveland Senior High School exemplifies LAUSD design ideals and principles of the era. Also eligible as a historic district under Criteria 3, as an excellent example of Mid-Century Modern style applied to institutional architecture. Some alterations, but intact and exceptional example that is eligible for the NRHP and CRHR.




School Name: Colfax Avenue Elementary School
Address: 11724 Addison St., North Hollywood
Date(s) of Construction: 1950–1955
Architect/Designer: Unknown
Eligibility Criteria: CRHR 1
CHR Status Code: 3CD

Notes: Appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Colfax Avenue Elementary School is an excellent, intact example of an indoor-outdoor, postwar finger-plan school. Exemplifies LAUSD design ideals and principles of the era. Some replaced/filled-in windows and non-original hardscaping; CRHR eligible as historic district.




School Name: Dodson Middle School
Address: 28014 South Montereina Drive, Rancho Palos Verdes
Date(s) of Construction: 1960
Architect/Designer: Unknown
Eligibility Criteria: CRHR 1
CHR Status Code: 3CD

Notes: Campus core appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent and intact example of an indoor-outdoor, postwar finger-plan school. Exemplifies LAUSD design principles of the era. CRHR eligible only (due to alterations).




School Name: Fernangeles Elementary School
Address: 12001 Art Street, Sun Valley
Date(s) of Construction: 1954
Architect/Designer: Unknown
Eligibility Criteria: CRHR 1
CHR Status Code: 3CD

Notes: Campus core appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Administration building and assembly room form a distinctive entrance to the school and architectural anchor for adjacent neighborhood. From the interior, these buildings frame a courtyard and outdoor dining area. Site design includes expansive central lawn with mature (original) trees. Due to alterations, CRHR eligible only.




School Name: Leapwood Avenue Elementary School
Address: 19302 Leapwood Avenue, Carson
Date(s) of Construction: 1962
Architect/Designer: Unknown
Eligibility Criteria: NRHP A; CRHR 1
CHR Status Code: 3D

Notes: Campus core appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Outstanding example of a one- and two-story school with a finger- and cluster-plan campus design.




School Name: Narbonne Senior High School
Address: 24300 South Western Avenue, Harbor City
Date(s) of Construction: 1955–1960
Architect/Designer: Daniel, Mann, Johnson & Mendenhall
Eligibility Criteria: CRHR 1
CHR Status Code: 3CD

Notes: Campus core appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, innovative example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. Some replaced / filled-in windows and non-original seismic supports. CRHR eligible only (due to alterations).





School Name: Pacoima II Middle School
Address: 9919; 9921 Laurel Canyon Boulevard, Pacoima
Date(s) of Construction: 1953 - 1957
Architect/Designer: Unknown
Eligibility Criteria: CRHR 1
CHR Status Code: 3CD

Notes: Campus core appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, intact example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. A number of alterations, including many filled-in / covered over clerestory windows, which has compromised the integrity of some classroom wings. CRHR eligible only (due to alterations). Site of a 1957 mid-air collision of two aircrafts.




School Name: Palisades Senior High School
Address: 15777 Bowdoin Street, Pacific Palisades
Date(s) of Construction: 1961
Architect/Designer: Adrian Wilson and Associates
Eligibility Criteria: NRHP 1, 3; CRHR, A, C
CHR Status Code: 3D

Notes: Campus core appears eligible as a historic district under Criteria A/1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, intact example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. Also eligible as a historic district under Criteria C/3, as an excellent example of Mid-Century Modern design (expressionist subtype) applied to institutional architecture in Los Angeles. Few visible alterations; eligible for NRHP and CRHR as historic district.




School Name: Parmelee Avenue Elementary School
Address: 1338 E. 76th Place, Los Angeles
Date(s) of Construction: 1962, 1964, 1965
Architect/Designer: Unknown
Eligibility Criteria: CRHR 1
CHR Status Code: 3CD

Notes: Campus core appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Outstanding example of a one- and two-story school with a cluster-plan campus design and ample indoor-outdoor integration. CRHR eligible only (due to alterations).





School Name: Topanga Elementary School
Address: 22075 Topanga School Road, Topanga
Date(s) of Construction: 1953, 1955
Architect/Designer: Unknown
Eligibility Criteria: NRHP 1, 3; CRHR, A, C
CHR Status Code: 3D

Notes: Campus core appears eligible as a historic district under Criteria A/1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, intact example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. Also eligible as a historic district under Criteria C/3 as an excellent example of the Mid-Century Modern style applied to institutional architecture.





School Name: Webster Middle School
Address: 11330 Graham Place, Los Angeles
Date(s) of Construction: 1954–1958
Architect/Designer: Building Dept., Los Angeles Board of Education
Eligibility Criteria: CRHR 1
CHR Status Code: 3CD

Notes: Campus core appears eligible as a historic district under CRHR Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Outstanding example of a postwar, indoor-outdoor school employing an innovative site plan. CRHR eligible only (due to alterations).

INELIGIBLE CAMPUSES: OVERVIEW




School Name: 122nd Street Elementary School
Address: 405 East 122nd Street, Los Angeles
Date(s) of Construction: 1963
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus is a typical but not outstanding example of a postwar LAUSD campus. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criterion 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: 153rd Street Elementary School
Address: 1605 W 153rd Street, Gardena
Date(s) of Construction: 1957–1958
Architect/Designer: Ain, Johnson & Day

Notes: Not eligible. This campus has many of the character-defining features of a postwar finger-plan school but not all the eligibility standards required under Criteria A/1 as an exemplification of LAUSD design ideals for postwar schools. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, this campus was designed by master architects Ain, Johnson & Day; however, the school plan and design overall do not stand out as an outstanding exemplar of the firm's work.




School Name: 186th Street Elementary School
Address: 1581 West 186th Street, Gardena
Date(s) of Construction: 1955–1962
Architect/Designer: John Kewell & Associates

Notes: Not eligible. Not typical of LAUSD design principles of the era; site design does not exhibit an exceptionally unified plan. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect. Displays some characteristics of Mid-Century Modern design, but the design does not rise to the level required for eligibility for either the NRHP or CRHR.




School Name: 232nd Place Elementary School
Address: 23240 Archibald Avenue, Carson
Date(s) of Construction: 1957–1968
Architect/Designer: A. Quincy Jones and Frederick E. Emmons & Associates; landscape architect Curtis Dixon Anderson

Notes: Not eligible. Campus and its classroom wings and buildings represent typical but not outstanding examples of a postwar finger-plan school. Lack of indoor-outdoor integration in campus plan; arcades are replaced with tunnel-like corridors. Represents the work of master architects A. Quincy Jones and Frederick E. Emmons & Associates, but is not an exceptional example of their many buildings throughout Southern California. The campus is not eligible under other applicable criteria.





School Name: Ambler Avenue Elementary School
Address: 319 East Sherman Drive, Carson
Date(s) of Construction: 1966
Architect/Designer: Unknown

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, the school does not qualify as an outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Amestoy Elementary School
Address: 1048 West 149th Street, Gardena
Date(s) of Construction: 1949–1957
Architect/Designer: Unknown

Notes: Not eligible. Not typical of LAUSD design principles of the era; site design does not exhibit an exceptionally unified plan. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Annalee Avenue Elementary School
Address: 19410 South Annalee Avenue, Los Angeles
Date(s) of Construction: 1966–1967
Architect/Designer: Unknown

Notes: Not eligible. The school campus and buildings represent a typical but not exemplary embodiment of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Avalon Gardens Elementary School
Address: 13940 South San Pedro Street, Los Angeles
Date(s) of Construction: 1948–1955
Architect/Designer: Unknown

Notes: Not eligible. This campus has many of the character-defining features of a postwar finger-plan school, but the range of construction dates, from 1948 to 1955, produced a campus plan that is not sufficiently unified to qualify under Criteria A/1 as an exemplification of LAUSD design ideals for postwar schools (under the context of institutional architecture/educational facilities in Los Angeles). In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Banneker Special Education Center
Address: 14024 South San Pedro Street, Los Angeles
Date(s) of Construction: 1972–1978
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, the campus is not representative of LAUSD design principles of the era. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Bonita Street Elementary School
Address: 21929 Bonita Street, Carson
Date(s) of Construction: 1958
Architect/Designer: Unknown

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Broadacres Elementary School
Address: 19424 South Broadacres Avenue, Carson
Date(s) of Construction: 1967
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities, the campus does not represent an outstanding example of LAUSD design principles of the era. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Brooklyn Avenue Elementary School
Address: 4620 Cesar Chavez Avenue, Los Angeles
Date(s) of Construction: 1960–1975
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, the campus is not representative of LAUSD design principles of the era. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Carnegie Middle School
Address: 21820 Bonita Street, Carson
Date(s) of Construction: 1965
Architect/Designer: Unknown

Notes: Not eligible. The campus overall is not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Caroldale Learning Community
Address: 22424 Caroldale Avenue, Carson
Date(s) of Construction: 1960–1969
Architect/Designer: Unknown

Notes: Not eligible. The campus overall is not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Carson Senior High School
Address: 22328 South Main Street, Carson
Date(s) of Construction: 1962–1969
Architect/Designer: Austin, Field, and Fry

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Century Park Elementary School
Address: 10935 South Spinning Avenue, Inglewood
Date(s) of Construction: 1948–1959
Architect/Designer: Unknown

Notes: Not eligible. Not typical of LAUSD design principles of the era; all of the original classrooms in addition to the auditorium are located in a single building; classrooms on double-loaded interior corridor. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Chandler Elementary School
Address: 14030 Weddington Street, Van Nuys
Date(s) of Construction: 1949–1956
Architect/Designer: Unknown

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Cimarron Elementary School
Address: 11559 Cimarron Avenue, Los Angeles
Date(s) of Construction: 1953–1957
Architect/Designer: Unknown

Notes: Not eligible. The school campus and buildings represent a typical but not exemplary embodiment of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Cowan Avenue Elementary School
Address: 7615 Cowan Avenue, Los Angeles
Date(s) of Construction: 1953–1958
Architect/Designer: Unknown

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Crenshaw Senior High School
Address: 5010 11th Avenue, Los Angeles
Date(s) of Construction: 1968
Architect/Designer: Unknown

Notes: Not eligible. Not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research showed that construction of Crenshaw High School reflected post-Watts Riots investment in South Los Angeles schools. Research conducted within the parameters of the current scope, however, did not identify a broader, contextual pattern to justify eligibility under Criteria A/1 on this basis. In addition, research did not show that this campus was the site of a significant event. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Curtiss Middle School
Address: 1254 East Helmick Street, Carson, Los Angeles
Date(s) of Construction: 1969
Architect/Designer: Unknown

Notes: Not eligible. The school campus and buildings represent a typical but not exemplary embodiment of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or work of a master architect.





School Name: Dixie Canyon Avenue Elementary School
Address: 4220 Dixie Canyon Avenue, Sherman Oaks
Date(s) of Construction: 1949–1961
Architect/Designer: Unknown

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Encino Elementary School
Address: 16941 Addison Street, Encino, Los Angeles
Date(s) of Construction: 1949–1961
Architect/Designer: Unknown

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Francis Polytechnic Senior High School
Address: 12431 Roscoe Boulevard, Sun Valley
Date(s) of Construction: 1957
Architect/Designer: Austin, Field, and Fry

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Fullbright Avenue Elementary School
Address: 6940 Fullbright Avenue, Canoga Park
Date(s) of Construction: 1954
Architect/Designer: Unknown

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Grant Senior High School
Address: 13000 Oxnard Street, Valley Glen
Date(s) of Construction: 1958–1964
Architect/Designer: J. E. Stanton and William F. Stockwell

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design. Designed by prominent architectural firm, Stanton & Stockwell (J.E. Stanton & William F. Stockwell), but the school is not the most representative or intact example of the firm's work.




School Name: Haskell Avenue Elementary School
Address: 15850 Tulsa Street, Granada Hills
Date(s) of Construction: 1953–1965
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus exhibits most of the character-defining features of the indoor-outdoor, finger-plan school constructed throughout LAUSD in the postwar period. However, due to alterations (primarily in-filled windows, altered window and door openings), the campus does not retain sufficient integrity to convey its period of significance.





School Name: Hawaiian Avenue Elementary School
Address: 540 Hawaiian Avenue, Wilmington
Date(s) of Construction: 1948–1966
Architect/Designer: Unknown

Notes: Not eligible. The campus overall is not typical of LAUSD design principles of the era. The 1948 Administration Building is noteworthy, but due to alterations (replaced windows), it does not retain integrity. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation.

In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Marianna Elementary School
Address: 4215 East Gleason Street, Los Angeles
Date(s) of Construction: 1958–1964
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus is a typical but not outstanding example of a postwar LAUSD campus. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Monroe Senior High School
Address: 9229 North Haskell Avenue, North Hills
Date(s) of Construction: 1957
Architect/Designer: Heitschmidt and Thompson

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Park Avenue Elementary School
Address: 8020 Park Avenue, Cudahy
Date(s) of Construction: 1968
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, the campus is a common but not outstanding example of LAUSD design principles of the era. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Purche Elementary School
Address: 13210 Purche Avenue, Gardena
Date(s) of Construction: 1957
Architect/Designer: Unknown

Notes: Not eligible. The school campus and buildings represent a typical but not exemplary embodiment of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Sellery Special Education Center
Address: 15804 South Budlong Avenue, Gardena
Date(s) of Construction: 1961–1963
Architect/Designer: Unknown

Notes: This school was custom-built to serve a special needs population of children with severe handicaps. As such, the plan and building types vary from typical LAUSD plan typologies. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect. The school displays many character-defining features of the Mid-Century Modern architectural style. However, the school is not an outstanding or distinctive example of the Mid-Century Modern architectural style and does not qualify under Criteria C/3.





School Name: Sherman Oaks Elementary School
Address: 14755 Greenleaf Street, Sherman Oaks
Date(s) of Construction: 1948–1976
Architect/Designer: Unknown

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Stagg Street Elementary School
Address: 7839 Amestoy Avenue, Van Nuys
Date(s) of Construction: 1954–1958
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus exhibits most of the character-defining features of the indoor-outdoor, finger-plan school constructed throughout LAUSD in the postwar period. However, due to alterations (primarily in-filled windows, altered window and door openings), the campus does not retain sufficient integrity to convey its period of significance.




School Name: Towne Avenue Elementary School
Address: 18924 Towne Avenue, Carson
Date(s) of Construction: 1958
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus is a typical but not outstanding example of a postwar LAUSD campus. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Van Deene Elementary School
Address: 826 West Javelin Street, Torrance
Date(s) of Construction: 1960–1965
Architect/Designer: Unknown

Notes: Not eligible; very typical but not outstanding example of LAUSD design ideals of the era. Appears to be drawn from one of the standardized plans for schools during this period. Not the site of significant event or representative of a significant pattern of development. Not an outstanding example of architectural design or the work of a master architect.




School Name: Vintage Street Elementary School (Vintage Street Fundamental Magnet School)
Address: 15848 Stare Street, North Hills
Date(s) of Construction: 1953
Architect/Designer: Unknown

Notes: Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus exhibits most of the character-defining features of the indoor-outdoor, finger-plan school constructed throughout LAUSD in the postwar period. However, due to alterations (primarily in-filled windows, altered window and door openings, and changes to the design configuration of the entrance and auditorium), the campus does not retain sufficient integrity to convey its period of significance.




School Name: White Middle School
Address: 22102 South Figueroa Street, Carson
Date(s) of Construction: 1956
Architect/Designer: Unknown

Notes: Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.




School Name: Wilmington II Middle School
Address: 1700 Gulf Avenue, Wilmington
Date(s) of Construction: 1951–1962
Architect/Designer: Unknown

Notes: Not eligible. The campus overall is not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.





School Name: Wilson Senior High School
Address: 4500 Multnomah Street, Los Angeles
Date(s) of Construction: 1970
Architect/Designer: Unknown

Notes: Not eligible. The campus overall is not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.

V. UPDATED LAUSD HISTORIC RESOURCES INVENTORY

This section presents a tabulated version of the updated LAUSD Historic Resources Inventory. The inventory compiles results from the LAUSD Historic Resources Survey, 2013/2014, with eligibility findings from the 2001–2004 Phase 1 and Phase 2 Getty Historic Resources Surveys. The compiled results are presented in an Excel spreadsheet format and an Access Database format compatible with ArcGIS.

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TABLE V-1
UPDATED LAUSD HISTORIC RESOURCES INVENTORY WITH COMPILED RESULTS FROM THE LAUSD HISTORIC RESOURCES SURVEY, 2013/2014, AND THE GETTY HISTORIC RESOURCES SURVEYS, 2001/2004

Assessor Parcel Number	LAUSD Campus #	Campus Name	School Type	Street #	Street Direction	Street Name	Street Type	City	ZIP	Principal Construction Dates: Start Date	Principal Construction Dates: End Date	Year Opened	Former Names & Dates	CR Status (2001-2004 Getty Surveys)	Evaluation Results / Notes	Found Eligible in 2013 / 2014 Survey?	CHR Status Code
4063-012-900	13673	**156th Street Elementary School**	ES	2100	W	156th	St	Gardena	90249	1953		1953		6Z/7N	Campus core appears eligible as a historic district under California Register Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent and intact example of the standardized indoor-outdoor, postwar finger-plan school used throughout LAUSD in the postwar period. Exemplifies LAUSD design principles of the era. California Register eligible only (due to alterations).	Yes	3CD
4308-019-900	13680	**Castle Heights Elementary School**	ES	9755		Cattaraugus	Ave	Los Angeles	90034	1951	1961	1951		6Z/7N	Campus core appears eligible as a historic district under California Register Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Castle Heights Elementary School is an excellent example of a postwar, indoor-outdoor LAUSD campus. Exemplifies LAUSD design principles of the postwar era.	Yes	3CD
2355-013-900	13681	**Colfax Avenue Elementary School**	ES	11724		Addison	St	North Hollywood	91607	1950	1955	1951		6Z/7N	Campus core appears eligible as a historic district under California Register Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Colfax Avenue Elementary School is an excellent, intact example of an indoor-outdoor, postwar finger-plan school. Exemplifies LAUSD design ideals and principles of the era. Some replaced/filled-in windows and non-original hardscaping; CRHR eligible as historic district.	Yes	3CD
2631-019-904	13594	**Fernangeles Elementary School**	ES	12001		Art	St	Sun Valley	91352	1948	1954	1946		6Z/7N	Campus core appears eligible as a historic district under California Register Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Administration building and assembly room form a distinctive, 1950s-flavored entrance to the school and anchor for the residential community around it. From the interior, these two buildings frame a courtyard and outdoor dining area. Site design features buildings and facilities oriented around an expansive lawn with mature (original) trees. Due to alterations on many of the classrooms, however, including clerestories that have been covered and sheathed in stucco, contributing buildings appear eligible for the California Register only.	Yes	3CD
2505-025-900	13707	**Olive Vista Middle School**	MS	14600		Tyler	St	Sylmar	91342	1958	1968	1958		6Z/7N	Campus core appears eligible as a historic district under Criteria C/3, as an excellent example of Mid-Century Modern design applied to institutional architecture. The elements of the campus that are considered contributors are the complex of buildings and structures at the entrance of the campus on Tyler Street, consisting of the Administration Building, the Library, the Health and Counseling Building, and the entrance portal that unifies the northwest side of the campus and forms a distinctive 1950s Mid-Century Modern entrance. Because the other structures on	Yes	3CD

TABLE V-1
UPDATED LAUSD HISTORIC RESOURCES INVENTORY WITH COMPILED RESULTS FROM THE LAUSD HISTORIC RESOURCES SURVEY, 2013/2014, AND THE GETTY HISTORIC RESOURCES SURVEYS, 2001/2004

Assessor Parcel Number	LAUSD Campus #	Campus Name	School Type	Street #	Street Direction	Street Name	Street Type	City	ZIP	Principal Construction Dates: Start Date	Principal Construction Dates: End Date	Year Opened	Former Names & Dates	CR Status (2001-2004 Getty Surveys)	Evaluation Results / Notes	Found Eligible in 2013 / 2014 Survey?	CHR Status Code
															campus and the site plan are not outstanding examples of LAUSD design principles or architecture, California Register eligible only.		
2622-001-900	13750	**Pacoima II Middle School**	MS	9919; 9921		Laurel Canyon	Blvd	Pacoima	91331	1953	1957	1954	Pacoima Junior High School	6Z/7N	Campus core appears eligible as a historic district under California Register Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, intact example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. A number of alterations, including many filled-in/stucco'd over clerestories, may compromise the integrity of some classroom wings. California Register eligible only (due to alterations).Site of infamous 1957 mid-air collision of two aircraft.	Yes	3CD
4258-016-900	13741	**Webster, Daniel Middle School**	MS	11330		Graham	Pl	Los Angeles	90064	1954	1958	1954	Richland JHS 1954	6Z/7N	Campus core appears eligible as a historic district under California Register Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent example of postwar LAUSD middle school campus; exemplifies LAUSD design ideals and principles of the era. Inventive site plan, with classroom wings radiating outward from a central circular core, and extensive network of arcades creates classroom spaces well integrated with designed outdoor spaces throughout the campus. Some alterations (to Auditorium and to some classroom wings, mostly consisting of in-filled windows). Eligible for CRHR as a district.	Yes	3CD
7552-017-900	13846	**Dodson Middle School (Rudecinda Sepulveda Dodson Middle School)**	MS	28014	S	Montereina	Dr	Rancho Palos Verdes	90275	1960		1960		N/A	Campus core appears eligible as a historic district under California Register Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent and intact example of an indoor-outdoor, postwar finger-plan school. Exemplifies LAUSD design principles of the era. California Register eligible only (due to alterations).	Yes	3CD
7439-015-900	13407	**Narbonne Senior High School**	SH	24300	S	Western	Ave	Harbor City	90710	1956		1938		N/A	Campus core appears eligible as a historic district under California Register Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, intact example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. Highly inventive site plan, in the form of a spiral, allows for maximum indoor-outdoor integrated classrooms on compact, urban site. Some replaced/filled-in windows and seismic supports visible on building exteriors. California Register eligible only (due to alterations).	Yes	3CD

TABLE V-1
UPDATED LAUSD HISTORIC RESOURCES INVENTORY WITH COMPILED RESULTS FROM THE LAUSD HISTORIC RESOURCES SURVEY, 2013/2014, AND THE GETTY HISTORIC RESOURCES SURVEYS, 2001/2004

Assessor Parcel Number	LAUSD Campus #	Campus Name	School Type	Street #	Street Direction	Street Name	Street Type	City	ZIP	Principal Construction Dates: Start Date	Principal Construction Dates: End Date	Year Opened	Former Names & Dates	CR Status (2001-2004 Getty Surveys)	Evaluation Results / Notes	Found Eligible in 2013 / 2014 Survey?	CHR Status Code
6024-022-900	13815	**Parmelee Elementary School**	ES	1338	E	76th	Pl	Los Angeles	90001	1962	1965	1962		N/A	Campus core appears eligible as a historic district under California Register Criterion 1, in the context of institutional architecture/educational facilities in Los Angeles. Outstanding example of a one- and two-story school with a cluster-plan campus design and ample indoor-outdoor integration. California Register eligible only (due to alterations).	Yes	3CD
2741-002-900	13870	**Chatsworth Senior High School**	SH	10027		Lurline	Ave	Chatsworth	91311	1963		1963		N/A	Campus core appears eligible as a historic district under Criteria A/1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, intact example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. Inventive site plan, with classrooms radiating outward from a central landscaped quad. Also eligible as a historic district under Criteria C/3, as an excellent example of Mid-Century Modern design applied to institutional architecture. Some alterations, but intact and exceptional example that is eligible for both National Register and California Register.	Yes	3D
2104-004-905	13753	**Cleveland, Grover Senior High School**	SH	8140		Vanalden	Ave	Reseda	91335	1959	1960	1950		N/A	Campus core appears eligible as a historic district under National Register and California Register Criteria A/1, in the context of institutional architecture/educational facilities in Los Angeles. As an intact, indoor-outdoor finger-plan school, Cleveland Senior High School exemplifies LAUSD design ideals and principles of the era. Also eligible as a historic district under Criteria A/3, as an excellent example of Mid-Century Modern style applied to institutional architecture. Some replaced/filled-in windows and non-original hardscaping.	Yes	3D
7321-018-900	13817	**Leapwood Elementary School**	ES	19302		Leapwood	Ave	Carson	90746	1962		1963		N/A	Campus core appears eligible as a historic district under National Register and California Register Criteria A/1, in the context of institutional architecture/educational facilities in Los Angeles. Outstanding example of a one- and two-story school with a cluster-plan campus design and ample indoor-outdoor integration. Few visible alterations.	Yes	3D
4413-021-905	13742	**Palisades Charter Senior High School**	SH	15777		Bowdoin	St	Pacific Palisades	90272	1961		1958		N/A	Campus core appears eligible as a historic district under Criteria A/1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, intact example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. Also eligible as a historic district under Criteria C/3, as an excellent example of Mid-Century Modern design (expressionist subtype) applied to institutional architecture in Los Angeles. Few visible alterations; eligible for National Register and California Register as historic district.	Yes	3D
4445-	13816	**Topanga Charter**	ES	22075		Topanga	Rd	Topanga	90290	1953	1955	1940		N/A	Campus core appears eligible as a historic district	Yes	3D

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Assessor Parcel Number	LAUSD Campus #	Campus Name	School Type	Street #	Street Direction	Street Name	Street Type	City	ZIP	Principal Construction Dates: Start Date	Principal Construction Dates: End Date	Year Opened	Former Names & Dates	CR Status (2001-2004 Getty Surveys)	Evaluation Results / Notes	Found Eligible in 2013 / 2014 Survey?	CHR Status Code
005-902		**Elementary School**				School									under Criteria A/1, in the context of institutional architecture/educational facilities in Los Angeles. Excellent, intact example of postwar LAUSD school; exemplifies LAUSD design ideals and principles of the era. Also eligible as a historic district under Criteria C/3 as an excellent example of the Mid-Century Modern style applied to institutional architecture.		
6103-017-900	13812	**153rd Street Elementary School**	ES	1605	W	153rd	St	Gardena	90247	1957	1958	1956		6Z/7N	Not eligible. This campus has many of the character-defining features of a postwar finger-plan school but not all the eligibility standards required under Criteria A/1 as an exemplification of LAUSD design ideals for postwar schools. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, this campus was designed by master architects Ain, Johnson & Day; however, the school plan and design overall do not stand out as an outstanding exemplar of the firm's work.	No	6Z
6108-003-900	13303	**186th Street Elementary School**	ES	1581	W	186th	St	Gardena	90248	1955	1962	1907	McKinley Home 1907; 182nd St 1924; 184th St 1925	6Z/7N	Not eligible. Not typical of LAUSD design principles of the era; site design does not exhibit an exceptionally unified plan. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect. Displays some characteristics of Mid-Century Modern design, but the design does not rise to the level required for eligibility for either the National Register or California Register.	No	6Z
6114-030-902	13426	**Amestoy Elementary School**	ES	1048	W	149th	St	Gardena	90247	1949	1957	1915	Amestoy Avenue 1915	6Z/7N	Not eligible. Not typical of LAUSD design principles of the era; site design does not exhibit an exceptionally unified plan. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural	No	6Z

TABLE V-1
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Assessor Parcel Number	LAUSD Campus #	Campus Name	School Type	Street #	Street Direction	Street Name	Street Type	City	ZIP	Principal Construction Dates: Start Date	Principal Construction Dates: End Date	Year Opened	Former Names & Dates	CR Status (2001-2004 Getty Surveys)	Evaluation Results / Notes	Found Eligible in 2013 / 2014 Survey?	CHR Status Code
															design or the work of a master architect.		
6131-013-900	13618	**Avalon Gardens Elementary School**	ES	13940	S	San Pedro	St	Los Angeles	90061	1948	1955	1952		6Z/7N	Not eligible. This campus has many of the character-defining features of a postwar finger-plan school, but the range of construction dates, from 1948 to 1955, produced a campus plan that is not sufficiently unified to qualify under Criteria A/1 as an exemplification of LAUSD design ideals for postwar schools (under the context of institutional architecture/educational facilities in Los Angeles). In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
4029-021-900	13675	**Century Park Elementary School**	ES	10935	S	Spinning	Ave	Inglewood	90303	1948	1959	1947		6Z/7N	Not eligible. Not typical of LAUSD design principles of the era; all of the original classrooms in addition to the auditorium are located in a single building; classrooms on double-loaded interior corridor. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
2247-020-900	13619	**Chandler Elementary School**	ES	14030		Weddington	St	Van Nuys	91401	1949	1956	1949		6Z/7N	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z

TABLE V-1
UPDATED LAUSD HISTORIC RESOURCES INVENTORY WITH COMPILED RESULTS FROM THE LAUSD HISTORIC RESOURCES SURVEY, 2013/2014, AND THE GETTY HISTORIC RESOURCES SURVEYS, 2001/2004

Assessor Parcel Number	LAUSD Campus #	Campus Name	School Type	Street #	Street Direction	Street Name	Street Type	City	ZIP	Principal Construction Dates: Start Date	Principal Construction Dates: End Date	Year Opened	Former Names & Dates	CR Status (2001-2004 Getty Surveys)	Evaluation Results / Notes	Found Eligible in 2013 / 2014 Survey?	CHR Status Code
4110-016-900	13622	**Cowan Avenue Elementary School**	ES	7615		Cowan	Ave	Los Angeles	90045	1953	1958	1949		6Z/7N	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
2360-011-900	13677	**Dixie Canyon Avenue**	ES	4220		Dixie Canyon	Ave	Sherman Oaks	91423	1949	1961	1947		6Z/7N	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
2258-016-902	13500	**Encino Elementary School**	ES	16941		Addison	St	Encino	91316	1947	1961	1923		6Z/7N	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z

TABLE V-1
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2136-009-900	13661	**Fullbright Avenue Elementary School**	ES	6940		Fullbright	Ave	Canoga Park	91306	1954	1954	1955		6Z/7N	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
2667-020-900	13736	**Haskell Avenue Elementary School**	ES	15850		Tulsa	St	Granada Hills	91344	1953	1965	1956	Haskell Avenue 1956	6Z/7N	Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus exhibits most of the character-defining features of the indoor-outdoor, finger-plan school constructed throughout LAUSD in the postwar period. However, due to alterations (primarily in-filled windows, altered window and door openings), the campus does not retain sufficient integrity to convey its period of significance.	No	6Z
7417-012-900	13648	**Hawaiian Avenue Elementary School**	ES	540		Hawaiian	Ave	Wilmington	90744	1948	1966	1942	Hawaiian Avenue School	6Z/7N	Not eligible. The campus overall is not typical of LAUSD design principles of the era. The 1948 Administration Building is noteworthy but, due to alterations (replaced windows), it does not retain integrity. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
2276-012-902	13517	**Sherman Oaks Elementary School**	ES	14755		Greenleaf	St	Sherman Oaks	91403	1948	1976	1924	Cahuenga Park 1924; Dickens Street 1929	6Z/7N	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state,	No	6Z

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															or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.		
2204-014-900	13722	**Stagg Street Elementary School**	ES	7839		Amestoy	Ave	Van Nuys	91406	1954	1958	1953		6Z/7N	Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus exhibits most of the character-defining features of the indoor-outdoor, finger-plan school constructed throughout LAUSD in the postwar period. However, due to alterations (primarily in-filled windows, altered window and door openings), the campus does not retain sufficient integrity to convey its period of significance.	No	6Z
2669-015-900	13694	**Vintage Street Elementary School (Vintage Street Fundamental Magnet School)**	ES	15848		Stare	St	North Hills	91343	1953	1955	1955	Vintage Street 1955	6Z/7N	Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus exhibits most of the character-defining features of the indoor-outdoor, finger-plan school constructed throughout LAUSD in the postwar period. However, due to alterations (primarily in-filled windows, altered window and door openings, and changes to the design configuration of the entrance and Auditorium), the campus does not retain sufficient integrity to convey its period of significance.	No	6Z
7414-008-900	13538	**Wilmington II Middle School**	MS	1700		Gulf	Ave	Wilmington	90744	1951	1962	1949		6Z/7N	Not eligible. The campus overall is not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
6086-021-906	13868	**122nd Street Elementary School**	ES	405	E	122nd	St	Los Angeles	90061	1963	1963	1963		N/A	Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus is a typical but not outstanding example of a postwar LAUSD campus. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z

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7363-020-900	13709	**232nd Place Elementary School**	ES	23240		Archibald	Ave	Carson	90745	1957	1968	1953		N/A	Not eligible. Campus and its classroom wings and buildings represent typical but not outstanding examples of a postwar finger-plan school. Lack of indoor-outdoor integration in campus plan; arcades are replaced with tunnel-like corridors. Represents the work of master architects A. Quincy Jones and Frederick E. Emmons & Associates but is not an exceptional example of their many buildings throughout Southern California. The campus is not eligible under other applicable criteria.	No	6Z
6126-012-900	13833	**Ambler Avenue Elementary School**	ES	319	E	Sherman	Dr	Carson	90746	1966		1966		N/A	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, the school does not qualify as an outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
7322-005-900	13760	**Annalee Avenue Elementary School**	ES	19410	S	Annalee	Ave	Los Angeles	90746	1966	1967	1965		N/A	Not eligible. The school campus and buildings represent a typical but not exemplary embodiment of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding/distinctive example of architectural design or the work of a master architect.	No	6Z
6131-013-900		**Banneker Special Education Center**		14024	S	San Pedro	St	Los Angeles	90061	1972	1978	1968	Alternate/former name Benjamin Banneker School	N/A	Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, the campus is not representative of LAUSD design principles of the era. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z

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7332-003-900	13796	**Bonita Street Elementary School**	ES	21929		Bonita	St	Carson	90745	1958	1958	1958		N/A	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
7320-013-900	13837	**Broadacres Elementary School**	ES	19424	S	Broadacres	Ave	Carson	90746	1967	1967	1967		N/A	Not eligible. In terms of the context of institutional architecture/educational facilities, the campus does not represent an outstanding example of LAUSD design principles of the era. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
5235-021-906	13471	**Brooklyn Avenue Elementary School**	ES	4620		Cesar Chavez	Ave	Los Angeles	90022	1960	1975	1922		N/A	Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, the campus is not representative of LAUSD design principles of the era. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
7332-004-901	13761	**Carnegie Middle School**	MS	21820		Bonita	St	Carson	90745	1965		1965		N/A	Not eligible. The campus overall is not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In	No	6Z

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															terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.		
7341-024-900	13843	**Caroldale Learning Community**	ES	22424		Caroldale	Ave	Carson	90745	1960	1969	1960		N/A	Not eligible. The campus overall is not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
7333-001-900	13869	**Carson Senior High School**	SH	22328	S	Main	St	Carson	90745	1962	1969	1962		N/A	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
4057-005-900	13660	**Cimarron Elementary School**	ES	11559		Cimarron	Ave	Los Angeles	90044	1953	1957	1955		N/A	Not eligible. The school campus and buildings represent a typical but not exemplary embodiment of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
5014-001-922	13766	**Crenshaw**	SH	5010		11TH	Ave	Los Angeles	90043	1968	1968	1968		N/A	Not eligible. Not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research showed that construction of Crenshaw High School reflected post-Watts Riots investment in South Los Angeles schools. Given project limitations and	No	6Z

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															scope, however, research did not identify a broader, contextual pattern to justify eligibility under Criteria A/1. In addition, research did not show that this campus was the site of a significant event. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.		
7380-004-900	13775	**Curtiss Middle School**	MS	1254	E	Helmick	St	Carson	90746	1969	1969	1969		N/A	Not eligible. The school campus and buildings represent a typical but not exemplary embodiment of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
2634-019-900	13734	**Francis, John H., Polytechnic Senior High School**	SH	12431		Roscoe	Blvd	Sun Valley	91352	1957	1957	1957	Los Angeles Commercial High School, 1900; Los Angeles Polytechnic High, 1905-1953 (LAT, Oct 14, 1956)	N/A	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
2341-024-900	13674	**Grant, Ulysses S. Senior High School**	SH	13000		Oxnard	St	Valley Glen	91401	1958	1964	1958		N/A	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated	No	6Z

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															with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design. Designed by prominent architectural firm, Stanton & Stockwell (J.E. Stanton & William F. Stockwell), but the school is not the most representative or intact example.		
5234-008-900	13479	**Marianna Elementary School**	ES	4215	E	Gleason	St	Los Angeles	90063	1958	1964	1924		N/A	Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus is a typical but not outstanding example of a postwar LAUSD campus. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
2671-013-900	13704	**Monroe, James Senior High School**	SH	9229	N	Haskell	Ave	North Hills	91343	1957	1957	1958		N/A	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
6224-001-900	13861	**Park Avenue Elementary School**	ES	8020		Park	Ave	Cudahy	90210	1968	1968	1968		N/A	Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, the campus is a common but not outstanding example of LAUSD design principles of the era. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding/distinctive example of architectural design or the work of a master architect.	No	6Z

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4060-018-900	13655	**Purche Elementary School**	ES	13210		Purche	Ave	Gardena	90249	1957	1957	1957		N/A	Not eligible. The school campus and buildings represent a typical but not exemplary embodiment of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
6113-004-902	13855	**Sellery Special Education Center**	ES	15804	S	Budlong	Ave	Gardena	90247	1961	1963	1961	C. Morley Sellery Elementary School	N/A	This school was custom-built to serve a special needs population of children with severe handicaps. As such, the plan and building types vary from typical LAUSD plan typologies. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect. The school displays many character-defining features of the Mid-Century Modern architectural style. However, the school is not a distinctive example of the Mid-Century Modern architectural style and does not qualify under Criteria C/3.	No	6Z
7341-002-902	13708	**Stephen M. White Middle School**	MS	22102	S	Figueroa	St	Carson	90745	1956	1956	1956		N/A	Not eligible. Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z

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7338-021-901	13755	**Towne Avenue Elementary School**	ES	18924		Towne	Ave	Carson	90746	1958	1958	1953		N/A	Not eligible. In terms of the context of institutional architecture/educational facilities in Los Angeles, this campus is a typical but not outstanding example of a postwar LAUSD campus. Additionally, under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
7345-006-900	13788	**Van Deene Elementary School**	ES	826	W	Javelin	St	Torrance	90502	1960	1965	1960		N/A	Not eligible; very typical but not outstanding example of LAUSD design ideals of the era. Appears to be drawn from one of the standardized plans for schools during this period. Not the site of significant event or representative of a significant pattern of development. Not an outstanding example of architectural design or the work of a master architect.	No	6Z
5215-040-901	13778	**Wilson, Woodrow Senior High School**	SH	4500		Multnomah	St	Los Angeles	90032	1970	1970	1969		N/A	Not eligible. The campus overall is not typical of LAUSD design principles of the era. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria 3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.	No	6Z
	13429	**Cienega**	ES	2611	S	Orange	Dr	Los Angeles	90016	1924-1969		1917	Sprague School 1917	2			
	13427	**Angeles Mesa**	ES	2611	W	52nd	St	Los Angeles	90043	1917-1968		1917		2S	Annexed from Hyde Park School District 1917; HUD DOE 1989 Crit AC		
	13350	**Buchanan Street**	ES	5024		Buchanan	St	Los Angeles	90042	1937-1996		1913	Illinois Avenue 1913	2S1	Ross Montgomery		
	13326	**002nd Street**	ES	1942	E	2nd	St	Los Angeles	90033	1923	1969	1895		2S2			
		017th Street	ES	644	W	17th	St	Los Angeles	90015	1926		1881	Georgia Street 1881; Montgomery Street 1885	2S2	Closed 1939; now Admin Ofc-SH Div		
	13335	**024th Street**	ES	2055	W	24th	St	Los Angeles	90018	1926-1971		1904		2S2	per GAP listing; not on OHP data base		
		Arlington Heights	ES	1717		Seventh	Ave	Los Angeles	90019	1937-1968		1910	Arlington Hts 1910; Seventh Avenue 1914	2S2	District; GAP db: at Mt. Vernon JHS		
	13458	**Bandini Street**	ES	425	N	Bandini	St	San Pedro	90731	1923-1977		1923		2S2	looked altered		

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	13373	**Belvedere I**	ES	3724	E	1st	St	Los Angeles	90063	1922-1962		1912		2S2			
	13416	**Canoga Park I**	ES	7438		Topanga Canyon	Blvd	Canoga Park	91303	1935-1969		1915	Owensmouth School 1915	2S2	Annexed from San Fernando 1915		
		Eshelman Avenue	ES	25902		Eshelman	Ave	Lomita	90717	1925-1969				2S2			
		Garvanza	ES	317	N	Avenue 62		Los Angeles	90042	1922-1966		1899	Garvanza 1899; Eagle Rock Ave 1903; 62nd Ave 1908	2S2			
		Gompers, Samuel Intermediate	MS	234	E	112th	St	Los Angeles	90061	1937-1962		1937	Gompers, Samuel 1937	2S2			
		Grant II	ES	1530	N	Wilton	Pl	Los Angeles	90028	1922-1990		1910		2S2			
		Gulf Avenue	ES	828	W	L	St	Wilmington	90744	1926-1969		1923		2S2			
		Hamilton, Alexander	SH	2955	S	Robertson	Blvd	Los Angeles	90034	1931-1974		1931		2S2			
		Hancock Park	ES	408	S	Fairfax	Ave	Los Angeles	90036	1937-1958		1937		2S2			
		Hollenbeck	MS	2510	E	6th	St	Los Angeles	90023	1923-1976		1914	Boyle Hts Inter. #1 1914	2S2			
		LA CES/Pasteur, Louis	Mag	5931	W	18th	St	Los Angeles	90035	1937-1961		1937		2S2	Closed 1987		
		Le Conte, Joseph	MS	1316	N	Bronson	Ave	Los Angeles	90028	1922-1977		1922	Le Conte Junior 1922	2S2			
		Lincoln, Abraham II	SH	3501	N	Broadway		Los Angeles	90031	1937-1980		1878	var.ES1878;Ave21Inter1911; LincolnHigh1918	2S2			
		Los Feliz	ES	1740	N	New Hampshire	Ave	Los Angeles	90027	1937		1910		2S2			
		Manual Arts	SH	4131	S	Vermont	Ave	Los Angeles	90037	1935-1989		1910		2S2	Donald Parkinson		
		Marshall, John	SH	3939		Tracy	St	Los Angeles	90027	1931-1992		1931		2S2			
		Miramonte	ES	1400	E	68th	St	Los Angeles	90001	1936-1969		1912		2S2	Annexed 1912		
		Morningside	ES	576	N	Maclay	Ave	San Fernando	91340	1915-1995		1915		2S2	Annexed from Morningside School District 1915		
		North Hollywood III	SH	5231		Colfax	Ave	North Hollywood	91601	1926-		1927	Lankershim HS 1927	2S2			
		Reseda I	ES	7265		Amigo	Ave	Reseda	91335	1936-1955		1916	Marian Avenue 1916	2S2	Annexed from San Fernando 1915		
		Ritter	ES	11108		Watts	Ave	Los Angeles	90059	1932-1968		1928		2S2	Annexed from Palomar District 1927		
		San Fernando II	MS	130	N	Brand	Blvd	San Fernando	91340	1916-1975		1915	San Fernando HS 1915	2S2	Annexed from San Fernando 1915		
		San Pedro I	SH	1001	W	15th	St	San Pedro	90731	1936-1971		1909		2S2	Annexed 1900; sold in late 1930s; new site built late 1930s		
		San Pedro II	AS	950	W	Santa Cruz	St	San Pedro	90731	1926				2S2			
		Santa Monica Boulevard	ES	1022	N	Van Ness	Ave	Los Angeles	90038	1937-1993		1910	Santa Monica Avenue 1910	2S2	Annexed 1910		
		Soto Street	ES	1020	S	Soto	St	Los Angeles	90023	1937		1914	?	2S2			
		South Gate I	MS	4100		Firestone	Blvd	South Gate	90280	1941-1966		1941		2S2			

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		University II	SH	11800		Texas	Ave	Los Angeles	90025	1924-1978		1922	Sawtelle 1922; Harding, Warren G. 1925	2S2			
		Van Ness	ES	501	N	Van Ness	Ave	Los Angeles	90004	1923		1916		2S2			
		Vine Street	ES	955	N	Vine	St	Los Angeles	90038	1922-1995		1909	Colgrove School 1909	2S2	Annexed 1909		
	13265	**010th Street**	ES	1000		Grattan	St	Los Angeles	90015	1922-1983		1888		3CS			
	13348	**049th Street**	ES	750	E	49th	St	Los Angeles	90011	1923-1969		1913		3CS			
	13366	**Adams, John**	MS	151	W	30th	St	Los Angeles	90007	1927-1964		1911	30th St Intermediate 1911	3CS			
	13608	**Apperson Street**	ES	10233		Woodward	Ave	Sunland	91040	1949-1957		1949		3CS			
	13488	**Bell**	SH	4328		Bell	Ave	Bell	90201	1925-1989		1926		3CS			
	13533	**Broadway**	ES	1015		Lincoln	Blvd	Venice	90291	1936-1963		1926	Abraham Lincoln 1926	3CS	Annexed from Venice 1926		
	13558	**Bryson Avenue**	ES	4470		Missouri	Ave	South Gate	90280	1925-1977		1931		3CS	McNerney annexed 1931		
	13415	**Canoga Park II**	SH	6850		Topanga Canyon	Blvd	Canoga Park	91303	1930-1977		1915	Owensmouth HS 1915	3CS	Aud.only; annexed from San Fernando 1915		
	13435	**Carson Street**	ES	161	E	Carson	St	Carson	90745	1927-1966		1921	Boulevard Acres 1920	3CS			
		Eagle Rock I	ES	2057		Fair Park	Ave	Los Angeles	90041	1917-1919		1923		3CS	Annexed 1923		
		Euclid Avenue	ES	806		Euclid	Ave	Los Angeles	90023	1923-1970		1907		3CS			
		Fairfax	SH	7850		Melrose	Ave	Los Angeles	90046	1942-1968		1924		3CS	Parkinson & Parkinson		
		Fries Avenue	ES	1301		Fries	Ave	Wilmington	90744	1924-1977		1923		3CS			
		Graham	ES	8407	S	Fir	Ave	Los Angeles	90001	1925-1975		1924		3CS			
		Hobart Boulevard	ES	980	S	Hobart	Blvd	Los Angeles	90006	1937-1968		1906		3CS			
		Humphreys Avenue	ES	500	S	Humphreys	Ave	Los Angeles	90022	1923-1969		1922		3CS			
		Jordan, David Starr	SH	2265	E	103rd	St	Los Angeles	90002	1927-1970		1925		3CS	Annexed 1925		
		Kester Avenue	ES	5353		Kester	Ave	Van Nuys	91411	1951-1957		1951		3CS	Richard Neutra		
		King Jr., Martin Luther	ES	3989	S	Hobart	Blvd	Los Angeles	90062	1936-1972		1914	Santa Barbara Ave 1914; Santa Barbara 1968	3CS			
		Lankershim I	ES	5250		Bakman	Ave	North Hollywood	91601	1912-1982		1910		3CS	Annexed 1910		
		Leland Street	ES	2120		Leland	St	San Pedro	90731	1924-1977		1922		3CS			
		Lokrantz, Sven Special Ed Ctr	SS	19451		Wyandotte	St	Reseda	91335	1960-1975		1961		3CS	Sidney Eisenstadt		
		Lomita Fundamental Magnet	ES	2211	W	247th	St	Lomita	90717	1937-1968		1909	Lomita 1909	3CS			

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		Mann, Horace	MS	7001	S	St. Andrews	Pl	Los Angeles	90047	1926-1977		1926	Mann JHS 1926	3CS	A. M. Edelman & A. C. Zimmerman		
		Mar Vista	ES	3330		Granville	Ave	Los Angeles	90066	1949-1957		1947		3CS			
		Muir, John	MS	5929	S	Vermont	Ave	Los Angeles	90044	1922-1971		1922		3CS	John C. Austin		
		Nightingale, Florence	MS	3311	N	Figueroa	St	Los Angeles	90065	1937-1969		1937		3CS			
		Norwood Street	ES	2020		Oak	St	Los Angeles	90007	1939-1969		1895		3CS			
		Pacoima I	ES	11016		Norris	Ave	Pacoima	91331	1916-1969		1915		3CS	Paul V. Tuttle & A. W. Angel; annexed from San Fernando 1915		
		Palms II	MS	10860		Woodbine	St	Los Angeles	90034	1949-1960		1949		3CS			
		Perez, Alfonso B. Special Education Center	SS	4540		Michigan	Ave	Los Angeles	90022	1926-1981		1926	BelvedereGardens1926;EugeneSt1926;McDonnellAve1959	3CS			
		Point Fermin	ES	3333		Kerckhoff	Ave	San Pedro	90731	1921-1925		1912		3CS	Hunt & Burns		
		Salvin, Sophia T. Special Education Center	SS	1925		Budlong	Ave	Los Angeles	90007	1937-1974		1896	see previous entry	3CS			
		San Gabriel Avenue	ES	8628		San Gabriel	Ave	South Gate	90280	1924-1937		1932		3CS	Annexed from Huntington Park 1932		
		San Pedro Street	ES	1635	S	San Pedro	St	Los Angeles	90015	1927-1997		1866		3CS			
		Solano Avenue	ES	615		Solano	Ave	Los Angeles	90012	1924		1904		3CS			
		South Park	ES	8510		Towne	Ave	Los Angeles	90003	1936-1966		1907	South Park Avenue 1907	3CS	Walker & Eisen		
		State Street	ES	3211		Santa Ana	St	South Gate	90280	1924-1937		1932		3CS	Annexed from Huntington park 1932		
		State Street Children's Center	CC	3210		Broadway		Huntington Park	90255	1931		1943		3CS			
		Sterry, Nora Children's Center	CC	1747		Sawtelle	Blvd	Los Angeles	90025	1914			Flower Guild	3CS			
		Sun Valley	MS	7330		Bakman	Ave	Sun Valley	91352	1944-1954		1950		3CS			
		Utah Street	ES	255	N	Clarence	St	Los Angeles	90033	1937-1970		1904		3CS			
		Van Nuys II	MS	5435		Vesper	Ave	Van Nuys	91411	1948-1958		1948		3CS			
		Vernon City	ES	2360	E	Vernon	Ave	Los Angeles	90058	1929-1942		1928		3CS	Annexed from Vernon City District 1928		
		Victoria Avenue	ES	3320		Missouri	Ave	South Gate	90280	1929-1976		1925	Home Gardens 1925	3CS	Annexed from Watts 1925		
		Warner Avenue	ES	615		Holmby	Ave	Los Angeles	90024	1949-1977		1927		3CS			
		West Vernon Avenue	ES	4312	S	Grand	Ave	Los Angeles	90037	1937-1976		1905		3CS			
		Wilton Place	ES	745	S	Wilton	Pl	Los Angeles	90005	1922-1996		1905		3CS			
		Yorkdale	ES	5687		Meridian	St	Los Angeles	90042	1923-1966		1912		3CS	Annexed from Annandale School District 1911		
	13307	**052nd Street II**	ES	816	W	51st	St	Los Angeles	90037	1922-1969		1908		3S			
	13339	**066th Street**	ES	6600	S	San Pedro	St	Los Angeles	90003	1927-1965		1909		3S	Fitzhugh & Teal/Gene Verge		
	13672	**109th Street**	ES	10915		McKinley	Ave	Los Angeles	90059	1940-1976		1926		3S	Survey evaluation		
	13401	**Aldama**	ES	632	N	Avenue 50		Los Angeles	90042	1923-1927		1924	Aldama Street 1924	3S	Charles F. Plummer		

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	13402	**Alta Loma**	ES	1745		Vineyard	Ave	Los Angeles	90019	1935-1972		1915	Sprague Avenue 1915	3S	Charles M. Hutchinson		
	13595	**Baldwin Hills**	ES	5421		Rodeo	Rd	Los Angeles	90016	1949-1973		1943		3S	Robert Alexander (aka University ES?)		
	13340	**Barton Hill**	ES	423	N	Pacific	Ave	San Pedro	90731	1923-1965		1909		3S			
	13274	**Berendo**	MS	1157	S	Berendo	St	Los Angeles	90006	1937-1992		1896	Pico Hgts1896;BerendoSt1903;BerendoInterme d1911	3S			
	13448	**Burroughs, John**	MS	600	S	McCadden	Pl	Los Angeles	90005	1923-1978		1922		3S			
	13453	**Corona Avenue**	ES	3825		Bell	Ave	Bell	90201	1935-1968		1926		3S	Richard Neutra; annexed from Bell 1926		
	13510	**Dorris Place**	ES	2225		Dorris	Pl	Los Angeles	90031	1928-1970		1925		3S			
		Dorsey, Susan Miller	SH	3537		Farmdale	Ave	Los Angeles	90016	1937-1961		1937		3S	Gogerty & Noerenberg		
		El Sereno II	MS	2839	N	Eastern	Ave	Los Angeles	90032	1937-1968		1937	Farmdale1915;ElSerenoAreaHS1936;WdrwWilsonHS1937	3S			
		Emerson, Ralph Waldo	MS	1650		Selby	Ave	Los Angeles	90024	1937-1957		1935		3S	Richard Neutra		
		Fremont, John C.	SH	7676	S	San Pedro	St	Los Angeles	90003	1924-1976		1924		3S	Edwin Bergstrom; auditorium only		
		Glassell Park	ES	2211	W	Avenue 30		Los Angeles	90065	1924-1952		1912	Washington Park 1912	3S			
		Hamasaki, Morris K. School	ES	4865	E	First	St	Los Angeles	90022	1927-1962		1926	Riggin Avenue 1926; Riggin 1968	3S			
		Hollywood	SH	1521	N	Highland	Ave	Los Angeles	90028	1910-1977		1910		3S			
		Huntington Park	SH	6020		Miles	Ave	Huntington Park	90255	1923-1991		1909		3S	Annexed 1932		
		Irving, Washington	MS	3010		Estara	Ave	Los Angeles	90065	1937-1990		1937		3S			
		Jefferson, Thomas	SH	1319	E	41st	St	Los Angeles	90011	1936-1970		1917	Jefferson High 1917	3S	Stiles O. Clements		
		Old Canyon School	N/A	421		Entrada	Dr	Santa Monica	90402	1894				3S			
		Old Farmdale School	N/A	2839	N	Eastern	Ave	Los Angeles	90032	1894				3S	Bradbeer & Ferris		
		Old Vernon Avenue School	N/A	450	N	Grand	Ave	Los Angeles	90012	1876				3S	1884 per Building Directory; restored 1976		
		Pacific Palisades	ES	800		Via de la Paz		Pacific Palisades	90272	1931-1960		1922	Palisades School 1922	3S			
		Reed, Walter	MS	4525		Irvine	Ave	North Hollywood	91602	1939-1958		1939	N.Hollywood JHS 1939	3S			
		Rowan Avenue	ES	600	S	Rowan	Ave	Los Angeles	90023	1916-1963		1912	Belvedere #2	3S	Annexed 1912		
		South Gate II	SH	3351		Firestone	Blvd	South Gate	90280	1930-1988		1932		3S	George M. Lindsey & Erwood P. Elden		
		Van Nuys III	SH	6535		Cedros	Ave	Van Nuys	91411	1933-1976		1915		3S	Annexed from San Fernando 1915		
		Venice	SH	13000		Venice	Blvd	Los Angeles	90066	1935-1969		1925		3S	Annexed 1925		

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		Verdugo Hills	SH	10625		Plainview	Ave	Tujunga	91042	1937-1970		1936	Calvin Coolidge High 1936	3S			
		Virgil II	MS	152	N	Vermont	Ave	Los Angeles	90004	1924-1978		1912	Virgil Ave Inter 1912; Virgil School 1914	3S	1924 CR South by Hunt & Burns		
		Virginia Road	ES	2925		Virginia	Rd	Los Angeles	90016	1924-1977		1924		3S			
		Wright, Orville	MS	6550	W	80th	St	Los Angeles	90045	1948-1951		1956		3S			

VI. CONCLUSION | RECOMMENDATIONS

The LAUSD Historic Resources Survey, 2013/2014, recommended a total of 14 of 55 campuses as eligible for either the NRHP and/or CRHR. Consequently, these campuses include buildings, structures, and features that are presumed historic resources under CEQA. The survey pool included a variety of LAUSD property types, including elementary, middle, and senior high schools, as well as special education centers. This variety was also reflected in the selection of campuses that appear to be eligible.

The following recommendations may further and expand the survey results in this report:

1. **Update and expand the *LAUSD Historic Resources Survey***
   LAUSD should update its comprehensive Historic Resources Survey in order to consider all as-yet unevaluated LAUSD assets. The survey could be initially broadened to include all post–1945 school buildings and campuses that have not yet been subject to context-driven evaluation. According to the *Los Angeles Unified School District History of Schools, 1855 to 1972*, there are roughly 175 campuses constructed between 1955 and 1969, as well as approximately 125 campuses constructed between 1945 and 1954.[8]

   The current survey examined 55 campuses, with approximately 245 remaining unevaluated.

   A comprehensive survey update would provide a cost-effective method for guiding district-wide redevelopment plans and CEQA compliance. It would also assist LAUSD in continuing stewardship of its many historically significant school buildings and campuses.

2. **Intensive-Level, District Recordation for Eligible Campuses**
   Proposed modernization or redevelopment projects may include the LAUSD campuses found eligible as historic districts in this survey or included in the LAUSD Historic Resources Inventory database. It is recommended that, prior to or concurrent with project planning, LAUSD commission an intensive-level survey by a qualified architectural historian to document all eligible and non-eligible buildings and structures (contributors and non-contributors) to the historic district. The qualified architectural historian should ideally meet and exceed the Secretary of the Interior's Professional Qualifications Standards for Architectural History and possess a minimum of 5 years of full-time experience conducting historic resource evaluations. It is further recommended that contributors and non-contributors be documented in ArcGIS maps for ease of use by LAUSD Facilities Services Division staff.

3. **Expand the *LAUSD Historic Context Statement* and *Historic Resources Survey* to include the period to 1980**
   Pursuant to Measure Q, district-wide modernization and redevelopment will unfold gradually, over many years. Broadening the LAUSD Historic Context Statement and survey to consider all schools constructed in the past 35 years (rather than 45 years) would allow the district to take proactive steps to identify historically significant campuses (and therefore historic resources under CEQA) prior to redevelopment planning and work. This would also bring the LAUSD comprehensive Historic Resources Survey up to date with the City of Los Angeles Office of Historic Resources citywide survey, SurveyLA.

4. **Conduct archival research to expand property eligibility under additional criteria**
   In the current scope, campus-specific work included research on events, patterns of development, and significant people associated with the schools included in the accompanying survey. However, scope limitations precluded extensive research on LAUSD's history that might result in eligibility under Criteria A/1 (such as LAUSD and the Civil Rights Movement) and Criteria B/2 (for an association with significant figures in the history of public schools in Los Angeles). These and other areas should receive further study. (The context of the Civil Rights Movement and Los Angeles schools was addressed, however, in the NRHP MPD form for African-Americans in Los Angeles.[9])

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ENDNOTES

1 California State Government Code, Section 53094 permits 'the governing board of a school district, by vote of two-thirds of its members . . . [to] render a city or county zoning ordinance inapplicable to a proposed use of property by such school district . . .' The legislative history of section 53094 indicates that 'the Legislature deliberately accorded different treatment to school districts than to other local agencies because it was well aware that school construction was subject to almost complete control by the state. . . . The Legislature accordingly provided in section 53094 that school districts, as opposed to other local agencies, should retain the right to exempt themselves from local zoning ordinances.'" (*Santa Clara, supra*, 22 Cal.App.3d at p. 158 fn. 3.) Court of Appeal, State of California, Second Appellate District, Division 7, Los Angeles Unified School District, Petitioner and Appellant, versus City of Maywood, et al., Respondents and Defendants. Nos. B238629, B238630, Los Angeles Superior Court. Filed 13 February 2013.

2 These figures are drawn from: Los Angeles Unified School District, Educational Housing Branch, School Planning Division, Los Angeles Unified School District History of Schools, 1855 to 1972, January 1973.

3 As noted above, under the provisions of California State Government Code Section 53094, California school districts, including LAUSD, are generally exempt from local zoning ordinance provisions, including for landmark designation. See endnote 1 for further detail.

4 U.S. Department of the Interior, National Park Service, National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation (Washington, DC: 1990, revised 1997).

5 See http://www.preservation.lacity.org/survey for survey results.

6 See the Website of the Los Angeles Unified School District for Pre-Planning Surveys. Search engine for Pre-Planning Survey available at: http://mo.laschools.org/planlausd/content. Accessed 14 March 2014.

7 Lee, Antoinette, and Linda F. McClelland, U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," *National Register Bulletin* No. 16B (1999).

8 These figures are drawn from: Los Angeles Unified School District, Educational Housing Branch, School Planning Division, Los Angeles Unified School District History of Schools, 1855 to 1972, January 1973.

9 Grimes, Teresa, 31 December 2008, National Register of Historic Places, "Historic Resources Associated with African Americans in Los Angeles, Los Angeles County, California" (Washington, DC: US Department of the Interior, National Park Service).

APPENDIX A
DEPARTMENT OF PARKS AND RECREATION FORMS, ELIGIBLE CAMPUSES

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 of 6 **Resource name(s) or number** (assigned by recorder) 156th Street Elementary School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Inglewood, CA **Date** 1981 **T** 3S **R** 14W; SW ¼ **of** SE ¼ **of Sec** 23; S.B.**B.M.**
c. Address 2100 West 156th Street City Gardena Zip 90249
e. Other Locational Data: APN: # 4063-012-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located in a residential neighborhood in the city of Gardena, the 156th Street Elementary School occupies a 4.9-acre site bounded by West 156th Street to the north, an alleyway to the south, an LAUSD facility to the east, and Van Ness Avenue to the west. Built in 1953 in a standardized school plan, the campus consists of a series of stucco-clad, one-story rectilinear buildings, with a central courtyard. The campus layout is characterized by finger-like classroom wings, arranged in a grid. Linking the classroom wings of the campus is a network of sheltered corridors, capped with flat roofs, with wood planks and cross beams and simple pipe supports. Campus buildings and structures display a similar massing, detailing, and Mid-Century Modern–influenced architectural style. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Description of Photo (view, date, accession #) Classroom building, northwest elevation
15 January 2014

***P6. Date Constructed/Age and Sources:** ■ Historic ☐ Prehistoric ☐ Both
1953 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila and Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:**
10 March 2014

***P10. Survey Type:**
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")
Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.
Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NHRP Status Code** 3CD

 ***Resource Name or #:** 156th Street Elementary School

B1. Historic Name: 156th Street Elementary School
B2. Common Name: Same
B3. Original Use: Institutional (Educational Facility)
B4. Present Use: Institutional (Educational Facility)
***B5. Architectural Style:** Mid-Century Modern–influenced
***B6. Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, the campus core was constructed in 1953. A $338,990 contract was awarded for the construction of a semi-permanent frame and stucco building to accommodate 520 students at the school, with the Hudson Construction Company serving as contractor ("Contract for Gardena School Let" 1953). All of the campus's permanent buildings, structures, and facilities date from 1953. The grounds also contain four portable/temporary buildings dating from 1997 located south of the campus core.

A number of alterations and repairs have taken place over the years, including seismic and systems upgrades, the removal of windows to accommodate the installation of air-conditioning units, the retrofitting of electrical systems, the removal and replacement of gutters and downspouts (*LAUSD Pre-Planning Survey, 156th Street Elementary School*, provides a list of repairs and improvements performed since the late 1990s). Alterations to the original buildings on campus include the replacement of some original windows and hardscaping.

***B7. Moved?** ■**No** ☐**Yes** ☐**Unknown** **Date:**_____ **Original Location:**_____
***B8. Related Features:** Landscaping/mature trees
B9a. Architect: Unknown **b. Builder:** Hudson Construction Company
***B10. Significance: Theme**, Institutional (Educational Facility), "Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1953 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: CRHR: 1
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of the 156th Street Elementary School appears eligible for the California Register of Historical Resources as a district under Criterion 1 as an excellent, intact example of a postwar finger-plan school in the Los Angeles Unified School District. The campus plan and buildings exemplify LAUSD design principles and ideals from the postwar period (as described in the *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* [Sapphos Environmental, Inc. 2014]). While drawing on standardized plans used districtwide, the campus represents a relatively early example of LAUSD's postwar finger-plan school. Character-defining features include a unified site plan with mature landscaping, a network of arcades, Mid-Century Modern-influenced design, one-story massing, and incorporation of generous expanses of windows oriented to the outdoors. Due to alterations, such as the replacement of some windows, the campus is eligible for the California Register only.

B11. Additional Resource Attributes: None

***B12. References:** *See Continuation Sheet*

B13. Remarks: None

***B14. Evaluator:** Debi Howell-Ardila, MHP

***Date of Evaluation:** 15 January 2014

(This space reserved for official comments.)

Sketch Map, with north arrow required



***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 10 March 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

Buildings are capped with low-pitched shed roofs, terminating in thin, unadorned fascia and shallow eaves. Fenestration generally consists of multi-light, wood-frame windows in a variety of configurations. At the western elevations, classrooms display bands of awning clerestories. Eastern elevations display grouped, four-over-four, double-hung wood sashes. A network of sheltered arcades provides shade and circulation corridors between classroom wings and facilities. Windows occupy approximately 70 percent of the wall height on the eastern elevations and mark the location of the interior classrooms. Classroom entrances consist of wood doors topped with four-light transoms.

Located on the western portion of the campus, the assembly building/cafeteria is rectangular in plan and symmetrical in design composition. It consists of a two-story main block, capped with a flat roof and clad in stucco. The assembly building is accessed via a projecting one-story entrance wing, located on the north elevation. The entrance displays paired wood doors, flanked with thin, attached brick piers, and sheltered beneath a flat cantilevered roof. This roofline forms a continuous horizontal course across the façade and around side elevations. Projecting from the second story on the façade is a perpendicular stucco blade wall, which extends above the height of the building. The entrance is flanked by stack-laid brick piers and planters and two symmetrical bands of multi-light wood-framed windows. The brick motif is continued in the entrance steps and a wall extending from the Assembly Building to the campus entrance. Transoms over the entrance door and some of the windows on the main elevation appear to have been filled in. On the east elevation of the building is an open-air lunch pavilion.

The buildings and structures comprising the campus core are in good repair and enhanced with mature landscaping. Alterations include the removal of a number of windows on the east elevations of classroom buildings to accommodate air-conditioning units and the asphalt paving of open spaces between classroom buildings.

P5b. Photo (continued): (view and date)



156th Street Elementary School, Assembly Building, viewed from the northwest.
Source: Sapphos Environmental, Inc., 15 January 2014.

***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 10 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



156th Street Elementary School, procession of finger-like classroom buildings. Northwest perspective. Source: Sapphos Environmental, Inc., 15 January 2014.



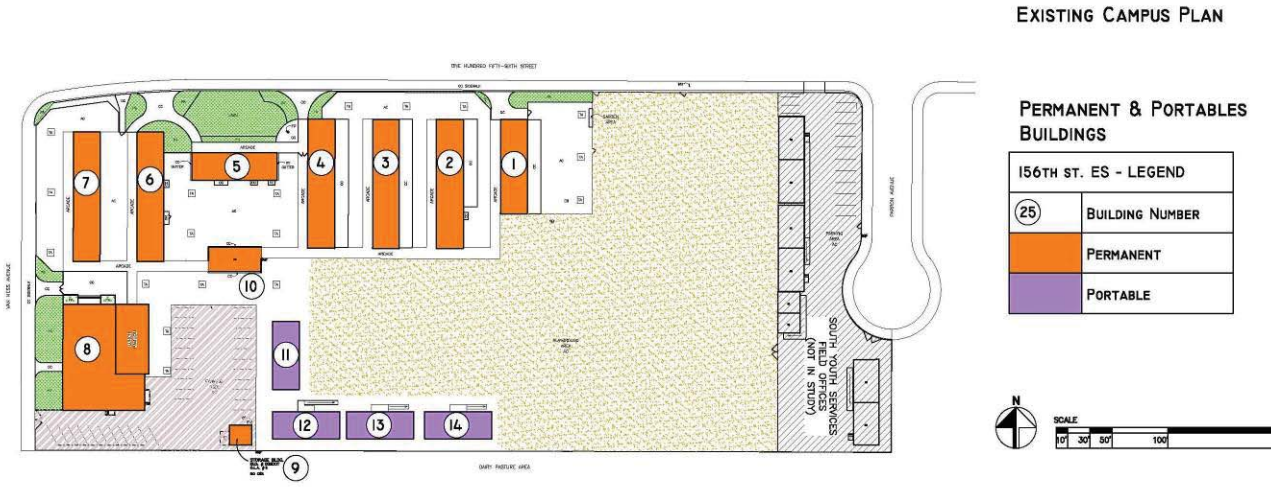
156th Street Elementary School, Classroom Building 7, grouping of windows and door viewed from the southeast. Source: Sapphos Environmental, Inc., 15 January 2014.

***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 15 January 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



156th Street Elementary School, asphalt hardscaping to the east of the Administration Building, viewed from the southeast. Source: Sapphos Environmental, Inc., 15 January 2014.



156th Street Elementary School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, 156th Street Elementary School, October 17, 2011.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

California Office of Historic Preservation, *California Register and National Register: A Comparison (for Purposes of Determining Eligibility for the California Register),* Technical Assistance Series No. 6. (Sacramento, CA, 14 March 2006).

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"Contract for Gardena School Let." *Los Angeles Times* (28 April 1953).

Donovan, John J., *School Architecture: Principles and Practices* (New York: The MacMillan Company, 1921).

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Gebhard, David, and Robert Winter, *A Guide to Architecture in Los Angeles and Southern California* (Santa Barbara, CA: Peregrine Smith, Inc., 1977).

Harris, Cyril M., *American Architecture: An Illustrated Encyclopedia* (New York: W.W. Norton & Company, 1998).

Heumann & Associates and Anne Doehne, Science Applications International Corporation, March 2002, "Historic Schools of the Los Angeles Unified School District," a presentation prepared for LAUSD Facilities Services Division (March 2002).

Hille, R. Thomas, *Modern Schools: A Century of Design for Education* (Hoboken, NJ: John Wiley & Sons, 2011), 13.

Lee, Antoinette, and Linda F. McClelland, U.S. Department of the Interior, National Park Service, *National Register Bulletin No. 16B, How to Complete the National Register Multiple Property Documentation Form* (1999).

Los Angeles Unified School District. *Los Angeles Unified School District Pre-Planning Survey* (2011).

McAlester, Virginia, and Lee McAlester, *A Field Guide to American House* (New York: Alfred A. Knopf, 2004).

Mock, Elizabeth, *Built in USA, 1932 – 1944: A Survey of Contemporary American Architecture*, The Museum of Modern Art (New York: Simon & Shuster, 1944).

Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

Los Angeles Unified School District. *Los Angeles Unified School District Pre-Planning Survey* (2011).

Sapphos Environmental, Inc., *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* (Pasadena, CA, March 2014).

Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, *American Architecture since 1780: A Guide to the Styles* (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 of 7 **Resource name(s) or number** (assigned by recorder) Castle Heights Elementary School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Beverly Hills, CA **Date** 1981 **T** **R** N/A
c. Address 9755 Cattaraugus Avenue City Los Angeles Zip 90034
e. Other Locational Data: APN: # 4308-019-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located on a 5.1-acre site in west Los Angeles, Castle Heights Elementary School is bounded by Beverlywood Street on the north, Cattaraugus Avenue on the south, Castle Heights Avenue on the east, and Beverwil Drive on the west. The campus core was constructed in 1951 in a predominantly residential neighborhood. Displaying a Mid-Century Modern architectural style, the original campus consists of four principal buildings: a one-story administration building/classroom, a two-story auditorium/cafeteria, separate kindergarten, and a one-story classroom wing. Following the curve of Castle Heights Avenue on the east is a curved classroom building, constructed in 1961.

(See Continuation Sheet)

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Auditorium, view from southeast, 23 January 2014

***P6. Date Constructed/Age and Sources:**
■ Historic ☐ Prehistoric ☐ Both
1951/1961 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila and Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:**
10 March 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")
Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.
Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

*NHRP Status Code 3CD

 *Resource Name or #: Castle Heights Elementary School

B1. Historic Name: Castle Heights Elementary School
B2. Common Name: Same
B3. Original Use: Institutional (Educational Facility)
B4. Present Use: Institutional (Educational Facility)
*B5. **Architectural Style:** Mid-Century Modern
*B6. **Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District (LAUSD), the campus core was constructed in 1951, with an additional classroom building added in 1961. All of the campus's permanent buildings, structures, and facilities date from this period. Portable buildings were added between 1990 and 1998 to the north of the campus core.

A number of alterations and repairs have taken place over the years, including seismic and systems upgrades and the removal/replacement of original windows to accommodate installation of air-conditioning units (the *LAUSD Pre-Planning Survey, Castle Heights Elementary School* lists repairs and improvements carried out since the late 1990s). Alterations to the original buildings on campus include the removal and infilling of original clerestory and transom windows.

*B7. **Moved?** ■No ☐Yes ☐Unknown **Date:**_____ **Original Location:**_____
*B8. **Related Features:** Landscaping/mature trees
B9a. Architect: Unknown b. Builder: Unknown

*B10. **Significance:** **Theme**, Institutional (Educational Facility), "Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1951-1961 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: CRHR: 1
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The core of the campus of Castle Heights Elementary School appears eligible for the California Register of Historical Resources as a district under Criterion 1 as an excellent, intact example of an indoor-outdoor postwar school in the Los Angeles Unified School District. The campus plan and buildings exemplify LAUSD design principles and ideals from the postwar period (as described in the *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*). The campus retains integrity of location, design, setting, workmanship, feeling, and association. However, due to alterations, the campus is not eligible for the National Register of Historic Places and is eligible for the California Register only.

B11. Additional Resource Attributes: None

*B12. **References:**
Sapphos Environmental, Inc., March 2014, *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* (Pasadena, CA).
(See Continuation Sheet)

B13. Remarks: None

*B14. **Evaluator:** Debi Howell-Ardila, MHP

*Date of Evaluation: 10 March 2014

Sketch Map, with north arrow required



(This space reserved for official comments.)

***P3a. Description (continued):**

The principal entrance is set back from the street and fronted by a lawn with mature trees and landscaping. Through the entrance breezeway, the campus opens to an expansive central courtyard containing a small lawn and a number of mature trees in brick planters. The courtyard is flanked by classrooms on the east and west, the cafeteria/auditorium on the south, and recreational areas on the north.

Rectangular in plan and sheathed in smooth stucco, the auditorium/cafeteria is two stories in height and capped with a flat roof and no eaves. The principal entrance is located on the south elevation; it consists of recessed double doors elevated on two concrete steps. The entrance's original side lights appear to have been filled in. Attached brick piers and a planter accent the primary elevation of the auditorium. Fenestration generally consists of multi-light wood-framed windows in a variety of configurations, including hopper casements and fixed panes. On the north elevation, a breezeway with an open skylight provides a transitional space between the auditorium, the cafeteria, and classrooms.

Classroom wings are one story in height and rectangular in plan, capped with flat roofs and no eaves. Exterior walls are clad in smooth stucco, with minimal adornment. Classrooms display groupings of six four-over-four, wood-framed double-hung sashes with simple wood surrounds. Doors are integrated into the window grouping and include fixed-pane transoms. Attached brick piers accent the exterior of the buildings, echoing the ornamental theme displayed at the entrance to the campus.

A later addition to the campus is the curved classroom along Castle Heights Avenue. The stucco-clad building forms a continuous, curved line along Castle Heights Avenue, where it is setback from the sidewalk and lined by a series of concrete planters. Stack-bond brick planters and wall cladding at the north and south ends of the building reiterate the decorative elements throughout the campus. One classroom deep, the building displays a curved recessed corridor with pole supports that open onto a landscaped courtyard. Two single-light, double-hung sashes grouped with a unadorned door and a small filled-in transom mark each classroom.

Buildings and structures comprising the campus core are in good repair. Alterations include the removal and infilling of some original windows, including on the auditorium and 1961 classroom, the replacement of windows with air-conditioning units, and placement of storage sheds in the main courtyard outside of classrooms. The campus otherwise retains sufficient integrity to convey its period of significance.

P5b. Photo (continued): (view and date)



Castle Heights Elementary School, Cafeteria/Auditorium, south elevation as seen from Cattaraugus Avenue. Source: Sapphos Environmental, Inc., 23 January 2014.

***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 10 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Castle Heights Elementary School, landscaping and Administration Building, viewed from the west. Source: Sapphos Environmental, Inc., 23 January 2014.



Castle Heights Elementary School, main courtyard, viewed from the south. Source: Sapphos Environmental, Inc., 23 January 2014.

***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 10 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Castle Heights Elementary School, Kindergarten Building, viewed from the southwest. Source: Sapphos Environmental, Inc., 23 January 2014.



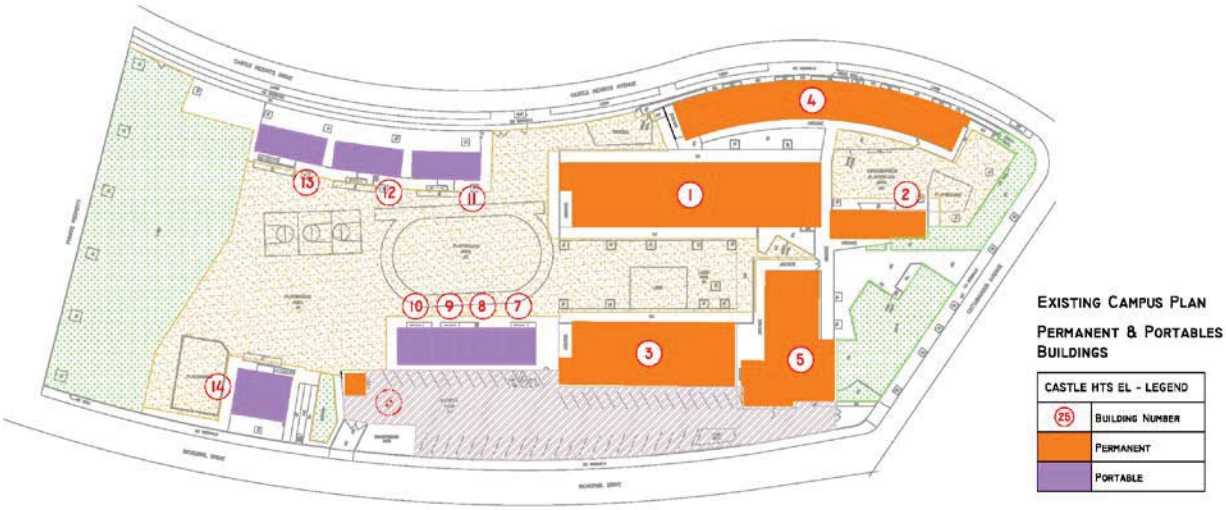
Castle Heights Elementary School, courtyard between classrooms, viewed from the south. Source: Sapphos Environmental, Inc., 23 January 2014.

***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 10 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Castle Heights Elementary School, classroom building as seen from Castle Heights Avenue from the southeast. Source: Sapphos Environmental, Inc., 23 January 2014.



Castle Heights Elementary School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Castle Heights Elementary School, 15 June 2010.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

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"Contracts Awarded for Two Schools Total $1,174,571." *Los Angeles Times* (21 July 1950).

Donovan, John J., *School Architecture: Principles and Practices* (New York: The MacMillan Company, 1921).

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Los Angeles Unified School District. *Los Angeles Unified School District Pre-Planning Survey* (2011).

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Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, American Architecture since 1780: A Guide to the Styles (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3D
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 of 6 **Resource name(s) or number** (assigned by recorder) Chatsworth Senior High School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Oat Mountain, CA **Date** 1969 **T** 2N **R** 16W; W ½ **of** SW ¼ **of** Sec 17. S.B.**B.M.**
c. Address 10027 Lurline Avenue City Chatsworth Zip 91311
e. Other Locational Data: APN: # 2741-002-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located on a 37.5-acre site in northwestern San Fernando Valley, Chatsworth Senior High School is bounded by Lemarsh Street on the north, Lurline Avenue on the east, Vintage Street on the south, and De Soto Avenue on the west. The campus core displays the textbook features of the postwar indoor-outdoor school plant, with low (generally one story) classroom wings extending across a large site, and ample outdoor courtyards and landscaping, connected by an extensive system of arcades. Constructed in 1963 in a Mid-Century Modern architectural style, the focal point of the campus is an oval-shaped central lawn, with eight one-story classroom wings radiating outward from the lawn. The central lawn is bisected by a concrete walkway and accented with mature trees and landscaping. An outdoor auditorium, with concrete steps and stage, are located in the lawn's northwestern portion. Anchoring both sides of the lawn are the Administration Building in the southeast portion of the campus and the cafeteria, outdoor dining area, and multipurpose room in the northwest portion. Throughout the core of the campus, landscaped courtyards with walkways, benches, and landscaping line each classroom wing.

The Administration Building consists of a one-story building, rectangular in plan and capped with a low-pitched, front-gabled roof. The building is sheathed in stucco and brick. Windows display a variety of configurations, including fixed lights, transoms, multi-light double-hung sashes, and awning casements. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date) Southeast elevation, 7 November 2013

***P6. Date Constructed/Age and Sources:** ■ Historic ☐ Prehistoric ☐ Both 1963 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila, MHP
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:** 2 January 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none") Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.
Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

*NHRP Status Code 3D

 *Resource Name or #: Chatsworth Senior High School

B1. Historic Name: Chatsworth Senior High School
B2. Common Name: Same
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
*B5. **Architectural Style:** Mid-Century Modern
*B6. **Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, construction was completed on Chatsworth Senior High School in 1963. A majority of the campus's extant buildings, structures, and facilities date from this period. The grounds also include several portable/temporary buildings from the 1940s and 1950s. After construction of the campus (especially during the 1980s and 2000s), additional modular, portable buildings and structures were added, primarily in the campus's southwestern portion. A number of alterations and repairs have taken place over the years, including seismic and systems upgrades, the installation of air-conditioner units, and safety improvements (see *LAUSD Pre-Planning Survey, Chatsworth Senior High School* for list of repairs and improvements carried out since the 1990s). Alterations to original buildings on campus include the infilling of original window openings with air-conditioners or other materials (such as wood paneling); such changes are visible on several classroom wings. The Multipurpose Room and Gymnasium also appear to have had window openings/doors altered or filled in.

*B7. **Moved?** ■No ☐Yes ☐Unknown **Date:**_____ **Original Location:**_____
*B8. **Related Features:** Landscaping/mature trees, hardscaping, benches
B9a. Architect: Unknown b. Builder: Unknown
*B10. **Significance:** **Theme**, Institutional (Educational Facility), "Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1963 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: NRHP: A and C; CRHR: 1 and 3.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Chatsworth Senior High School appears eligible as a district under Criteria A/1 as an excellent, intact example of an indoor-outdoor postwar school in the Los Angeles Unified School District. The campus plan and buildings exemplify LAUSD design principles and ideals from the postwar period (as described in the Los Angeles Unified School District Historic Context Statement, 1870 to 1969). The construction of Chatsworth Senior High School in 1963 also reflects the continuing postwar suburban expansion of the San Fernando Valley. The campus is also eligible under Criteria C/3 as an excellent example of the Mid-Century Modern style applied to institutional architecture.

With plans launched in 1961, Chatsworth Senior High School was designed to accommodate overflow student populations from Canoga Park, Cleveland, and Granada Hills high schools. The school was originally designed to accommodate up to 2,500 students. Although the campus shows some signs of alteration, such as the removal of original hardscaping, windows, and doors, the campus core retains integrity of location, design, setting, workmanship, feeling, and association.

B11. Additional Resource Attributes: HP15. Educational Facility.
HP 29. Landscape Architecture.

*B12. **References:** *(See Continuation Sheet)*

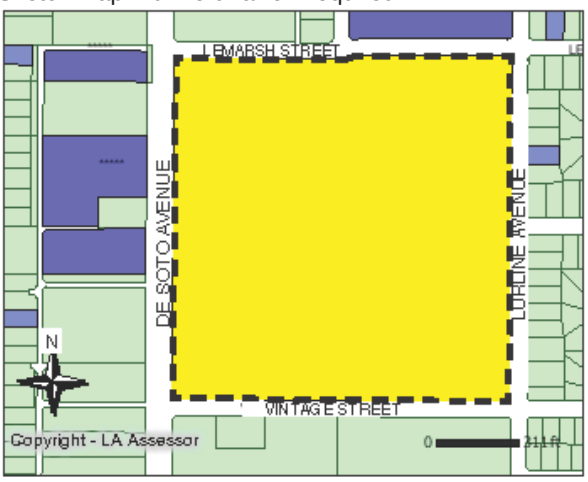
B13. Remarks: None

*B14. **Evaluator:** Debi Howell-Ardila, MHP

*Date of Evaluation: 7 November 2013

(This space reserved for official comments.)

Sketch Map with north arrow required



***Recorded by** Debi Howell-Ardila ***Date:** 2 January 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

Swaths of wide horizontal louvers provide shade along the façade the Administration Building. The campus also displays a generous setback, with the Administration Building fronted by an expansive lawn and several mature trees.

The eight wings of the campus core, which include the main classroom wings and campus library, are largely identical in plan, configuration, and architectural detailing. Classrooms consist of rectangular, one-story buildings capped with low-pitched, front-gabled roofs. Roof lines terminate in thin gable bargeboards. At the ends of the roof gables, eaves extend and turn downward at a 90-degree angle, providing additional shading for the interior. These wings have double-loaded corridors with classrooms along each side. Generous bands of fixed and casement windows line the classroom wings; in a typical fenestration pattern for postwar LAUSD schools, windows occupy approximately 60 percent of the exterior wall height. Sheathing materials used on classroom wings vary; facing the central lawn, primary and secondary elevation walls are sheathed in smooth stucco, with some scoring detailing. The elevation facing the exterior of the campus displays patterned Roman brick sheathing and a cantilevered shelter over the entrance.

The entrances on both sides of the classroom wings feature similar architectural detailing. Flanking the entrances are thin, square piers, sheathed in off-white brick. Entrances consist of sets of metal doors with fixed and side lights, capped with clerestory windows. On all classroom wings, decorative tile work and horizontal vents accent the apexes of the roof gables. On the interior of the campus, the cantilevered roofs over entrances extend to form covered canopies. The concrete-clad canopies are capped with flat roofs and rest on thin, spider-leg supports.

Beyond the campus core, the school includes a music room, gymnasium, playing fields, and a shop building, as well as other ancillary buildings and structures. Alterations include the replacement of some original hardscaping and windows, and the infilling of original window openings with air-conditioner units. The core of the campus is otherwise intact. The original entrance of the gymnasium also appears to have been altered, with original windows and doors filled in on the eastern portion of the façade.

P5b. Photo (continued): (view and date)



Chatsworth Senior High School, Classroom Wing D, northwest (outward facing) elevation.
Source: Sapphos Environmental, Inc., 7 November 2013.

P5b. Photo (continued): (view and date)



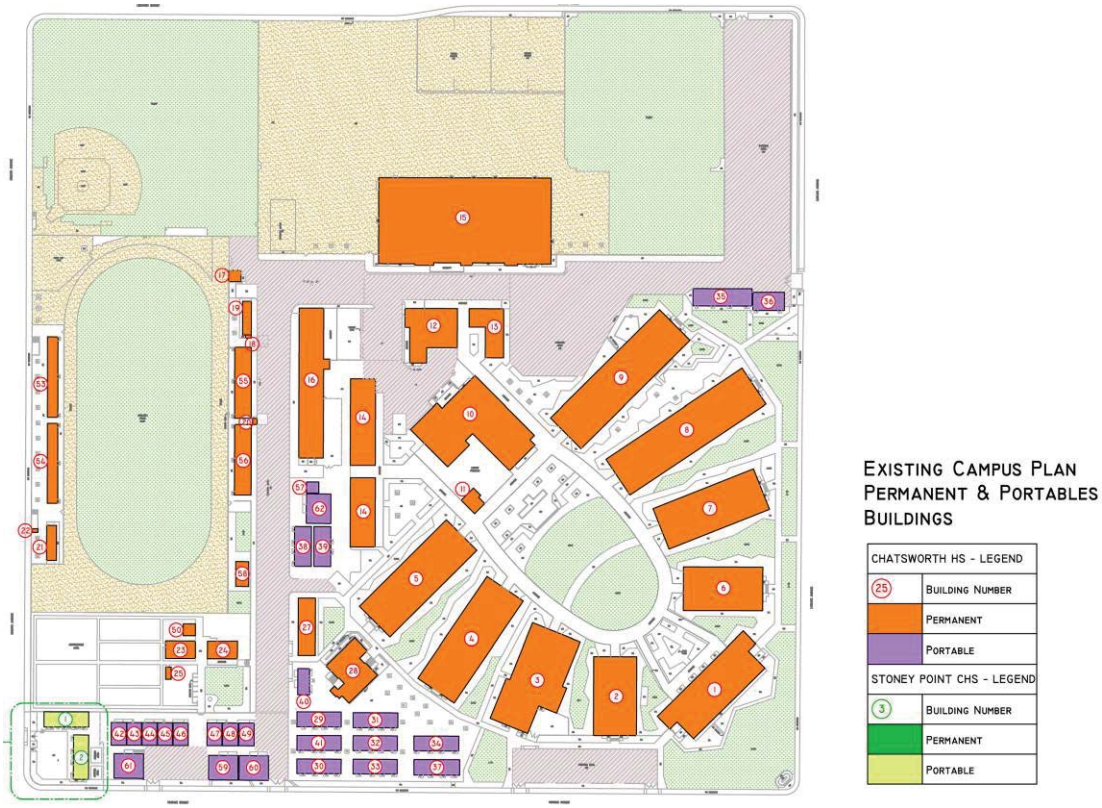
Chatsworth Senior High School, Classroom Building 8, seen from the curved arcade, which forms a network throughout the campus. West perspective. Source: Sapphos Environmental, Inc., 7 November 2013.



Chatsworth Senior High School, oval-shaped lawn and arcade system. Southeast perspective. Source: Sapphos Environmental, Inc., 7 November 2013.

***Recorded by** Debi Howell-Ardila ***Date:** 2 January 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Chatsworth Senior High School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Chatsworth Senior High School, December 2010.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

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"Contracts Awarded for 2 Major Schools." *Los Angeles Times* (3 August 1961).

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Harris, Cyril M., *American Architecture: An Illustrated Encyclopedia* (New York: W.W. Norton & Company, 1998).

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Hille, R. Thomas, *Modern Schools: A Century of Design for Education* (Hoboken, NJ: John Wiley & Sons, 2011), 13.

Lee, Antoinette, and Linda F. McClelland, U.S. Department of the Interior, National Park Service, *National Register Bulletin No. 16B, How to Complete the National Register Multiple Property Documentation Form (1999).*

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McAlester, Virginia, and Lee McAlester, *A Field Guide to American House* (New York: Alfred A. Knopf, 2004).

Mock, Elizabeth, *Built in USA, 1932 – 1944: A Survey of Contemporary American Architecture*, The Museum of Modern Art (New York: Simon & Shuster, 1944).

"New School Will Expect Much from Students, Says Principal." *Los Angeles Times* (23 January 1963).

Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

Sapphos Environmental, Inc., *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* (Pasadena, CA, March 2014).

Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

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U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, American Architecture since 1780: A Guide to the Styles (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3D
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 of 7 **Resource name(s) or number** (assigned by recorder) Cleveland Senior High School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Canoga Park, CA **Date** 1967 **T** 2N **R** 16W; Unsectioned; S.B.**B.M.**
c. Address 8140 Vanalden Avenue City Reseda Zip 91335
e. Other Locational Data: APN: # 2104-004-905

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located in northwest Reseda in the San Fernando Valley, Grover Cleveland Senior High School occupies a 33-acre site bounded by Roscoe Boulevard on the north, the Los Angeles River on the east, Wilbur Avenue on the southeast, Strathern Street on the south, and Vanalden Avenue on the west.

Constructed in 1959/1960 in the Mid-Century Modern style, the campus core displays the textbook features of the postwar indoor-outdoor school plant, with low (generally one story) classroom wings extending across a large site, and with outdoor courtyards and plantings, connected by an extensive network of arcades. The site plan combines the features of a finger-plan and a cluster-plan school, with axial, double-loaded classroom wings grouped around shared courtyard spaces and a large central lawn. The central lawn provides gathering spaces for students and doubles as an outdoor auditorium, with a raised concrete platform along the eastern portion of the lawn. A low wall, characterized by alternating panels of brick cladding and decorative grillwork, fronts the central lawn. The principal entrance to the school is located in the Administration Building, which is located along the northeastern portion of the lot. Classrooms extend outward from the main entrance, in a symmetrical plan linked by arcades. Courtyards and outdoor spaces throughout the campus exhibit mature trees and plantings, built-in concrete benches, planters and hardscaping. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date) Southwest elevation, 6 November 2013

***P6. Date Constructed/Age and Sources:** ■ Historic ☐ Prehistoric ☐ Both 1959/1960 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila and Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:**
29 January 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")

Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.
Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

*NHRP Status Code 3D

 *Resource Name or #: Cleveland Senior High School

B1. Historic Name: Grover Cleveland Senior High School
B2. Common Name: Same
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
*B5. **Architectural Style:** Mid-Century Modern
*B6. **Construction History:** (Construction date, alterations, and date of alterations):

Grover Cleveland Senior High School was constructed in 1959–1960 at an estimated cost of $5 million (*Los Angeles Times*, 22 September 1957). A majority of the campus's extant buildings, structures, and facilities date from this period. The grounds also include a number of portable/temporary buildings, most of which were added during the mid-1980s and early 2000s. A number of alterations and repairs have taken place over the years, including seismic and systems upgrades, the installation of air-conditioning units, and safety improvements (see *LAUSD Pre-Planning Survey, Cleveland Senior High School* for list of repairs and improvements carried out since the 1990s). Alterations to original buildings on campus include the infilling of some original window openings with air-conditioner units; such changes are visible on several of the classroom wings.

*B7. **Moved?** ■No ☐Yes ☐Unknown **Date:**_____ **Original Location:**_____
*B8. **Related Features:** Landscaping/mature trees, hardscaping, benches
B9a. Architect: Charles O. Matcham, Stewart S. Granger and Associates b. Builder: Unknown
*B10. **Significance:** **Theme**, Institutional (Educational Facility), "Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1959-1960 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: NRHP: A and C; CRHR: 1 and 3.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Cleveland Senior High School appears eligible as a district under Criteria A/1 as an excellent, intact example of an indoor-outdoor postwar school in the Los Angeles Unified School District. The campus plan and buildings exemplify LAUSD design principles and ideals from the postwar period, specifically as an example of a finger-plan and cluster-plan school (as described in the *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*). The construction of Cleveland Senior High School in 1959 also reflects the continuing postwar suburban expansion of the San Fernando Valley. The campus is also eligible under Criteria C/3 as an excellent example of the Mid-Century Modern style applied to institutional architecture.

With plans launched in 1957, Cleveland Senior High School was designed to accommodate 3,000 students in the rapidly expanding San Fernando Valley. Although the campus shows some signs of alteration, such as the removal of original hardscaping and windows, the campus core retains integrity of location, design, setting, workmanship, feeling, and association.

B11. Additional Resource Attributes: HP15. Educational Facility. HP 29. Landscape Architecture.

*B12. **References:** *(See Continuation Sheet)*

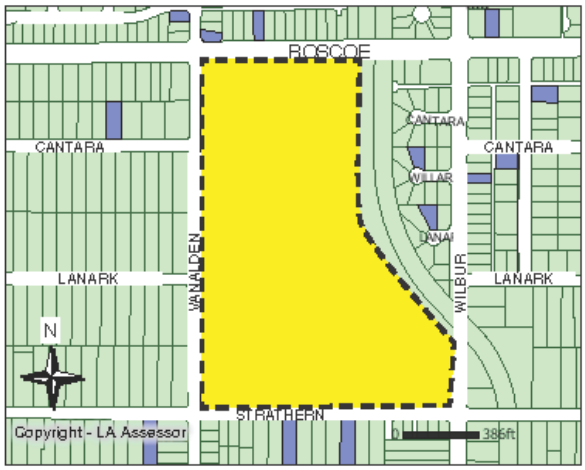
B13. Remarks: None

*B14. **Evaluator:** Debi Howell-Ardila, MHP

***Date of Evaluation:** 7 November 2013

(This space reserved for official comments.)

Sketch Map, with north arrow required



***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 29 January 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

The defining feature of the campus is the Administration Building, which is located along the northeastern portion of the lot. The one-story building is rectangular in plan and capped with a very low-pitched, front-gabled roof. Projecting from the north half of the building, a brick-clad wall separates the entrance from an adjacent parking lot. On the primary (east) elevation, wood-framed, full-height windows face the drop-off area for students and look out onto extensive landscaping, brick planters, and mature trees. Decorative detailing is primarily reserved for the entrance, which is centered beneath the gable and displays Roman-patterned brick and a flat-roofed cantilevered shelter. Horizontal vents mark the gable apex. A recessed courtyard with landscaping is located on the south elevation.

The main entrance is centered on the building and consists of paired metal doors, sheltered by a flat-roof arcade that provides a transition from the exterior to the interior of the school. A wall composed of alternating panels of brick and decorative grillwork separates the entrance arcade from an adjacent parking lot. As on the campus interior, the arcade is characterized by a stucco-clad shelter supported on steel, spider-leg supports (along the central lawn, the arcade is supported on thick, brick-clad piers). The structure is frankly expressed, with exposed steel supports exposed beneath the arcades. In a configuration that also characterizes classroom wings throughout the campus, the gable of the Administration Building displays shallow eaves trimmed with thin bargeboards. Along the side of the building, the roof line ends in medium cantilevered eaves sheathed in stucco. (This roof configuration and detailing are echoed in the classroom wings throughout campus.)

Typical classroom wings follow this pattern, with one-story rectangular buildings, capped with low-pitched front-gabled roofs. Along the length of the classrooms, windows are recessed and generally consist of two-over-two, double-hung wood sashes, grouped in rows that mark the location of the classrooms inside. These window groupings mark the classrooms on the interior and occupy approximately 60 percent of the exterior wall height. A variety of fenestration types and patterns are seen throughout campus, including a number of fixed pane, clerestories, and casements. Sheathing materials include stucco, with some decorative scoring, and patterned Roman brick. *(See Continuation Sheet, p. 4)*

P5b. Photo (continued): (view and date)



Cleveland Senior High School, Administration Building. Southwest perspective.
Source: Sapphos Environmental, Inc., 6 November 2013.

***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 29 January 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

Beyond the campus core, the school includes a library (on the northwestern side of campus), cafeteria and sheltered outdoor dining area, gymnasium and recreational fields (in the southern portion of the lot), as well as a number of facilities and portable buildings/structures, installed primarily in the 1980s. All buildings on campus are one story with the exception of one classroom building, the cafeteria, and gymnasium. Overall, the campus core is in good repair and enhanced by extensive original (and new) landscaping. Visible alterations include some replaced hardscaping and concrete benches in the courtyards, the addition of security grills and air-conditioning units in some of the original window openings.

P5b. Photo (continued): (view and date)



Cleveland Senior High School, typical classroom building. East perspective.
Source: Sapphos Environmental, Inc., 6 November 2013.



Cleveland Senior High School, typical classroom building. Southwest perspective.
Source: Sapphos Environmental, Inc., 6 November 2013.

***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 29 January 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



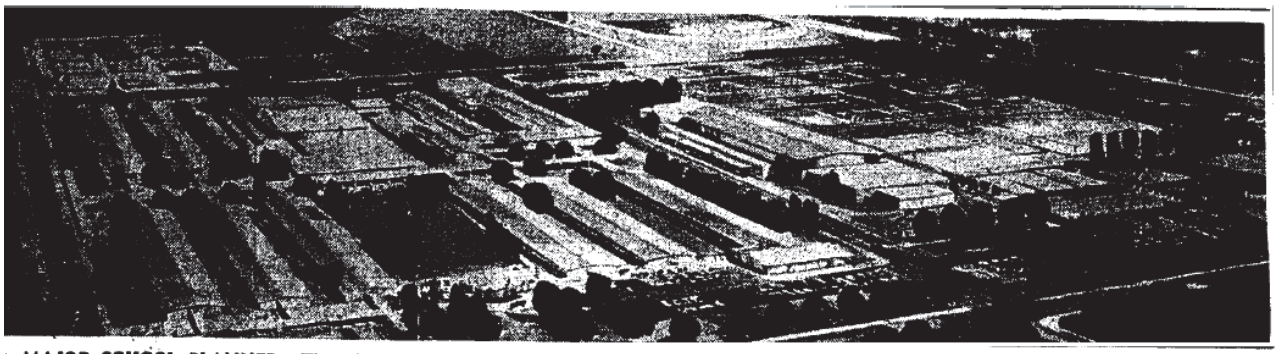
Cleveland Senior High School, typical inter-classroom courtyard and landscaping. Southeast perspective. Source: Sapphos Environmental, Inc., 6 November 2013.



Cleveland Senior High School, typical classroom building. Southwest perspective. Source: Sapphos Environmental, Inc., 6 November 2013.

***Recorded by** Debi Howell-Ardila and Marilyn Novell ***Date:** 29 January 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



MAJOR SCHOOL PLANNED—This drawing indicates design and magnitude of Grover Cleveland Senior High School, $5,000,000 project proposed to be built on Northridge site for accommodation of 3000 students. Plans are by architectural firm of Charles O. Matcham, Stewart S. Granger and Associates. School will be constructed in two phases. Entire completion set September of 1959.

Los Angeles Times, 22 September 1957. Announcement of construction of Grover Cleveland High School, to be constructed as an estimated cost of $5 million, to accommodate 3,000 students. Campus design by Charles O. Matcham, Stewart S. Granger and Associates.



Cleveland Senior High School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Cleveland Senior High School, March 2012.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

California Office of Historic Preservation, *California Register and National Register: A Comparison (for Purposes of Determining Eligibility for the California Register),* Technical Assistance Series No. 6. (Sacramento, CA, 14 March 2006).

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Donovan, John J., *School Architecture: Principles and Practices* (New York: The MacMillan Company, 1921).

Eales, John R., "A Brief, General History of the Los Angeles City School System," Doctoral Dissertation (Los Angeles: University of California, June 1956).

Gebhard, David, and Robert Winter, *A Guide to Architecture in Los Angeles and Southern California* (Santa Barbara, CA: Peregrine Smith, Inc., 1977).

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Heumann & Associates and Anne Doehne, Science Applications International Corporation, March 2002, "Historic Schools of the Los Angeles Unified School District," a presentation prepared for LAUSD Facilities Services Division (March 2002).

Hille, R. Thomas, *Modern Schools: A Century of Design for Education* (Hoboken, NJ: John Wiley & Sons, 2011), 13.

Lee, Antoinette, and Linda F. McClelland, U.S. Department of the Interior, National Park Service, *National Register Bulletin No. 16B, How to Complete the National Register Multiple Property Documentation Form (1999).*

McAlester, Virginia, and Lee McAlester, *A Field Guide to American House* (New York: Alfred A. Knopf, 2004).

Mock, Elizabeth, *Built in USA, 1932 – 1944: A Survey of Contemporary American Architecture*, The Museum of Modern Art (New York: Simon & Shuster, 1944).

"New $5,000,000 High School's Plans Stated." *Los Angeles Times* (September 22, 1957).

Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

Los Angeles Unified School District. *Los Angeles Unified School District Pre-Planning Survey* (2011).

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Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

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U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, *American Architecture since 1780: A Guide to the Styles* (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

 Resource name(s) or number (assigned by recorder) Colfax Avenue Elementary School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Sherman Village, CA **Date** 1972 **T** 2N **R** 16W; Unsectioned; S.B.**B.M.**
c. Address 11724 Addison Street City North Hollywood Zip 91607
e. Other Locational Data: APN: # 2355-013-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located on an 8-acre site in the Valley Village area of the San Fernando Valley, Colfax Avenue Elementary School is bounded by Colfax Avenue on the east, Huston Street on the south, Morella Avenue on the west, and Addison Street on the north. The campus exhibits the textbook features of a postwar, finger-plan school, with axial, one-story classroom wings, one room deep, extending across the site. Indoor-outdoor integration is created through the generous use of windows, which occupy approximately 80 percent of the wall height along eastern elevations, as well as through the incorporation of courtyards adjacent to classroom wings, outdoor gathering and recreational areas, and mature landscaping and trees.

The core of the campus consists of five rectilinear classroom wings, linked on both sides by continuous arcades. The arcades, which form circulation corridors throughout the main campus, display flat-roofed shelters, terminating in broad, unadorned wood fascia. Wood rafters and planks, visible from beneath the sheltered corridors, form the roof structure. Simple metal poles serve as supports for corridors throughout campus. Classroom wings display the differentiated fenestration patterns and roof eave treatment typical of postwar schools from this era (though ordinarily the orientation of the building would have been north-south, with fewer windows on the sunny, south side, and broad expanses of windows on the north side). In this case, the orientation of classroom wings is east-west, with fewer windows/clerestories on the west, and generous expanses of windows on the east. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date) Northwest elevation, 15 January 2014

***P6. Date Constructed/Age and Sources: :** ■ Historic ☐ Prehistoric ☐ Both 1950-1955 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila, MHP
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:** 20 January 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none") Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.
Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

*NHRP Status Code 3CD

 *Resource Name or #: Colfax Avenue Elementary School

B1. Historic Name: Colfax Avenue Elementary School
B2. Common Name: Same
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
*B5. **Architectural Style:** Mid-Century Modern–influenced
*B6. **Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, construction on the core of the campus was completed in 1950/1951. In 1955, a two-story auditorium was added in the northeastern corner of the parcel, at Colfax Avenue and Addison Street. The eastern portion of the campus grounds also includes several portable/temporary buildings from the late 1980s and early 1990s. A number of alterations and repairs have taken place over the years, including seismic and systems upgrades, the installation of air-conditioner units, replacement of original hardscaping, new fencing, and various safety improvements (see *LAUSD Pre-Planning Survey, Colfax Avenue Elementary School* for list of repairs and improvements carried out since the 1990s). In addition, alterations to original classroom wings include the infilling of some clerestory casements and entry glazing, as well as replacement of original windows with air-conditioner units; such changes are visible on several of the classroom wings.

*B7. **Moved?** ■No ☐Yes ☐Unknown **Date:**_____ **Original Location:**_____
*B8. **Related Features:** Landscaping/mature trees, hardscaping, benches
B9a. Architect: Unknown b. Builder: Unknown
*B10. **Significance:** **Theme**, Institutional (Educational Facility),
"Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1950-1955 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: CRHR: 1.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Colfax Avenue Elementary School appears eligible for the California Register of Historical Resources under Criterion 1 as an excellent, intact example of a modern, indoor-outdoor postwar elementary school in Los Angeles. The campus plan and buildings exemplify LAUSD design principles and ideals from the postwar period (as described in *the Los Angeles Unified School District Historic Context Statement, 1870 to 1969*). The construction of Colfax Avenue Elementary School in 1950/1951 also reflects the rapid postwar suburban expansion of the San Fernando Valley.

The campus exhibits some alterations, such as the removal of original hardscaping and windows and the infilling of original clerestory hopper casement windows, which spanned the length of classroom wings on the west elevations. While many of the casements appear to have been painted over or filled in with wood, the original size and configuration of the windows is still visible. Overall, the campus core (which includes the site plan, the relationship of buildings to outdoor spaces, and original plantings) retains integrity of location, design, setting, workmanship, feeling, and association. However, due to alterations, the campus is not eligible for the National Register and is eligible for the California Register only.

B11. Additional Resource Attributes: HP15. Educational Building. HP29. Landscape Architecture.

*B12. **References:** *(See Continuation Sheet)*

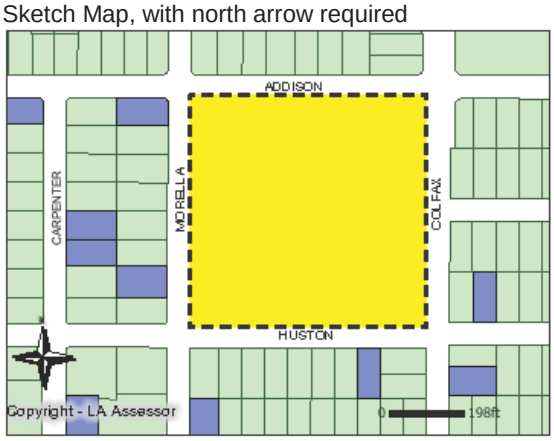
B13. Remarks: None

*B14. **Evaluator:** Debi Howell-Ardila, MHP

*Date of Evaluation: 24 January 2014

(This space reserved for official comments.)

Sketch Map, with north arrow required



Recorded by Debi Howell-Ardila **Date:** 23 January 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

Along the west elevations, classroom windows are sheltered beneath wide cantilevered eaves, with wood beams and planks and broad, unadorned fascia boards. A slightly sloping shed roof caps the classroom buildings, with the slightly higher side located on the east. Clerestory windows appear to have originally spanned the west elevations of the classrooms (they are now filled in). On the east elevation, roof eaves are slightly shallower, also displaying wood beams and fascia boards. The main entrances to classrooms are located on the east elevation and generally consist of original metal doors with single-pane fixed windows. On the east elevations, classrooms are lined with generous expanses of wood-framed windows (which span roughly 80 percent of the wall height, from roof line nearly to the ground). Also on the east elevations of the classrooms are two square built-in mechanical service rooms, which appear to house air-conditioning units. These mechanical service rooms are flush with the roofline and accessed via paired metal doors.

The Administration Building, which serves as the main entrance to the campus, is located on the northeastern portion of the lot, on Addison Street. One story in height, the building is roughly rectangular in shape, with a street-level façade displaying recessed wings and features. The building is capped with a very low-pitched side-gable roof, terminating in shallow eaves with exposed wood beams. Broad, unadorned wood fascia boards terminate the roof line. A projecting, cantilevered shelter marks the entrance to the Administration Building. The entrance shelter has a flat roof with wide eaves and wood fascia boards, which display the school name. The roof line is trimmed with an open wood grid, marking a transitional space from the outside to the inside. The design composition of the façade is simple. The wall plane varies, with portions of the façade featuring wide expanses of wood-framed windows, set flush with the roof eaves, and recessed sheltered with sets of double-hung wood-framed windows, accented with brick planters along the ground. The façade includes a simple ornamental detail of a diamond-patterned metal screen and an angled wood grid serving as a roof support.

The campus exhibits many of the characteristics typical of Mid-Century Modernism. The Administration Building and classroom wings display a horizontal design composition, with very low-pitched or flat roofs and wide, cantilevered overhangs. There is an overall lack of applied ornament; campus buildings consist of simple, geometric volumes, with modular site planning. All classrooms are lined with windows, which appear to be wood-framed, multi-light double-hung sashes. *(See Continuation Sheet, p. 4)*

P5b. Photo (continued): (view and date)



Colfax Avenue Elementary School, Administration Building, view from inside campus. Southwest perspective. Source: Sapphos Environmental, Inc., 21 January 2014.

Recorded by Debi Howell-Ardila **Date:** 23 January 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

Extending southward from the classroom wings and library are an outdoor dining area, capped with a flat roof supported on metal poles, a playground and recreational fields, and other facilities extending through the south portion of the campus. Mature trees appearing to date to the original construction era (early 1950s) are located throughout the campus, in particular in the northern portion. In the northeastern corner of the campus is the two-story auditorium building, constructed in 1955.

Alterations include the infilling of clerestory lights along the west elevations of classrooms, the apparent addition of mechanical sheds along the east elevations, the replacement of original hardscaping , as well as the addition of security gates at the entrance and bars on some of the windows. In addition, since the school's construction, a number of portable structures have been added, primarily in the southeastern portion of campus. The campus is otherwise in good repair, intact, and enhanced through landscaping and mature trees (including a number of old eucalyptus along Addison Street).

P5b. Photo (continued): (view and date)



Colfax Avenue Elementary School, detail, Administration Building. Eaves extend to form an open grid around the entrance wing. Northeast perspective. Source: Sapphos Environmental, Inc., 21 January 2014.

P5b. Photo (continued): (view and date)



Colfax Avenue Elementary School, typical west-elevation classroom wing and mature trees. North perspective. Source: Sapphos Environmental, Inc., 21 January 2014.



Colfax Avenue Elementary School, arcades connect all classrooms along the north and south expanses of campus. East perspective. Source: Sapphos Environmental, Inc., 21 January 2014.

Recorded by Debi Howell-Ardila **Date:** 23 January 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Colfax Avenue Elementary School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Colfax Avenue Elementary

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

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Lee, Antoinette, and Linda F. McClelland, U.S. Department of the Interior, National Park Service, *National Register Bulletin No. 16B, How to Complete the National Register Multiple Property Documentation Form (1999).*

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U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

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Whiffen, Marcus, American Architecture since 1780: A Guide to the Styles (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

 Resource name(s) or number (assigned by recorder) Dodson Middle School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Torrance, CA **Date** 1981 **T** **R** N/A
c. Address 28014 South Montereina Drive City Rancho Palos Verdes Zip 90275
e. Other Locational Data: APN: # 7552-017-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located in Rancho Palos Verdes, south of Los Angeles, Rudecinda Sepulveda Dodson Middle School occupies a 20.7-acre site in a residential neighborhood. The campus is generally bounded by Avenue Aprenda on the north, Avenida Estudiante on the south, Avenida Cuaderno on the east, and South Montereina Drive on the west and south. The school was constructed in 1960, with a number of small relocatable/temporary classroom buildings dating from 1935 through 2002, located on the periphery of campus along the west and north. The site plan displays the features of a postwar finger-plan school, designed in the Mid-Century Modern style. At the core of the campus, the focal point is an outdoor assembly area, courtyard, and lawn, which are framed by a two-story Multipurpose Building and one-story Administration Building. Extending from this student quad is a series of axial, finger-like classroom wings, linked by a sheltered arcade. Sheathed in smooth stucco, classrooms are one-story in height, one room deep, and capped with slightly sloped shed roofs with no overhanging eaves. Along the south elevation of classroom wings, a covered arcade, with a wide, wood plank-and-beam roof and simple pipe supports, provides a sheltered circulation corridor. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date) Administration Building, Southwest perspective, 5 February 2014

***P6. Date Constructed/Age and Sources:**
■ Historic ☐ Prehistoric ☐ Both
1960 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila and Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:** 10 March 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")
Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.

Sapphos Environmental, Inc. May 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NHRP Status Code** 3CD

 ***Resource Name or #:** Dodson Middle School

B1. Historic Name: Rudecinda Sepulveda Dodson Middle School
B2. Common Name: Dodson Middle School
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
***B5. Architectural Style:** Mid-Century Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, the core of the Dodson Middle School campus was constructed in 1960. Nine small portable/temporary buildings at the east and north sides of campus date from 1935 to 2002. A number of alterations and repairs have taken place over the years, including systems upgrades (the *LAUSD Pre-Planning Survey, Dodson Middle School* lists repairs and improvements performed at the school since the 1990s). Visible alterations include the removal of clerestory lights on some classroom wings and in-filling of windows with air conditioning units; expanses of locker storage added to the side elevations of some classroom wings also appear to be nonoriginal.

***B7. Moved?** ■**No** ☐**Yes** ☐**Unknown** **Date:**_____ **Original Location:**_____
***B8. Related Features:** Landscaping/mature trees, hardscaping
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance:** **Theme**, Institutional (Educational Facility),
"Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1960 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: CRHR: 1.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Dodson Middle School appears eligible as a historic district for the California Register of Historical Resources under Criterion 1 as an excellent, intact example of a postwar finger-plan high school. The campus plan and buildings exemplify LAUSD design principles and ideals from the postwar period (as described in the *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*).

The core of the campus is an outstanding example of a postwar, Mid-Century Modern school exhibiting a finger-plan campus design. Due to alterations, the campus is not eligible for listing on the National Register. Overall, the campus core retains historic integrity and continues to convey the reasons for its significance.

B11. Additional Resource Attributes: HP15. Educational Building. HP29. Landscape Architecture.

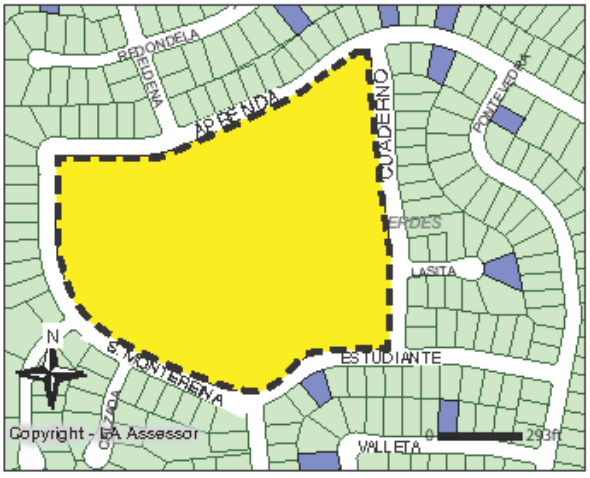
***B12. References:** *(See Continuation Sheet)*

B13. Remarks: None

***B14. Evaluator:** Debi Howell-Ardila, MHP

***Date of Evaluation:** 5 February 2014

Sketch Map, with north arrow required



(This space reserved for official comments.)

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 10 March 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

Lined with mature trees and plantings, the campus entrance is accessed via an open courtyard paved with patterned red brick. To the east is a one-story, stucco-clad administration building and to the west a one-and-a-half-story library, also clad in stucco. Screening the windows on the library's east side is a prominent band of wide, vertical metal louvers set in a rectangular frame. The administration building is capped with a shed roof and no eaves, with the roof edge trimmed with metal. Connecting the two buildings is an entrance portal capped with a flat roof and shallow overhanging eaves. The portal consists of alternating panels of metal screen gates, trimmed with decorative geometric patterning, and rusticated, faux stone.

The brick pavers continue into an entrance courtyard, where a lawn and elevated concrete stage with semicircular steps form a central gathering area. Clad in stucco, the classroom wings are one-story in height and one room deep, capped with slightly sloped shed roofs. South elevations of the classrooms are lined with sheltered arcades consisting of wood plank and beam ceilings, supported on steel pipe supports. Along most north elevations, the roof terminates in no eaves. Sheltering each window grouping on the north elevations are flat, cantilevered eaves. Windows along the north elevations consist primarily of expansive two-light double-hung sash windows. Windows occupy approximately 60 percent to 70 percent of the wall height, providing natural light and views of courtyards with lawns, foundation plantings, and mature trees.

The buildings and structures comprising the campus core are in good repair, and enhanced with mature landscaping and trees. Alterations include the replacement of some original windows as well as apparent removal of original materials/openings along some classroom exteriors to accommodate the addition of nonoriginal lockers. The campus core is otherwise intact.

P5b. Photo (continued): (view and date)



Dodson Middle School, entrance gate, with rusticated, faux stone. Library appears in left portion of photo. Southeast perspective. Source: Sapphos Environmental, Inc., 5 February 2014.

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 10 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Dodson Middle School, Library, viewed from entrance. East perspective. Source: Sapphos Environmental, Inc., 5 February 2014.



Dodson Middle School, Lunch Pavilion and Multi-Purpose Room, view from central courtyard. Southwest perspective. Source: Sapphos Environmental, Inc., 5 February 2014.

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 10 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Dodson Middle School, Lunch Pavilion, view through to central courtyard. Northeast perspective. Source: Sapphos Environmental, Inc., 5 February 2014.



Dodson Middle School, Building 14, showing patios. Northwest perspective. Source: Sapphos Environmental, Inc., 5 February 2014.

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 10 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Dodson Middle School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Dodson Middle School, Ver. 2, July 16, 2011.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

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State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 of 5 **Resource name(s) or number** (assigned by recorder) Fernangeles Elementary School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Van Nuys, CA **Date** 1972 **T** 2N **R** 14W; Unsectioned Area S.B.**B.M.**
c. Address 12001 Art Street City Sun Valley Zip 91352
e. Other Locational Data: APN: # 2631-019-904

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located on a 6.7-acre site in San Fernando Valley immediately north of the Interstate 5 freeway, Fernangeles Elementary School is bounded by Wicks Street on the northwest, Oneida Avenue on the southwest, a residential neighborhood on the northeast, and Art Street on the southeast. The campus core displays many typical features of a cluster- and finger-plan campus, with classrooms grouped around a central courtyard and axial classroom wings. The focal point of the campus from the exterior is the Administration Building and Assembly Building, which create a distinctive, Mid-Century Modern-style entrance to the school at the southwestern portion of the property. The two buildings form an interior courtyard, which is ringed by a grid-like trellis near the entrance and covered arcade, consisting of a wood-plank roof and wood cross beams, resting on simple pole supports. While the campus classrooms display extensive alterations (mostly in the form of the removal and in-filling of original clerestory windows), the two buildings at the campus entrance remain relatively intact and are highly representative of LAUSD's standardized postwar school, both in terms of style and building plan/features. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Administration Building (left) and Assembly Building (right), southwest perspective, 15 January 2014

***P6. Date Constructed/Age and Sources:** ■ Historic ☐ Prehistoric ☐ Both 1954 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila and Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:**
15 January 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")
Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.

Sapphos Environmental, Inc. May 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NHRP Status Code** 3CD

 ***Resource Name or #:** Fernangeles Elementary School

B1. Historic Name: Fernangeles Elementary School
B2. Common Name: Same
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
***B5. Architectural Style:** Mid-Century Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, construction was completed on most of the extant campus of Fernangeles Elementary School in 1954. To accommodate expanding enrollment, over 20 portable buildings have been added to the campus since its construction, with a majority of these located in the northern and eastern portions of the property. As of 2014, portable buildings represent 67 percent of the classroom space on campus, with most added in the 1990s. A number of alterations and repairs have taken place over the years, including systems upgrades and the installation of air-conditioner units (see *LAUSD Pre-Planning Survey, Fernangeles Elementary School* for list of repairs and improvements carried out since the 1990s). The most visible alterations on the exterior include the removal of original windows and in-filling and covering of original window openings with stucco; this includes bands of original clerestory windows lining the west elevations of classroom wings. In other areas, original windows have been replaced with air-conditioning units. The Administration Building and Multipurpose Room also appear to have some in-filled windows.

***B7. Moved?** ■**No** ☐**Yes** ☐**Unknown** **Date:**_____ **Original Location:**_____
***B8. Related Features:** Landscaping/mature trees, hardscaping, benches
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance:** **Theme**, Institutional (Educational Facility),
"Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1954 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: CRHR: 1.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The grouping of the Fernangeles Elementary School Administration Building, Assembly Building, interior courtyard and landscaping features appears eligible for the California Register of Historical Resources as a district under Criterion 1 in the context of institutional architecture/educational facilities in the Los Angeles Unified School District. The Adminstration Building and Assembly Building form a distinctive, Mid-Century Modern–style entrance to the school and represent a recognizable anchor for the neighboring residential community. The finding of eligibility applies to the identified buildings and features, which, while exhibiting some alterations, continue to convey the reasons for their significance. Subsequent survey of contributing and noncontributing features will be necessary to make a detailed determination regarding all contributors and noncontributors to the historic district within the campus grounds.

B11. Additional Resource Attributes: HP15. Educational Facility.

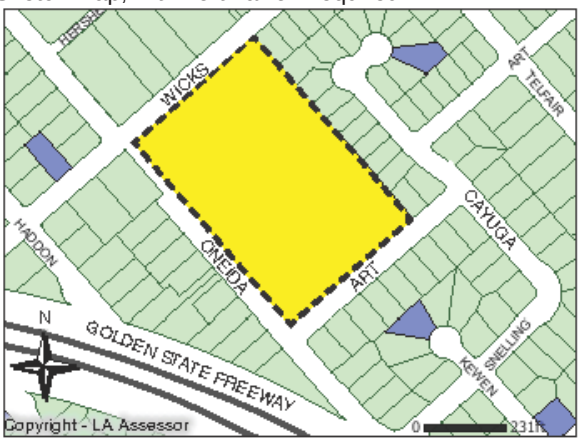
***B12. References:** *(See Continuation Sheet)*

B13. Remarks: None

***B14. Evaluator:** Debi Howell-Ardila, MHP

***Date of Evaluation:** 15 January 2014

Sketch Map, with north arrow required



(This space reserved for official comments.)

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 15 January 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

The Assembly Building and Administration Building are connected by a brick wall and gate capped by a flat-roofed arcade. This gate serves as the entrance to campus; on the interior, it passes beneath a wood-grid trellis and opens onto a courtyard ringed with covered arcades. The approach to the main entrance also displays a series of tiered brick planters with landscaping. Matching stack-bond brick sheathes the south elevation of the Administration Building. Set at a right angle with the Assembly Building, the Administration Building is rectangular in plan, one story in height, and capped with a flat roof and tapered, shallow eaves. Fenestration consists of various configurations and types, and the building is clad in stucco. In a feature typical for Southern Californian Mid-Century Modern architecture, the roof line extends on the northern portion of the Administration Building in a wood-grid trellis, which encloses a tree.

The Assembly Building is roughly two stories in height, rectangular in plan, and clad in smooth stucco. The main portion of the building is capped with a flat roof with no overhanging eaves. Located on the southwest elevation, the main entrance to the Assembly Building consists of a pair of doors elevated on brick steps. The entrance is flanked by thin, stack-bond brick piers, which project from the wall, and two identical bands of recessed multilight windows.

Alterations include the apparent removal and filling-in of windows in variation locations. It also appears that windows have been covered at the upper level of the southwest elevation of the Assembly Building. The buildings are otherwise relatively intact and in fair repair overall.

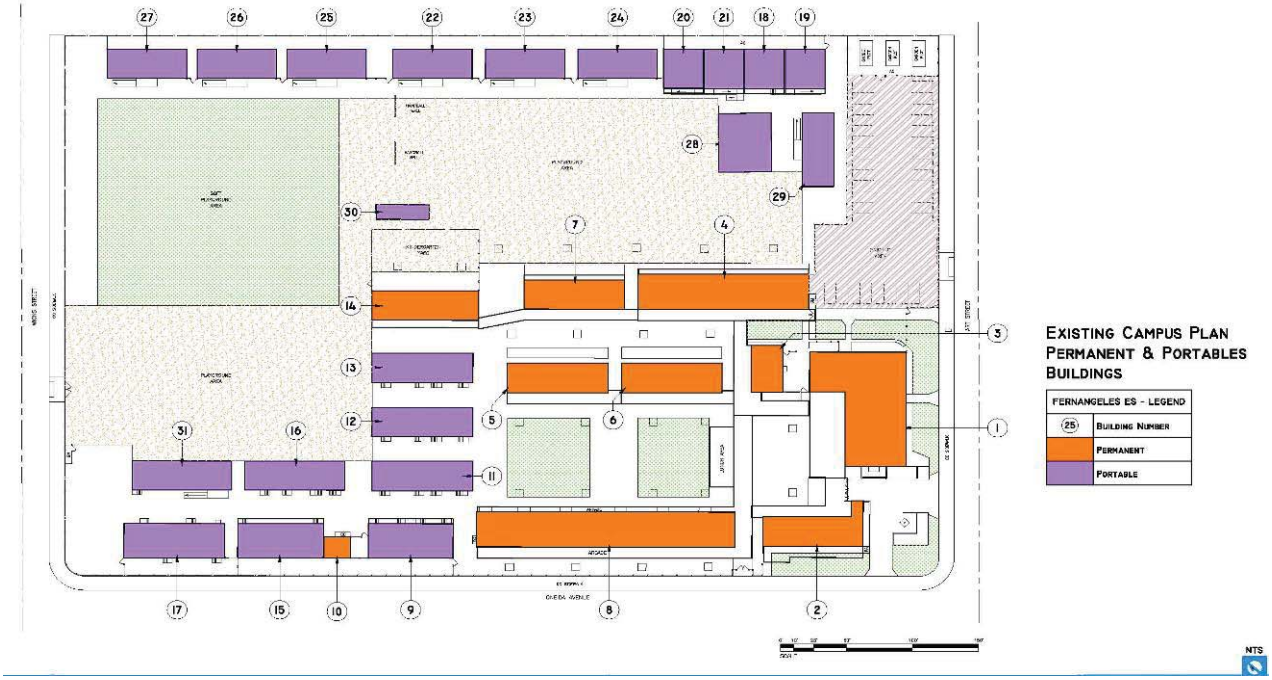
P5b. Photo (continued): (view and date)



Fernangeles Elementary School, Administration Building, view from southeast.
Source: Sapphos Environmental, Inc., 15 January 2014.



Fernangeles Elementary School, entrance trellis, courtyard, and covered dining area. Southern perspective. Source: Sapphos Environmental, Inc., 15 January 2014.



Fernangeles Elementary School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Fernangeles Elementary School, October 11, 2011.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

California Office of Historic Preservation, *California Register and National Register: A Comparison (for Purposes of Determining Eligibility for the California Register),* Technical Assistance Series No. 6. (Sacramento, CA, 14 March 2006).

California Office of Historic Preservation, *Instructions for Recording Historical Resources* (Sacramento, CA, March 1995).

Donovan, John J., *School Architecture: Principles and Practices* (New York: The MacMillan Company, 1921).

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McAlester, Virginia, and Lee McAlester, *A Field Guide to American Houses* (New York: Alfred A. Knopf, 2004).

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Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

Sapphos Environmental, Inc., *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* (Pasadena, CA, March 2014).

Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, *American Architecture since 1780: A Guide to the Styles* (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3D
Other Listings_____
Review Code_____ Reviewer_____ Date_____

 Resource name(s) or number (assigned by recorder) Leapwood Avenue Elementary School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Torrance, CA **Date** 1981 **T** 4S **R** 13W; Unsectioned Area S.B.**B.M.**
c. Address 19302 Leapwood Avenue City Carson Zip 90746
e. Other Locational Data: APN: # 7321-018-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Leapwood Avenue Elementary School is located in a residential neighborhood in the city of Carson, south of Los Angeles. The campus occupies a 7.1-acre site bounded by Brenner Drive to the north, Eddington Drive to the east, East Elsmere Drive to the south, and Leapwood Avenue to the west. Constructed in 1962, the campus core consists of a series of two-story classrooms, assembly building, administration building, and two kindergarten buildings, all oriented around a central lawn and open-air lunch pavilion. A network of sheltered corridors and exterior stairways links the buildings throughout the campus core. Three temporary buildings are located at the eastern portion of the campus.

The campus entrance is set back from Leapwood Avenue by a lawn lined with landscaping and a row of mature trees. Defining the principal entrance are the assembly building to the south and the administration building to the north. Linking the two buildings is a sheltered entrance courtyard, capped with a low-pitched roof with a large, square skylight perforating the center. A concrete planter with landscaping is positioned beneath the skylight. The roof of the entry courtyard mirrors treatment of the arcades on the interior of the campus, with the low-pitched, side-gabled roofs and concrete-block piers. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Assembly and Administration Building, northwest perspective
12 February 2014

***P6. Date Constructed/Age and Sources:**
■ Historic ☐ Prehistoric ☐ Both
1962 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila and Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:** 1 March 2014

***P10. Survey Type:** Intensive-level

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")
Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.

Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NHRP Status Code** 3D

 ***Resource Name or #:** Leapwood Avenue Elementary School

B1. Historic Name: Leapwood Avenue Elementary School
B2. Common Name: Same
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
***B5. Architectural Style:** Mid-Century Modern–influenced
***B6. Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, construction of Leapwood Avenue Elementary School was completed in 1962. The total cost was just over $834,000, which was financed with school bond funds (*Los Angeles Times*, 1961). Three portable/temporary buildings were added at the eastern perimeter of campus in the 1990s. A number of alterations have taken place over the years, including systems upgrades, the removal of windows to accommodate the installation of air-conditioning units, replacement of gutters and downspouts, new fencing, and various other improvements, including the addition of an access ramp at the campus entrance (the *LAUSD Pre-Planning Survey, Leapwood Avenue Elementary School* lists repairs and improvements performed since the 1990s). In addition, security grilles have been added to windows throughout the campus, and storage units have been placed outside some of the classrooms.

***B7. Moved?** ■**No** ☐**Yes** ☐**Unknown** **Date:**_____ **Original Location:**_____
***B8. Related Features:** Landscaping/mature trees
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance:** Theme, Institutional (Educational Facility), "Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1962 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: NRHP: A; CRHR: 1.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The core of the campus of Leapwood Avenue Elementary School appears eligible for the National Register of Historic Places and California Register of Historical Resources under Criteria A/1 as an excellent, intact example of a postwar finger- and cluster-plan school campus in the Los Angeles Unified School District. The campus plan and buildings exemplify LAUSD design principles and ideals (as described in the Los Angeles Unified School District Historic Context Statement, 1870 to 1969). The campus combines one- and two-story massing with a finger- and cluster-plan site design. Overall, the campus core (which includes the site plan, the relationship of buildings to outdoor spaces, and original plantings) retains sufficient integrity to convey its period of significance.

B11. Additional Resource Attributes: HP15. Educational Building. HP29. Landscape Architecture.

***B12. References**: *(See Continuation Sheet)*

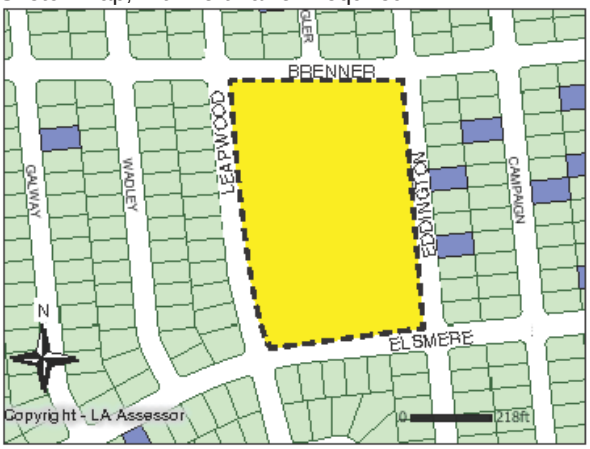
B13. Remarks: None

***B14. Evaluator:** Debi Howell-Ardila, MHP

***Date of Evaluation:** 12 February 2014

(This space reserved for official comments.)

Sketch Map, with north arrow required



Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 10 March 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

Most buildings on campus are clad in stucco and capped with low-pitched, gabled roofs with wide overhanging eaves. The two-story classroom building displays a folded-plate overhang, which shelters the corridor below. The floor of the upper corridor is supported on concrete-clad beams. A railing made of metal mesh panels, with decorative geometric detailing, encloses the second-story corridor and walkway. The corridors of the classroom building are free of vertical roof supports, exhibiting a clean, open look. Arcades capped with flat roofs, supported on steel-pipe supports, provide circulation corridors throughout the campus core.

Throughout campus, fenestration consists of a variety of treatments and configurations. Classrooms are lined with grouped, steel-frame windows, with clerestories lining the top and opaque panels along the bottom. At each side of the window bays are classroom entrances. (These are topped with panels that appear to have originally been transom lights.) Connected to the main classroom building via sheltered corridors is a freestanding restroom facility, adjacent to the campus's central courtyard. The facility is capped with a low-pitched, gabled roof with shallow overhanging eaves. Covered corridors line the facility along three sides. On the north elevation, fenestration consists of a band of multi-light, awning-style casements, with a thin rectangular light fixed pane below. A vent pierces the gable. Located south of central courtyard is a freestanding lunch pavilion. Octagonal in form, the roof is supported by a central concrete block pylon, with thin concrete block piers supporting each point of the roof eaves.

In terms of design, the campus exhibits characteristics typical of 1960's Mid-Century Modernism. Although the main classroom building is two stories, its broad overhanging eaves, ample fenestration, and flat roof give the building a strong horizontality. The campus buildings exhibit simple orthogonal massing with minimal ornament and a strong site plan that clusters a variety of building types around a unifying courtyard. With generous use of windows and exterior corridors and access to courtyards and mature landscaped areas, the campus exhibits a high degree of indoor-outdoor integration. The buildings and structures comprising the campus core are in good repair, with minimal alterations.

P5b. Photo (continued): (view and date)



Leapwood Avenue Elementary School, Classroom Building 5, view from inside campus. Southwest perspective. Source: Sapphos Environmental, Inc.,12 February 2014.

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 10 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Leapwood Avenue Elementary School, Classroom building showing wide overhang with folded plate. Source: Sapphos Environmental, Inc., 12 February 2014.



Leapwood Avenue Elementary School, octagonal lunch pavilion. East perspective. Source: Sapphos Environmental, Inc., 12 February 2014.

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 10 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Leapwood Avenue Elementary School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Leapwood Avenue Elementary School, December 16, 2010.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

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Donovan, John J., *School Architecture: Principles and Practices* (New York: The MacMillan Company, 1921).

"Double-Decking." *Los Angeles Times,* 5 November 1961.

Eales, John R., "A Brief, General History of the Los Angeles City School System," Doctoral Dissertation (Los Angeles: University of California, June 1956).

Gebhard, David, and Robert Winter, *A Guide to Architecture in Los Angeles and Southern California* (Santa Barbara, CA: Peregrine Smith, Inc., 1977).

Harris, Cyril M., *American Architecture: An Illustrated Encyclopedia* (New York: W.W. Norton & Company, 1998).

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Hille, R. Thomas, *Modern Schools: A Century of Design for Education* (Hoboken, NJ: John Wiley & Sons, 2011), 13.

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Mock, Elizabeth, *Built in USA, 1932 – 1944: A Survey of Contemporary American Architecture*, The Museum of Modern Art (New York: Simon & Shuster, 1944).

Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

Los Angeles Unified School District. *Los Angeles Unified School District Pre-Planning Survey* (2011).

Sapphos Environmental, Inc., *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* (Pasadena, CA, March 2014).

Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, *American Architecture since 1780: A Guide to the Styles* (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 of 5 **Resource name(s) or number** (assigned by recorder) Narbonne Senior High School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Torrance, CA **Date** 1981 **T** 4S **R** 14W; Unsectioned; S.B.**B.M.**
c. Address 24300 South Western Avenue City Harbor City Zip 90710
e. Other Locational Data: APN: # 7439-015-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located on a 37.5-acre site in a residential neighborhood in the Harbor City area, Narbonne Senior High School is bounded by 242nd Street on the north, 247th Street on the south, President Avenue on the east, and South Western Avenue on the west. The spiral-shaped site plan exhibits an innovative adaptation of the finger-plan school, with classroom wings radiating outward, in a spoke-like arrangement. At the center of spiral plan is a curved arcade, capped with a flat-roof with a coffered concrete ceiling and oversized steel-pole supports. This arcade system provides circulation corridors throughout the campus core. Located in the center of the circular arcade is a circular central open lawn, with a raised concrete stage and outdoor seating area. Classroom wings are generally rectangular in plan, one story in height, and primarily double-loaded, with two rows of classrooms on each side and a central hallway. The design of the classroom wings emphasizes the horizontal axis through the use of flat roofs ending in wide cantilevered roof eaves. Generous expanses of steel-frame, multi-light windows face onto landscaped courtyards between the buildings. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Auditorium, West perspective
4 February 2014

***P6. Date Constructed/Age and Sources:** ■ Historic ☐ Prehistoric ☐ Both 1955–1960 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila and Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:** 4 February 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")
Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.

Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NHRP Status Code** 3CD

B1. Historic Name: Nathaniel A. Narbonne Senior High School
B2. Common Name: Same
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
***B5. Architectural Style:** Mid-Century Modern-influenced
***B6. Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, the core of the Narbonne Senior High School campus was constructed in phases between 1955 and 1960. (Contemporaneous accounts in the *Los Angeles Times* also track the development history of the site; see "Unique School Design Planned for Lomita Site," *Los Angeles Times*, 1954; "Work Started on Large New School Portion," *Los Angeles Times*, 1955). In addition, numerous small portable/relocatable buildings dating from 1950 to 2002 are located throughout the campus. A number of alterations and repairs have taken place over the years, including systems and seismic upgrades (including the apparent incorporation of concrete support beams beneath cantilevered roof eaves on some of the classroom wings) and the removal of windows to accommodate the installation of air-conditioning units (see *LAUSD Pre-Planning Survey, Narbonne High School,* for a list of repairs and improvements performed since the 1990s). Other visible alterations include the filling-in of numerous transom windows over classroom entrances.

***B7. Moved?** ■**No** ☐**Yes** ☐**Unknown** **Date:**_____ **Original Location:**_____
***B8. Related Features:** Landscaping/mature trees
B9a. Architect: Daniel, Mann, Johnson & Mendenhall b. Builder: Morley Building Co.
***B10. Significance: Theme**, Institutional (Educational Facility),
"Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1955-1960 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: CRHR: 1.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Narbonne Senior High School appears eligible for the California Register of Historical Resources under Criterion 1 as an excellent, intact example of an innovative finger-plan school campus. The spiral campus plan represents a creative interpretation of LAUSD design principles and ideals from the postwar period (as described in the Los Angeles Unified School District Historic Context Statement, 1870 to 1969). Designed and engineered by architects Daniel, Mann, Johnson & Mendenhall, classroom wings and buildings extend outward in a spoke-like pattern from a central hub, a concept that the designers intended would reduce cross-campus travel distances and maximize available lot acreage. The plan was said to be a variation on the older finger plan, which included a long central corridor; in the spiral plan, the corridor is curved around a central open court ("Work Started on Large New School Portion," *Los Angeles Times*, 1955). Overall, the campus core retains sufficient integrity to convey the reasons for its significance. Due to alterations, the historic district does not appear eligible for listing on the National Register.

B11. Additional Resource Attributes: HP15. Educational Building. HP29. Landscape Architecture.

***B12. References:** *(See Continuation Sheet)*

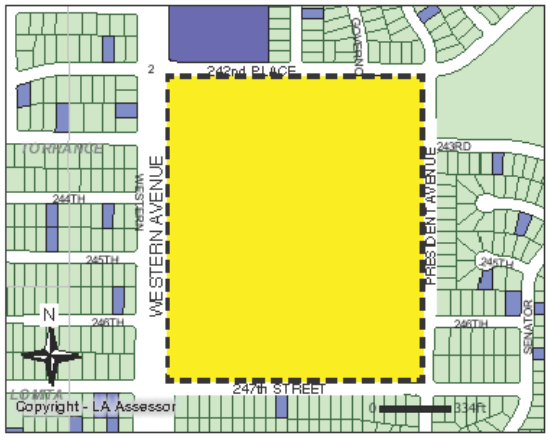
B13. Remarks: None

***B14. Evaluator:** Debi Howell-Ardila, MHP

***Date of Evaluation:** 4 February 2014

(This space reserved for official comments.)

Sketch Map with north arrow required



Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 4 February 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

Additional facilities on campus include an auditorium, a multi-purpose building, and two gymnasiums. All of the campus buildings are clad in smooth stucco. At the vehicle drop-off entrance to the campus, a semi-circular driveway is defined by low brick planters and is flush with a concrete walkway beneath a flat-roofed arcade.

P5b. Photo (continued): (view and date)



Narbonne High School, Administration Building. North perspective. Source: Sapphos Environmental, Inc., 4 February 2014.



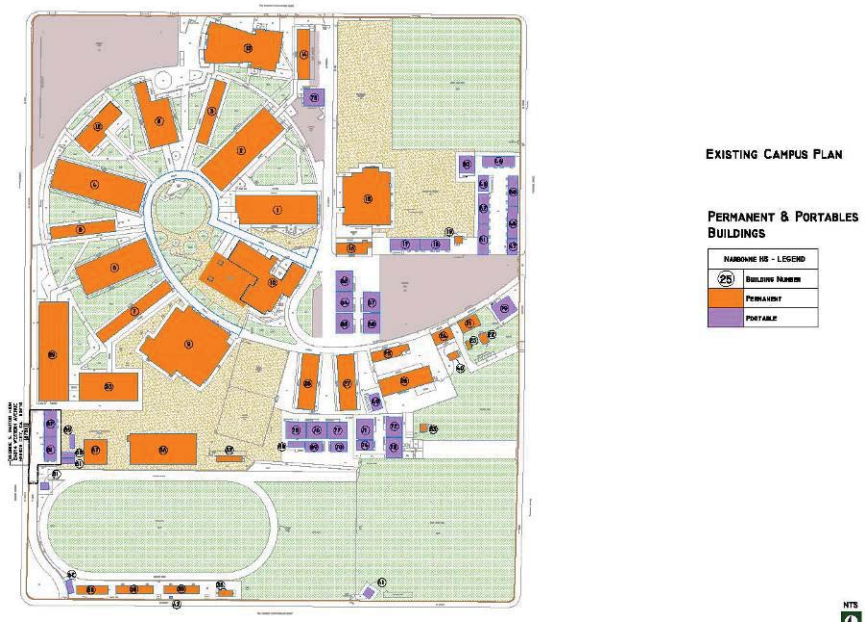
Narbonne High School, Arcade, South perspective. Source: Sapphos Environmental, Inc., 4 February 2014.

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 4 February 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Narbonne High School, Central lawn. South perspective. Source: Sapphos Environmental, Inc., 4 February 2014.



Narbonne High School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Narbonne High School, Ver. 5, March 15, 2012.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

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Eales, John R., "A Brief, General History of the Los Angeles City School System," Doctoral Dissertation (Los Angeles: University of California, June 1956).

Gebhard, David, and Robert Winter, *A Guide to Architecture in Los Angeles and Southern California* (Santa Barbara, CA: Peregrine Smith, Inc., 1977).

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Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

"Pupils Go in Circles in 'Spiraled' School," *Los Angeles Times,* May 11, 1958.

Los Angeles Unified School District. *Los Angeles Unified School District Pre-Planning Survey* (2011).

Sapphos Environmental, Inc., *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* (Pasadena, CA, March 2014).

Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

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State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 **of** 5 **Resource name(s) or number** (assigned by recorder) Pacoima Middle School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** San Fernando and Van Nuys, CA **Date** 1988 and 1972 **T** 2N **R** 15W; Unsectioned, S.B.**B.M.**
c. Address 9919 Laurel Canyon Boulevard City Pacoima Zip 91331
e. Other Locational Data: APN: # 7552-017-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located in San Fernando Valley in the community of Pacoima, the Pacoima Middle School occupies a 23.7-acre site bounded by Laurel Canyon Boulevard on the northeast, Kagel Canyon Street on the southeast, Cranford Avenue on the southwest, and Terra Bella Street on the northwest. Interstate 5 (Golden State Freeway) runs immediately adjacent to Cranford Avenue. The spoke-like site plan and general design and configuration of the classrooms display the typical features of LAUSD's standardized finger-plan school from the postwar era. Classroom buildings extend outward from the main entrance and courtyard, which include the Administration Building and Library at the eastern corner of the campus. Designed in a Mid-Century Modern-influenced style, classroom wings are one-story, single-loaded, stucco-clad rectangular buildings capped with slightly sloping shed rooms. Classroom entrances open off flat-roofed arcades, and a wall of windows defines each classroom on the opposite side. Covered arcades with steel pipe supports and flat roofs provide circulation throughout the campus. A central quad and the open areas between the classroom buildings are planted with lawns and mature trees. Typical of the postwar LAUSD high school campus, a two-story gymnasium is sited outside the campus core, near recreation areas. The auditorium and the cafeteria are also set apart from the classroom buildings on the edge of campus. Alterations include a number of removed and/or in-filled or stuccoed windows, including bands of clerestory lights. In fair repair, the campus core retains sufficient integrity to convey its period of significance.

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Entrance, east perspective
13 March 2014

***P6. Date Constructed/Age and Sources:**
■ Historic ☐ Prehistoric ☐ Both
1955 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila and Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:** 27 March 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")

Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA. Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NHRP Status Code** 3CD

 ***Resource Name or #:** Pacoima Middle School

B1. Historic Name: Pacoima Junior High School
B2. Common Name: Pacoima Middle School
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
***B5. Architectural Style:** Mid-Century Modern-influenced
***B6. Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, the core of the Pacoima Middle School campus was constructed in 1955. Nine small portable/temporary buildings at the east and north sides of campus date from 1935 to 2002. A number of alterations and repairs have taken place over the years, including seismic and systems upgrades (the *LAUSD Pre-Planning Survey, Pacoima Middle School* lists repairs and improvements performed at the school since the 1990s). Other alterations include the removal of clerestory lights on some classroom wings and in-filling of windows with air-conditioning units.

***B7. Moved?** ■**No** ☐**Yes** ☐**Unknown** **Date:**_____ **Original Location:**_____
***B8. Related Features:** Landscaping/mature trees, hardscaping
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance:** **Theme**, Institutional (Educational Facility),
"Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1955 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: CRHR: 1.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Pacoima Middle School appears eligible as a historic district for the California Register of Historical Resources under Criterion 1 as an outstanding example of the standardized indoor-outdoor postwar school. Considered in the context of institutional architecture/educational facilities in Los Angeles, the campus plan and buildings exemplify LAUSD design principles and ideals from the period (as described in the *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*). A number of alterations, including many filled-in or stuccoed clerestories, appear to have compromised the integrity of some classroom wings. Because of these alterations, the campus is not eligible for listing on the National Register. Overall, the campus core (which includes the site plan, the relationship of buildings to outdoor spaces, and original plantings) retains sufficient integrity to convey the reasons for its significance. Of historic note was Pacoima Middle School's role as the site of a 1957 plane crash in which seven students were killed and 74 other people injured when a transport plane collided with a jet over the school yard ("7 Killed, 74 Hurt in School Air Crash" 1957).

B11. Additional Resource Attributes: HP15. Educational Building.

***B12. References:** *(See Continuation Sheet)*

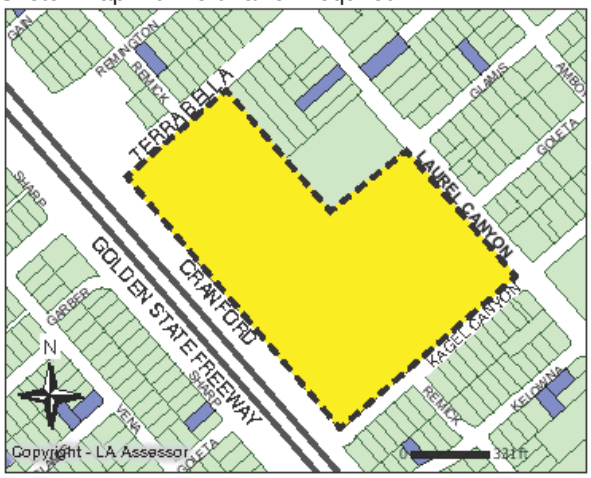
B13. Remarks: None

***B14. Evaluator:** Debi Howell-Ardila, MHP, and Marilyn Novell

***Date of Evaluation:** 27 March 2014

(This space reserved for official comments.)

Sketch Map with north arrow required



Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 27 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Pacoima Middle School, Central quad. Source: Sapphos Environmental, Inc., 13 March 2014.



Pacoima Middle School, Typical classroom building. Source: Sapphos Environmental, Inc., 13 March 2014.

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 27 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Pacoima Middle School, Windows on typical classroom building. Source: Sapphos Environmental, Inc., 13 March 2014.



Pacoima Middle School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Pacoima Middle School, July 2010.

***B12. References (continued):**

"7 Killed, 74 Hurt in School Air Crash," *Los Angeles Times,* February 1, 1957.

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

"Boy's Suit for Damages in Air Tragedy Settled," *Los Angeles Times,* June 10, 1959.

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"Crash Hero: Teacher's Act Saves Boy's Life," *Los Angeles Times,* February 1, 1957.

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Eales, John R., "A Brief, General History of the Los Angeles City School System," Doctoral Dissertation (Los Angeles: University of California, June 1956).

Gebhard, David, and Robert Winter, *A Guide to Architecture in Los Angeles and Southern California* (Santa Barbara, CA: Peregrine Smith, Inc., 1977).

"Flash! An Integration Program That Works," *Los Angeles Times,* January 24, 1978.

Harris, Cyril M., *American Architecture: An Illustrated Encyclopedia* (New York: W.W. Norton & Company, 1998).

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Hille, R. Thomas, *Modern Schools: A Century of Design for Education* (Hoboken, NJ: John Wiley & Sons, 2011), 13.

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Mock, Elizabeth, *Built in USA, 1932 – 1944: A Survey of Contemporary American Architecture*, The Museum of Modern Art (New York: Simon & Shuster, 1944).

Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

"Pacoimans Will Mark Air Tragedy," *Los Angeles Times,* January 26, 1958.

Los Angeles Unified School District. *Los Angeles Unified School District Pre-Planning Survey* (2011).

Sapphos Environmental, Inc., *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* (Pasadena, CA, March 2014).

"Saw at Fall: Students Hurt by Debris Tell of Tragedy," *Los Angeles Times,* February 1, 1957.

Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, *American Architecture since 1780: A Guide to the Styles* (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3D
Other Listings_____
Review Code_____ Reviewer_____ Date_____

 Resource name(s) or number (assigned by recorder) Palisades Charter Senior High School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Topanga, CA **Date** 1981 **T** 1S **R** 16W; Unsectioned Area, S.B.**B.M.**
c. Address 14777 Bowdoin Street City Pacific Palisades Zip 90272
e. Other Locational Data: APN: # 4413-021-905

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located on a 30.8-acre hillside site in Pacific Palisades, Palisades Charter Senior High School is bounded by Sunset Boulevard (north), Temescal Canyon Road (east), El Medio Avenue (west), and Bowdoin Street, which transects the campus. The two halves of campus are linked with pedestrian tunnels running beneath Bowdoin Street. Constructed in 1961 in an expressionist, Mid-Century Modern style, Palisades Charter Senior High School displays the textbook characteristics of a postwar indoor-outdoor high school campus. The heart of the campus consists of an expansive central lawn and gathering area, around which classrooms, an outdoor dining area, and other facilities are oriented. The central lawn includes mature trees, landscaping, benches, and an elevated stage. Classroom wings are generally two stories in height, rectangular in plan, and unified beneath a continuous folded-plate roof. Wall expanses are clad in patterned brick, with exposed stucco piers providing decorative accents. Broad, sheltered walkways fronted by simple metal grills and diagonal structural supports line upper stories of classrooms. Providing circulation corridors throughout campus is a network of sheltered arcades, which consist of steel I-beam roofs resting on simple, steel posts. To the east of the central lawn is an outdoor dining area, sheltered beneath a stylized zig-zag roof resting on simple pipe supports. South of Bowdoin Street, recreational facilities include a track, football stadium, and various recreational facilities and ancillary structures. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Southeast elevation
23 January 2014

***P6. Date Constructed/Age and Sources:** ■ Historic ☐ Prehistoric ☐ Both 1961 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Debi Howell-Ardila and Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:**
3 February 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")
Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.
Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

*NHRP Status Code 3D

 *Resource Name or #: Palisades Charter Senior High School

B1. Historic Name: Palisades Charter Senior High School
B2. Common Name: Pacific Palisades Senior High School
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
*B5. **Architectural Style:** Mid-Century Modern/Expressionistic
*B6. **Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, construction was completed on Palisades Charter Senior High School in 1961. A majority of the campus's extant buildings, structures, and facilities date from this period. The grounds also include several portable/temporary buildings, most of which were installed in the 1990s (and located primarily in the northern portion of campus and near the football stadium). A number of minor alterations have taken place over the years, including seismic and systems upgrades, safety and security improvements (see *LAUSD Pre-Planning Survey, Palisades Charter Senior High School* for list of repairs and improvements carried out since the 1990s). Alterations to original buildings on campus include the addition of X-shaped cross-bracing on outdoor walkways, the addition of security grills on some windows, and the in-filling/replacement of some original windows. The campus is otherwise highly intact and in good repair.

*B7. **Moved?** ■No ☐Yes ☐Unknown **Date:**_____ **Original Location:**_____
*B8. **Related Features:** Landscaping/mature trees, hardscaping, benches
B9a. Architect: Adrian Wilson and Associates b. Builder: Unknown
*B10. **Significance:** **Theme**, Institutional (Educational Facility),
"Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1961 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: NRHP: A and C; CRHR: 1 and 3.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Palisades Charter Senior High School appears eligible for the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) as a district under Criteria A/1 as an excellent, intact example of a postwar indoor-outdoor educational facility in Los Angeles. The campus plan and buildings exemplify the design principles and ideals of the Los Angeles Unified School District from the postwar period (as described in the *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*). The campus core also appears eligible for the NRHP and CRHR as a district under Criteria C/3 as an excellent example of the Mid-Century Modern style (Expressionist subtype) applied to institutional architecture.
(See Continuation Sheet)

B11. Additional Resource Attributes: HP15. Educational Facility. HP 29. Landscape Architecture.

*B12. **References:** *(See Continuation Sheet)*

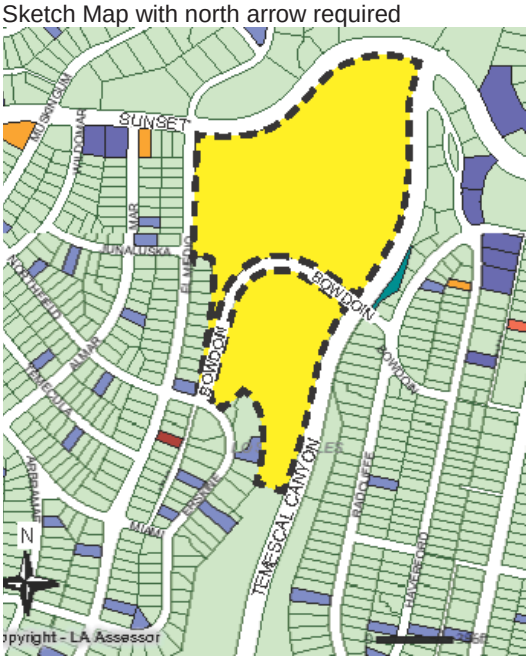
B13. Remarks: None

*B14. **Evaluator:** Debi Howell-Ardila, MHP

*Date of Evaluation: 4 February 2014

(This space reserved for official comments.)

Sketch Map with north arrow required



Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 4 February 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

The principal entrance to campus is located on Bowdoin Street, with the main entry flanked by the Administration Building on the west and the Assembly Room/Cafeteria on the east. Arcades extend to the sidewalk and lead into the main campus. Architectural details on these signature buildings are reflected throughout the campus. Features include exterior walls clad in brick and stucco, sheltered beneath cantilevered overhanging eaves. Marking the centered entrance bays are a set of floor-to-ceiling stucco-clad piers. Formed by gaps in the brick cladding, these full-height piers provide visual interest on the exterior walls, which consist of broad expanses of brick sheathing. Continuous bands of metal sunshades line the southern elevation of the Administration Building. A variety of fenestration patterns are seen throughout campus, including steel-framed casements, fixed panes, clerestories, and transoms. Exterior walls of classrooms have built-in lockers. Throughout the core of the campus, landscaped courtyards with walkways, benches, and greenery provide outdoor spaces for gathering.

School facilities include a shop building, outdoor pool, parking areas, portable buildings and structures, added primarily in the 1990s, as well as other ancillary buildings and structures. Alterations include various safety and systems upgrades, the installation of security grills on some windows, and the in-filling of some windows. The core of the campus is otherwise highly intact and in good repair.

***B10. Significance (continued):**

With its "ultra-modern" design and $6-million cost, Palisades Senior High School was said to be the "most expensive and most architecturally distinctive plant in the Los Angeles city schools system" when it was built in 1961 ("Palisades High School Readied for Occupancy," *Los Angeles Times*, 1961). Due to its location—in a constricted valley, nestled in the hillsides of Pacific Palisades—the campus required $1-million of earth-moving activities to prepare the site. Los Angeles firm Adrian Wilson and Associates, responsible for design and engineering specifications, envisioned the school as a series of classroom wings focused on a central quadrangle, in a compact but open campus plan accommodating up to 3,000 students ("Record Earth-Moving Job at School Site Told" 1961). The campus core exhibits few signs of alteration and retains a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association.

P5b. Photo (continued): (view and date)



Palisades Charter Senior High School, entrance arcade and courtyard.
Southeastern perspective. Source: Sapphos Environmental, Inc., 23 January 2014.

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 4 February 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Palisades Charter Senior High School, outdoor dining area with zig-zag roof canopy. Southwest perspective. Source: Sapphos Environmental, Inc., 23 January 2014.



Palisades Charter Senior High School, typical classroom and courtyard. Southwestern perspective. Source: Sapphos Environmental, Inc., 23 January 2014.

P5b. Photo (continued): (view and date)



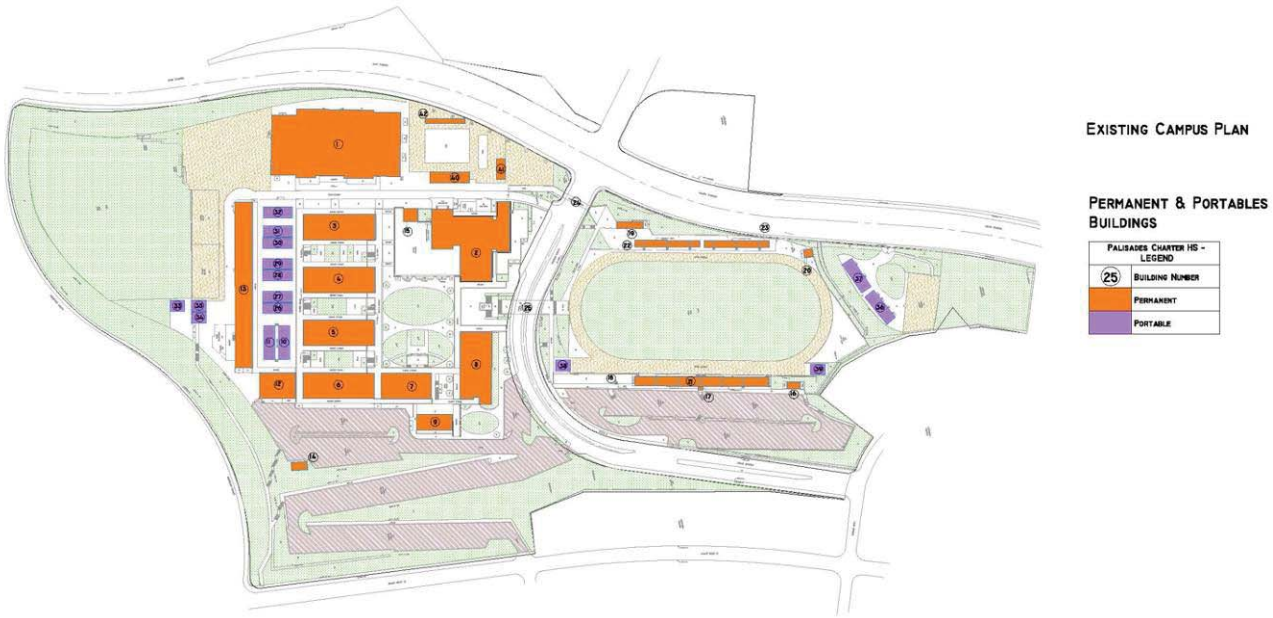
Palisades Charter Senior High School under construction, as of circa 1961. Source: J. Paul Getty Trust, Getty Research Institute, Julius Shulman Photography Archive, # gri_2004_r_10_b271_f18_001.



Palisades Charter Senior High School, as of circa 1961. Source: J. Paul Getty Trust, Getty Research Institute, Julius Shulman Photography Archive, # gri_2004_r_10_b278_f03_007.

Recorded by Debi Howell-Ardila and Marilyn Novell **Date:** 4 February 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Palisades Senior High School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Palisades Charter Senior High School, March 2012.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

California Office of Historic Preservation, *California Register and National Register: A Comparison (for Purposes of Determining Eligibility for the California Register),* Technical Assistance Series No. 6. (Sacramento, CA, 14 March 2006).

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Donovan, John J., *School Architecture: Principles and Practices* (New York: The MacMillan Company, 1921).

Eales, John R., "A Brief, General History of the Los Angeles City School System," Doctoral Dissertation (Los Angeles: University of California, June 1956).

Gebhard, David, and Robert Winter, *A Guide to Architecture in Los Angeles and Southern California* (Santa Barbara, CA: Peregrine Smith, Inc., 1977).

Harris, Cyril M., *American Architecture: An Illustrated Encyclopedia* (New York: W.W. Norton & Company, 1998).

Heumann & Associates and Anne Doehne, Science Applications International Corporation, March 2002, "Historic Schools of the Los Angeles Unified School District," a presentation prepared for LAUSD Facilities Services Division (March 2002).

Hille, R. Thomas, *Modern Schools: A Century of Design for Education* (Hoboken, NJ: John Wiley & Sons, 2011), 13.

Lee, Antoinette, and Linda F. McClelland, U.S. Department of the Interior, National Park Service, *National Register Bulletin No. 16B, How to Complete the National Register Multiple Property Documentation Form (1999).*

McAlester, Virginia, and Lee McAlester, *A Field Guide to American House* (New York: Alfred A. Knopf, 2004).

Mock, Elizabeth, *Built in USA, 1932 – 1944: A Survey of Contemporary American Architecture*, The Museum of Modern Art (New York: Simon & Shuster, 1944).

Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

"Palisades School Readied for Occupancy," *Los Angeles Times,* September 3, 1961.

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Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

"School Dedication Set for Saturday," *Los Angeles Times,* November 5, 1961.

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, American Architecture since 1780: A Guide to the Styles (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 **of** 7 **Resource name(s) or number** (assigned by recorder) Parmelee Elementary School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Inglewood, CA **Date** 1981 **T** 2S **R** 13W; SE ¼ **of** NW ¼ **of Sec** 28, S.B.**B.M.**
c. Address 1338 E. 76th Place City Los Angeles Zip 90001
e. Other Locational Data: APN: # 6024-022-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Parmelee Elementary School is located in a residential area of the Florence-Graham neighborhood in the City of Los Angeles. The campus occupies a 6.3-acre site bounded by East 76th Place to the north, East 77th Place to the south, Parmelee Avenue to the east, and Hooper Avenue to the west. The school consists of three two-story classroom buildings and three two-story utility buildings, in addition to a one-story administration building and two kindergarten buildings, all constructed in 1962. An Assembly Building and associated lunch pavilion were added in 1964, and nine temporary/portable buildings were added between 1960 and 2005 to the east and south of the campus core. All permanent buildings on the campus core are linked by sheltered corridors and wide overhanging eaves.

Parmlee Elementary School exhibits the typical features of a finger- and cluster-plan school. With generous use of windows and exterior corridors and access to courtyards and mature landscaped areas, the campus displays the indoor-outdoor connection typical of this school typology. The use of exposed cast-concrete structural elements and sculptural forms is associated with the style as it transitioned to the 1960s. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Assembly Building, northeast perspective
21 February 2014

***P6. Date Constructed/Age and Sources:**
■ Historic ☐ Prehistoric ☐ Both
1962, 1964, 1965 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:** 21 February 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none") Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.

Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

*NHRP Status Code 3CD

 *Resource Name or #: Parmelee Elementary School

B1. Historic Name: Parmelee Elementary School
B2. Common Name: Same
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
*B5. **Architectural Style:** Mid-Century Modern
*B6. **Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, the core of the Parmelee Elementary School campus was completed in 1962, with the assembly building added in 1964 and the lunch pavilion in 1965. Construction of the school cost more than $1.2 million ("Pupils to Get Preview of New Parmelee School," *Los Angeles Times*, 1962). In 1965, an arson fire destroyed four classrooms ("School Hit by Two-Alarm Fire," *Los Angeles Times*, 1965). Three portable/temporary buildings were added at the eastern perimeter of the campus in the 1990s. A number of alterations and repairs have taken place over the years, including seismic and systems upgrades, the removal of windows to accommodate the installation of air-conditioning units, and various safety improvements (see *LAUSD Pre-Planning Survey, Parmelee Elementary School,* for a list of repairs and improvements performed since the 1990s). In addition, security grilles have been added to windows throughout the campus.

*B7. **Moved?** ■No ☐Yes ☐Unknown **Date:**_____ **Original Location:**_____
*B8. **Related Features:** Landscaping/mature trees, hardscaping
B9a. Architect: Unknown b. Builder: Unknown
*B10. **Significance:** **Theme**, Institutional (Educational Facility),
"Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1962-1965 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: CRHR: 1.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Parmelee Elementary School appears eligible for the California Register of Historical Resources under Criterion 1 as an excellent, intact example of a postwar finger- and cluster-plan elementary school. The campus plan and buildings exemplify LAUSD design principles and ideals from the postwar period (as described in the *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*). The campus core also appears eligible under Criterion 3 as an outstanding, intact example of the Mid-Century Modern style applied to institutional architecture. Due to alterations, the campus is not eligible for listing on the National Register and is eligible for the California Register only. Overall, the campus core (which includes the site plan, the relationship of buildings to outdoor spaces, and original plantings) retains integrity of location, design, setting, workmanship, feeling, and association.

B11. Additional Resource Attributes: HP15. Educational Building. HP29. Landscape Architecture.

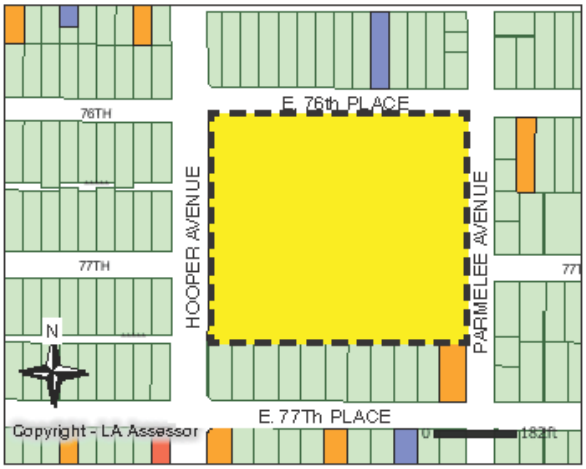
*B12. **References:** *(See Continuation Sheet)*

B13. Remarks: None

*B14. **Evaluator:** Debi Howell-Ardila and Marilyn Novell

*Date of Evaluation: 21 February 2014

Sketch Map with north arrow required



(This space reserved for official comments.)

***P3a. Description (continued):**

The two-story auditorium and a small two-story classroom/utility building linking two of the classroom wings are clad in red brick over a convex barrel surface. The north and south elevations of the auditorium and the west elevation of the utility building display a curved façade that contrasts with rectilinear overhanging roofs and heavy cast-concrete beams. In plan, orthogonal one-story wings to the south and west of the curvilinear auditorium and a projecting one-story entrance at the east elevation present a complex arrangement of forms. At the main elevation, recessed entry doors are placed asymmetrically beneath a broad overhanging eaves supported by a brick pier.

The roof of the major east-west arcade is constructed of corrugated metal and suspended from the cross-beam of a single row of heavy cast-concrete pilons. Exposed vertical cast-concrete structural elements and exterior stairways contribute to a sturdy-appearing architecture throughout the campus. Inlaid blond brickwork on the north elevation of the auditorium and the west elevation of the administration building and a terra cotta screen on the curved façade of Building 6 contribute Mid-Century-Modern details to the campus. Cladding of the buildings throughout the campus varies between red brick and stucco, with structural concrete marking the locations of the classrooms and the corners of the classroom wings. Three two-story classroom buildings have back-to-back classrooms opening onto exterior corridors with views of courtyards. At the upper level, a metal handrail and mesh balustrade is supported by slender inward-curving metal stanchions. The floor of the upper-level corridor shelters the corridor below.

The lunch pavilion has a tripartite roof; the central section is in the form of a folded “butterfly” roof with the ends rising in a V shape above the two lower roofs at either side to allow circulation of air. The roofs are supported by steel poles. Otherwise, roofs throughout the campus are flat with wide fascia. Windows in the classroom wings are arranged in groups of four three-part fixed panes flanked by a plain metal door with a fixed transom on each side. The upper tier of windows and the transoms appear to be filled in on the administration building.

The campus design exhibits many of the characteristics typical of Mid-Century Modernism in the Expressionistic subtype as applied in the 1960s. Although the classroom buildings are two stories in height, their broad overhanging eaves and flat roof retain a simple, horizontal effect. The campus buildings have simple orthogonal massing with minimal ornament, and the site has a strong site plan that clusters a variety of building types around a unifying courtyard.

Recorded by Marilyn Novell **Date:** 21 February 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Parmelee Elementary School, Utilities Building (Building 6), view from inside campus. Southwest perspective. Source: Sapphos Environmental, Inc., 21 February 2014.



Parmelee Elementary School, Administrative Building, viewed from entrance. Northwest perspective. Source: Sapphos Environmental, Inc., 21 February 2014.

Recorded by Marilyn Novell **Date:** 21 February 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Parmelee Elementary School, Lunch Pavilion with Auditorium behind. Southeast perspective. Source: Sapphos Environmental, Inc., 21 February 2014.



Parmelee Elementary School, main east-west arcade. Southeast perspective. Source: Sapphos Environmental, Inc., 21 February 2014.

Recorded by Marilyn Novell **Date:** 21 February 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Parmelee Elementary School, Classroom Building, Southwest perspective. Source: Sapphos Environmental, Inc., 21 February 2014.



Parmelee Elementary School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Parmelee Elementary School, Ver. 4, May 7, 2011.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

California Office of Historic Preservation, *California Register and National Register: A Comparison (for Purposes of Determining Eligibility for the California Register),* Technical Assistance Series No. 6. (Sacramento, CA, 14 March 2006).

California Office of Historic Preservation, *Instructions for Recording Historical Resources* (Sacramento, CA, March 1995).

Donovan, John J., *School Architecture: Principles and Practices* (New York: The MacMillan Company, 1921).

Eales, John R., "A Brief, General History of the Los Angeles City School System," Doctoral Dissertation (Los Angeles: University of California, June 1956).

Gebhard, David, and Robert Winter, *A Guide to Architecture in Los Angeles and Southern California* (Santa Barbara, CA: Peregrine Smith, Inc., 1977).

Harris, Cyril M., *American Architecture: An Illustrated Encyclopedia* (New York: W.W. Norton & Company, 1998).

Heumann & Associates and Anne Doehne, Science Applications International Corporation, March 2002, "Historic Schools of the Los Angeles Unified School District," a presentation prepared for LAUSD Facilities Services Division (March 2002).

Hille, R. Thomas, *Modern Schools: A Century of Design for Education* (Hoboken, NJ: John Wiley & Sons, 2011), 13.

"L.A. Schools Expected to Be Nation's Largest," *Los Angeles Times,* January 28, 1962.

Lee, Antoinette, and Linda F. McClelland, U.S. Department of the Interior, National Park Service, *National Register Bulletin No. 16B, How to Complete the National Register Multiple Property Documentation Form (1999).*

McAlester, Virginia, and Lee McAlester, *A Field Guide to American House* (New York: Alfred A. Knopf, 2004).

Mock, Elizabeth, *Built in USA, 1932 – 1944: A Survey of Contemporary American Architecture*, The Museum of Modern Art (New York: Simon & Shuster, 1944).

Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

"Pupils to Get Preview of New Parmelee School," *Los Angeles Times,* March 16, 1962.

Los Angeles Unified School District. *Los Angeles Unified School District Pre-Planning Survey* (2011).

Sapphos Environmental, Inc., *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* (Pasadena, CA, March 2014).

Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

"School Hit by Two-Alarm Fire," *Los Angeles Times,* March 13, 1965.

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, *American Architecture since 1780: A Guide to the Styles* (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 **of** 7 **Resource name(s) or number** (assigned by recorder) Topanga Charter Elementary School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Topanga, CA **Date** 1981 **T** 1S **R** 16W; W ½ **of** SW ¼ **of Sec** 7; S.B.**B.M.**
c. Address 22075 Topanga School Road City Topanga Zip 90290
e. Other Locational Data: APN: # 4445-005-902

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Topanga Charter Elementary School is located in the Santa Monica Mountains on the western edge of Los Angeles County on a 12.2-acre site in heavily wooded, rugged terrain. The campus is on a cul-de-sac at the end of Topanga School Road, a semi-private road off Topanga Canyon Boulevard. The acreage downslope from the campus core is geologically unstable, and approximately half of the site remains undeveloped.

Despite its unique mountainous setting and dense vegetation, the campus displays many of the classic features of the postwar indoor-outdoor school, with low, single-loaded classroom wings connected by a system of arcades and exterior corridors. Immersed in this natural setting, the buildings are placed on various levels on terraced hillsides to accommodate the steep topography, with one classroom placed downslope from the Administration Building and the Assembly Building at a higher level shared with the main playground and temporary buildings. Each classroom has access to the outdoors and abundant air and natural light. Constructed in 1953 and 1955, the steel-reinforced red brick buildings display clean, simple lines with steep shed roofs and extensive windows typical of the Mid-Century Modern architectural style of the period. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Administration Building, view from west
6 March 2014

***P6. Date Constructed/Age and Sources:** ■ Historic ☐ Prehistoric ☐ Both 1953, 1955 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:** 6 March 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none") Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.
Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NHRP Status Code** 3D

 ***Resource Name or #:** Topanga Charter Elementary School

B1. Historic Name: Topanga Charter Elementary School
B2. Common Name: Topanga Elementary School
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
***B5. Architectural Style:** Mid-Century Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, construction was completed on Topanga Elementary School in 1953 and 1955. With the exception of a lunch shelter built in 1940, all of the campus's buildings, structures, and facilities date from this period. The grounds also include four portable/temporary buildings from the 1990s. A number of alterations and repairs have taken place over the years, including seismic and systems upgrades, the installation of systems on roofs, and safety improvements (see *LAUSD Pre-Planning Survey, Topanga Charter Elementary School,* for a list of repairs and improvements carried out since the 1990s). However, permanent alterations are minimal, apparently limited to the painting over and filling in of clerestory windows on the Assembly Building.

***B7. Moved?** ■**No** ☐**Yes** ☐**Unknown** **Date:**_____ **Original Location:**_____
***B8. Related Features:** None
B9a. Architect: Unknown b. Builder: Unknown
***B10. Significance:** **Theme**, Institutional (Educational Facility),
"Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1953-1955 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: NRHP: A and C; CRHR: 1 and 3.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Topanga Charter Elementary School appears eligible as a district under Criterion A/1 as an excellent, intact example of a modern, indoor-outdoor postwar school in the Los Angeles Unified School District. The campus plan and buildings exemplify LAUSD design principles and ideals from the postwar period (as described in the *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*). The campus core also appears eligible under Criterion C/3 as an excellent example of the Mid-Century Modern style applied to institutional architecture.

The campus shows minimal signs of alteration, and the campus core retains integrity of location, design, setting, workmanship, feeling, and association.

B11. Additional Resource Attributes: HP15. Educational Facility.

***B12. References:** *(See Continuation Sheet)*

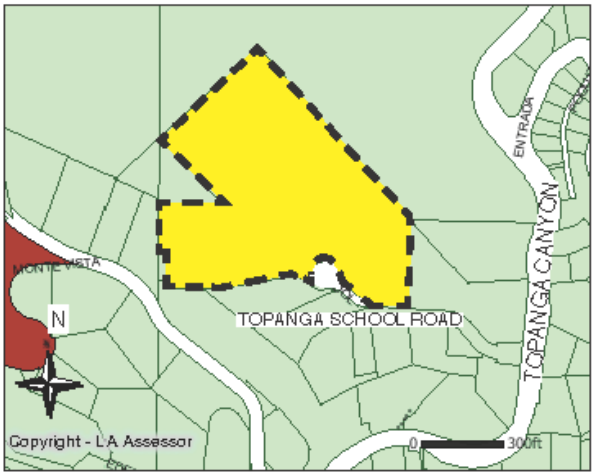
B13. Remarks: None

***B14. Evaluator:** Debi Howell-Ardila and Marilyn Novell

***Date of Evaluation:** 6 March 2013

(This space reserved for official comments.)

Sketch Map with north arrow required



***P3a. Description (continued):**

Topanga Charter Charter Elementary School (formerly called Topanga Charter Elementary School) was featured in a *Los Angeles Times* photo feature focusing on the open-air architecture of new L.A. schools. In 1961, the financially strapped Topanga Charter Elementary School District, consisting of a single school, voted for annexation to Los Angeles ("More and Better Schools Rising in Southland for New Generations" 1954; "Plans Studied to Add Junior College Districts" 1961; "Topanga Charter School to Be Joined to L.A. Group" 1961).

The two main classroom buildings and the Administration Building were constructed in 1953, with a classroom/sanitary building and an assembly building added in 1955. Steep shed roofs slope down from the back of the building, with a wide overhanging eave sheltering the corridor below. The ceilings of the corridors are composed of diagonal wood planks with doubled cross-beams. The cross-beams are bolted to an additional single beam at an angle of approximately 30 degrees that serves as support for a series of horizontal aluminum louvers that run the length of the corridor.

Built of reinforced masonry with no interior wall cladding, all of the campus buildings display the exposed red brick of the exterior inside the classrooms, further contributing to a melding of indoors and outdoors. On the southeast elevations of the two main classroom buildings and the south elevation of a third classroom building are banks of windows filling approximately 70 percent of the height of the wall. The arrangement of each bank of windows consists of alternately fixed and awning-style steel-framed windows set in vertical wood mullions. Grouped with the banks of windows defining each classroom is a single, unadorned wood door to one side with an outward-opening wood-veneer hopper transom. On the back of each classroom is a bank of seven clerestory windows, each composed of a band of awning-type windows with a fixed window below, providing the classrooms with cross-ventilation and additional natural light.

The shed roof of the Administration Building slopes from a low point at the back up toward the front, where it faces the central courtyard. The roof has a wide, flat wood fascia with no overhanging eaves. At the courtyard side of the building, a flat-roofed corridor supported by plain steel posts sits just above the northwest-facing windows. A series of unadorned wide doors with fixed transoms open onto the corridor, with banks of windows in various groupings. Each set of windows consists of a large awning-type window with a fixed light above and below.

A paved trail leads up a wooded pathway to the upper level of the campus, where the Assembly Building and Lunch Shelter, as well as four temporary buildings and the main playground, are located. The Assembly Building is a double-height block with a side-gabled roof and clerestory windows, and a lower one-story, side-gabled wing that houses offices and auxiliary rooms extends along the south and east elevations. A wide overhanging eave at the set-back entrance on the southeast corner of the lower section is supported by three red-brick piers.

Recorded by Marilyn Novell **Date:** 6 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Topanga Charter Elementary School, view of arcades connecting classroom buildings and Administration Building, from central courtyard, west perspective. Source: Sapphos Environmental, Inc., 6 March 2014.



Topanga Charter Elementary School, Classroom Building 3, east elevation. Source: Sapphos Environmental, Inc., 6 March 2014.

P5b. Photo (continued): (view and date)



Topanga Charter Elementary School, typical classroom grouping of windows and door on southeast elevations. Source: Sapphos Environmental, Inc., 6 March 2014.



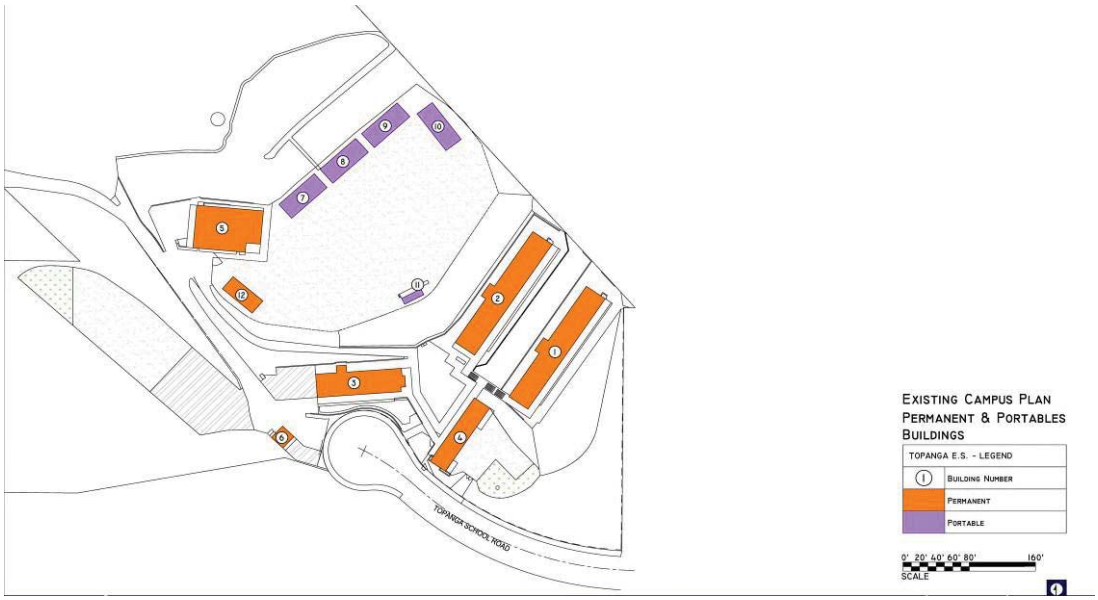
Topanga Charter Elementary School, view of corridor ceiling, classroom building. Source: Sapphos Environmental, Inc., 6 March 2014.

Recorded by Marilyn Novell **Date:** 6 March 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Topanga Charter Elementary School, Assembly Building, east elevation. Source: Sapphos Environmental, Inc., 6 March 2014.



Topanga Charter Elementary School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Topanga Charter Elementary School, Version 5, March 2012.

***B12. References (continued):**

Bhatia, Pavan, "Modern Concept for Los Angeles Public Schools," Doctoral Dissertation (Cambridge, MA: Harvard University Graduate School of Design, Advanced Management Development Program in Real Estate, July 2009).

Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977).

California Office of Historic Preservation, *California Register and National Register: A Comparison (for Purposes of Determining Eligibility for the California Register),* Technical Assistance Series No. 6. (Sacramento, CA, 14 March 2006).

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Donovan, John J., *School Architecture: Principles and Practices* (New York: The MacMillan Company, 1921).

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Lee, Antoinette, and Linda F. McClelland, U.S. Department of the Interior, National Park Service, *National Register Bulletin No. 16B, How to Complete the National Register Multiple Property Documentation Form (1999).*

Los Angeles Unified School District. *Los Angeles Unified School District Pre-Planning Survey* (2012).

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Mock, Elizabeth, *Built in USA, 1932 – 1944: A Survey of Contemporary American Architecture*, The Museum of Modern Art (New York: Simon & Shuster, 1944).

"More and Better Schools Rising in Southland for New Generations," *Los Angeles Times,* January 2, 1954.

Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91.

"Plans Studied to Add Junior College Districts," *Los Angeles Times,* March 2, 1961.

Sapphos Environmental, Inc., *Los Angeles Unified School District Historic Context Statement, 1870 to 1969* (Pasadena, CA, March 2014).

Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, prepared for Los Angeles Unified School District (Pasadena, CA: March 2002).

"Topanga School to Be Joined to L.A. Group," *Los Angeles Times,* October 5, 1961.

U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," National Register Bulletin No. 15 (Washington, DC, 2002).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Form," National Register Bulletin No. 16A (Washington, DC, 1997).

U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," National Register Bulletin No. 16B (Washington, DC, 1999).

Whiffen, Marcus, *American Architecture since 1780: A Guide to the Styles* (Cambridge, MA: MIT Press, 1981).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #_____
HRI #_____
Trinomial_____
NRHP Status Code 3CD
Other Listings_____
Review Code_____ Reviewer_____ Date_____

Page 1 of 7 **Resource name(s) or number** (assigned by recorder) Daniel Webster Middle School

P1. Other Identifier:
***P2. Location:** ☐Not for Publication ■Unrestricted
***a. County** Los Angeles County
***b. USGS 7.5' Quad** Beverly Hills, CA **Date** 1981 **T** **R** N/A
c. Address 11330 Graham Place City Los Angeles Zip 90064
e. Other Locational Data: APN: # 4258-016-900

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Located on a 24-acre site in west Los Angeles, Daniel Webster Middle School is bounded on the north by Graham Place and, further north, Interstate 10, Sawtelle Boulevard and Interstate 405 (on the east), National Boulevard (on the south), and Butler Avenue (on the west). Constructed in 1954, the campus is located in a residential neighborhood of primarily single-family homes. The site plan is largely symmetrical, with a swath of landscaping, courtyards, and an open lawn forming an axis through the center. Classroom buildings, facilities, and circulation corridors form a ring around this central open space in the campus core. With a Mid-Century Modern–influenced style, the campus is generally low in scale and massing, with a decentralized, outdoor-oriented plan. The core of the campus consists of a series of finger-like classroom wings, radiating outward from a U-shaped, central lawn. An extensive network of sheltered arcades, made of wood plank roofs and beams, resting on simple steel pipe supports and railings, ring the central lawn and provide circulation corridors throughout campus. The central lawn and a landscaped courtyard at the entrance display an abundance of plantings and mature trees. At the southern portion of the central lawn is an elevated concrete stage. *(See Continuation Sheet)*

***P3b. Resource Attributes:** (list attributes and codes) HP15. Educational Building. HP29. Landscape architecture.

***P4. Resources Present**: ☐Building ☐Structure ☐Object ☐Site ■District ☐Element of District ☐Other

P5a. Photo



P5b. Photo: (view and date)
Northwest elevation
23 January 2014

***P6. Date Constructed/Age and Sources:** ■ Historic ☐ Prehistoric ☐ Both 1954 (Los Angeles Unified School District)

***P7. Owner and Address:**
Los Angeles Unified School District

***P8. Recorded by:**
Marilyn Novell
Sapphos Environmental, Inc.
430 North Halstead Street
Pasadena, CA 91107

***P9. Date Recorded:**
4 February 2014

***P10. Survey Type:** Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none")
Sapphos Environmental, Inc. March 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969*. Pasadena, CA.
Sapphos Environmental, Inc. June 2014. *Los Angeles Unified School District Historic Resources Survey Report*. Pasadena, CA.

***Attachments:** ☐None ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (list)

BUILDING, STRUCTURE, AND OBJECT RECORD

***NHRP Status Code** 3CD

 ***Resource Name or #:** Webster Middle School

B1. Historic Name: Richland Junior High School (original name)
B2. Common Name: Webster Middle School
B3. Original Use: Institutional (Educational Facility) B4. Present Use: Institutional (Educational Facility)
***B5. Architectural Style:** Mid-Century Modern-influenced
***B6. Construction History:** (Construction date, alterations, and date of alterations):

According to records on file with the Los Angeles Unified School District, construction was completed on Webster Middle School in 1954. A majority of the campus's extant buildings, structures, and facilities date from 1954. The grounds also include some portable buildings, with clusters located primarily in the southeastern and northwestern portions of campus. A number of alterations have taken place over the years, including seismic and systems upgrades, safety and security improvements (see *LAUSD Pre-Planning Survey, Webster Middle School* for list of repairs and improvements carried out since the 1990s). Alterations to original buildings on campus include the removal and infilling of original windows (in particular a number of clerestories on classroom wings). The campus is otherwise intact and in good repair.

***B7. Moved?** ■**No** ☐**Yes** ☐**Unknown** **Date:**_____ **Original Location:**_____
***B8. Related Features:** Landscaping/mature trees, hardscaping, benches
B9a. Architect: Building Dept., Los Angeles Board of Education b. Builder: Building Dept., Los Angeles Board of Education
***B10. Significance: Theme**, Institutional (Educational Facility),
"Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1945-1969" **Area** Los Angeles
Period of Significance: 1954 (District) **Property Type:** Institutional (Educational Facility)
Applicable Criteria: CRHR: 1.
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity)

The campus core of Webster Middle School appears eligible for the California Register of Historical Resources (CRHR) as a district under Criterion 1 as an excellent, intact example of a postwar indoor-outdoor educational facility in Los Angeles. The campus plan and buildings exemplify the design principles and ideals of the Los Angeles Unified School District from the postwar period (as described in the Los Angeles Unified School District Historic Context Statement, 1870 to 1969). Following a major bond initiative in 1952, plans for the school were announced with fanfare. With a sketch of the school's design, the *Los Angeles Times* thus described plans for the school: "One of the biggest school projects slated for Los Angeles in recent years is the starter of the $130,000,000 school building expansion program… It's the Richland Junior High School to be built on a 27-acre site at the west side of Sawtelle Bouelvard. The new school group of structures, designed to accommodate 1600 students, is estimated to cost $2,445,000" ("Big School Project Launches Program: Will Mark Start of $130,000,000 Expansion Plan," *Los Angeles Times*, 1952). The campus core exhibits some signs of alteration but retains a high degree of integrity of location, design, setting, workmanship, feeling, and association.

B11. Additional Resource Attributes: HP15. Educational Facility. HP 29. Landscape Architecture.

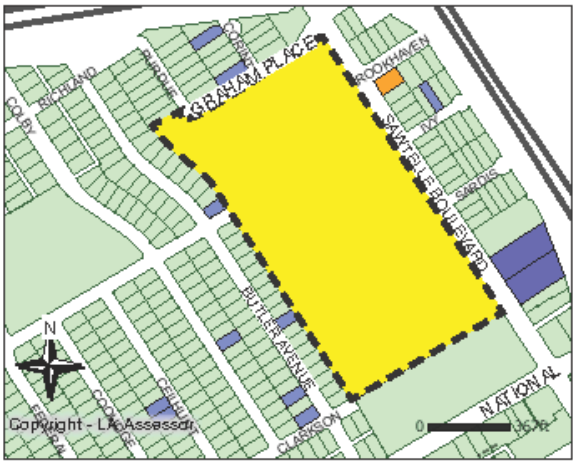
***B12. References:** *(See Continuation Sheet)*

B13. Remarks: None

***B14. Evaluator:** Debi Howell-Ardila, MHP

***Date of Evaluation:** 4 February 2014

Sketch Map with north arrow required



(This space reserved for official comments.)

Recorded by Marilyn Novell **Date:** 4 February 2014 ☒ Continuation ☐ Update

***P3a. Description (continued):**

The signature buildings for the campus are located along the north, on Graham Place: these consist of the Auditorium (a two-story, brick and stucco-clad building in the northeast corner of campus), the Health and Counseling Building (a one-story, brick and stucco-clad building, set back from the street), an entrance gate, arcades, and landscaped courtyard, and a Library (one- and one-half stories, sheathed in brick and stucco). A low wall, consisting of alternating panels of brick and decorative metal framing and grillwork, separate the campus from the public right-of-way. This wall is flanked by two gates made of large brick-clad piers, capped with a flat roof and flared cornice (the entrance on the eastern side has been closed off with a security gate).

The Health and Counseling Building and Library have little applied ornament; the focal point of the design is the use of continuous bands of windows, mostly grouped rectangular lights, with both fixed and casement windows.

Classroom buildings are generally one-story high, one-room deep, and rectangular in plan. Most classrooms are capped with a low-pitched shed roof, with thin, unadorned eaves. Along the north elevations, classrooms have continuous bands of windows, which occupy approximately 70 percent of the wall height. The north elevation windows primarily consist of four-over-four wood-framed double-hung sashes. Along south elevations, indirect light is provided through the use of clerestory lights, some of which appear to be operable casement windows. Projecting from the south elevations of classrooms are wide, one-story arcades, with flat roofs, wood plank and beam structure, and simple steel pipe supports.

Throughout the core of the campus, landscaped courtyards with walkways, benches, and landscaping provide outdoor spaces for gathering. Beyond the campus core, school facilities also include a gymnasium and recreational fields, portable buildings and structures, added primarily in the 1990s, as well as other ancillary buildings and structures. Alterations include various safety and systems upgrades, the installation of security grills on some windows, and the infilling of numerous windows. The core of the campus is otherwise intact and in good repair.

P5b. Photo (continued): (view and date)



Webster Middle School, entrance courtyard. Southeastern perspective.
Source: Sapphos Environmental, Inc., 23 January 2014.

P5b. Photo (continued): (view and date)



Webster Middle School features an extensive system of arcades, lined by landscaping and trees. Northeast perspective. Source: Sapphos Environmental, Inc., 23 January 2014.



Webster Middle School, typical classroom and courtyard configuration. West perspective. Source: Sapphos Environmental, Inc., 23 January 2014.

Recorded by Marilyn Novell **Date:** 4 February 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Webster Middle School: the Auditorium is sited for easy public access and linked to the school by the campus's extensive arcade system. Northwestern elevation.
Source: Sapphos Environmental, Inc., 23 January 2014.



Webster Middle School, typical south-elevation design and configuration of classroom wings. Southeastern elevation. Source: Sapphos Environmental, Inc., 23 January 2014.

Recorded by Marilyn Novell **Date:** 4 February 2014 ☒ Continuation ☐ Update

P5b. Photo (continued): (view and date)



Webster Middle School, Site Plan, with permanent buildings marked in orange and portable buildings marked in purple. Source: Los Angeles Unified School District Pre-Planning Survey, Webster Middle School, February 2011.

***B12. References (continued):**

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APPENDIX B
LAUDS HISTORIC CONTEXT STATEMENT, 1870 TO 1969
(ON CD)







LOS ANGELES UNIFIED SCHOOL DISTRICT

HISTORIC CONTEXT STATEMENT, 1870 to 1969

Prepared by

Sapphos Environmental, Inc.
for the
Los Angeles Unified School District
Office of Environmental Health and Safety

March 2014

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Figure 1. Point Fermin Elementary School, Administration Building, Sumner P. Hunt & Silas Burns, San Pedro (1917–1925; remodeled in 1936 following Long Beach Earthquake). Source: LAUSD Point Fermin Elementary School Pre-Planning Survey, 2010.

I. INTRODUCTION

Behind every building type and feature comprising our built environment—whether commercial or residential buildings, urban plans, or parks—is a long history of practitioners who tried to harness the best ideas and technologies of their day to create quality environments for living and working. In California and throughout the United States, few other areas have generated as much debate and study, however, as environments for learning.

Whether in 1900 or 1960, reform-minded architects and designers, school boards, and educators used similar language to present their ideas for the most "modern" classroom and campus. Through this time, ideas evolved, of course. But the debate has always been shaped by the latest ideas about teaching methods and curricula, childhood development, and optimal environmental conditions for comfort, safety, and efficiency. Fueled by a national network of education-related organizations and publications, this has been a shared, ongoing project throughout the United States since the Progressive Era.

Spanning the early 1870s to 1969, this Historic Context Statement explores over a century of development of the Los Angeles Unified School District (LAUSD), examined in the context of school design in the United States. Since the Progressive Education Movement gained momentum in the early twentieth century, national standardization has been at the heart of school reform, in terms of both classroom curriculum and design. Therefore, the local story is best understood against the backdrop of the national context. This study explores the ways in which LAUSD's schools and campuses reflect a century of national practice, reform, and regional variation.

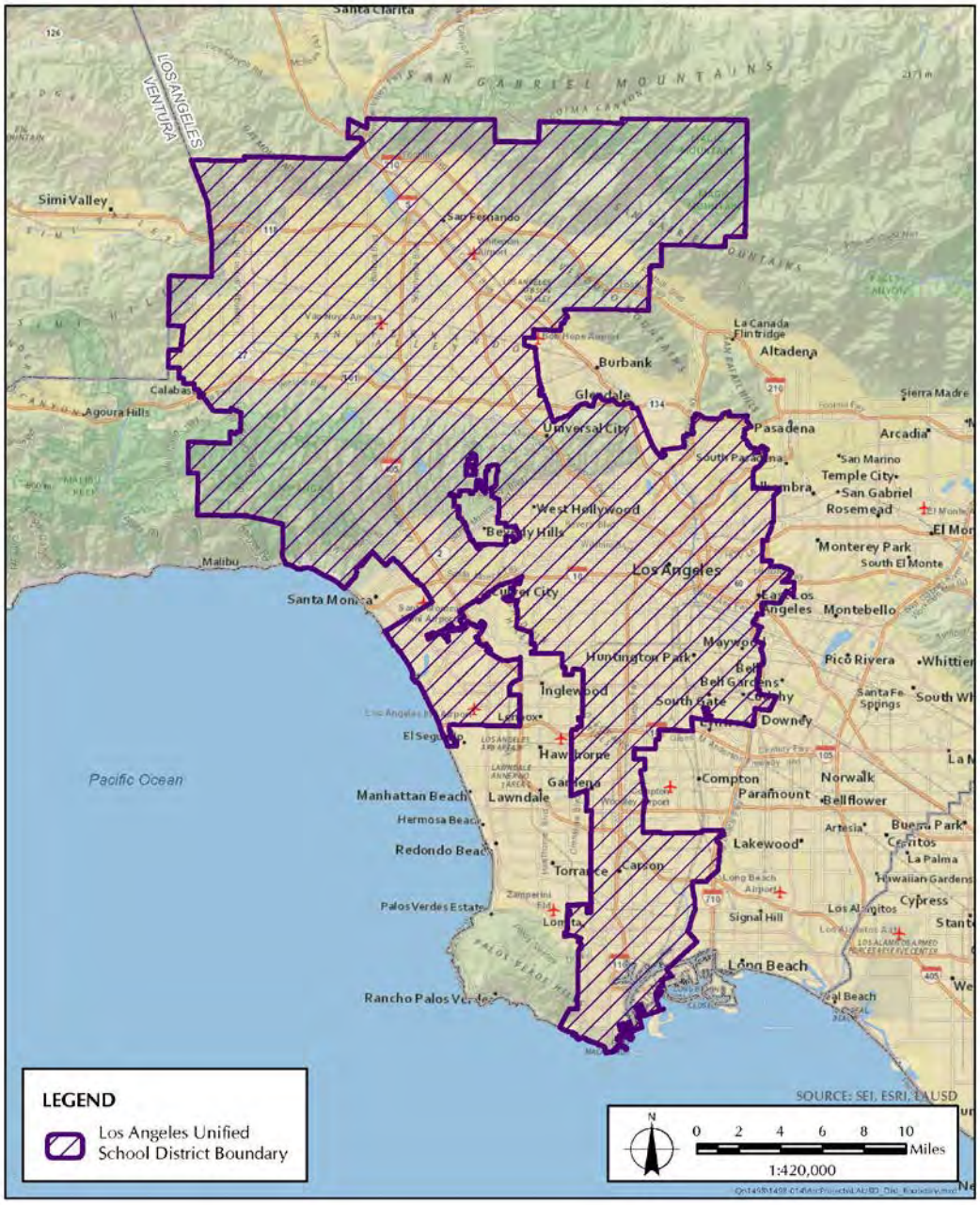


Figure 2. Los Angeles Unified School District Boundary. Source: Sapphos Environmental, Inc., 2014.



Figure 3. Children at Vernon Avenue Junior High School, Los Angeles, circa 1925. Source: LAPL Photo Collection.

Project Summary and Scope

With nearly 800 campuses and a geographic span of over 700 square miles, LAUSD is the second largest public school system in the United States. The district's northern portion spans the San Fernando Valley, including Granada Hills, Chatsworth, Reseda, Woodland Hills, Van Nuys, Sylmar, San Fernando, Pacoima, and Sunland. Along the west, the district includes western Los Angeles, Pacific Palisades, Venice, and Westchester. Along the east, LAUSD borders Glendale, Monterey Park, Montebello, Commerce, Downey, and Long Beach. Within the district, extending south from Los Angeles, are the communities of Vernon, Huntington Park, Maywood, Bell, South Gate, Gardena, and Carson. LAUSD's southernmost portion includes San Pedro, Lomita, and Rancho Palos Verdes.

Since its founding in 1872, the district has commissioned, designed, and acquired a remarkable collection of buildings, campuses, and facilities. These properties reflect over a century of social, architectural, and technological advances, as well as ongoing educational and curricular reform. Extant properties range from the wood-framed schoolhouse of the late nineteenth century to superblock campuses displaying Mid-Century Modern architectural styles.

In July 2013, in anticipation of district-wide modernization efforts, LAUSD contracted Sapphos Environmental, Inc. to provide historic resource consulting services to inform master planning efforts and environmental review under the California Environmental Quality Act (CEQA). The scope of work includes updating the LAUSD Historic Context Statement, conducting historic resource surveys of 55 unevaluated campuses, and preparing design and procedural guidelines to help guide facilities management and planning efforts.




Figures 4 and 5. San Fernando Valley schools: on left, Grover Cleveland Senior High School (1959), Charles Matcham & Stewart Granger and Associates, Reseda-West Van Nuys. On right, Chatsworth Senior High School (1963), Adrian Wilson & Associates, Chatsworth. Source: Sapphos Environmental, Inc., 2013.

Purpose of Historic Context Statements

The *LAUSD Historic Context Statement* follows the National Register of Historic Places (NRHP) Multiple Property Documentation (MPD) format, which provides a consistent framework for evaluating properties sharing similar periods, geographic distribution, and historic themes.[1] The MPD approach defines themes of significance, eligibility standards, and related property types. Properties sharing a theme of significance are then assessed consistently, in comparison with resources that share similar physical characteristics and historical associations.

According to federal, state, and local law, landmark eligibility is not just tied to architectural style but also to significant people, events and patterns of development. Historic context statements facilitate the consistent consideration of these criteria. Three principal components go into context statements: historic themes, geographic areas, and chronological periods. Contexts offer more than a chronological history; they identify the patterns and events that drove development of an area—or, in this case, a building type, educational facilities—and caused the building type to acquire the form and appearance for which it became known.

Because of the high degree of national standardization of school curricula and facilities design, in particular during the postwar period, the *LAUSD Historic Context Statement* provides a framework for evaluating school plants not only in Los Angeles but also in other school districts throughout California and beyond.

Historic Resources and CEQA

The *LAUSD Historic Context Statement* is also designed to facilitate compliance with CEQA, which requires lead agencies to consider the impacts of proposed projects on historic resources. CEQA identifies a historic resource as a property that is listed on—or eligible for listing on—the NRHP, California Register of Historical Resources (CRHR), or local registers.

NRHP-listed properties are automatically included on the CRHR. The criteria for both are similar and described below, with the NRHP letter (A, B, C, and D) followed by the corresponding CRHR number (1, 2, 3, and 4). In keeping with the 2001–2004 Phase 1 and 2 LAUSD historic resources survey, this survey does not include local criteria.[2]

Resources that may be eligible for listing include buildings, sites, structures, objects, and historic districts. To qualify as a historic resource under CEQA, a resource must be significant at the local, state, or national level under one or more of the following criteria:

A/1: For an association with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States (NRHP Criterion A; CRHR Criterion 1);

B/2: For an association with the lives of persons important to local, California, or national history (NRHP Criterion B; CRHR Criterion 2);

C/3: As an embodiment of the distinctive characteristics of a type, period, region, or method of construction, representative of the work of a master or high artistic values (NRHP Criterion C; CRHR Criterion 3); or

D/4: Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (NRHP Criterion D; CRHR Criterion 4).

Resources eligible for listing in the California Register must retain enough of their historic character or appearance to be "recognizable as historic resources and to convey the reasons for their significance."[3] Some resources that do not retain sufficient integrity for listing in the National Register may still be eligible for the California Register. There is no specific age threshold for California Register eligibility; rather, the regulations specify that enough time must have passed for a property to be evaluated within its historic context.

Focus and Parameters of the LAUSD Historic Context Statement

This Historic Context Statement creates a framework for evaluating Los Angeles's public schools at a critical juncture, as LAUSD begins planning for campus-wide modernization and redevelopment. Emphasized in this study, therefore, was the question of potential eligibility of schools under Criteria A/1, as outstanding examples of LAUSD design ideals and principles. The history and context of Los Angeles public school design and educational architecture are the particular focus of this study. Because the postwar era largely fell outside the scope of the 2002 LAUSD historic context statement, the postwar era is examined in detail.

This study represents not a comprehensive history but rather a first step in better understanding the evolution of school design in the district. Project limitations precluded extensive research on additional aspects of LAUSD's history that might result in eligibility

under Criteria A/1 and Criteria B/2. Campus-specific research was conducted on all pertinent topics for each of the schools surveyed. Subsequent research that establishes additional themes for the district overall would be an excellent area for future study. For example, this study offers a short section on LAUSD and the Civil Rights Movement; in addition, this topic was addressed in the National Register of Historic Places Multiple Property Documentation form for African-Americans in Los Angeles.[4] Given how broad and rich the topic is, however, ample opportunities remain for further research.

In terms of evaluations under Criteria C/3, this study also includes a section on the typical architectural styles of LAUSD schools. This material draws on and expands the 2002 LAUSD Historic Context Statement as well as the guidelines prepared by the City of Los Angeles Office of Historic Resources for historic resource survey work.

Inclusion in this context does not indicate eligibility for listing. Rather, the range of LAUSD campuses, past and present, illustrated or described here serves to define the context, themes of significance, and features of properties that might be found significant upon further study.



Figure 6. Orville Wright Middle School (originally Westchester High School), Spaulding & Rex, architects (1948-1952). Source: LAUSD Orville Wright Middle School Pre-Planning Survey, 2012.

Project Team

Debi Howell-Ardila, senior architectural historian with Sapphos Environmental, Inc., served as project manager, principal investigator, and author of the LAUSD Historic Context Statement. Carole Zellie, historic resources manager, provided guidance and input. Marilyn Novell, historic resources coordinator, provided valuable research assistance, and Matthew Adams, senior technical editor, provided editorial expertise. Gwenn Godek of the LAUSD Office of Environmental Health and Safety served as project administrator and manager. The study also benefited from the feedback of LAUSD Facilities Services Divisions staff Mitra Nehorai; Janet Hansen, deputy manager of the City of Los Angeles Office of Historic Resources; and Linda Dishman, executive director, and Adrian Scott Fine, director of advocacy, of the Los Angeles Conservancy.

Report Preparation and Methodology

A wide range of repositories and archives were consulted in the course of this study. Among them were the combined collections of the University of Southern California (USC) libraries; the Los Angeles Public Library, including the Photo Collection, California Index, and Sanborn Fire Insurance Maps; the Getty Research Institute; and the historic *Los Angeles Times* and other digital newspaper collections. The photographic collections of the Getty Research Institute and the USC Digital Archive were also used. A variety of primary source materials were provided by LAUSD.

Research also explored an array of online and print sources. These included historic photographs and aerial images, reports, studies, and treatises on school architecture (ca. 1900 to 1950). Other sources included books, trade publication and newspaper articles, and architectural plans. Scholarly articles as well as specialized studies and chronologies of LAUSD were also consulted.

Also informing this study was a review of past LAUSD historic resource contexts and surveys, including the multiphase survey conducted by Leslie Heumann and Associates and Science Applications International Corporation between 2001 and 2004. In addition, Sapphos Environmental, Inc. reviewed the findings of historic resource surveys conducted through SurveyLA, a citywide, multiyear initiative of the City of Los Angeles Office of Historic Resources. To complement the work of SurveyLA, this Historic Context Statement reflects and draws upon the basic structure of context, themes, and property types used in SurveyLA for institutional architecture in Los Angeles. With a focus on the patterns and trends that shaped LAUSD's history and schools, as well as on-site access to district campuses, this context provides a supplemental framework to help inform and guide evaluations.

In accordance with LAUSD and the City of Los Angeles Office of Historic Resources, once complete, the LAUSD Historic Context Statement and Historic Resources Inventory database will be provided to the Office of Historic Resources. The Historic Resources Inventory being developed by Sapphos Environmental, Inc. is Arc-GIS compatible and can easily be utilized as an Arc-GIS layer in future historic resource surveys carried out for the City of Los Angeles.

Study Contents

This report consists of six sections: Section I, Introduction; Section II, Summary of Themes of Significance; Section III, Historic Context and Background; Section IV, Architectural Character; Section V, Themes of Significance; Section VI, Conclusion and Recommendations; and Section VII, Selected Bibliography. Four distinct eras for LAUSD were identified: Founding Years, 1870s to 1909; Progressive Education Movement: Standardization and Expansion, 1910 to 1933; Era of Reform: Great Depression, Earthquake, and Early Experiments in the Modern, Functional School Plant, 1933 to 1945; and Educating the Baby Boom: Postwar Expansion and the Functional, Modern School Plant, 1946 to 1969.



Figure 7. Garvanza School, 1910.
Source: USC Digital Library.



Figure 8. Circa 1900, Schoolhouse, West Los Angeles.
Source: LAPL Photo Collection.

II. SUMMARY OF THEMES OF SIGNIFICANCE

Themes of significance were prepared for extant school property types. No known examples exist of some important types, notably the monumental, early-twentieth-century big-block school that was once a LAUSD standard. This school type was usually constructed of unreinforced, fire-resistant masonry. However, the material's earthquake vulnerability meant that most of these schools were either destroyed or damaged beyond repair in the 1933 Long Beach earthquake, or were subsequently replaced to comply with new building codes.

In order to facilitate cross-agency coordination, this section draws on relevant material developed by the City of Los Angeles Office of Historic Resources for historic resource evaluations. Information used in SurveyLA to evaluate institutional properties was consulted and adapted where appropriate.

CONTEXT: PUBLIC AND PRIVATE INSTITUTIONAL DEVELOPMENT | EDUCATION

THEME: LAUSD | FOUNDING YEARS, 1875–1894

This theme is embodied in Los Angeles's remaining one- and two-story wood-frame schoolhouses that generally display Late Victorian or vernacular styles. Only three nineteenth-century schoolhouses are known to remain from LAUSD's founding years. Schools constructed during this period display traditional modes of school design, before the Progressive Education Movement and widespread reform changed national construction standards and before increased urbanization necessitated larger-capacity school plants.

THEME: LAUSD | PRE–1933 LONG BEACH EARTHQUAKE SCHOOL PLANTS, 1910–1933

This theme reflects an important period for Los Angeles schools. First, it occurred after the Progressive Education Movement had triggered widespread reform of school design throughout the United States. This resulted in a more differentiated, expansive school plant, with specialized facilities and program-specific buildings and classrooms; this ended the era of the monumental, big-block school. Second, this period occurred before a statewide overhaul of school building codes and practices after the 1933 Long Beach earthquake.

This period also began as the 1920s ushered in a school building boom and period-revival golden age in Southern Californian architecture. The importance placed on public education was expressed through beautifully designed school buildings, often created by the region's leading architects. Campus design became more unified, with elaborate approaches and entrances. The advent of more grand entrances, as well as the incorporation of separate auditoriums, sited for ease of public access, reflected a growing sense that public education was a community affair.



Figure 9. 10th Street Elementary School, Los Angeles (1922). Source: LAUSD.

Replacing the big-block school, with internal corridors, was a generally lower-massed, spread-out campus. In some examples, designers replaced hallways with covered outdoor walkways. Building plans also evolved, as the traditional rectangular plan took on adjacent wings, in H-shaped, T-shaped, or U-shaped buildings that facilitated the creation of sheltered outdoor spaces and patios. Lower massing was particularly common for elementary schools.

Because most pre-1933 schools were substantially remodeled following the Long Beach earthquake, intact examples from this era are relatively rare. It is common to find 1920s-era schools that were remodeled following the earthquake; such schools might exhibit the building plans and configurations typical of the 1920s but with 1930s PWA Moderne and Streamline Moderne detailing.



Figures 10 and 11. Post–Long Beach Earthquake school: H-shaped plan and Mission Revival style of Reseda Elementary School (1936). Aerial photographs from 1959 (left) and circa 2010 (right). Source: U.S. Dept. of Agriculture, historicaerials.com (left) and LAUSD Reseda Elementary School Pre-Planning Survey (right).

THEME: LAUSD | POST–1933 LONG BEACH EARTHQUAKE SCHOOLS, 1933–1945

Following the 1933 Long Beach earthquake, state and city legislation regarding school building codes and practices shifted the character of LAUSD schools and campuses. Requirements of the Field Act (1934), such as maintaining one-story massing for elementary schools and no more than two stories for junior and high schools, mirrored reforms already under way. Classroom wings continued to be designed for connections to the outdoors, with L-, H-, U-, and T-shaped buildings accommodating sheltered courtyard and patio spaces. Continuing another trend under way in the 1920s, campuses displayed an increasingly unified site design, with sheltered corridors linking campus buildings.

The advances of the Progressive Education Movement also continued to shift school plant design. Campuses were increasingly differentiated, with administration buildings, auditoriums and gymnasiums, separate classroom, shop, and specialty wings, and cafeterias. Adequate indirect lighting and ventilation were provided through the use of generous bands of windows, including multilight sashes, casements, and clerestories. Stylistically, these buildings were less ornamental than their 1920s period-revival counterparts. An emphasis was placed on traditional Southern Californian styles, such as the Spanish Colonial and Mission Revival. Other styles included Streamline Moderne, Art Deco, and Late Moderne. Much post-earthquake reconstruction was funded through the Public Works Administration (PWA), and many schools exhibit a range of PWA Moderne styles.



Figure 12. Reseda Elementary School, 1936. The spare Mission Revival style was in keeping with the post-Field Act requirement for one-story massing and the post–Long Beach Earthquake trend to design in the "traditional Southern Californian" mode. Source: LAUSD.



Figure 13. Susan Miller Dorsey High School, Gogerty and Noerenberg, Los Angeles (1937). Source: LAUSD.



Figure 14. The inventive site plan of Dorsey High School. Source: Google Maps, 2013.

THEME: LAUSD | EARLY EXPERIMENTS IN THE MODERN, FUNCTIONALIST SCHOOL, 1933–1945

Although this category shares general characteristics with the preceding theme (Post–1933 Long Beach Earthquake Schools), it is distinguished by an experimental approach to school design that emerged during the Great Depression. Such schools reflect the most avant-garde ideas of the era and the beginning of modern, functionalist school design. Stylistically, the proto-modernist school need not be purely "modern" in the sense of lacking any ornamental detailing. The significant changes reflected a philosophy that went a step further than did the schools of the 1920s in designing for function and integrating school buildings with exterior spaces. During the postwar construction boom, many of the same ideas that characterized these experimental schools became the norm throughout Los Angeles and the United States.

The notable differences between the two themes (or periods) relate to scale, site plan, and functional, child-centered design. The proto-modernist school has an explicitly domestic scale, with low ceilings and a lack of monumental design or massing. These schools generally exhibit a decentralized, nonhierarchical campus, with a strong geometric patterning applied to the site plan. Classroom wings generally consist of one-room-deep rectilinear buildings, lined with adjacent patios and landscaping. Building plans clearly express their function, with (usually) one-story massing, generous expanses of glazing, window sizes and configurations tailored to sun patterns and doors opening directly onto patio areas and courtyards. The preferred typology was the early version of the "finger-plan" school, with rectilinear classroom wings extending from a central axis.

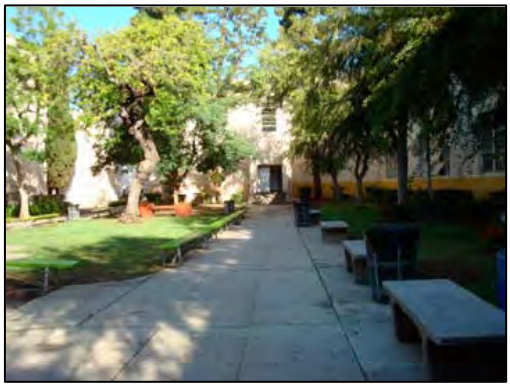


Figure 15. Emerson Middle School, Richard Neutra (1937–1940), example of open green spaces lining classroom wings. Source: LAUSD Emerson Middle School, Pre-Planning Survey, 2011.



Figure 16. Baldwin Hills Elementary School, Robert Alexander, architect, Los Angeles (1949–1951). Source: Getty Research Institute, Shulman Archives.



Figure 17. Early finger-plan school, Baldwin Hills Elementary School. Source: Google Maps, 2013.

THEME: LAUSD | EDUCATING THE BABY BOOM: THE POSTWAR MODERN FUNCTIONALIST SCHOOL PLANT, 1945–1969

By the 1950s, many of the design ideas considered experimental in the 1930s had matured and become the national standard for schools. Stylistically, schools might include some historicist detailing reflecting popular styles (such as Colonial Revival). But, overall, a unified campus design, building types and plans that accommodated a high degree of indoor-outdoor integration, ample outdoor spaces, and sheltered corridors marked the typology as the mature version of the functionalist school plant. The priority remained the creation of a domestic scale for schools. Campuses displayed a one-story massing for elementary schools, and up to two stories for middle and high schools. Site plans, which often featured a decentralized, pavilion-like layout, lacked the formality and monumentality that characterized earlier eras of school design.

School types expressive of these ideals include the finger-plan (1940s–1950s) and cluster-plan (1950s), and variations on their basic themes. Combinations of these basic forms, which flexed according to available lot size and school enrollment, are also evident.

For LAUSD, the postwar years brought another round of reform as well as unprecedented expansion. Given the postwar classroom shortage, many campuses were constructed quickly, from standardized plans used district-wide, in designs that convey some of these ideas. The most intact and well-designed campuses among these, though, uniquely represent this era of reform and the midcentury modern school.



Figure 18. Orville Wright Middle School, Spaulding & Rex (1948–1952); balanced, indirect classroom lighting. Source: LAUSD Orville Wright Middle School, Pre-Planning Survey, 2012.

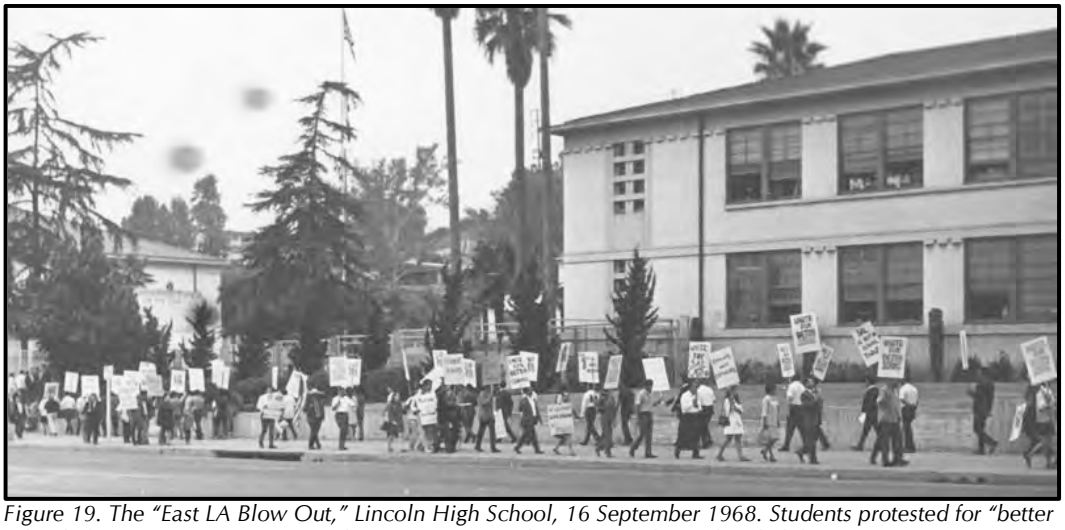


Figure 19. The "East LA Blow Out," Lincoln High School, 16 September 1968. Students protested for "better schools for Mexican Americans. Sal Castro was a teacher there and spearheaded the movement." Source: LAPL, Herald-Examiner Collection, 00041327.

THEME: LAUSD AND THE CIVIL RIGHTS MOVEMENT, 1954–1980

This theme of significance begins with the filing of the landmark U.S. Supreme Court case *Brown v. The Board of Education, Topeka, Kansas*. Although *Brown v. Board of Education* addressed state laws that did not exist in California—namely, laws allowing for racially segregated public schools—this case and the Civil Rights Movement helped generate and focus attention on related issues in Los Angeles. Issues touched on racial division and cultural identity, equal access, and how to create more balance and diversity in public schools. Signaling the end of this period of significance is the U.S. Supreme Court decision effectively ending mandatory school busing as a solution to racial imbalance in California's public schools. Although this issue continued to form part of the social context for LAUSD, this period captures an era of intense debate and activism on the part of community members, parents, politicians and jurists, as well as teachers and administrators.

A school eligible under this theme might be the site of significant integration initiatives, challenges, or community activities related to the Civil Rights Movement and school integration. This might include initiatives for equal access to schools and/or to employment opportunities in LAUSD schools.

In addition, a school might qualify under this theme for a long-term association with a figure who was significant in the Civil Rights Movement and school integration.



Figure 20. "School integrationists," in a 1963 hunger strike for better racial integration of Los Angeles public schools. Source: LAPL, Shades of Los Angeles, #00041605.



Figure 21. Postwar school: Chatsworth High School (1963), curved outdoor corridor and mature landscaping of student quad and courtyard. Source: Sapphos Environmental, Inc., 2013.



Figure 22. Chatsworth High School, classroom. Source: Sapphos Environmental, Inc., 2013.



Figure 23. Chatsworth High School, aerial view of site plan and design. Source: Google Maps, 2013.



Figure 24. Chatsworth High School, courtyard. Source: Sapphos Environmental, Inc., 2013.



Figure 25. Chatsworth High School, courtyard. Source: Sapphos Environmental, Inc., 2013.



Figure 26. Old Farmdale School circa 1950. Source: LAPL Photographic Collection.

III. HISTORIC CONTEXT AND BACKGROUND

This section provides a broad overview of the trends and patterns of development that shaped the facilities of the Los Angeles Unified School District since its founding in the 1870s. The following eras are covered:

A. Founding Years, 1870s through 1909

B. Progressive Education Movement: Standardization and Expansion, 1910 to 1933

C. Era of Reform: Great Depression, Earthquake, and Early Experiments in the Modern, Functionalist School Plant, 1933 to 1945

D. Educating the Baby Boom: Postwar Expansion and the Modern, Functionalist School Plant, 1945 through 1969

Each era is broken down into three sections: (1) National Context and Developments, exploring the trends in educational methods and curricula, as well as background information on school plant design; (2) Effects on School Buildings and Campuses, exploring how these trends resulted in changes to school plant facilities; and (3) Los Angeles City School Districts: Developments and Context, presenting Los Angeles–specific events that resulted in changes to educational policy and school plant design in Los Angeles and the region as a whole.

Sections also include a variety of historic and current photographs, with national and local examples illustrating the trends, patterns of development, and significant themes in the evolution of school plant design. Until 1961, what became the LAUSD comprised two separate entities: the Los Angeles City School District, covering primary education; and the Los Angeles City High School District. Throughout the Historic Context Statement, references to the district therefore reflect the administrative structure at the time (as the Los Angeles City school districts).



Figure 27. Los Angeles High School, 1891.
Source: LAPL Photo Collection.



Figure 28. Palos Verdes High School, 1961.
Source: Getty Research Institute, Shulman Archives.

A. FOUNDING YEARS: 1870s THROUGH 1909[5]

Only three schools are known to remain from this early era in the history of the Los Angeles Unified School District: the Old Vernon Avenue School (1876; 450 N. Grand Avenue); the Old Farmdale School (1889; 2839 N. Eastern Avenue, in El Sereno); and, in present-day Santa Monica, the Old Canyon School (1894), now serving as the library for an elementary school. The Old Farmdale School, a Queen Anne Revival–style building attributed to architects Bradbeer and Ferris, was restored and rededicated as a museum in 1976.

Few resources remain, but the late-nineteenth- and early-twentieth-century context helps set the stage for the eras that followed. During the period considered in this context, school architects and educators shared a sense of urgency in describing the importance of the safe, well-designed school. Whether in 1906 or 1966, they used remarkably similar language to describe their era's contributions to designing the ideal "modern American school."

Describing the district's founding years helps illustrate the evolution of school plant design and the challenges faced by successive generations of architects and educators. Well into the postwar period, late-nineteenth-century educational philosophies and facilities remained a point of comparison, an example of what to avoid. In 1965, writing about modern Californian school design, State Department of Education official Charles D. Gibson declared that "big block schools with internal corridors and windowless classrooms are becoming a rarity, with most schools returning to the campus plan concept, using landscaped courts and natural materials to create informal environments."[6]

In fact, by 1965, the battle against the big-block school had long since been won. But the specter of the imposing, factory-like school plant remained the example against which new ideas were measured.



Figure 29. Old Vernon Avenue School, built in 1876. Source: LAUSD Vernon City Elementary School Pre-Planning Survey, 2011.



Figure 30. Old Canyon School, built in 1894. Source: LAUSD.

NATIONAL CONTEXT | DEVELOPMENTS

In the early years of American school design, the most typical building type for educational facilities had been the wood-framed, one-room schoolhouse—a basic typology that attempted "to be all things for all children," as well as all things for all teachers and educational methods.[7] Rapid urbanization throughout the United States called for a new approach. Large-scale schools, with classrooms accommodating several dozen pupils, were needed. With the increased demand, public schools started separating children into grades, with separate classrooms for each rather than a single large room housing all grades.

The new building typology tended to be rectangular in plan, with multistory massing, sanitation systems and facilities placed in a basement, and classrooms designed for large groups of students seated in rows. High ceilings accommodated tall windows, which provided the main source of interior illumination. In his study of the history of the American school, R. Thomas Hille observed that "a typical urban school from this era was organized in a single block of one or two floors, with standardized classrooms on each floor organized symmetrically around a central hallway. ... School furniture was already standardized and typically included individual desks organized in rows and bolted to the floor."[8]

This typology fit the curricula and methods of the time. Before the Progressive Education Movement gained momentum throughout the United States, beginning in the 1880s, primary and secondary schools continued to follow traditional methods emphasizing rote memorization and discipline, in an atmosphere that was regimented and authoritarian (rather than flexible and participatory).

In this respect, Los Angeles's early schools were similar to schools around the country. Los Angeles educators and administrators followed the philosophy of Johann Heinrich Pestalozzi (1746–1827), an influential Swiss pedagogue and reformer, and his "emphasis on the disciplinary values of the subjects taught."[9]



Figure 31. Old Farmdale School, opened in 1899. Source: LAUSD.



Figure 32. 79th Street School, South Central Los Angeles (now McKinley Avenue Elementary School), shown in 1925 aerial photo. Source: LAPL Photo Collection.

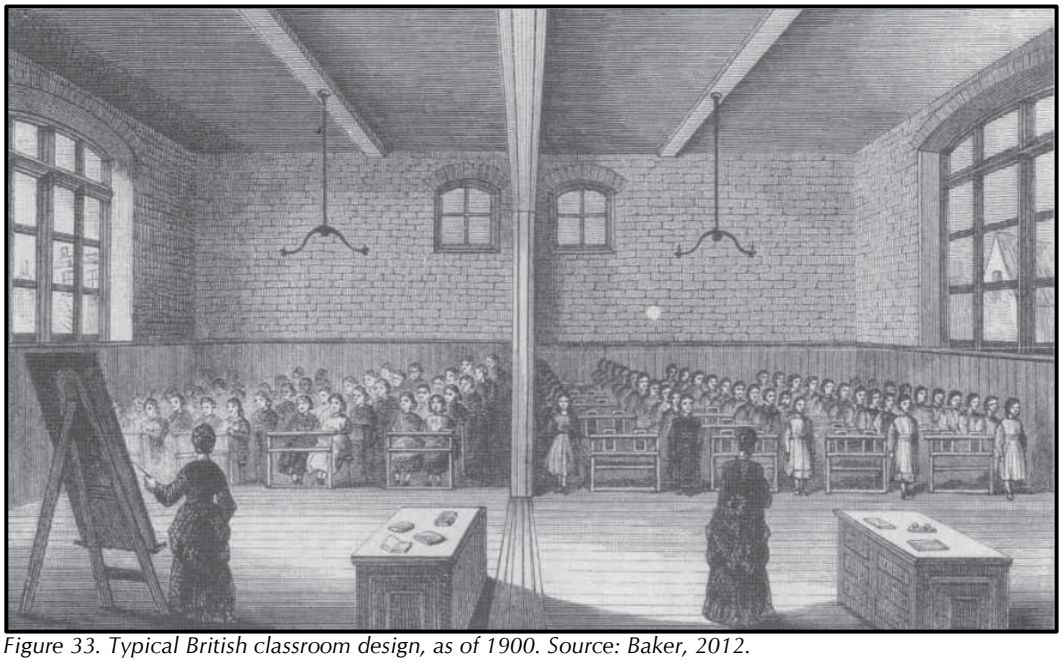


Figure 33. Typical British classroom design, as of 1900. Source: Baker, 2012.

Pestalozzi's thinking mirrored the trends of American education at the time, with an emphasis on memorization and recitation. In Los Angeles schools, "All pupils did the same lessons in the same way. There was no recognition of individual differences."[10] Early school officials emphasized the "disciplinary values of their subjects" and uniform teaching methods for all students and classes.[11]

At this time, the effects of the Progressive Era—the period of social activism and political reform associated with the 1890s through the 1920s—were becoming evident in the public schools. In Los Angeles, when promoting the activities and accomplishments of the schools, district officials began describing a general liberalization of teaching methods and curriculum. The new programs were based less on discipline—including, as one official proudly pointed out, a diminishing reliance on corporal punishment—and were more participatory and tailored to children's nature and needs.

In this way, as the nineteenth century came to a close, "the foundations were laid against regimented instruction," in Los Angeles as elsewhere; "the concept of the pupil as the passive recipient, the sponge soaking up information in preparation of adult life, was abandoned. The broader concept of education as an integral part of the life process, of learning by doing through creative participation, slowly replaced the old accepted theory."[12] In subsequent decades, these evolving philosophies would also shift ideas about school plant design.

EFFECTS ON SCHOOL BUILDINGS AND CAMPUSES

It took time for school plant design to catch up with evolving educational methods. As noted Connecticut school architect Warren Richards Briggs (1850–1933) argued in 1906, "no one will deny [that] the public system of education has been carried in our country during the last half century to a degree of perfection heretofore unknown to any country of the world." Yet, he wrote, "can it be said, however, with equal assurance that our school buildings have kept pace with our educational systems? Are they as complete in their design and construction as the educational system in its plan and equipment?"[13]

Among architects and educators it was widely recognized that reform and standardization were needed. During the late nineteenth century, especially in urban schools, systems for sanitation and safety "were less than ideal and varied considerably from location to location, with little in the way of regulatory oversight."[14] This area was the first to be widely studied and significantly changed during this time, as many resources were devoted to developing and improving health and safety standards and systems.[15]

In Briggs's 1906 book, *Modern American School Buildings*, the architect contributed one of many guides available for standardized schools. The scale of Briggs's schools remained imposing and monumental, with the entire school contained within a single, multistory building. But the new standardized schools offered the best building infrastructure available at the time, with improved heating, ventilation, and sanitation systems, as well as recommendations for the ideal size and configuration for windows, doors, emergency exits, and other features.

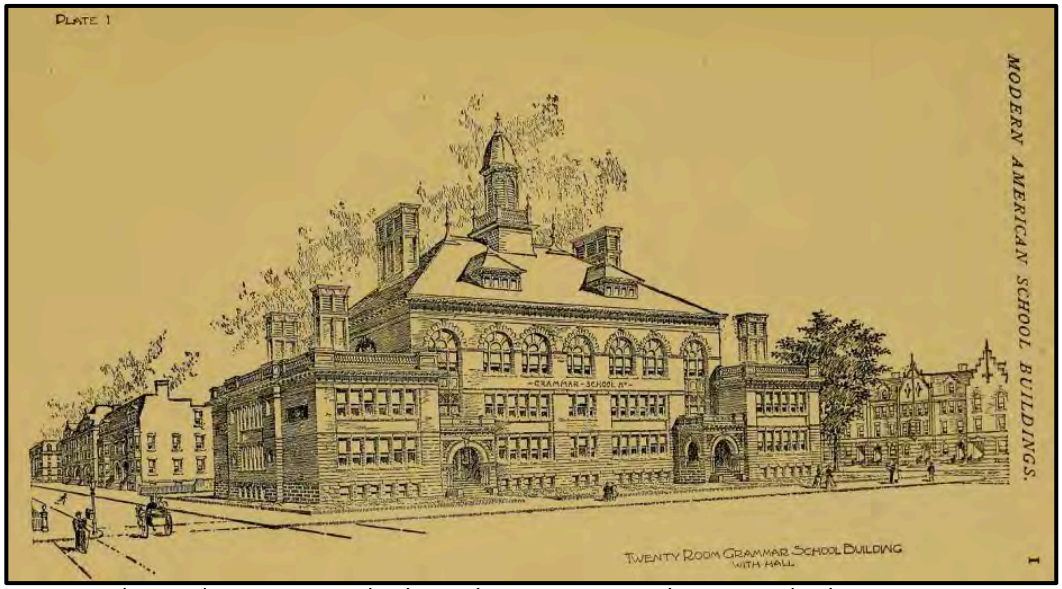


Figure 34. The "Modern American School," as of 1906, a 20-room elementary school. Source: Briggs, 1906.

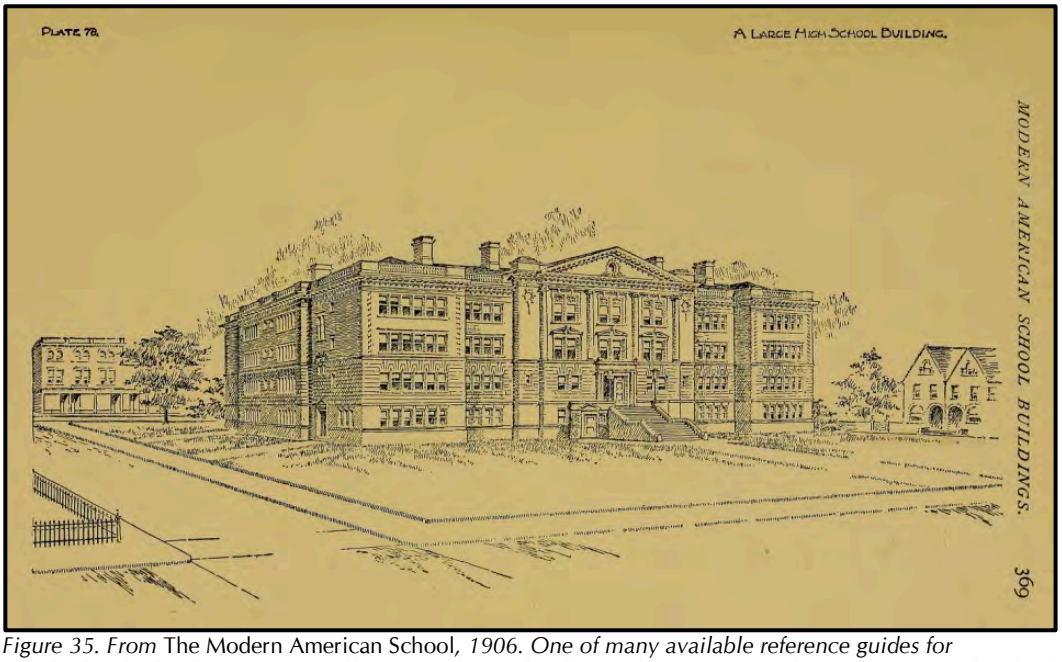


Figure 35. From The Modern American School*, 1906. One of many available reference guides for standardized school construction. Illustration shows sketch for a four-story, neo-classical "Large High-School Building." Source: Briggs, 1906.*

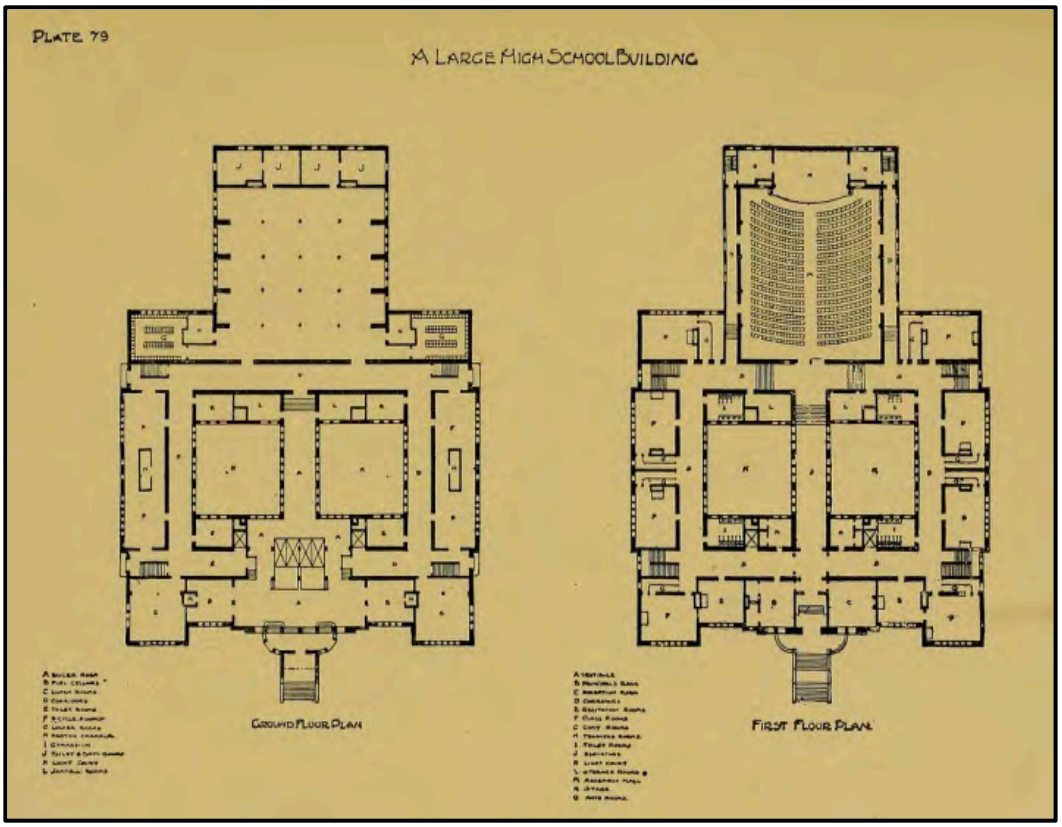


Figure 36. From The Modern American School*, 1906. Plan for first two stories of neo-classical "Large High-School Building." Source: Briggs, 1906.*

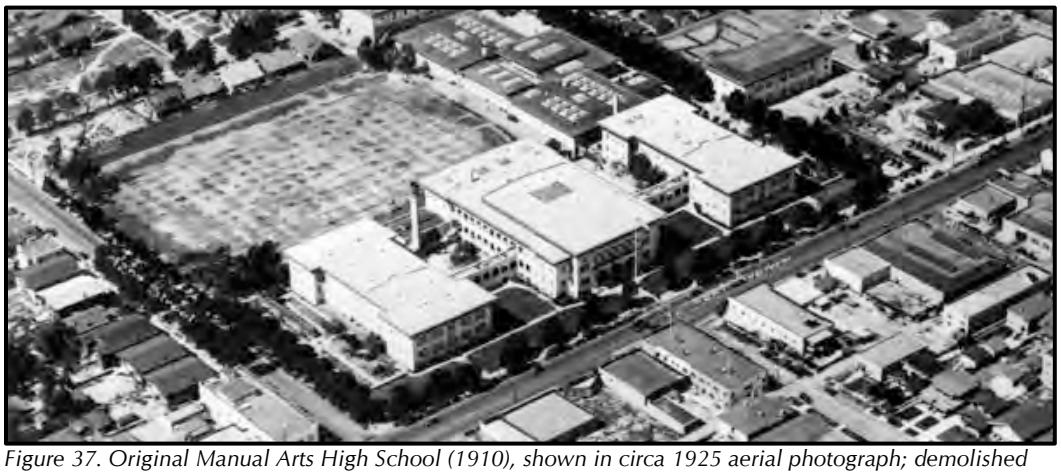


Figure 37. Original Manual Arts High School (1910), shown in circa 1925 aerial photograph; demolished and rebuilt following the 1933 Long Beach Earthquake. Source: LAPL Photo Collection.

In the early twentieth century, the movement to standardize and improve schools gained momentum and took off in earnest. American school architecture "advanced from the low point of complete neglect to a high point of monumentalism. School buildings changed from small, shabby units to large, beautiful edifices, glorifying the people's devotion to education."[16] Education-related organizations and trade publications around the country helped forward the cause. Overall, urban school plants still tended to be imposing "big-block" institutions "designed to house as many students as possible."[17]

But the seed had been planted among a national network of educators and administrators that the classroom should be a comfortable, safe place. Advances in health and hygiene research translated into changes in school plant design. By the end of the nineteenth century, for example, a better understanding of ventilation and disease prevention, in particular for tuberculosis, affected approaches to fenestration and building siting and led to an increasing emphasis on cross-ventilation. Overall, the issue of how to design the most healthy and efficient school remained the topic of intense study and debate, as these ideas continued to evolve through the first quarter of the twentieth century.

LOS ANGELES CITY SCHOOL DISTRICTS | DEVELOPMENTS AND CONTEXT

As elsewhere, the earliest schools in Los Angeles were utilitarian and vernacular in style, constructed to serve newly established communities emerging throughout the region during this time. Early schools were generally wood framed and sheathed, with a simple communal room or two serving all of the school's needs. The late nineteenth century was the era that "introduced the bell tower as a signature element of a school building, perhaps modeling school buildings on early churches."[18] Three late-nineteenth-century school buildings survive in Los Angeles.

As school buildings turned from vernacular, domestic-scaled forms to more monumental statements of civic pride, the model became Beaux-Arts Academic Classicism: "The Classical Revival was especially favored, and impressive porticos of colossal columns

proclaimed the importance attached to education."[19] School buildings came to resemble grand civic buildings, with monumental scale, classical styling, symmetrical design composition, and a rational program. Spanning the nineteenth and twentieth centuries, this era brought improved technologies and industrial-strength materials, allowing buildings to rise to two or three stories in height. Most of these buildings were unreinforced masonry construction—more fireproof, but also more vulnerable to earthquakes—and many of these schools were destroyed or damaged beyond repair by the 1933 Long Beach earthquake.

Formation of the Los Angeles City School Districts

In 1872, little more than two decades after California's entry to the United States, the Los Angeles City School District was founded. The timing of the district's establishment was tied to state legislation requiring, among other things, that each city in California create a board of education. In 1879, amendments to the state constitution gave cities the authority to establish school curricula and methods, and Los Angeles educators set to the task of developing a program of study for their new district. Curricular improvements and reform in Los Angeles, as elsewhere, remained the topics of ongoing debate and refinement throughout the late nineteenth century and into the twentieth.



Figure 38. Central School (1873) at Temple and Broadway Streets in downtown Los Angeles, 1931 photo (demolished). Source: USC Digital Archive.

As the new district was launched, two schools were constructed in the early 1870s. One of these was the wood-framed Central School, located at Temple and Broadway Streets (then Fort Street) in downtown Los Angeles. Constructed in 1873 for $25,000, Central School became home to the county's first high school, which occupied four rooms of the two-story building.

In a 1936 series of articles exploring "landmarks almost forgotten in the march of progress," the *Los Angeles Times* recalled that when the school was constructed, it was "so big and grand that they came from miles around to see it, quite the finest school south of San Francisco. Its lines were classic, and it had a cupola with a clock in it. … The teachers like the wide corridors and generous windows and the transoms over the doors. The earthquake, which did so much damage to newer school buildings, didn't harm the [Central] school in the least."[20] In 1882, Los Angeles's first teaching college, the State Normal School, was constructed downtown near the present-day site of the Los Angeles Public Library.

Early Currents of Change

One shift during this period was a growing sense that public education and schools should be a community affair, with a mission to serve the needs of the population. One example of this is seen in a citywide poll launched in 1900 by the Los Angeles Board of Education. With an extended list of questions, the poll was distributed to all city residents in order to solicit input on district curricula and teaching methods. The stated goal of the board in creating the survey was to initiate "the freest and most open discussion of public school work by all interested."[21] All citizens of Los Angeles were asked to offer opinions on the subjects taught at all grade levels, with a particular amount of attention going toward the newly established kindergarten program, as well as the amount of homework assigned and classroom conditions. After surveys were distributed throughout the city, results were tallied and discussed at a public meeting, in what would ultimately become an ongoing effort to solicit community input.

Similarly, in this era, a range of special-needs schools were established, including facilities for the deaf, blind, physically disabled, or cognitively impaired; special facilities were also provided for children suffering from tuberculosis. In addition, vocational schools with more hands-on, skills-related curricula were established in these early years. The 1904 Polytechnic High School was one example of this initiative.

The Boom of the 1880s and Los Angeles City Schools

In the 1880s, as has been well documented, Los Angeles experienced a significant population boom. One factor fueling this expansion was a speculative land rush, fueled by the completion of the transcontinental railroad and price wars between competing railway lines. The "boom of the 1880s" brought prosperity and development throughout Southern



Figure 39. Los Angeles's first teaching college, State Normal School (1882), downtown Los Angeles, in a circa 1900 photo. In the 1920s, this site became the location for the Los Angeles Public Library. Source: LAPL Photo Collection.

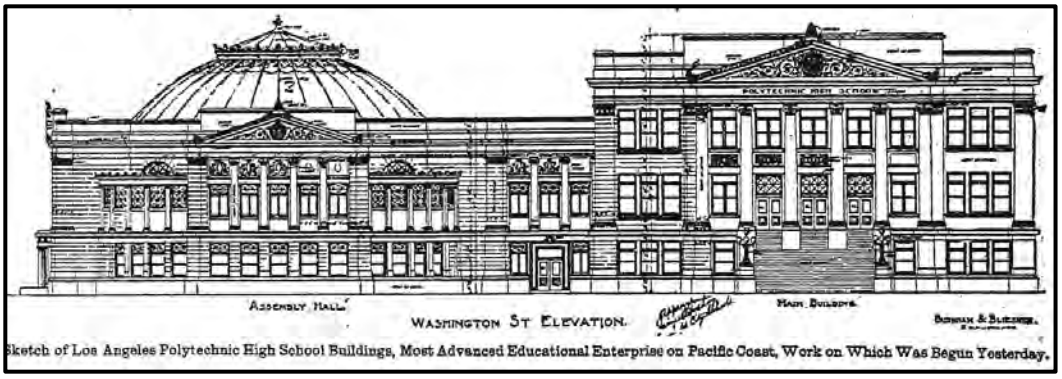


Figure 40. Elevation sketch of Los Angeles Polytechnic High School (1904), by Los Angeles architects Burnham & Bliesser. Source: Los Angeles Times, *July 9, 1904.*

California (though the boom had collapsed by 1890). Between 1880 and 1900, the population of Los Angeles expanded tenfold, growing from 10,000 to more than 100,000. In another decade, these numbers would triple, expanding to nearly 320,000 by 1910, greatly testing the capacity of the fledgling school district and board.

Although the district carried out an extensive building campaign during its first decade, keeping pace with population growth was a constant struggle. The city's schools quickly became overcrowded. As of 1874, the Los Angeles Board of Education recorded a total of six schools with nearly 900 students in the district. Within one decade, by 1884, the number of students within the district had nearly quadrupled, expanding to almost 3,500. By 1890, the Los Angeles Board of Education operated a total of 178 classrooms, which, in the spirit of the times, were classified not in terms of grade level but according to classroom capacity to house students.[22]



Figure 41. Neo-Classical Los Angeles Polytechnic High School (1904), Burnham & Bliesser (demolished). Source: LAPL Photo Collection.

Rapid population growth produced multiple problems for the fledgling Los Angeles Board of Education and school districts. Among them, according to the board's 1884 annual report, were a lack of scholastic uniformity among schools; significant gaps in the educational levels of pupils; crowded classrooms, which necessitated turning students away; and poor financial support. In addition, board president Frank A. Gibson "bemoaned" a governing structure by which state boards of education lacked the authority to issue bonds for school-building campaigns.[23] Within five years of the publication of this annual report, state policy changed. Cities were given the authority to issue bonds for municipal projects and improvements, including school construction. In



Figure 42. Grand, neo-classical high school beyond the city core: San Fernando Union High School (circa 1900), shown in a circa 1900 image (original location unknown). Source: USC Digital Archive.

1899, the City of Los Angeles sold bonds amounting to $200,000, generating proceeds for a turn-of-the-century building campaign for new schools.[24]

The funding provided through the bond measure temporarily helped ease overcrowding. However, the respite was short-lived. The board and district struggled to accommodate ever-expanding enrollment figures. Reflecting on the school year 1892–1893, the superintendent of the Los Angeles Board of Education wrote, "There seems to be no way to get entirely rid of these half-day schools in our rapidly and continuously growing city."[25] In the 1900s, this problem remained an issue, with rapidly increasing enrollment each year. Indeed, overcrowding continued to represent one of the most pressing challenges facing Los Angeles school districts throughout this era (and throughout the twentieth century).

Civic Pride and the Turn-of-the-Century School

On the city periphery, as undeveloped lands slowly gave way to residential and farming communities, utilitarian wood-framed schoolhouses continued to serve the needs of new communities. But in the city core, grand new schools reflected the city's economic and institutional success. In its first few decades, the district added many monumental large-scale schools. Designed by the city's nascent field of architects, the buildings were generally self-contained, multistory buildings exhibiting the palette of styles popular in the era, including late Victorian, Romanesque, Classical Revival, and Beaux-Arts styles. The district's educational facilities and slowly modernizing methods mirrored Los Angeles's transformation from an outpost of 10,000 in 1880 to a metropolis of nearly 320,000 by 1910.[26] Of the district's rapid growth, the *Los Angeles Times* noted in 1898 that

> while it is altogether unnecessary to draw comparisons, it may be said that there is no other city in the United States that can show a proportionately great increase in school population. To say that Los Angeles is proud of her school record and of the large and well-appointed buildings erected for the education of her children is but to repeat that which the parents of the children well know and appreciate. No expense has been spared in providing every modern acquirement.[27]




Figures 43. and 44. A rare remnant of the neo-classical era in school design: San Fernando Middle School, Auditorium, John C. Austin, architect (1916). Source: Heumann & Associates and SAIC for LAUSD.

On January 1, 1898, the *Los Angeles Times* took stock of a decade of expansion of the city's public schools, which by then included 57 facilities with nearly 400 classrooms, estimated in value at $1.25 million. The new, progressive tone was evident in the article. "Play is the business of childhood," the reporter wrote, so the new kindergarten facility is "the playschool for the little ones," with a day filled with varied arts and crafts activities. "By those simple methods, which afford an amusement rather than a task, the mind of the child is set in motion."[28]

The monumentality and beauty of the city's public schools were also celebrated as forwarding the cause of education. The fine buildings, along with updated classroom activities and subjects, would inspire the older pupil to attend school rather than "lie awake all night scheming how he might play hookey all next day." "How different it all is from days gone by," the reporter concluded wistfully.[29]

In this way, for Los Angeles, providing the most modern, up-to-date curricula and facilities became important symbols of the city's growth, economic success, and stature as an urban center worthy of comparison to San Francisco, its well-established rival to the north. With the 1908 groundbreaking for the Los Angeles Aqueduct, and the subsequent wave of land annexations to the city, the area covered by the Los Angeles City School Districts would expand even more in the 1910s and into the 1920s, bringing new challenges for the city's school districts.



Figure 45. 10th Street Elementary School, 10th St. and Olympic Blvd., Los Angeles, in 1926 photo. The oldest extant building on campus is the Administration Building, constructed in 1922. Source: LAPL Photo Collection.

B. PROGRESSIVE EDUCATION MOVEMENT: STANDARDIZATION AND EXPANSION, 1910 TO 1933

"One of the important functions of school architecture is to sell education to the public. This is accomplished by making attractive that side of education the public sees most."
—John J. Donovan, *School Architecture: Principles and Practices*, 1921

NATIONAL CONTEXT | DEVELOPMENTS

Throughout the early part of the twentieth century, Progressive Era reform inspired a broad restructuring of educational methods and curricula in the United States. Reform was guided by the theories of educators and philosophers such as John Dewey (1859–1952) of the Columbia University Teachers College. Dissatisfied with authoritarian teaching methods emphasizing passivity and rote learning—and factory-like schools—Dewey and others argued that a student's natural curiosity and real-life needs should shape the classroom environment and curriculum. Dewey and the Progressive Education Movement stressed "learning both abstract concepts and real skills through projects ... children should move freely through classrooms, use materials other than textbooks ... explore the physical world through hands-on projects."[30]

By the 1910s, the Progressive Education Movement had gained momentum. Educators and administrators interested in reform advocated for more hands-on, child-centered methods and curricula. Key to this movement was the notion that the classroom should flex to the needs of each student. Anthropologist William Henry Holmes (1846–1933) thus noted the change in 1912: "Within the past few years we have been coming to measure education by a new standard, the standard of individual achievement. This means that we have begun to differentiate the abilities of children ... not in terms of a general standard, but in terms of what each individual is able to do within the range of his own ability."[31] This new standard brought changes to classroom dynamics, school structures, and to schools themselves.



Figure 46. Los Angeles High School (1917), in 1925 photo. Although the school still occupies this site, at 4600 W. Olympic Boulevard in Central Los Angeles, this building is no longer extant; most of the existing campus core was constructed between 1964 and 1978. Source: LAPL Photo Collection.



Figure 47. Lincoln High School (1918), northeast Los Angeles, shown here in circa 1925 photo. After sustaining significant damage during the 1933 Long Beach Earthquake, the school was reconstructed beginning in 1936/1937. Source: LAPL Photo Collection.

The 1910s in Los Angeles also brought a number of developments that ultimately affected public schools. In addition to the 1913 opening of the Los Angeles Aqueduct, the film industry settled in the Los Angeles area during this time, and its economic strength drew new residents. Also in the early 1910s, the region's first collegiate school of architecture was taking shape at USC. By 1925, USC began conferring the region's only professional degree in architecture.[32] This helped establish the city's architectural profession and culture by training architects and attracting faculty throughout the country.

During this period, the role of the public school also changed, with a greater focus on serving community needs. An expansion of specialized programs and facilities served new groups, including working teenagers and adults. The school plant itself also took on a greater role as a community-gathering place, with auditoriums, outdoor spaces, and public rooms sited and designed to double as gathering areas. Artfully designed and landscaped approaches and entrances to schools represented an acknowledgment of this change and the need for positive relations with the community. Summing up the changes to educational philosophy in the early twentieth century, W. H. Crocker (1861–1937), editor of *The American Architect*, wrote,

> During the past quarter century, each succeeding year has witnessed the broadening development of public education. The relation of the school to the community has radically changed. Systems of education have been evolved as the result of the careful observation of those engaged in pedagogy, and these systems have become broadened and extended. ... With this evolution and extension of educational methods it was logical to assume that the modern schoolhouse would keep pace in its designing and planning.[33]





Figures 48. and 49. Civic pride and the monumental public school. On the left: Historic postcard of Union High School (1910), later Hollywood High, Hollywood. Source: LAPL Photo Collection. On the right: Union High School in a circa 1915 photo. Located at 1521 N. Highland Avenue, the building is extant but significantly altered; it is currently in use as the Hollywood High School Museum. Source: LAPL Photo Collection.

In fact, modern schoolhouse design was initially slower to keep up with the times. But by the early 1920s, the Progressive Education Movement had brought significant changes to two main realms: first, teaching methods and curricula became more hands-on and individualized, less rigid and authoritarian; and second, environments for learning were transformed to facilitate these new ideas. As architectural historian Amy Ogata wrote, "Historians of education are still divided on the real impact of progressivism on American education, but its effect on the *architectural* discourse was profound and enduring."[34]

EFFECT ON SCHOOL BUILDINGS AND CAMPUSES

Educational philosophies and methods—and eventually schools themselves—changed substantially during this period. For their communities, school plants remained important symbols of civic identity and pride. The buildings were increasingly functional, but the wish to create beautiful temples to learning, reflecting the community's aspirations for itself and its youth, remained strong: "There is nothing more impressive or hopeful in American democracy than the devotion of the people to education. … Unconsciously the spirit has been to represent truly this national devotion to education in the architecture of public schools."[35]

As architects and designers began experimenting with the new ideas of this period, school plants became "more flexible and adaptable, and more accommodating of the new methods of teaching."[36] The keys became functionality, adaptability, and programmatic differentiation of buildings and spaces, for interiors and for the site overall. The increasing emphasis on natural light and fresh air brought the incorporation of bays of windows, which would march across the building elevations and span each floor of classroom wings.

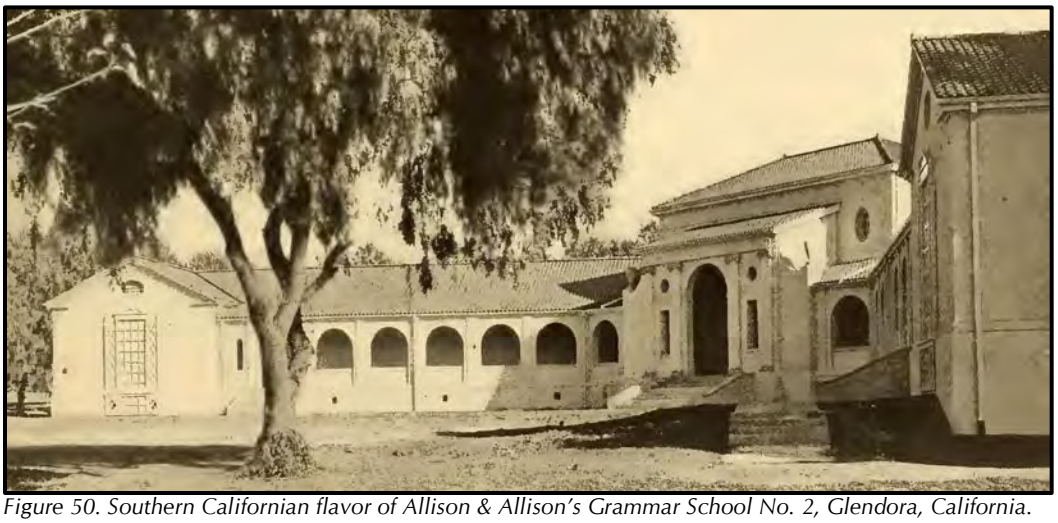


Figure 50. Southern Californian flavor of Allison & Allison's Grammar School No. 2, Glendora, California. Source: Donovan, 1921.

With a growing network of education-related organizations and publications, the push for modernization was a shared project for architects and educators around the United States. One of the era's most defining documents in this respect—one that became a standard office reference for architects—was John J. Donovan's 1921 *School Architecture: Principles and Practices*. Encyclopedic in scope, Donovan's volume offered a richly illustrated guide with the latest ideas in everything from construction to costs, campus planning and landscape development, to each feature of a modern school plant, whether vocational, elementary, junior, or high school. A wealth of drawings and floor plans illustrated the ideas described by Donovan and other school architects in the volume. In 1954, renowned school architect William Wayne Caudill referred to Donovan's book as "the 'bible'": "Any account of the architectural development of school buildings in the United States certainly would not be complete without a statement concerning the writings of Donovan."[37]

John J. Donovan's School Architecture: Principles and Practices

A native of Massachusetts and alumni of the Massachusetts Institute of Technology, John J. Donovan (1876–1949) moved to Oakland, California, in 1911 to supervise the construction of Oakland City Hall. Donovan resided and practiced in Oakland for the rest of his career, completing many high-profile commissions including libraries, schools, and infrastructure projects. Although he lived and practiced in Northern California, Donovan's book became a standard reference throughout the United States.

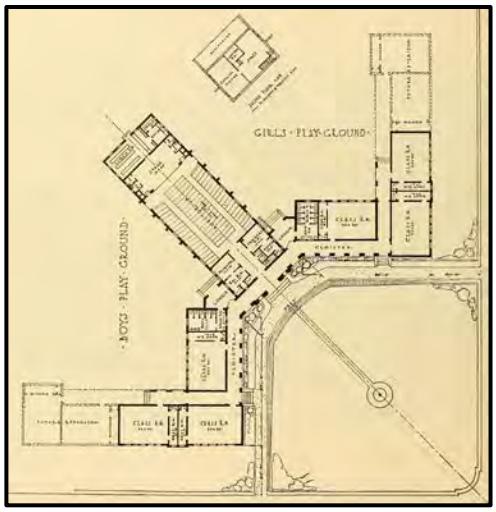


Figure 51. Open-air plan, Allison & Allison's Grammar School No. 2. Source: Donovan, 1921.



Figure 52. Open-air classrooms in northern and southern California. On left, Leland Stanford Jr. University Elementary School, Palo Alto, California. On right, Francis W. Parker Elementary School, San Diego, California. Source: Donovan, 1921.

Shift away from Monumental Scale and Beaux-Arts Classicism

Donovan documented and proposed examples of how to plan for the new school. In terms of scale, the schools were less monumental, less imposing. For primary grades especially, Donovan wrote, "Vainglorious attempts to build monumentally are fatal to both child and adult, for instead of attracting the child's interest they are most likely to repel and make fearful." Rather, he continued, "the architecture of the elementary school should be symbolic of quiet simplicity, expressing in permanent materials much the same charm that the little child has for those who appreciate and love children."[38]

Stylistically as well, from the 1910s through the 1920s, there was a move away from Beaux-Arts Classicism and Classical Revival styles toward the period-eclectic styles commonly used in domestic architecture. The significant innovations and departures from earlier eras were in building plan, layout, and interior program. Using a range of national examples, Donovan's illustrations and narrative showed a new approach to school design that was focused on artful, functional site planning, and coordination of campus buildings.

During this time in Southern California, as in many other parts of the region, architecture was entering a golden age. Responding to the boom in construction, architects and designers were both meeting and fueling demand for the menu of period-eclectic styles popular at the time. In Southern California, architects drew on the heritage of the region, including the Arts and Crafts movement and Spanish Colonial past, to forge a unique architectural identity.

Importance of Indoor-Outdoor Integration

One of the most significant shifts during this era was the emphasis on outdoor spaces in schools. In 1910, in another guide for designing "modern" schoolhouses, architect Alfred D. Hamlin observed that "however perfect the heating and ventilating plant, and however faultless its operation, let it be clearly understood and always remembered that no artificial

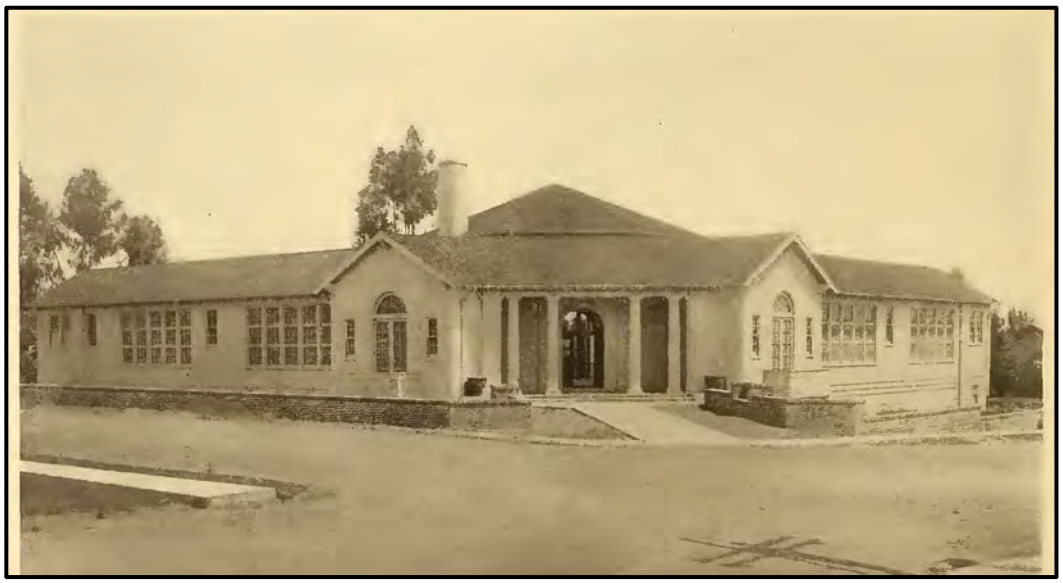


Figure 53. A lack of monumentality, low scale, and U-shaped plan characterize John J. Donovan's Stanford University Elementary School, Palo Alto, California. Source: Donovan, 1921.

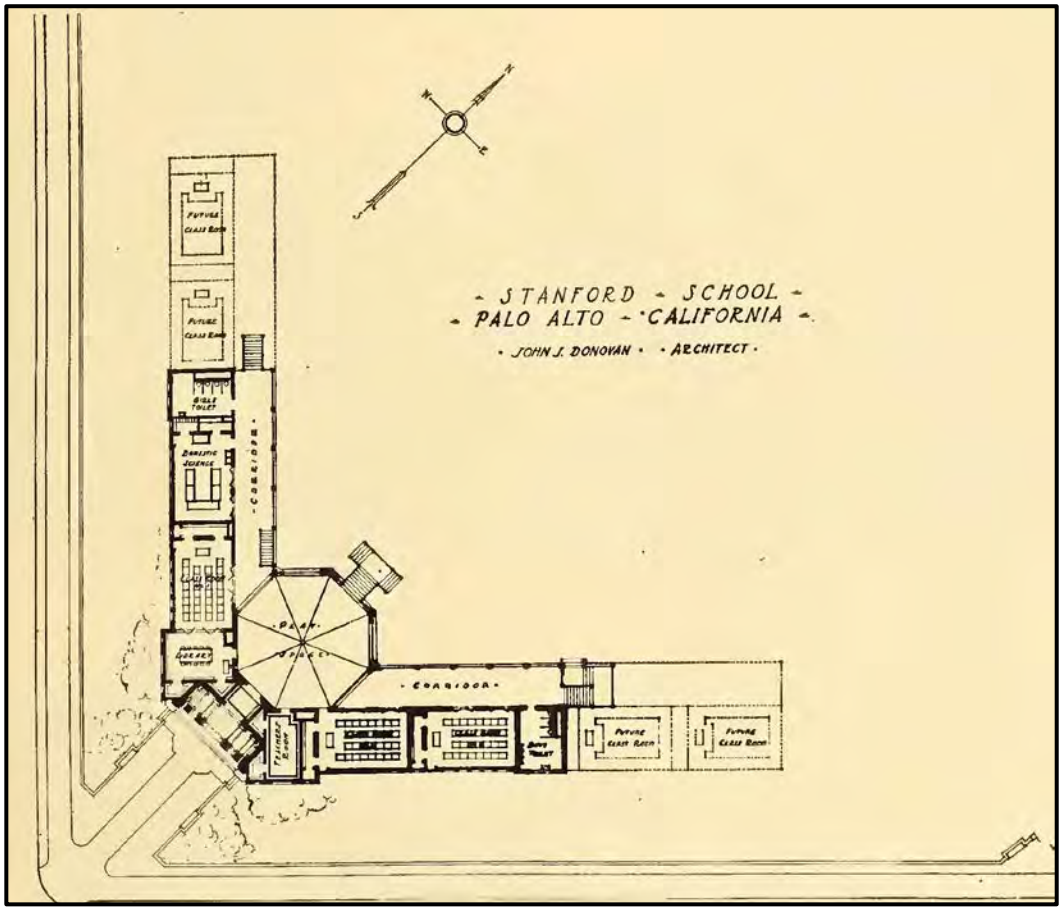


Figure 54. U-shaped campus plan, Stanford University Elementary School, Palo Alto, California. The plan allows for easy indoor-outdoor spaces as well as expansion as the school grows. The locations for four "future class rooms" are sketched in at each end of the plan. Source: Donovan, 1921.

heating and ventilation can ever take the place of fresh outdoor air and sunshine."[39] Rapid urbanization throughout the United States brought increased acknowledgment of the need for and benefits of outdoor activities. During this era, Hille wrote, "Connections to the out-of-doors were important for reasons of health and hygiene, providing access to natural light, fresh air, and exercise, and places for new kinds of learning activities."[40]

These ideas translated into clear changes in school design. Plans became "more open and interconnected, with more transparency and spatial complexity—both inside and out."[41] Schools capturing these ideas in particular abounded in Donovan's book. Simple changes to the traditional big-block school, such as adding adjacent or parallel wings, created numerous possibilities for outdoor spaces. The school branched out and turned in on itself, with building plans including elongated L shapes, T shapes, H shapes, or U shapes, all of which spread out the interior program and opened up possibilities for courtyard spaces and interconnections.

Many of the examples Donovan used to illustrate the latest ideas were drawn from Northern and Southern California. As Donovan said of these Californian schools, "Elevating the building and spreading its area over more ground brought forth many interesting developments in plan of single units and groups of units which of course led to delightful exterior compositions of the modified Romanesque, Spanish, Italian, English, and modern Renaissance. Thus it is that the school architecture of California has found a permanent spot in the sun."[42]

In this respect, California led the way. With its relatively mild climate—not to mention rapidly growing population, need for new schools, and room to grow—Southern California in particular was an early proving ground for the open-air campus and school. (For the region's residential architecture as well, outdoor living came to exemplify the good life and contemporary design in the "Californian" mode, a label that itself was becoming a marker for the latest ideas.)

This was an idea promoted by the Los Angeles school district officials as well. In 1911, M. C. Bettinger, assistant superintendent of the Los Angeles City School District, told the *Los Angeles Times* that in the city's schools "the custom of studying and even reciting out of doors is growing. The children take their books and go out under the trees, sit on the benches or the ground."[43] Bettinger said, "In my district I heartily encourage this custom." He evoked the language of reform when he declared that outdoor study provided a means of "getting away from the factory system of education. … This is especially desirable in the lower grades, when the children grow restless, and look longingly out toward the fields and the hills."[44]



Figure 55. One-story scale and E-shaped plan of Fishburn Avenue Elementary School (1923), extant in Maywood, south of Los Angeles, shown here in 1927 aerial photo. Source: LAPL Photo Collection.



Figure 56. The grand approach, unified campus plan, and H-shaped building of John C. Fremont High School (1924), shown in 1932 aerial photo. Located in south Los Angeles, limited portions of the original campus are extant. Note series of window bays on each floor, letting in natural light and fresh air. Source: LAPL Photo Collection.

Site Planning and Layout

Unified site planning, the incorporation of landscape architecture, and a spread-out campus became increasingly important in this era. These qualities enhanced patterns of circulation, created more outdoor gathering spaces, and built connections between campus buildings based on use. Spreading out the plan, Donovan wrote, created "many opportunities for pleasing courts, and approaches, at the same time furnishing to the plan spaces for lawns, shrubs, trees."[45]

Because of the acreage requirements for an extended campus plan, though, such schools were often added on the city periphery. Donovan wrote, "The trend of the times is to locate secondary schools in sparsely settled sections of the cities where the buildings may be spread out and their height reduced. This is desirable, as it means better lighting, better natural ventilation, fewer fire hazards."[46] This was the case in Southern California as well, with many examples of open-air campuses located in what were, at the time, the expanding suburbs beyond the city core. This trend in campus planning also made school plant design, planning, and construction an interdisciplinary project, involving teams of architects, landscape designers, and school facilities personnel.

Buildings were designed with generous setbacks, taking into account adjacent traffic to ensure that classrooms were adequately buffered from street noise. More comprehensive site planning also allowed architects and school planners to think ahead to future expansion needs, in terms of both individual buildings that could be expanded and buildings and structures that might be added.



Figure 57. Garfield High School (1925), in 1929 photo. While the campus still occupies this site, very little of the original campus appears intact. Note semicircular driveway and approach to school, generous setback, use of landscaping, and unified campus plan. Expanses of window bays span each elevation. Source: LAPL Photo Collection.



Figure 58. Expansive site plan of Hyde Park Elementary School (1923), south Los Angeles, shown in 1927 aerial photo. The site is still occupied by a school (LAUSD's Young Empowered Scholars Academy), though little of the original campus appears extant. Source: LAPL Photo Collection.

The notion of campus planning was becoming more important as well, especially for upper grades. High schools were expected to be "about double the size" of junior highs, with the "character of the college campus": "The day has arrived when high schools are being planned as groups of buildings, not more than two or three stories high, with the different departments in separate buildings connected by open or inclosed arcades or wings."[47] This trend was best suited to expansive lots, though, rather than dense urban environments. For urban schools without much acreage to work with, multiple stories were often necessary, with classrooms organized in blocks with adjacent wings and double-loaded corridors. Although Donovan conceded that in the "larger cities, due to the cost of land, it may be necessary to have the high school under one roof," his book illustrated how variations in plans and programs still created opportunities for visual interest and outdoor spaces.

In addition to limited acreage, limited funding played a role in determining how far a campus could spread out across a site. Resources were not always available to design and construct an entire campus. In the Los Angeles city school districts in this period, buildings would be added as enrollment increased, usually starting with the administration building—usually the flagship building of the campus—and classroom wings, then eventually including additional classrooms, a cafeteria, and a gymnasium, depending on the grade level of the school. Purposeful site planning also allowed architects to factor into their designs the patterns of the sun and interior illumination, in order to make the best of natural light in the classroom.

According to Donovan, as of 1921, the finer points of building siting, orientation, and interior lighting had been "carefully documented and thoroughly understood by architects at the time."[48] Conventional wisdom held that window areas should equal approximately 40 to 50 percent of the total wall area of the room's longest side. Windows would extend up to 6 inches from the ceiling, to maximize light. In this way, the repetitive bays of windows, on

each floor with classroom space, became one of the trademark features of 1920s schools in particular. Views out the windows were also considered important, because students should have the chance to look out the window and "rest their eyes at times."[49] Ceilings also tended to be high, ranging typically from 12 to 15 feet, "a minimum standard that in many places was regulated by building codes."[50] High ceilings helped with ventilation and accommodated tall windows, which provided the main light source until the advent of fluorescent lighting in the 1930s.

LOS ANGELES CITY SCHOOL DISTRICTS | DEVELOPMENTS AND CONTEXT

Building Program

During this time in Southern California, the boom in construction and resources brought a golden age for period-revival architecture. Buildings reflected a wide palette of styles and stylistic hybrids; schools exhibited the ornamental programs of Romanesque, Italian Renaissance, Spanish Colonial, and Collegiate Gothic Revival styles. In terms of materials, schools during this period were generally, though not always, of masonry construction. Brick was a popular structural and decorative cladding material, as were hollow clay tile and concrete, the latter often manipulated to resemble stone or other materials.

While the 1920s boom provided opportunities to test new ideas, the era remained transitional, with some new construction showing the new lower massing and open site plans recommended by Donovan, and some schools still adopting a more monumental decorative program and higher massing. As elsewhere, the most common building plan types during this period were increasingly rectilinear with perpendicular wings in T, H, and U shapes, providing areas for courtyards and outdoor spaces. Ordinarily the interior would consist of classrooms lining a double-loaded corridor.



Figure 59. Craftsman-style Morningside Elementary School (1915), George Lindsey, architect. Morningside Elementary remains LAUSD's oldest school building still serving its original purpose. Source: LAUSD.



Figure 60. John Burroughs Middle School (1922), central Los Angeles, shown in 1926 aerial photo. This school is extant and shown in the illustration below. Source: LAPL Photo Collection.

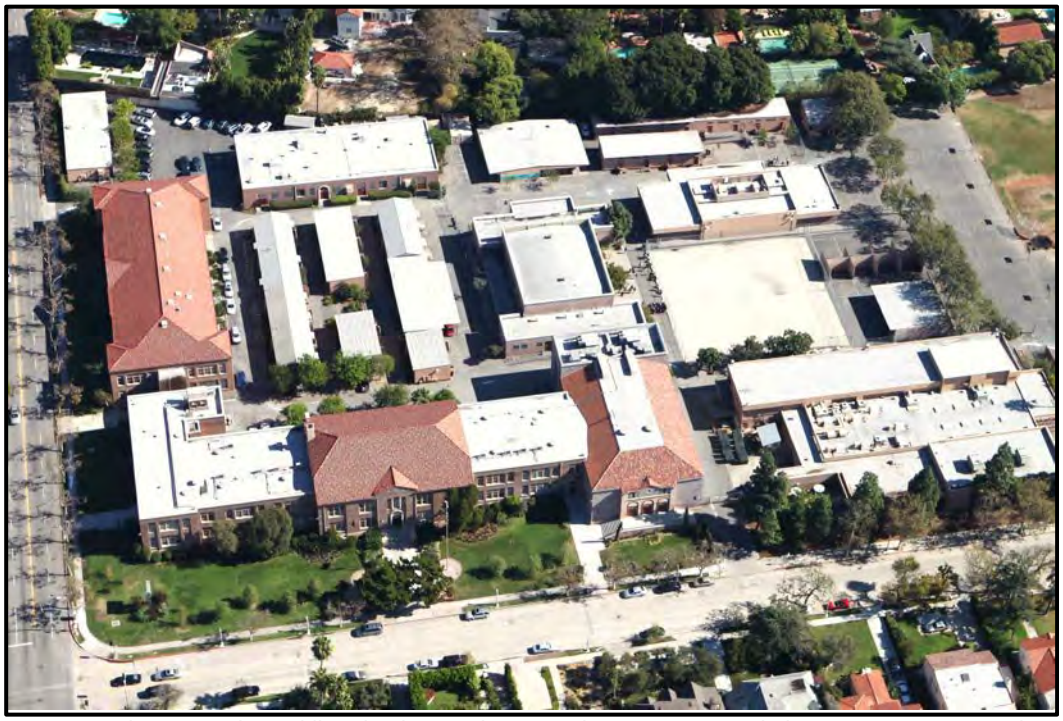


Figure 61. John Burroughs Middle School, central Los Angeles, in recent aerial photo. Source: LAUSD John Burroughs Middle School Pre-Planning Survey, 2011.



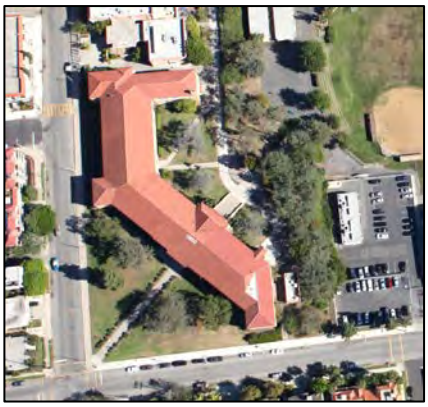
Figure 62. John Burroughs Middle School (1922). This Renaissance Revival–style school is one of the most intact 1920s schools in the district. Source: LAUSD John Burroughs Middle School Pre-Planning Survey, 2011.

Construction generally unfolded in phases as school enrollment grew. Between the mid-1910s and 1930, elementary schools, for example, were typically constructed in three stages. The first stage usually brought an administrative office, the flagship building of the school, as well as a kindergarten and a nine-classroom wing. The second stage took place once enrollment reached 400, with the addition of more classrooms, facilities for home economics and manual education, and a cafeteria. When enrollment reached 900, the third stage took place, which usually brought a new auditorium, classrooms, or other service rooms as needed. Kindergartens tended to be self-contained and separate from other classes. Gymnasiums, shops, and specialized facilities for home economics, wood shop, and other coursework were also added for junior high and high schools.

During this era, newspapers of the day reflected much civic pride in—and promotion of—the city's new public schools. In 1914, when Los Angeles's public schools were singled out as "models for the rest of the state" (in comparison with San Francisco's schools, which were declared substandard), the bragging rights this conferred made news in the *Los Angeles Times*:

> A city is known by the schools it keeps and nobody can ignore the fact that Los Angeles owes no small measure of her astonishing growth, her rapidly increasingly wealth and commercial stranding, her desirable American population, to the acknowledged high efficiency of her public school system.[51]

Keeping up with ever-expanding enrollment figures remained a struggle, however. By the end of the 1910s, high enrollment and little funding for new facilities had again led to overcrowded classrooms and the need for half-day sessions. In April 1919, the Los Angeles Board of Education took temporary measures, building 30 bungalows to relieve the overcrowding, in advance of bond funding for a wider building campaign.




Figures 63 and 64. Spread-out plan and Renaissance Revival style of University High School (1924), west Los Angeles. Source: LAUSD University High School Pre-Planning Survey, 2011.

The 1920s brought dramatic expansion in school construction. By 1927, $60 million in bond issues had been sold for the construction of new schools, as well as additions to existing facilities. More than 200 permanent facilities were constructed in 6 years. As a reporter for the *Los Angeles Times* wrote in 1927,

> Los Angeles is in many respects such a super city that it is difficult to write about her without using superlatives. In speaking of her public schools, however, one may be pardoned—especially an outsider—for according them high praise, since they are the product of teachers and officers who are laboring unselfishly for the public good.[52]

Alfred S. Nibecker Jr. and the District Architecture and Building Department

Guiding the Los Angeles school districts through rapid expansion in 1920s, disaster and depression during the 1930s, and the great postwar boom through the mid-1950s was district architect and business manager Alfred S. Nibecker, Jr. In the 1920s, Nibecker began private practice in Los Angeles; he joined the Los Angeles City Board of Education as an architect in 1926, where he remained until his retirement in 1955. In his three-decade career with the school district, Nibecker oversaw the construction of, and contributed designs to, hundreds of school plant projects. Many commissions were completed by the district's in-house staff, but many others were handled by a range of the region's best architects and builders, with an increasing number of firms specializing in school design. In addition to his work with the Los Angeles City school districts, Nibecker was a fellow of the American Institute of Architects and served on the National Committee on School House Construction, the National Advisory Council on School Building Problems, run under the auspices of the U.S. Department of the Interior, Office of Education. In 1955, Nibecker was made an honorary member of the Structural Engineers Association of Southern California, the association's highest award.

Building Code Reform

New building codes attempted to keep pace with the construction boom and ensure safety. In 1914, with the focus still on fire hazards, Los Angeles voters approved a law requiring the replacement of wood-framed schools with masonry structures. Of course, the vulnerability

of masonry construction to earthquakes was not yet fully known. Therefore, most schools constructed in Los Angeles post-1914 utilized masonry construction, with brick construction used for a majority of the new schools.

In 1925, in response to the devastating Santa Barbara earthquake, the state adopted new building codes aimed at strengthening seismic safety. In 1927, the City of Los Angeles followed suit and revised its local building ordinance and added supplemental steps and requirements to ensure the structural stability of schools. Improvements included fire-resistant corridors, stairs, and exterior walls and reinforced concrete beams within floors and roofs. When the March 1933 Long Beach earthquake hit, schools built after 1927, under the new requirements, proved more resilient than those constructed before the laws took effect.

As before, the new schools of the district generated much civic pride, with newspapers of the day praising new campuses for their beauty and modern facilities. As *Los Angeles Times* reporter Neeta Marquis wrote in 1928, "Let us of Los Angeles who often grow depressed at times over the inadequacies of our city administration in other departments take heart of grace from the efficiency and stability of the factory which is turned out our citizens of tomorrow, our public schools."[53]

The Roaring '20s and Enrollment Expansion

The basic shift in philosophy coincided with the continuing, remarkable expansion of Los Angeles, not only in terms of population growth but also geographical range. In anticipation of the ample water supply promised by the Los Angeles Aqueduct, constructed between 1908 and 1913, Los Angeles experienced rapid population and land growth through annexation of neighboring cities. As of 1910, the population of the City of Los Angeles stood at 319,000, and the area served by the Los Angeles City School District spanned more than 85 square miles, with more than 46,500 students enrolled. Within just 6 years, by 1916, enrollment in the Los Angeles City School District had nearly doubled to more than 78,000 students, and the expanse of the district quadrupled, growing from 85 square miles




Figures 65 and 66. Vernon City Elementary School (1929), with Spanish Colonial Revival arcades moving school corridors outside. Source: LAUSD Vernon City Elementary School Pre-Planning Survey, 2011.



Figure 67. One of Los Angeles's earliest middle schools, Lafayette Junior High School (1911), in 1925 photo. Located in southern downtown Los Angeles, the school closed in 1955 due to decreasing enrollment figures. Source: LAPL Photo Collection.



Figure 68. Winter 1933 class at Lafayette Junior High School. Source: LAPL Photo Collection.

to approximately 400.[54] Some areas annexed by the Los Angeles City School District already had schools to serve their own needs; more often, though, new schools were required. Between 1911 and 1915, a total of 22 schools had been annexed to the district, with an additional 31 elementary and high school buildings under construction.[55]

During the boom of the 1920s, Los Angeles film and aeronautics industries remained strong draws for new settlers. In one decade, between 1920 and 1930, Los Angeles's population doubled, climbing to 1.2 million, making the city the fifth largest in the United States. At a high point during the 1920s, new residential subdivisions were being established at the rate of 40 per week in the City of Los Angeles. By 1930, Los Angeles spanned 441 square miles.[56] This represented a twelvefold expansion in 30 years.

Concurrently, Los Angeles's public school enrollment grew nineteenfold during the 1920s. The construction boom in schools helped accommodate the enrollment increase, but the need for new schools and classrooms remained a constant issue. By 1933, the Los Angeles City School District included a student population of 300,000, attending 384 schools—293 of them elementary schools; 22 junior high schools; 32 senior high schools; and continuation, trade, and junior college facilities rounding out the remainder.[57]

Curriculum Shifts

The Los Angeles City school districts followed the curriculum modernization and reform trends seen in the rest of the United States. By the early 1910s, the city's public schools had made a decisive move "away from the uniformity that was so much prized at the turn of the century. Diversification now marked the schools and the officials made that fact known."[58]

The heart of reform was designing curricula that flexed according to the students—their abilities, needs, psychological well-being, and their inherent curiosity and love of learning. For example, the new course of study in elementary schools was based on the idea that



Figure 69. Central Junior High School, as of circa 1925. Located in downtown Los Angeles on Hill Street, this school closed in 1946. Source: LAPL Photo Collection.

"individuals should progress in accordance with their individual capacities" and was organized in "large units with the activity approach emphasized throughout."[59]

In 1911, Los Angeles established a new intermediate level for schools, launching the third junior high school system in the United States, behind Columbus, Ohio, and Berkeley, California. Vocational schools and junior colleges (as an extension of the high school curriculum) were also greatly expanded in this period.

Social Responsiveness and a Broadened Mission for Public Schools

In Los Angeles and elsewhere, this era saw a broadened role for public schools as community centers. Public education became more inclusive and socially responsive to underserved populations. During the first quarter of the twentieth century, a range of special-needs schools were established, including special facilities for the deaf, blind, physically disabled, or cognitively impaired; special facilities were also provided for children suffering from tuberculosis. National trends and legislation prompted the establishment of evening high schools, for adults seeking to broaden or finish their education; part-time high schools, to help meet the new requirement for working children between the ages of 14 and 18 to attend school part time; and vocational schools. Cafeterias and nurseries became part of schools—the first for nourishment, and the second to ensure that older children tasked with caring for younger siblings could attend school while their parents worked. Schools also offered assimilation and language programs for the city's significant immigrant population.

The first evening high school opened in 1907 in Los Angeles at the Polytechnic High School. Offered initially as a means for working adults to obtain a high school education or diploma, night schools blossomed in popularity; and by the post–World War I period, they served as informal community centers, with offerings expanding to include a variety of course offerings.

Legislative Reform and Public Education

The two other major changes to Los Angeles's public schools were prompted by legislation at the state and federal level. Beginning in the early 1910s, legislation began emerging throughout the United States making part-time school compulsory for teenagers. The first such law was introduced in Wisconsin in 1911, with California following in 1919.

In 1913, a presidential commission was formed to assess the need for vocational training throughout the United States. One of the results of this commission was the 1917 Smith-Hughes Act, which, among other things, initiated new compulsory education requirements for school-aged children and provided federal funding for vocational schools and coursework, in particular in agriculture. In Los Angeles, specialized vocational training had been available as early as 1905, with Polytechnic High School. Throughout the early part of the twentieth century, technical schools offered specialized coursework, such as commercial courses at Polytechnic, industrial and household arts at the Manual Arts High Schools, and agriculture at Gardena High School.[60]

The state law that emerged from the Smith-Hughes Act required that all working children between the ages of 14 and 18 attend a minimum of 144 hours of class instruction per year.[61] In 1920, in response, Los Angeles public schools launched a program in part-time education, making use of "a large number of rented locations."[62] In 1926, Los Angeles's largest part-time high school—aptly named the Part-Time High School—became Metropolitan High School (located at 234 W. Venice Boulevard in Los Angeles, the campus became the Los Angeles Metropolitan Junior College in 1950).



Figure 70. Frank Wiggins Trade School, circa 1925. Located in downtown Los Angeles on Olive Street, this school closed in 1951. Source: USC Digital Archive.

The Frank Wiggins Trade School, the first of its kind in the district, was established in 1925 on Grand Avenue in downtown Los Angeles (though it was relocated in 1927 to South Olive Street). Named for the longtime secretary of the Los Angeles Chamber of Commerce, the Frank Wiggins Trade School provided a course of adult education in specific vocations and placement of students in the

occupations for which they had been trained. Among its other curricula, the school offered the first professional culinary training program in the nation, an offshoot of the home economics program. The trade school evolved into the Los Angeles Trade-Technical College, still operational today as part of the nine campus, 882-square-mile Los Angeles Community College District.

The establishment of the District's first junior college in 1929 was represented as the crowning accomplishment of the administration then in office. The school district purchased the Vermont Avenue campus of the former State Normal School when it relocated to Westwood and established the Los Angeles Junior College, which was an immediate success. The curriculum constituted the freshman and sophomore years of college and included semiprofessional courses for students interested in a 2-year education, as well as certificate work for those planning to qualify for subsequent admission to a university.

Together with trade schools, junior colleges filled an important social need by supplying focused adult education and career training during the Depression years, and enrollment steadily increased as the war approached.



Figure 71. Susan Miller Dorsey High School (1937), extant in mid-city Los Angeles near Baldwin Hills. The school's yearbook, "Circle," took its name from the innovative site plan and arc of outdoor corridors. Source: Circle, Dorsey High School Yearbook, 1942.

C. ERA OF REFORM: GREAT DEPRESSION, EARTHQUAKE, AND EARLY EXPERIMENTS IN THE FUNCTIONALIST SCHOOL, 1933 TO 1945

"The old school was primarily designed to impress the adult and the new school primarily designed to impress and provide comfort to the pupil."
—William Wayne Caudill, *Better Design for Schools*, 1954

NATIONAL CONTEXT | DEVELOPMENTS

In the simple epigraph above, architect William Wayne Caudill (1914–1983) captured the evolving ideas about twentieth-century school design. Traditional schools had often been built as self-contained, monumental blocks, in Classical Revival and Beaux Arts–inspired styles designed to impart prestige. In the first quarter of the twentieth century, reformers started moving away from the multistory, block-style school in favor of a more flexible, program-differentiated school plant.



Figure 72. Indoor-outdoor classroom, Corona Avenue Elementary School, Richard Neutra, 1935. Extant in Bell, California, south of Los Angeles. Source: USC Digital Archive.

The reform movement was not concerned with bringing modernist style, per se, to school plant design. The real push was for a more "functional" school. If the function of a school was educating children—and if educational methods and curricula had improved and evolved—then school plant design had to evolve as well. Building plans, campuses, and interiors were increasingly designed to be more child-centered and flexible: "The broadening curriculum, the more active methods of learning, and emphasis upon doing and working with things rather than merely studying books—all have focused attention upon the importance of the physical environment."[63]

Continuing the trend begun in the 1920s, integration of classrooms with the outdoors became one key factor for school plant improvement. The early-twentieth-century recognition of the importance of children's playgrounds and an increasing emphasis on the benefits of outdoor living fueled this movement. Wrote Elizabeth Mock in 1943, "If we grant the importance of encouraging the child's awareness of nature along with his sense of freedom, we can then understand the present tendency towards ground-level classrooms, each with its own door to the outside and its adjacent outdoor class area."[64]

Numerous proposals were forwarded for including more indoor-outdoor connections for classrooms and campuses, whether through the use of patios, courtyards, or playing fields. So central was the concern for outdoor classrooms and recreation that, by the 1930s, the trend became known as the "open-air school" movement, with its emphasis on "air, light, outdoor learning, and easy circulation through the school buildings."[65] Site planning was also carried out with an eye toward environmental factors, such as sun patterns, interior cross-lighting, and ventilation. With its mild climate and room to grow, Southern California pioneered some of the nation's best and earliest examples of open-air schools in the 1930s.[66]

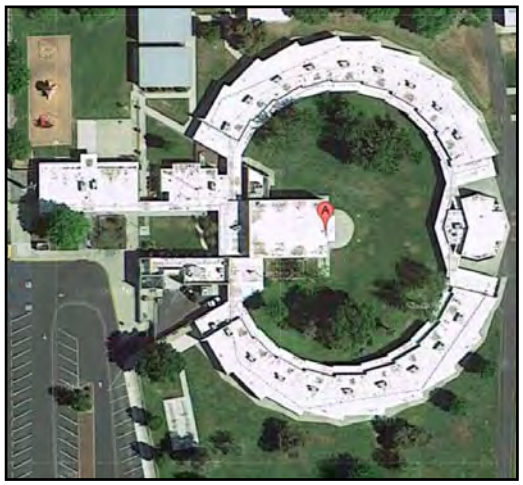


Figure 73. Richard J. Neutra School, Lemoore, California (Central Valley), 1960, based on Neutra's 1928 design. Source: Google Maps, 2013.

As in the 1920s, schools continued to play an increasingly important role as gathering places for the community. This was reflected in campus site planning, with auditoriums sited for public accessibility and separate entrances allowing for school-time access by the public that would not interrupt studies. Architects, designers, and school staff actively sought ways to adapt schools to this expanded function within the community, and innovations in this regard were amply noted in the education- and architecture-related trade magazines.

In the 1930s, an expanding field of research in the building sciences aided those tasked with designing comfortable classrooms for children. Controlling, designing for, and regulating the environmental conditions of classrooms became the topic of numerous studies, including in the science of proper lighting, ventilation, and safety systems (the field of acoustics came into play in the postwar period).

A new focus on defining and better understanding building typologies and their specific needs also grew out of this era, with the idea of creating better environments and lowering costs through standardization.[67]



Figure 74. Hollywood High School, Marsh, Smith & Powell (1935), in 1939 photo. The school is still located in Hollywood on Sunset Boulevard and Highland Avenues. Source: LAPL Photo Collection.



Figure 75. Thomas Jefferson High School, Stiles O. Clements, 1936 image. Extant in south Los Angeles, on East 41st Street. Source: LAPL Photo Collection.

By the mid-1930s, the advent of the New Deal and the PWA (later the Works Progress Administration) sponsored a generation of new building. Throughout the United States, PWA funding helped buoy school construction during the Great Depression, with approximately 70 percent of all new school construction in the 1930s funded through the agency.[68] In Southern California, following the 1933 Long Beach earthquake and the urgent need for new facilities (described in detail below), PWA funding for school construction and reconstruction totaled over $13 million, a sum accounting for 62 percent of the spending overall.[69]

Throughout the United States, PWA buildings, including dozens of schools, became known for their distinctive Streamline Moderne styling. In Southern California, Streamline Moderne ideas were also applied to historic-eclectic styles that had been popular in the 1920s, creating new stylistic hybrids.

EFFECTS ON SCHOOL BUILDINGS AND CAMPUSES

The Functionalist, Modern Movement in School Design

By the 1930s, progressive educational reform had brought major changes: teaching methods and materials were becoming more hands-on, practical, and engaged; and the environments for learning were themselves transformed to facilitate the new ideas. As architectural historian Amy Ogata wrote, "Historians of education are still divided on the real impact of progressivism on American education, but its effect on the architectural discourse was profound and enduring."[70]

Compared with school buildings and campuses just a decade before, schools were increasingly nonmonumental in their scale, site plan, and design. One-story buildings were increasingly used for all grade levels, in particular for elementary schools. In a companion piece to the Museum of Modern Art exhibit *Modern Architecture for the Modern School*, Elizabeth Mock wrote in 1943 that "if the architect is guided primarily by his desire to create a building for children, the result will almost certainly be a one-story school, built as close to the ground as possible. This is the easiest way to open each room to the outside, and the easiest way to attain suitable scale."[71]

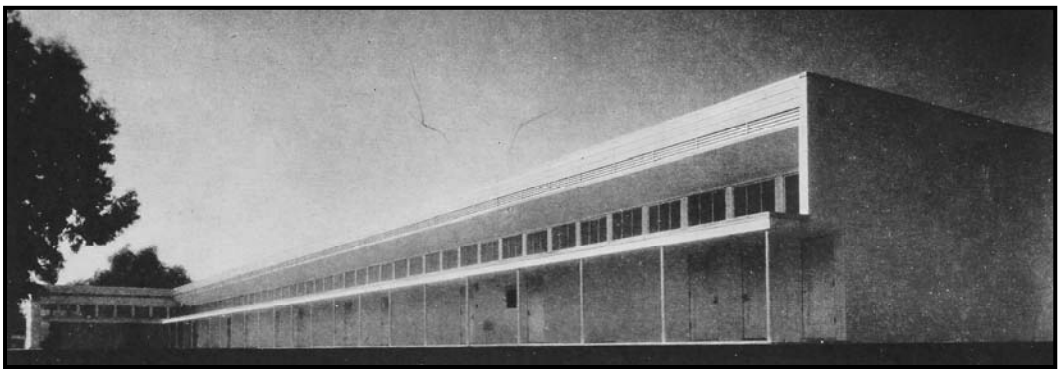


Figure 76. Richard Neutra's Corona Avenue Elementary School addition, 1934/1935. Extant in Bell, California, southeast of downtown Los Angeles. Source: Built in USA, 1944.

The emergence of modern architectural design provided a quantum leap forward for this new wave of reform. Modernism embraced honesty in structure and materials and a functional design driven not by a given style or ornamental program but by the building's purpose. By the postwar period, this debate had been settled, and modernism did become the preferred (though not exclusive) idiom for American school plants. But in the 1930s, this movement, which brought together ideas about educational reform, modern architecture, and research in building sciences, was just taking root.

William Edmond Lescaze

One architect who actively advocated for a more modern, functional approach to school design in the 1930s was William Edmond Lescaze (1896–1969). Between 1929 and 1932, Lescaze, along with partner George Howe (1886–1955), designed one of the era's most significant modern buildings in the United States, the Philadelphia Savings Fund Society building, considered to be the country's first example of a skyscraper in the International Style.[72] In the mid-1930s, Lescaze published articles in architectural magazines as well as specialized education-related trade journals to argue for more functionalist, modern schools:

> If buildings have an influence on us, should we not insist that our school buildings work well, and be good looking? Of course we should. But do they work well, and are they good looking? Alas, no! Most of the schools are massive, uninspiring, uninviting buildings. Pediments of limestone, a few columns and, when we can afford them, a tower or a cupola! Just as you may order lettuce salad with French dressing or mayonnaise, you may have a school building Gothic or Colonial!
>
> There can be no school planning worthy of the name unless the functions of the building are clearly understood, clearly expressed: and that understanding, expressing clearly the functions of a building, has been achieved by all good architecture in the past, and is what modern architecture is today attempting to achieve.[73]



Figure 77. Corona Avenue Elementary School, 1935. Source: LAPL Photo Collection.



Figure 78. Same outdoor classrooms, circa 1950. Source: Getty Research Institute, Shulman Archives.

The key to this, Lescaze argued, was moving beyond historic eclecticism:

> Modern functions cannot be fitted into old forms, nor can twentieth-century "uses" be combined with twelfth-century "beauties"! The buildings of the past are beautiful not because they are a "style." They are beautiful because the men responsible for them devoted all their skill, their taste, their understanding, to fulfilling the purposes, the functions, of these buildings. In other words, these buildings grew out of the life of their time, to meet the requirements of their time. And that is exactly what our buildings must do.[74]

Richard Neutra

As of 1936, Lescaze wrote, there was only one truly modern school building in the United States: Richard Neutra's 1934/1935 Corona Bell Elementary School in Los Angeles. Like Lescaze, Neutra (1892–1970) was European-born and educated and had come to the United States in the 1920s. Neutra had long been working on the problem of the modern school plant, with a philosophy steeped in Progressive-era notions of deinstitutionalizing the classroom. As Esther McCoy wrote, Neutra's ideas about school design

> grew out of the conviction that tensions begin to accumulate in a child when he is taken from the home and living room into a school and classroom, to be moored to the floor, and forced to look up at a teacher sitting above him on a platform. … Neutra saw great advantages in classrooms, especially for elementary grades, which resembled living rooms filled with group action—but a living room such as only a handful of architects had conceived at that time, one connected to a patio by a movable glass front.[75]

In 1928, Neutra had proposed a ring-plan school consisting of an outdoor, sheltered corridor providing circulation and access to finger-like classroom wings separated by landscaped patios and gardens. The elliptical plan was inventive and practical, as it made use of a compact lot and shortened distances between classrooms. (The plan was radical for 1928 but perfectly in the spirit of the times by 1960, when it was constructed as the Richard J. Neutra School by Neutra and his partner Robert Alexander in Lemoore, California.)



Figure 79. Emerson Junior High (now Middle) School, Richard Neutra, 1937, Los Angeles. This school is extant and located on Selby Avenue near Santa Monica Boulevard in west Los Angeles. Source: Julius Shulman Archives, J. Paul Getty Trust, Getty Research Institute.



Figure 80. Seamless connections between classrooms and outside patios. Emerson Middle School, 1937. Source: Julius Shulman Archives, J. Paul Getty Trust, Getty Research Institute.



Figure 81. Richard Neutra's Emerson Middle School (1937), extant, west Los Angeles. Source: LAPL Photo Collection.

In 1934, Neutra was given the opportunity to translate theory into practice. In the wake of the Long Beach earthquake, the architect was chosen to design an addition for the Corona Avenue Elementary School. His simple, L-shaped plan quickly became a prototype for Californian (and American) schools and "a classic in its field."[76]

The addition consists of a linear, one-story wing of single classrooms. On one side, covered passageways provide circulation corridors and, as Esther McCoy noted, evoke the arcades of Spanish Colonial architecture. On the west elevation, sliding glass walls provide direct access to outdoor play areas and classrooms. Landscaping creates divisions between classes, and 6-foot roof eaves provide shelter and transitional space. With this, Neutra perfectly melded outside and in and presaged the ways in which postwar architects would create seamless indoor-outdoor spaces.

The construction system of earthquake-friendly wood framing with generous expanses of single-pane windows adds to the sense of weightlessness and integration with the site. With a band of high clerestories on one side and full-length windows on the other, Neutra controlled classroom illumination and provided cross-ventilation. As McCoy wrote, the Corona School "banished the 'listening classroom,' which had its effect upon education methods, for the teacher became a part of the group as soon as students were no longer restricted to fixed seats."[77]

As the decade progressed, the ideas of architects like Lescaze and Neutra started to take hold. In 1937, Neutra designed a second pioneering example of a functionalist school plant, with the steel-framed Ralph Waldo Emerson Junior High School in Los Angeles. In this school, the architect continued the same themes of indoor-outdoor integration on a more constricted urban site. Emerson Junior High's "basic plan organization and massing are clearly expressive of function, with classrooms efficiently organized along double-loaded hallways in freely arranged wings. … The restrictions of the site are compensated by Neutra's inventive plan, making use of outdoor spaces, like a rooftop, for outdoor access."[78] As with the Corona Avenue project, Neutra created seamless connections between classrooms and patios with movable walls and landscaping.

Franklin & Kump and Finger-Plan Schools

Beyond Los Angeles in this era, other prototypes that became influential in the postwar period were under construction. One of the most important of these was Franklin & Kump and Associates' Acalanes Union High School in Lafayette, California, east of San Francisco. Franklin & Kump's rational "finger-plan" school perfectly captured the ideas of the day and became the most common school plan typology in the United States in the 1940s.

Constructed in 1939/1940, Acalanes Union High School was designed for a large rural site, with one-story wings extending outward in finger-like wings. Classrooms consist of open lofts with adjustable plywood partitions dividing the interiors. The pavilion-like site plan, low scale, and finger-like classrooms provide ample opportunities for outdoor access.

As with Neutra's early experiments, Acalanes Union High School moved interior hallways outside, with sheltered outdoor corridors throughout the campus. A recessed terrace off the dining room provided outdoor seating areas for lunch, and lockers were installed on exterior walls. The finger-like plan also allowed for cross-lighting and ventilation for each classroom. To the north, students enjoyed outdoor views through full-length windows. To the south, bands of high clerestory lights provided balanced illumination without glare.

Modular design and construction allowed for easy expansion of the school as enrollment increased. The campus included a variety of facilities, including gymnasium and playing fields, workshops, dining room, a network of classroom wings, and a parking area, all

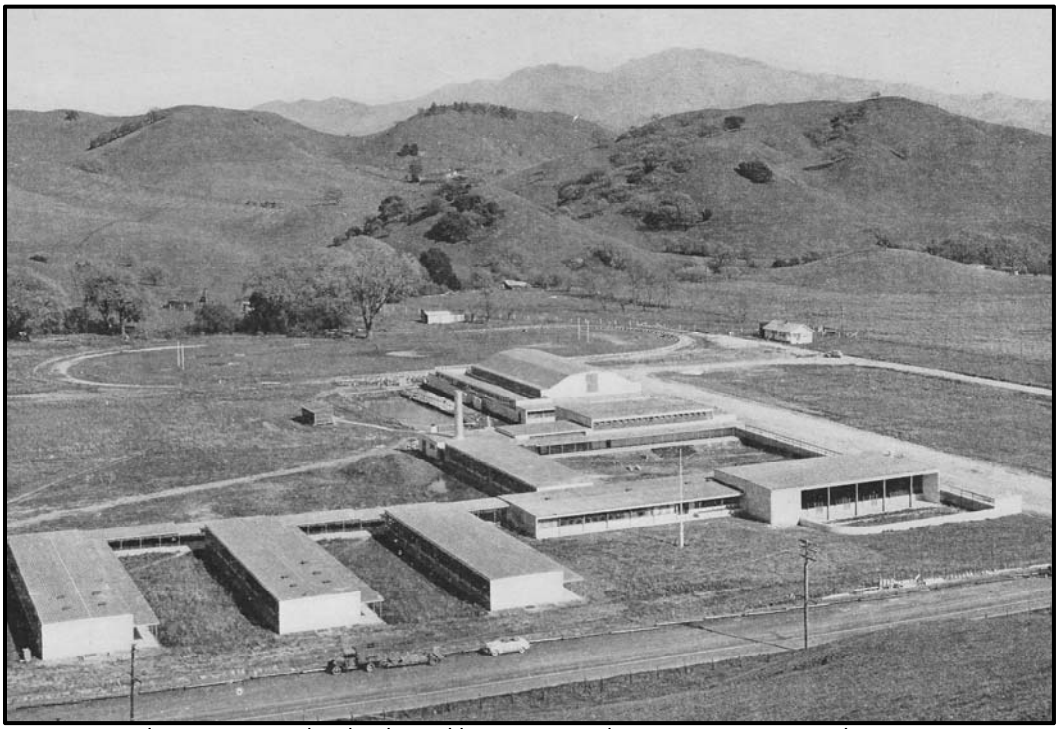


Figure 82. Acalanes Union High School, Franklin & Kump and Associates. Source: Built in USA, 1944.

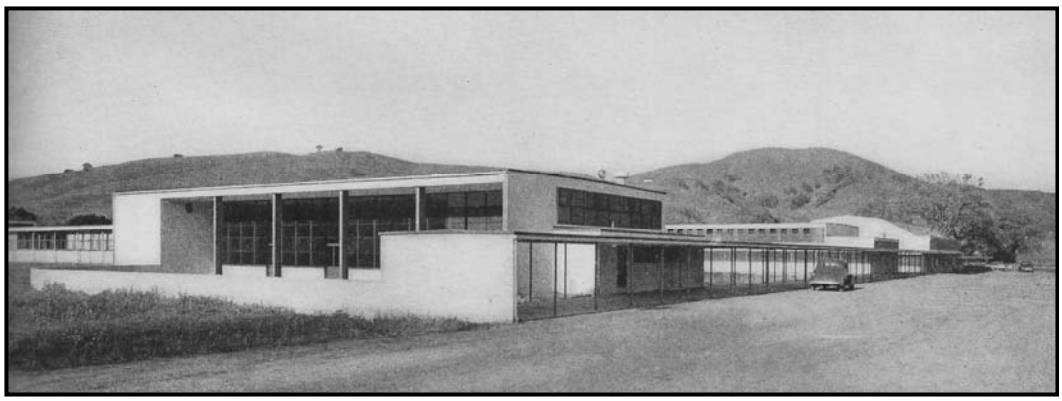


Figure 83. Franklin & Kump and Associates, Acalanes Union High School, Lafayette, California, 1939/1940. Source: Built in USA, 1944.

configured in a unified site plan. In keeping with 1930s planning trends, pedestrians and automobiles were separated through the use of a 500-foot-long canopied passageway, which connects the street and drop-off areas with the school entrance.

Although Franklin & Kump's school was published nationally on multiple occasions prior to 1945, it was in the postwar era that the school typology and plan took off. Pre-1945, Elizabeth Mock included the school in *Built in USA*, the Museum of Modern Art's 1944 exhibit and publication showcasing American regional modernism. Acalanes Union High School was one of only three other schools constructed between 1932 and 1944 included in the volume (Neutra's Corona Avenue project was among them).

Also included in the Museum of Modern Art's *Built in USA* was Eliel and Eero Saarinen's 1939/1940 Crow Island Elementary School in Winnetka, Illinois. Crow Island was another early experiment in how to interpret new ideas about education into function-driven, modern schools. The Saarinens, along with Perkins, Wheeler, and Will, proposed a domestic-scaled modular school, with an innovative pin-wheel plan, finger-like classrooms, plentiful opportunities for outdoor play, cross-lighting, and ventilation. This plan also was widely published and imitated in the postwar period.



Figure 84. Another highly influential pre-1945 modern, functional school design: Eliel and Eero Saarinen's Crow Island Elementary School in Winnetka, Illinois, 1939/1940. Source: Built in USA, 1944.

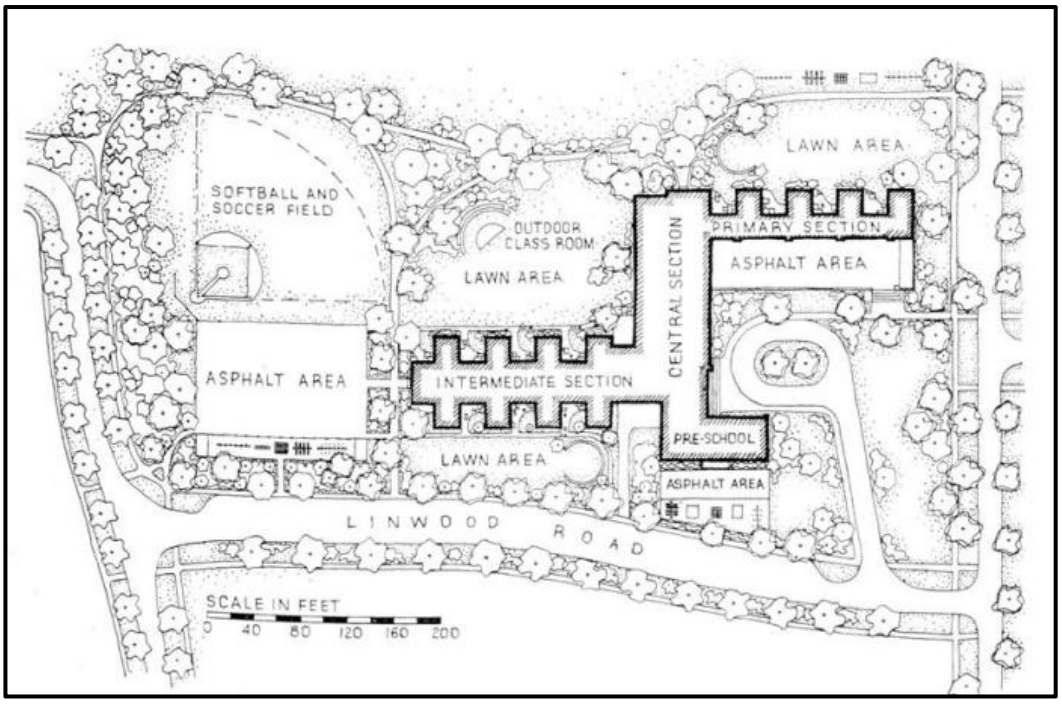


Figure 85. Plan, Eliel and Eero Saarinen's Crow Island Elementary School. Source: Built in USA, 1944.



Figures 86 and 87. Hollywood High School, Science Building, Marsh, Smith & Powell (1935), in 1939 (left) and 2002 (right). Extant in Hollywood, on Sunset Boulevard and Highland Avenue. Source: LAPL Photo Collection and LAUSD.

Post–Long Beach Earthquake: The Era of the PWA Moderne | Streamline Moderne

Not all examples of the functional school plant were modernist in the sense of being antihistoricist. Most 1930s schools continued to display stylistic programs and ornamentation, though tastes had shifted to PWA Moderne, Streamline Moderne, Art Deco, and streamlined versions of historic-eclectic styles, such as the Spanish Colonial Revival. School plants embracing the new ideas might express their function clearly, with a differentiated, unified campus plan, but they might also display a specific style. These examples were widely praised and published as representative of the 1930's movement toward more functional school plants.

Several of the most significant Southern Californian firms to point the way forward in this regard on a national scale were James Edward and David Clark Allison; Sumner Spaulding and John Rex; Donald and John Parkinson; and Norman Marsh, David Smith and Herbert James Powell (later Marsh, Smith and Morgridge). During this era, these firms, among others, participated actively in school construction, designing more functional, child-centered, open-air schools that were also historicist to varying degrees.

In the postwar period, Spaulding & Rex, Marsh, Smith & Powell, and the successor firm to the Parkinsons' partnership continued to play an active role in school plant design, by then in stylistic idioms that forwarded the cause of modernism.

Marsh, Smith and Powell

During the 1930s and early 1940s, Marsh, Smith and Powell designed numerous school commissions that garnered national attention. Their work brought together the latest ideas in functional site plans and child-centered buildings and classrooms, with the all-important indoor-outdoor spaces and connections. The same issue of *Architectural Record* featuring Lescaze's 1936 call to American architects used a Marsh, Smith and Powell school, Roosevelt Elementary School in Santa Monica, to illustrate the new trends.



Figure 88. Post–Long Beach earthquake reconstruction at Manual Arts High School, Parkinson & Parkinson, circa 1935. Extant in mid-city Los Angeles, on South Vermont Avenue and West Martin Luther King Jr. Boulevard. Source: LAPL Photo Collection.



Figure 89. Manual Arts High School, Parkinson & Parkinson, circa 1935. Source: LAUSD.

The firm, consisting of Norman Foote Marsh, David D. Smith, and Herbert James Powell, was also featured in a 1938 issue of *Architect and Engineer* in order to illustrate the "progress" made in American school design during the decade: "The architects of California can well take pride in that which has been accomplished during the last twenty-five years. Their school buildings are beautiful—they are practical, they are utilitarian, and they are economical. To the credit of the architectural profession, the architecture of educational buildings has kept abreast with the progress of education."[79]

Los Angeles City School District's The Progressive Elementary School: A Handbook

Southern California's version of the open-air, functional school was also brought to a national audience in 1938's *The Progressive Elementary School: A Handbook for Principals, Teachers and Parents*. The guidebook was written by Robert Hill Lane, the assistant superintendent of schools in Los Angeles and vice president of the Progressive Education Association. Published by Houghton Mifflin Company and prepared in conjunction with the Los Angeles City School District and State Department of Education, Lane's handbook explored the region's array of modern, functional, open-air school plants.

The handbook drew on the wealth of post–Long Beach earthquake examples with numerous illustrations and plates. It also described the philosophical underpinnings of the movement: the desire to create more child-friendly, inviting schools and classrooms. The handbook was one of many primers and guides on modern schools, but *The Progressive Elementary School* brought Los Angeles school plant design to a national audience.

The trend continued away from the institutional, monumental school block and toward more approachable, flexible facilities and plants. A few years before the end of World War II, the movement had footholds throughout the United States, just in time to decisively shape the character of schools designed during the postwar building boom. As one commentator noted in 1942,

> Here and there throughout the country there appear signs of another basic change in school architecture. It is primarily a movement away from the monumentalism of the past four decades. People are not using their school buildings to sell their communities. The school building is being developed as a more intimate and better integrated element of the community, a place closely association with child and adult living.[80]

The era of reform in progressive educational methods and school plants had thus come of age by the end of the Great Depression and just prior to 1945. Many prototypes and proposals emerged throughout the 1930s, with many examples from Southern California. By the time the war ended and construction began in earnest, these pre-1945 examples suggested the direction and the future shape of the modern, functional American school plant.



Figure 90. Franklin Junior High School, Long Beach, March 1933. Source: National Information Service for Earthquake Engineering, University of California, Berkeley.

LOS ANGELES CITY SCHOOL DISTRICTS | CONTEXT AND DEVELOPMENTS

Long Beach Earthquake and the Field Act

The March 1933 Long Beach earthquake was one of the decade's most significant events for the region's built environment. The 6.5-magnitude earthquake caused significant damage and losses; in Long Beach, more than two-thirds of the city's schools were in need of demolition and reconstruction.[81] In Los Angeles, 40 unreinforced masonry school buildings were destroyed.[82] In addition, after a survey of Los Angeles schools within 10 days of the earthquake, all damaged or "precariously placed" chimneys, parapets, fire walls, and ornamentation were removed. Fortunately, the earthquake took place when school was not in session.

The Long Beach earthquake posed a disaster for the district but also an opportunity for the region's architects. While change and reform in school plant design were already underway, the Long Beach earthquake and the mini–school construction boom it triggered provided ample opportunities to test new ideas about school architecture and campus planning in Southern California.

These changes also affected the state overall. One month following the earthquake, through the efforts of California Assembly member Charles Field, the State of California adopted the Field Act. Similar legislation had already been passed following the 1925 earthquake in the City of Santa Barbara. With this, the state had adopted building codes tailored to upgrading seismic stability. In 1927, the City of Los Angeles revised its own City Building Ordinance and adopted additional requirements for schoolhouse construction. All new construction after 1927 adopted the updated building codes, which included requirements for fire-resistant corridors, stairs, and exterior walls and for reinforced concrete beams within floors and roofs. By the time the 1933 earthquake struck, these post-1927 schools indeed proved more resilient.

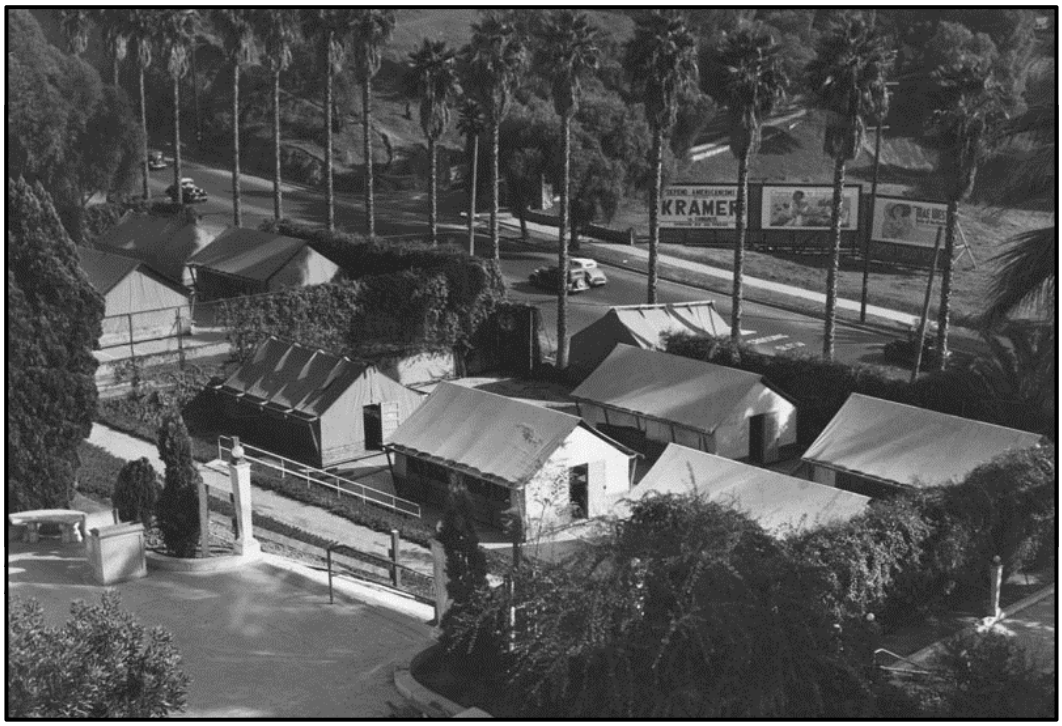


Figure 91. October 1934, Lincoln High Tent Village, awaiting reconstruction of classrooms. Source: LAPL Photo Collection.

Through the Field Act, the lessons learned in the Long Beach earthquake were used to further strengthen school building codes. The law directed the State Division of Architecture to design and enforce regulations to ensure earthquake-resistant buildings. State oversight and implementation of building codes/construction inspections were also established. Additionally, the City of Los Angeles Board of Education again revisited its own building codes. Post-1933 elementary school buildings were not to exceed one story in height, and high school buildings were limited to two stories (this would change over time, given the tremendous demand for classroom space in the postwar period and relative scarcity and expense of large lots). New buildings incorporated the latest construction techniques and prominently showcased the use of modern materials such as steel and reinforced concrete. On sites where soil load-bearing properties were found to be too low for steel and concrete, demolished schools were replaced with relatively earthquake-resistant wood-frame buildings. In cases where damaged buildings were rehabilitated, methods included installing reinforcing steel columns, beams, and diagonal bracing, exterior refacing with reinforced gunite and installation of reinforced concrete walls.

Some of the requirements of the Field Act were well aligned with the goals of progressive architects for more child-scaled, one-story schools. In a 1942 article on modern trends in school architecture, one commentator observed the overlapping influences: "Much emphasis has been given to the open plan in California. It is possible that this development has not grown so much from changing educational practice as it has from structural needs."[83] The author's insight had come from an *Architectural Record* article on a new

"open plan" school in El Monte, California. As *Architectural Record* pointed out, however, "'Two factors determined the choice of open plan, with departments housed in separate structures: the local soil-bearing value was very low; the buildings had to be designed to resist earthquake stresses.'"[84] In this way, the new requirements were compatible with the trend of the times toward one-story, open-plan buildings and campuses.

PWA Funding and the Post–Long Beach Earthquake Building Boom for Schools

Following the earthquake, the district planned for phased reconstruction. Available at the time were a total of $5.3 million in unsold bonds. The PWA purchased the bonds and granted additional matching funds for school reconstruction efforts. A total of $12.1 million was ultimately raised for the 1933 to 1935 reconstruction program. Approximately $250,000 funded the construction of temporary classroom housing, in order to minimize the interruption of the school year. An estimated 879 tents and 139 bungalows were initially erected to house the district's enrollment of 300,000 students.

As the school reconstruction program progressed, final steps included reinforcing or replacing 132 unreinforced masonry buildings, strengthening 275 buildings constructed since 1927, replacing 51 wood-frame buildings, and eliminating all temporary classroom housing. By 1937, over $34 million had been spent on post-earthquake school construction, repairs, retrofitting, and rehabilitation. The advent of World War II put substantial investments in schools on hold (after war's end, a $75 million bond issue kick-started these efforts).

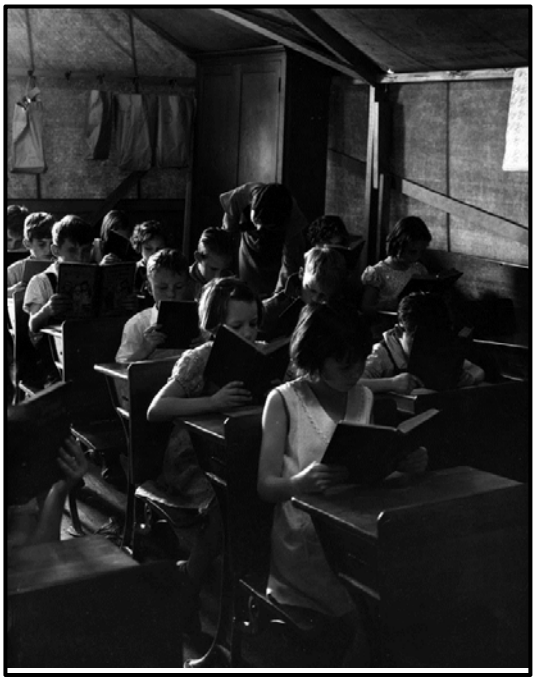


Figure 92. Children attending school in tents, one year following the Long Beach earthquake, March 1934. Source: LAPL Photo Collection.

As reconstruction began, Los Angeles City school districts intended to build new seismically sound buildings but also facilities with regionally inflected styles. As the *Los Angeles Times* reported in 1934, new and repaired buildings would be designed for "absolute safety with simplicity and beauty of architecture in harmony with the atmosphere and traditions of Southern California."[85] Many designs were executed by the district's architectural department, under the direction of Alfred Nibecker, but bids were also issued to outside architects, with the intention of awarding the work to a wide field of architects. In addition, new buildings were to be explicitly Southern Californian in design but "free of needless ornamentation."[86] This represented a move away from 1920s period-



Figure 93. Reseda Elementary School, 1936. The spare Mission Revival style was in keeping with the post-Long Beach earthquake trend to design in the "traditional Southern Californian" mode. This school is extant and located on Wyandotte Street, Reseda, San Fernando Valley. Source: LAUSD.



Figure 94. South Gate Middle School, 1941. A streamlined mix of Moderne, classical and modern elements. This school is extant and located on Firestone Boulevard, South Gate. Source: LAUSD.

revival styles but also a nod to earthquake safety, since applied ornament often failed and fell to the ground during earthquakes.

Early Experiments with the Finger-Plan School

Other school plants began exploring the new currents in modern, function-driven design. Henry L. Gogerty and C. E. Noerenberg's Susan Miller Dorsey High School is one such example. While the 1937 design drew inspiration from the PWA Moderne, the classrooms, patio spaces, and radial site plan, with classrooms extending outward like spokes of a wheel, were innovative for the time. With this site plan, the architects created an early form of condensed finger-plan school, which made use of a smaller site but provided the ample air, cross-lighting, and outdoor access possible with one-story finger-like classrooms. A circular outdoor corridor, sheltered beneath wide overhanging eaves with thin post supports, acted as the outdoor hallway for the campus, providing circulation to all classrooms and the main entrance. Adopting the language of functionalist reform, *Southwest Builder and Contractor* praised how the designs "architecturally and structurally express in functional form the outer envelope of a process of public education."[87]



Figure 95. Susan Miller Dorsey High School, 1937, Gogerty and Noerenberg, mid-city Los Angeles. Adopting the language of formalist reform, Southwest Builder and Contractor *praised how the design expressed "in functional form the outer envelope of a process of public education." Source: LAUSD.*

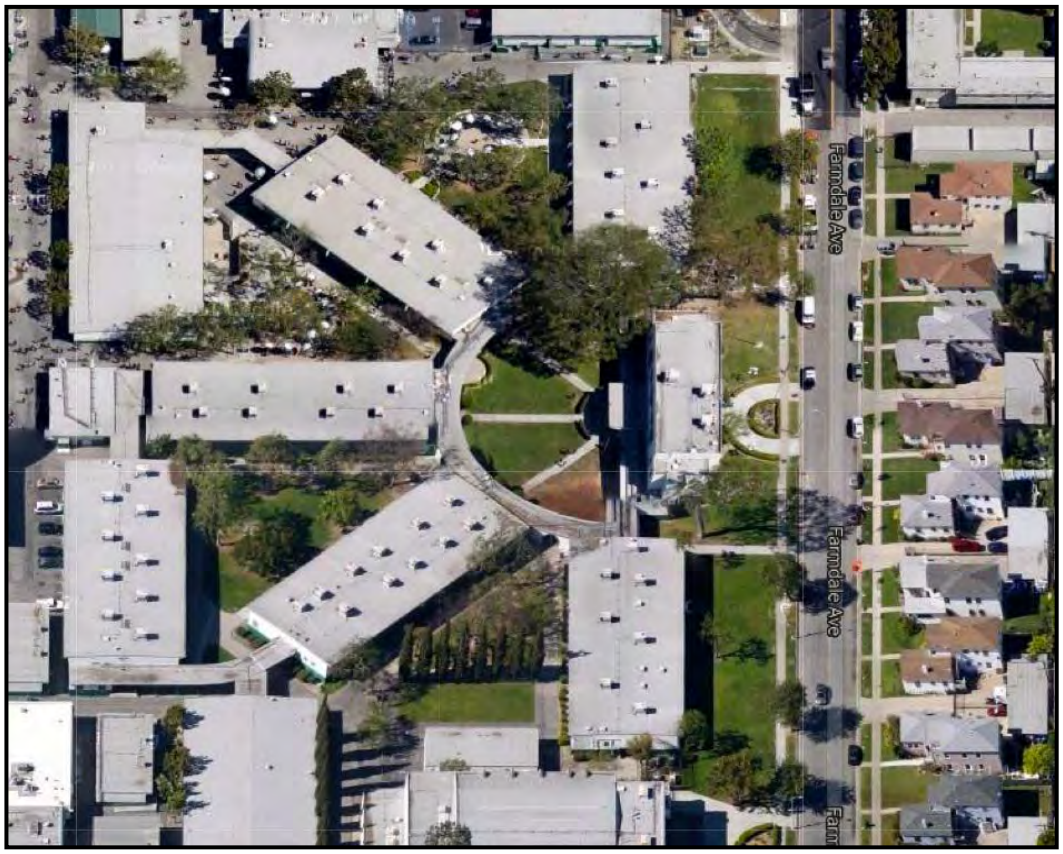


Figure 96. The inventive site plan and semicircle corridors of Dorsey High School. Source: Google Maps, 2013.

Great Depression and World War II: Curriculum Shifts

Just as the Long Beach earthquake struck in 1933, the Great Depression hit its nadir, and within the decade, the advent of World War II brought another round of readjustment. This period brought many changes to the operations and curricula of Los Angeles's public schools. Overall the decade was characterized by experimentation and liberalization of the curricula, in particular for secondary students. The general trend moved away from college preparatory studies and toward a more generalized program. Courses and new areas of emphasis came to reflect the realities of the era and the individual needs of students. A few examples include the expansion of social studies courses to consider contemporary issues and problems and a shift in the sciences toward more applied topics, aimed at the consumer rather than the future researcher.[88]

Through this era, the notion of the public school as an important gathering place for the community took a new turn. Schools became the focal point for a number of initiatives aimed at mitigating the social costs of the Great Depression, and later at supporting the troops during World War II.

By 1935, two federal programs had been launched that ultimately had a significant presence in Los Angeles public schools: the Emergency Education Program and the National Young Administration. Established in 1933, the Emergency Education Program provided federal



Figure 97. Lincoln High School War Bond Drive, 1945. Source: LAPL Photo Collection.



Figure 98. The women of Frank Wiggins Trade School, 1943. Source: LAPL Photo Collection.

funding to hire unemployed teachers to provide instruction to adults. With this, teachers were again gainfully employed and adults were able to further their training and education. By 1934, Los Angeles public schools provided approximately 200 such classes at 52 different campuses.[89]

In 1935, Congress authorized the National Youth Administration (NYA) program, aimed at providing jobs to teenagers and young adults in order to help them remain in school. The program was open to those aged 16 to 25, who earned no more than $6 a month. Through the NYA, Los Angeles public schools provided employment to thousands of students. After World War II began, this program continued but shifted its focus to defense-related classes.

Los Angeles Public Schools and World War II

World War II brought another round of adjustments to an educational system already reeling from the Great Depression. The focus on every front of American life for defense-related support brought major shifts. New classes for secondary students included defense-related training and specialized programs in aircraft recognition and aviation mechanics. At the city's vocational schools, applied skills were emphasized. The Frank Wiggins Trade School began teaching auto mechanics to female students, since the "war has taken away many a guy with the monkey wrench, and so today industrial schools are opening new courses for

women auto mechanics to fill the gap."[90] Coursework during the war and immediately after reflected the sociopolitical background of the time, with school districts offering programs in democratic systems of government, the functions of the United Nations, and, for a short time, "moral and spiritual values."[91] Geography courses took on a more international view, exposing students to a wider array of countries around the world.

The war also impacted activities in the city's elementary schools, where students were given opportunities to participate in a variety of war-related drives and programs. By 1942, Los Angeles City school districts had created nearly 30 different ways for students to support the war effort. The goal was organizing "every school so that each pupil and teacher had a part in supporting the war program" and inspiring "each child to be so patriotic that he would, of his own volition, carry on a program which would help the war effort."[92]



Figure 99. World War II in the Los Angeles public schools: materials drive, Crescent Heights Boulevard Elementary School, circa 1943. Source: LAPL Photo Collection.



Figure 100. Victory Garden at Manual Arts High School, 1942: "Students in a gardening class at Manual Arts High School learning about vegetables. The students and teachers during the spring term of 1942 had over 500 Victory Gardens to help in the war effort." Source: LAPL Photo Collection.

Two federal programs brought significant changes to the operations and curricula of Los Angeles public schools. The first program was the National Defense Training (NDT) program, which provided $15 million to American schools, $400,000 of which went to Los Angeles, for vocational and war-related training programs. Congress authorized the program in 1940 (before the U.S. entry into the war); by September 1940, the Los Angeles Board of Education had launched programs in 13 high schools and 10 evening high schools. Training programs included welding and shipbuilding, mechanics, and aircraft production and maintenance. The program continued to grow, and by 1942, Los Angeles City public schools housed the largest NDT program in the United States.[93] In August 1942, the NDT program because the War Production Training program.

In 1942, following the U.S. entry into the war, Congress established the Rural War Production Training program. A branch was established in Los Angeles, with classes targeted to working teenagers and adults attending evening high schools. Referred to as the Out-of-School Youth and Adults program, this initiative was more geared toward food production than industrial production (as with the NDT program). Canneries were established in schools throughout the district as a result of the program, which was renamed "Food Production War Training" in 1943. After the war, though federal funding of the project ended, the Los Angeles Board of Education continued the program, and community canning projects remained in place at a number of area high schools.

D. EDUCATING THE BABY BOOM: POSTWAR EXPANSION & THE FUNCTIONAL, MODERN SCHOOL, 1945 TO 1969

"Above all the school must be childlike.... It must be a place for living, a place for use, good hard use, for it is to be successively the home for a procession of thousands of children through the years. It must be warm, personal and intimate [so] that it shall be to each of these thousands 'My school.'"
—An American educator, writing to his architect, *Architectural Forum*, 1952[94]

NATIONAL CONTEXT | DEVELOPMENTS

With the end of World War II, the United States turned its attention to the long-awaited postwar—and post–Great Depression—expansion. The magnitude of the construction and population boom that followed, and its effect on the built environment, have been well documented. A wealth of literature has been devoted to the era's severe housing crisis, for example, and the array of initiatives launched to address it.

Less widely explored in the literature, but equally pressing at the time, was a dire classroom shortage. In 1949–1950, enrollment at U.S. elementary and secondary schools stood at 25.1 million. In one decade, this number expanded by nearly 50 percent to approximately 36 million; by 1971, it reached 46 million.[95] In 1955, in the midst of this boom, "editors at the *Architectural Forum* worried, 'every 15 minutes enough babies are born to fill another classroom and we are already 250,000 classrooms behind.' The rising population of young American children made school building, together with housing, the most widely discussed architectural challenge after World War II."[96]

Perhaps in no other state of the union was this growth felt more acutely than in California. The booming birth rate was accompanied by a wave of in-migration, as new settlers were drawn by established employment centers in, among other things, the aerospace industry, which had shifted operations to peacetime production. In Southern California, one region with a particularly strong pull in this regard was the San Fernando Valley. The postwar construction boom transformed miles of the San Fernando Valley's agricultural lands into new residential communities, and the population—and demands on schools—expanded accordingly.

School districts around the country struggled to keep up with unprecedented demand and overcrowded classrooms. Adding to the challenges facing school districts was the need not only for new schools, in particular in emerging suburban communities, but also the need to repair and maintain aging school plants, facilities, and equipment.

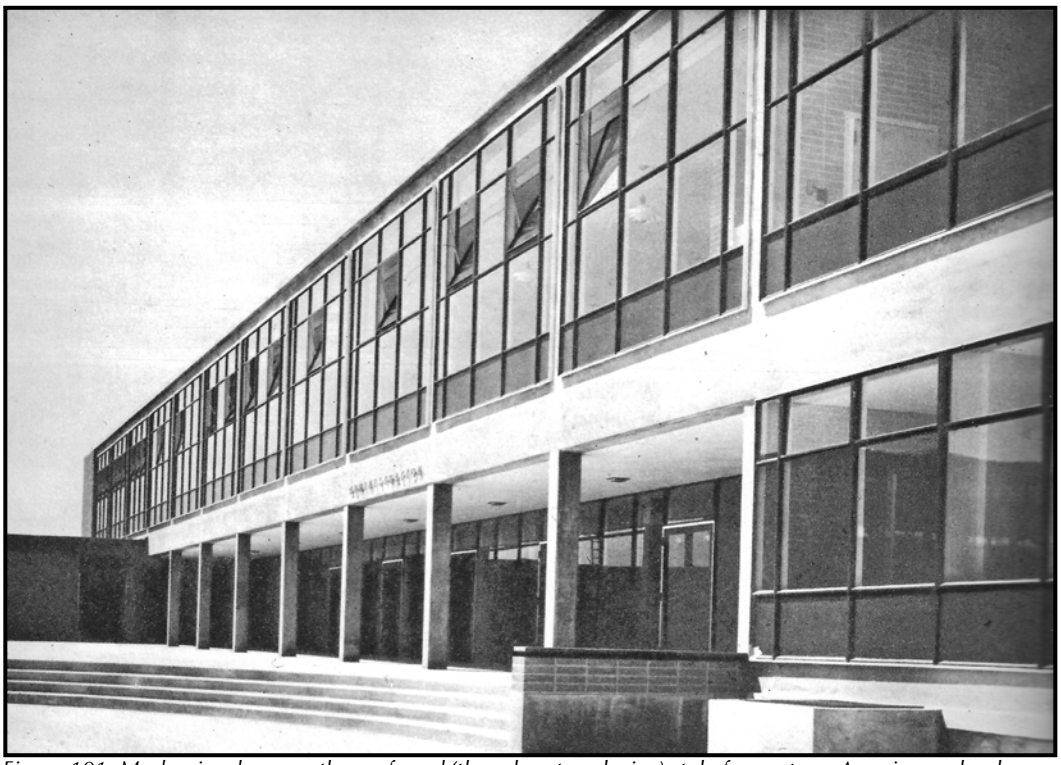


Figure 101. Modernism became the preferred (though not exclusive) style for postwar American schools. Ernst J. Kump, San Jose High School, 1952. Source: Built in USA, 1952.



Figure 102. Fern Drive School, 1956, Smith, Powell, & Morgridge, Fullerton. A functionalist postwar school need not also adopt a modern, machine-age aesthetic. The notion of providing a child-friendly environment often translated into incorporating forms and details commonly used in residential architecture. Source: J. Paul Getty Trust, Getty Research Institute, Julius Shulman Archives.



Figure 103. Oso Avenue Elementary School, 1959, Woodland Hills. Most students "come from new tracts still opening in West Valley." Source: LAPL Photos.



Figure 104. Image for a 1959 article on the "back to back construction" of schools taking place in the San Fernando Valley. Source: LAPL Photos.

1930s Reform Comes of Age: The Modern, Child-Centered School

In this era, the functional, child-centered school plant that emerged in experimental form in the late 1930s became the norm. Newspapers, magazines, and trade journals in a variety of fields—including architecture, engineering, building trades, education, and school design—began forwarding proposals for the ideal modern school. Organizations devoted to the topic also helped standardize and disseminate these ideas; these included the American Institute of Architects Committee on School Buildings, the National Council on Schoolhouse Construction, the American Association of School Administrators, and the Council of Educational Facilities Planners. Journals and guidebooks proliferated with the latest ideas in school plant design, infrastructure and systems, and, above all, how to meet the demand in the most economical fashion possible. Within the architectural profession, a new subgroup of architects who specialized in school design also started to emerge.

Modernism—whether regionally inflected, wood post-and-beam or the machine-age International Style—became the idiom of choice for expressing the new ideas, for its relative economy, informality, accessibility, and, increasingly, "democratic" spirit:

> All the architecture shall be a setting for childlife. Everywhere children and what they can do shall be the adornment of the structure. The building itself shall be the place of joy in living. But I must warn you. It must be a place which permits the joy in the small things of life, and in democratic living. These two things we must safeguard in children's lives.[97]

While some school plants adopted the period styles popular at the time—including a postwar return to American Colonial Revival—the trend by not only modern architects but also educators was to move beyond historicist styles: "The building must not be too beautiful," wrote one commentator, "lest it be a place for children to keep and not one for them to use. Its materials must be those not easily marred, and permitting some abuse. The



Figure 105. Smith, Powell & Morgridge, Thomas Jefferson Elementary School, 1954. Source: J. Paul Getty Trust, Getty Research Institute, Julius Shulman Archives.

finish and settings must form harmonious background with honest child effort and creation."[98]

While regional variations existed, this was a national project. The extent to which school districts throughout the United States adopted similar approaches and strategies to the modern school plant was noteworthy. Since the early twentieth century and the days of the Progressive Education Movement, national standardization was a key element of reform. But the avenues available to architects, builders, and schools in this regard proliferated in the postwar era.

The National Council on Schoolhouse Construction, for example, addressed the topic in its annual guidebook, *Guide for Planning School Plants*. Written for school facilities managers, planners, and architects, the 1946 version illustrates the extent to which ideas considered experimental just a few years before had become best practices for the nation. The emphasis remained designing schools around their function—serving and educating children. With the psychological well-being of the student the prime consideration, numerous studies were devoted to optimal interior conditions and controls, such as studies in proper lighting, color schemes, and surface reflectivity to "increase morale and to decrease fatigue."[99]



Figure 106. John Lyon Reid, Manor Elementary School, Fairfax, California, 1958. Source: J. Paul Getty Trust, Getty Research Institute, Shulman Archives.



Figure 107. Henry Gogerty, Inglewood High, 1954. Source: J. Paul Getty Trust, Getty Research Institute, Shulman Archives.

Educational Facilities Laboratories (EFL)

The need for schools remained dire through the 1950s. In 1953, the American Institute of Architects established its Committee on School Buildings to address the issue. In 1956, the committee became the Educational Facilities Laboratories (EFL), a nonprofit funded by the Ford Foundation's Fund for the Advancement of Learning. The EFL "brought together educators, architects, manufacturers, and government officials" to "encourage new ideas about both curriculum and architecture."[100] The EFL conducted research, sponsored conferences, and held grant competitions.

With the rate of school construction continuing apace, EFL officials visited Southern California often. In 1962, the EFL sponsored a tour of one of the nations' early open-plan schools in West Covina, California. Attending the tour were Dr. James D. MacConnell, director of the school planning laboratory at Stanford University; Dr. Paul Salmon, superintendent, Covina Valley District; and Dr. Harold B. Gores, president of EFL in New York. In 1965, the EFL conferred an award on Covina High School as one of three outstanding Californian examples of "schools without walls" (the open-plan school, described in more detail below).[101]

In 1964, the EFL sponsored an airplane tour of the United States for 60 educators, including two from Orange County. The EFL flyover tour reflects two noteworthy points about this era in school design: (1) many innovations were best revealed from the air, by looking at the campus design and plan, building siting and configuration; and (2) ideas about how to create the best possible modern school were developed in tandem and shared among architects, builders, researchers, and school officials throughout the United States.[102] Between 1958 and 1976, the EFL invested over $25 million in the rethinking and designing modern American educational facilities.[103]

By the early 1960s, a shortage of teachers, as well as ever-evolving ideas about childhood development and education, prompted a renewed wave of reform. At its heart was an updated version of the Progressive Education Movement: the idea was that schools—both in terms of facility design and teaching methods—were not adequately harnessing a child's natural curiosity and creativity. There was a renewed sense that classrooms should nurture and capitalize on these qualities and adapt to the individual needs and pace of each student.

The national embrace of team teaching (an idea further promoted because of a shortage of qualified teachers) was one result of this movement. As the name implies, team teaching established a system whereby teachers shared pupils and class spaces, and classroom sizes varied throughout the day, depending on the wishes of the teachers. A few dozen students might gather to watch a movie, then break into smaller groups to work on projects. The classroom would be a dynamic rather than static place, with mixed grade levels, multimedia educational methods, and hands-on learning.

This push for more creative, flexible curricula and teaching methods flourished in Southern Californian schools. By 1968, reformed programs had been launched in 18 Southern Californian elementary schools, in conjunction with the League of Cooperating Schools. As in early eras, methods that appeared "traditional" were de-emphasized and a more experimental classroom environment was proposed. The coordinator of the program, Robert E. Keuscher, invoked many of the same ideas shaping curricular reform throughout the twentieth century, with a distinctively 1960's spin:

> Labels are disappearing, there are fewer graded classes. Schedules are more flexible. More and more, curriculum is not worked out in advance; the kids work it out as they go along, and it's more advanced and more scholarly. The teacher is more of a guide than an oracle. The emphasis is shifting from the group to the individual; there is more emphasis on query and discovery.[104]

Of the Southern Californian schools making this transition, Keuscher said, "We're helping these 18 become creative schools, but it's a slow, painful process. Our biggest problem is to make teachers and principals comfortable with change. … But it has been great to emancipate the creative teacher."

Throughout this era, the debate on how to shape a curriculum that best served children, and how to keep up with ever-expanding enrollment figures, continued to evolve. Yet the basic ideas seen in the early twentieth century remained at the heart of educational reform at midcentury. The evolving experiments in curricula and school plant types grew out of the same wish to eliminate institutionalism and to fashion a child-centered curriculum and school plant. The variety of building plans and campuses that grew out of midcentury reform reflected the postwar boom of construction and population, the robust network of publications and organizations disseminating the ideas nationally, and evolving philosophies about childhood development and education.



Figure 108. Grover Cleveland High School, Charles O. Matcham & Stewart S. Granger and Associates, architects (1959), Reseda. Source: Sapphos Environmental, Inc., 2013.

EFFECTS ON SCHOOL BUILDINGS AND CAMPUSES

The stylistic vocabulary of choice for American schools became modern—antihistoricist, decentralized, with function instead of style the driving concern. Of course, modernism did not take hold in earnest for residential design (to the dismay of many architects at the time). But for schools, by 1950, "the battle between 'contemporary' and 'traditional' was won. The public not only began to accept 'modern,' but also demanded it. … This new movement … brought together educators as well as architects, and together they are forwarding the cause of architecture for children."[105]

Although this era brought a major stylistic shift, from the architects' perspective, designing in a modern "style" was not the main concern. Progressive architects at midcentury often sounded a tone of idealism about the social value of their work. As architect William Wayne Caudill explained about school design, "There is no 'modern' style as such. Each new building ideally is the product of specific solutions to individual problems peculiar to that building's particular environs, site, function, budget, and designer. If two new schools are similar in appearance, they are … only because they were designed to perform similar specific functions in similar environments."[106]

This was especially true for architects trained and already practicing in the pre-1945 era. William Wayne Caudill was among them; the Texas architect graduated from MIT in 1939 and, by 1941, had already authored a pioneering study on modern school design, *Space for Teaching*. Throughout the 1940s and into the 1960s, Caudill and his firm specialized in functional, modern classrooms and campuses.



Figure 109. Balanced cross-lighting is achieved through full-length windows on the north elevation and clerestories on the south. Franklin & Kump, Acalanes Union High School. Source: Built in USA, 1944.

By 1969, Caudill had become an international authority on school design, and his firm, Caudill, Rowlett & Scott, had designed educational facilities in 28 states. Caudill's classic finger-plan schools in Blackwell, Oklahoma, designed in the late 1940s and early 1950s, epitomized the school planning ideals of the time. In 2009, all four schools--Huston, Northside, Parkside, and Washington Elementary—were listed on the National Register for their exemplification of postwar ideals of modern American school design.

Whether a postwar school exhibited a modern or mildly historicist design, they likely shared the same basic design principles. Postwar schools were designed to feel decentralized, nonhierarchical, approachable, informal, and child-centered (indeed, domestic-scaled for elementary schools, with lower ceilings making the class feel more like a living room). The preferred massing was one story, with an axial wing of classrooms usually one room deep, to provide cross-lighting, ventilation, and easy access to the outdoors.

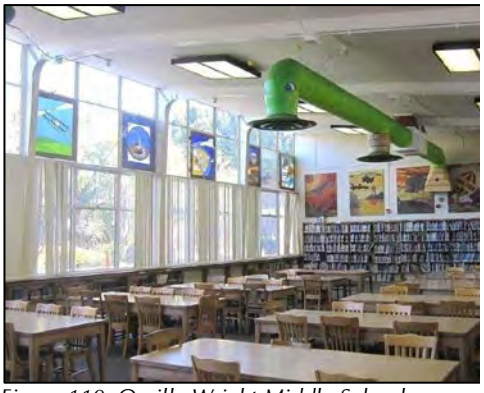


Figure 110. Orville Wright Middle School, library roof slopes upward on north elevation to allow for maximum indirect lighting. Source: LAUSD Orville Wright Middle School, Pre-Planning Survey, 2011.

Postwar schools continued to emphasize and experiment with the limits of indoor-outdoor integration. By the postwar period, one feature that was still experimental in the 1930s was now essential: canopied outdoor corridors. Supports remained simple posts or pilotis, either in steel or wood post-and-beam. It was a feature used in schools throughout the United States. Outdoor corridors lined classroom wings, providing sheltered circulation throughout the campus as well as outdoor gathering spaces.

During this period, size and orientation of windows took cues from the environment: a building with north-south exposure, for example, might feature large-panel, floor-to-ceiling glazing on the north elevation, with bands of clerestory casement windows on south elevations modulating or softening illumination. Experiments in roof configuration and design also tackled the issue not only of lighting but acoustics.

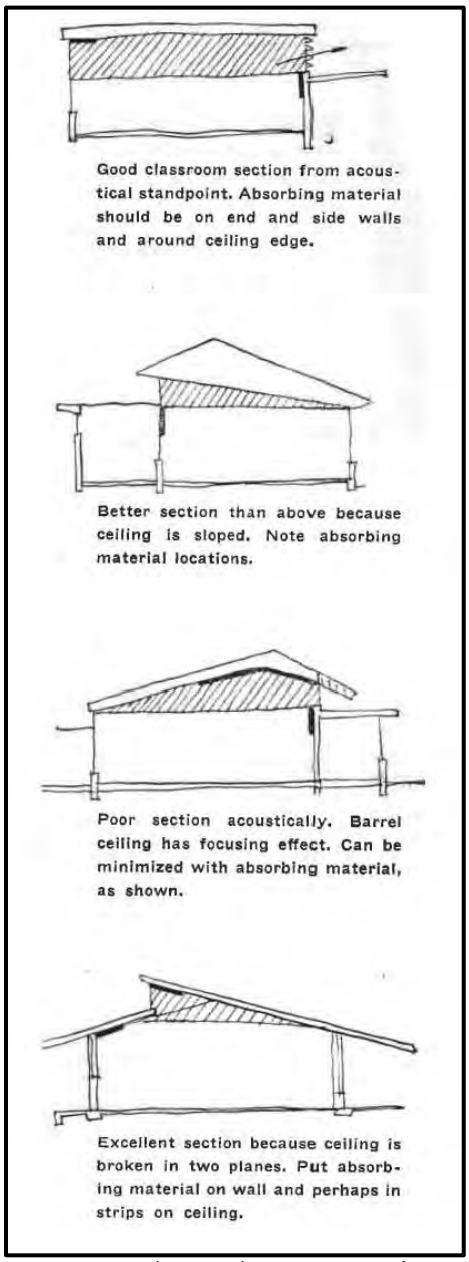


Figure 111. Architectural Forum*, 1949, showing studies of roof configuration and acoustic properties. Source: Baker, 2008.*



Figure 112. Fern Drive School reflected the latest ideas about roof-line configuration and classroom acoustics. Smith, Powell, & Morgridge, 1956, Fullerton. Source: Getty Research Institute, Shulman Archives.

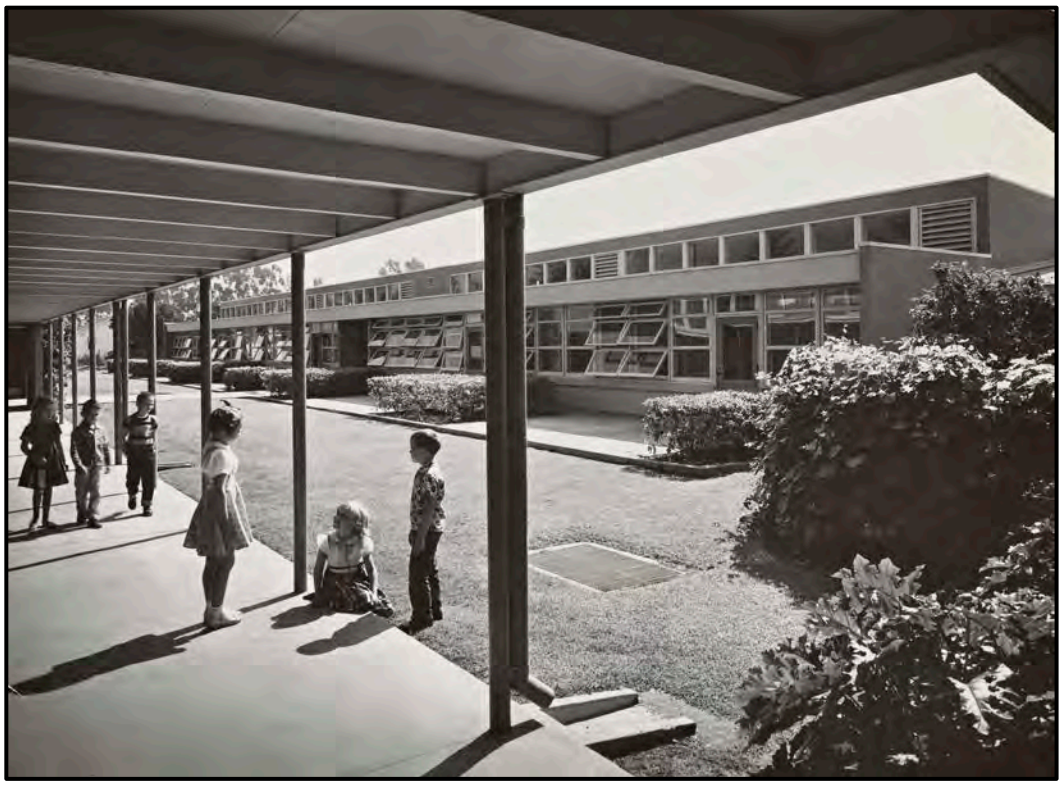


Figure 113. Thomas Jefferson Elementary School, with covered corridors, outdoor courtyard spaces, ample awning casements and clerestories. A sloped shed-roof caps the building for good classroom acoustics. Smith, Powell, & Morgridge, 1954, Anaheim. Source: Getty Research Institute, Shulman Archives.



Figure 114. Hallways move outdoors in postwar schools. El Monte School (1956) Los Angeles County. Source: Getty Research Institute, Shulman Archives.



Figure 115. Classroom and patio are one in Neutra's Kester Avenue Elementary School (1951), extant, Sherman Oaks, San Fernando Valley. Source: Getty Research Institute, Shulman Archives.

When necessary, massing might climb to two (or rarely, three) stories, if real estate was scarce and demand was high. But this allowance was more commonly made for junior and high schools. Roofs were flat, sloped, or occasionally gabled, with simple, exposed construction systems of steel or concrete framing with large-pane in-fill windows. Wide overhanging eaves with simple porch or piloti supports were common for connecting corridors. In terms of materials, the treatment and finishing were simple and unpretentious.

In the postwar period, architects economized through the use of new prefabricated materials, such as plywood, glass, and steel, as well as modular design and coordination, a 1930's movement that took off in the postwar era following the 1945 adoption of the 4-foot module as the American Standard Measurement.[107] Modular design and construction allowed for easy expansion as school enrollment grew and was a common construction technique in Southern Californian schools. (Two early all-steel-frame schools in Los Angeles were the 1937 Emerson Junior High, by Richard Neutra, and the 1959 Justice Street Elementary School in Canoga Park; stylistically unpretentious, the school was promoted as durable, safe, and easily expandable, a concern that remained pressing at the end of the 1950s.)

Modular site planning and design also lent itself particularly well to creating the indoor-outdoor connections now considered essential. As with the residential architecture of the era, school design relied on generous expanses of windows and outdoor access to patios or courtyards to provide students with recreational areas and outdoor classrooms. Throughout the United States, the importance of indoor-outdoor living for both residential and educational architecture remained a central concern. In this respect, California schools continued to garner national attention. In its 1949 series on postwar American schools, for example, *Architectural Forum* commented that "possibly because California's balmy climate ventilates educators' minds as well as their houses, California schools have been less tradition-bound than most. As one of the fastest growing states in the union, California has had plenty of chance to experiment in school design."[108]

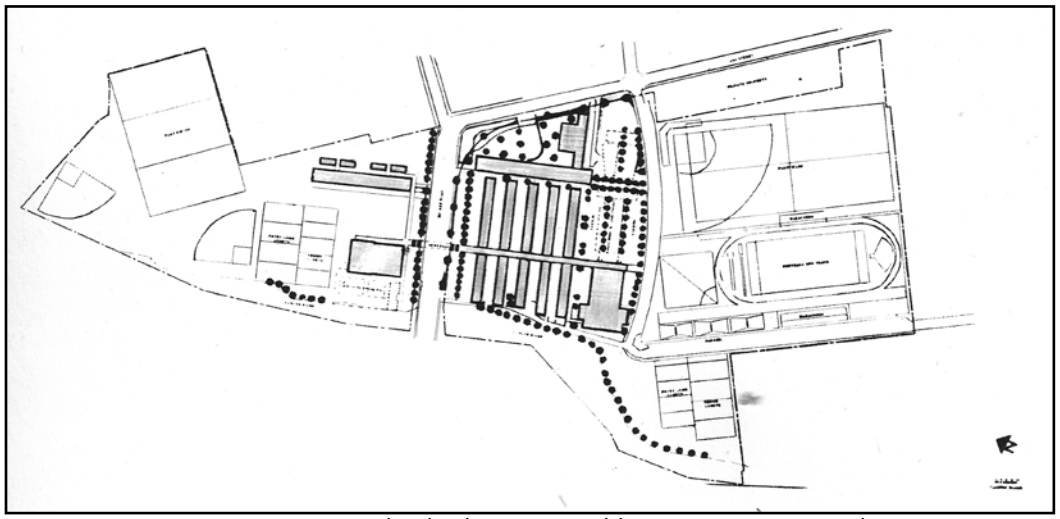


Figure 116. Ernst J. Kump, San Jose High School, San Jose, California, 1952. Source: Built in USA, 1952.

By the 1950s, school design had entered "a new age of innovation," as the decade brought "a proliferation of standardized plans and facades."[109] In California and elsewhere, three main plan types emerged during this period: the finger-plan school, the cluster-plan school, and the open-plan school. As the trends came and went, these plan typologies morphed, hybridized, and changed. But they shared basic design principles, and most reflected the tenets of midcentury modern design.

The 1940s and the Decade of the Finger-Plan School

The plan type that best captured the design principals of the immediate postwar years was the finger-plan school, which was launched in the late 1930s in Franklin & Kump's Acalanes Union High School and the Saarinen's Crow Island Elementary School. According to *Architectural Forum*, this plan type, dubbed the "western finger plan," became the most influential building typology for schools in the 1940s. The finger-plan school resembled

> a tree plan, based on a trunk corridor with side branches. It rests on radical standardization of classrooms; on absolute insistence that all classrooms share the best (north) orientation to sun and air; daylight for all of them from the open-corridor side as well as the main window side. This plan is not only flexible … but extensible indefinitely outward like a tree, by growing at branch-ends and by sprouting new branches.[110]

To illustrate the advantages of the plan in 1949, *Architectural Forum* chose the 1939/1940 Acalanes Union High School, which it described as

> the first large scale school which could serve as a complete demonstration of principles which amounted to a schoolhouse revolution—the revolution of the thirties. Since then, the Acalanes type of school, with its wide ranging, one-story classrooms arranged according to the "finger" plan, has swept the West Coast, is sweeping rapidly across the Midwest on its way to the East Coast.[111]

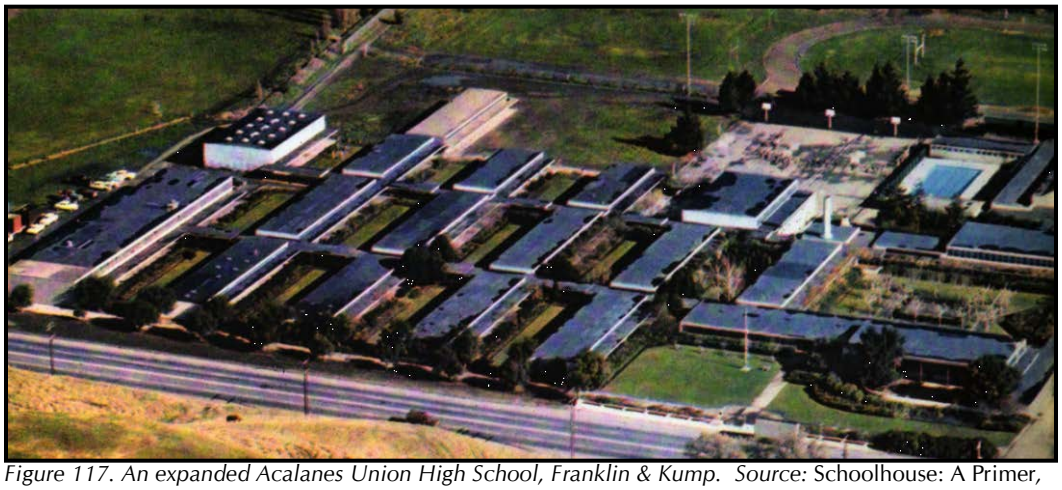


Figure 117. An expanded Acalanes Union High School, Franklin & Kump. Source: Schoolhouse: A Primer, *1958.*



Figure 118. Finger-plan school in Eugene, Oregon, 1947. Kelly Junior High. Source: Pinyerd Historic Postcards.



Figure 119. Exterior of a finger-plan school: G. Russell Wilkerson Elementary School, 1950, El Monte. Source: Getty Research Institute, Shulman Archives.

Acalanes had been published nationally, on multiple occasions, prior to 1945, but it was in the postwar period that the "schoolhouse revolution" it started took off in earnest. In the immediate postwar period, numerous examples could be found on the West Coast. Even though the plan type spread through the United States, the Californian roots and flavor of Acalanes Union High School were often highlighted.

In 1958, a self-described "primer" on how to build a good modern public school described Acalanes High School's divided "rows of classrooms with open-ended corridors of greenery, to achieve good ventilation, sound isolation, and a remarkable California-like architectural comfort."[112]

Built in USA included another California finger-plan school in its 1952 edition, San Jose High School, also by Ernest J. Kump. In San Jose High School, Kump proposed a slightly more condensed finger-plan, with concrete-frame construction, generous expanses of windows set flush to the wall plane, and a sheltered corridor with unadorned post supports providing circulation and outdoor spaces.



Figure 120. Huston Elementary School, Caudill, Rowlett & Scott, 1949, Blackwell, OK. Source: Getty Research Institute, Shulman Archives.



Figure 121. Huston Elementary School, Blackwell, OK. Source: Google Maps, 2013.

With many of the early experimental schools located in California, the issue arose of whether these prototypes would work in the rest of the country. In a 1943 article on modern American schools, Elizabeth Mock commented on this question: "Many people have the illusion that such schools are impractical. 'Fine for California,' they will say, 'but not for this climate. Too costly to build and heat."[113] However, Mock argued, modern materials and construction techniques were sound and economical enough to mitigate these problems. William Caudill appears to have agreed, as evidenced in his four classic finger-plan schools in Blackwell, Oklahoma (all now listed, as noted earlier, on the National Register of Historic Places).

As the popularity of the finger-plan school increased, its basic form changed to accommodate climate variations. Modifications on the plan included double-loaded hallways to provide the same level of indoor-outdoor connections, light, and ventilation, but with one less elevation exposed to the exterior. In the Midwest, the spread-out finger-plan became a compact trunk, with double-loaded corridors providing better insulation. Other plan innovations included a zigzag building plan, with an interior connecting walkway, in order to double-load corridors but also maximize window space for each classroom.

Two examples of more condensed finger-plan schools are seen in Richard Neutra's Kester Avenue Elementary School in Sherman Oaks and Robert Evans Alexander's Baldwin Hills Elementary School in Los Angeles, both from 1949 to 1951. Neutra designed the finger-plan of the Kester Avenue Elementary School around a compact central axis, with classroom wings alternating with landscaped patios. With its seamless connections between classrooms and outdoor play areas, the Kester Avenue facility displayed, in Esther

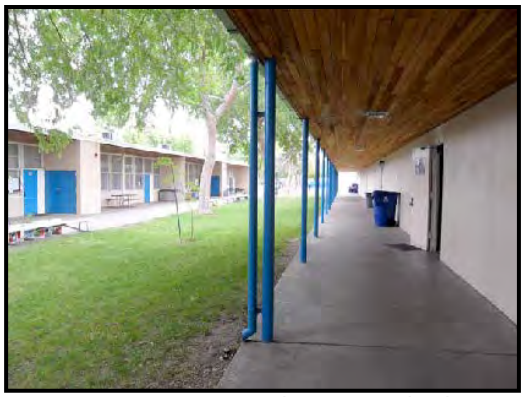


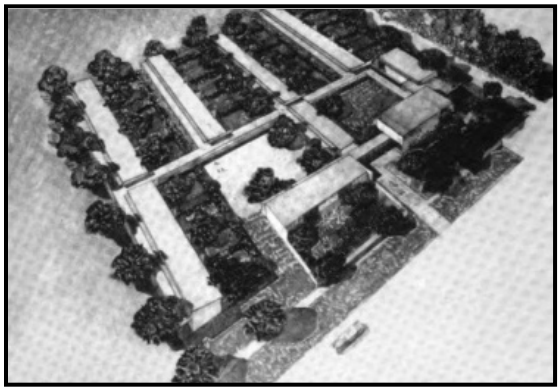
Figure 122. Kester Avenue Elementary School, Richard Neutra (1951), Sherman Oaks. Source: LAUSD Kester Avenue Elementary School Pre-Planning Survey, 2011.

McCoy's word, the "essentials of the open-air classroom ... restated in a more refined form."[114] Canopied passageways supported with light steel columns provided circulation and outdoor gathering areas.

Baldwin Hills Elementary School was constructed as part of the groundbreaking garden city of Baldwin Hills Village. Architect Robert Alexander arranged the school along a central corridor/axis, with parallel classroom wings extending from each side in lengths tailored to fit the site. Swaths of greenery divide the classroom wings, which are sheltered beneath wide overhanging eaves. The focal point of the entrance is a dramatic, cantilevered canopy, resting on a simple steel I-beam. The design otherwise is spare, unpretentious, and modern.



Figure 123. Kester Avenue Elementary School, Richard Neutra (1951), Sherman Oaks. Source: LAUSD Kester Avenue Elementary School Pre-Planning Survey, 2011.





Figures 124 and 125. Neutra's conceptual sketch of Kester Avenue Elementary School and the current aerial view. Source: McCoy, Neutra *(left) and LAUSD Kester Avenue Elementary School Pre-Planning Survey, 2011 (right).*



Figure 126. Robert Evans Alexander, Baldwin Hills Elementary School, 1949-1951. Source: The J. Paul Getty Trust, Getty Research Institute, Shulman Archives.

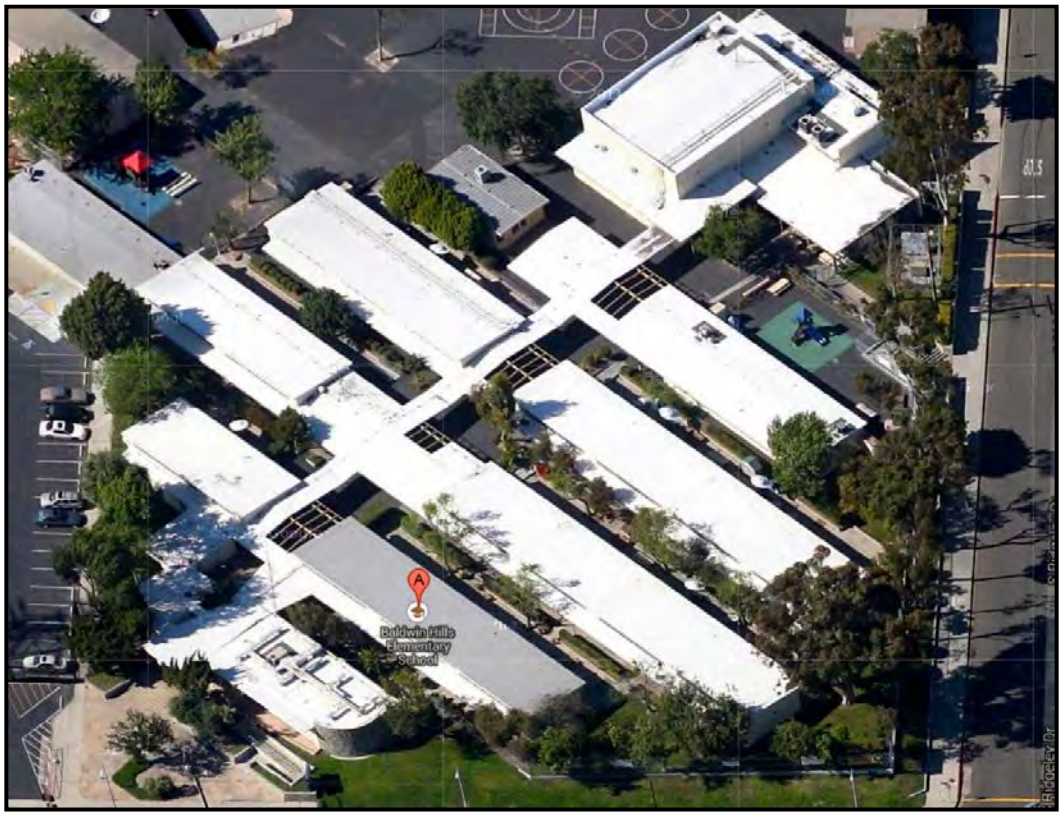
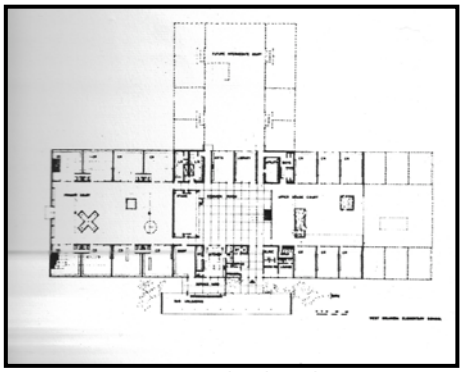


Figure 127. Neutra & Alexander, Baldwin Hills Elementary School. Aerial shows the condensed finger-plan design used to create the preferred one-story massing, set off by swaths of landscaping and patios, but with a more compact site plan. Source: Google Maps, 2013.

Figures 128 and 129. Cluster-plan school, Donald Barthelme & Associates, West Columbia Elementary School, West Columbia Texas, 1950. Source: Built in USA, 1952.

The 1950s and the Advent of the Cluster-Plan School

By the early 1950s, the popularity of the finger-plan school had begun to decline.[115] First, the design required large swaths of land to accommodate the extended site plan. Second, the plan increased cross-campus walk times and communication. In some scenarios, it also made more sense to build upward instead of outward. On hillside locations, where an expanded footprint meant doubling or tripling already expensive grading costs, the finger-plan school was not a viable option. In mass circulation and trade magazines of the day, though, the one-story scale was still preferred, in particular for elementary schools (the exception remained densely developed urban sites, where one could only expand upward).

The need for cost-effective school design and construction was an additional factor in the move away from the finger-plan. By the early 1950s, there were signs that the immediate postwar focus on carefully harnessing and controlling light—including orienting the building on a north-south axis to create the perfect blend of cross-lighting—was becoming too time-consuming. Not all sites would be large enough, and not all building programs well-funded enough, to justify having such an expenditure of design time devoted to fenestration alone. In 1952, *Architectural Record* observed that, in national school design,

> in more and more localities we can expect substantially less emphasis on daylighting. Natural light is so variable that it can seldom be relied on during the entire school day without considerable recourse to electric light. Control of daylight to prevent glare has been found costly and involved.[116]

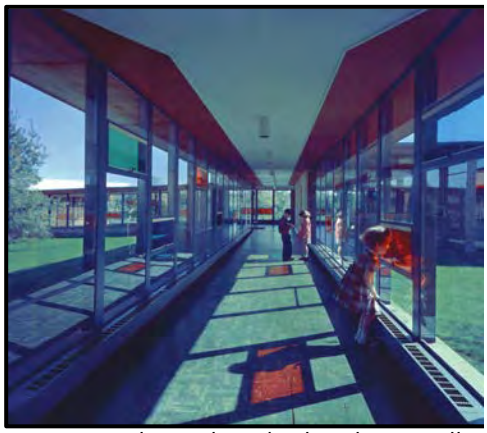


Figure 130. Cluster-plan school, Perkins & Will, Heathcote Elementary School, Scarsdale, New York, 1953. Source: Ogata, 2008.

With high demand and restricted funding for new schools a constant issue, the possibility of a more compact campus plan became the subject of study, a few early prototypes, then a new trend, the cluster-plan school, by the early

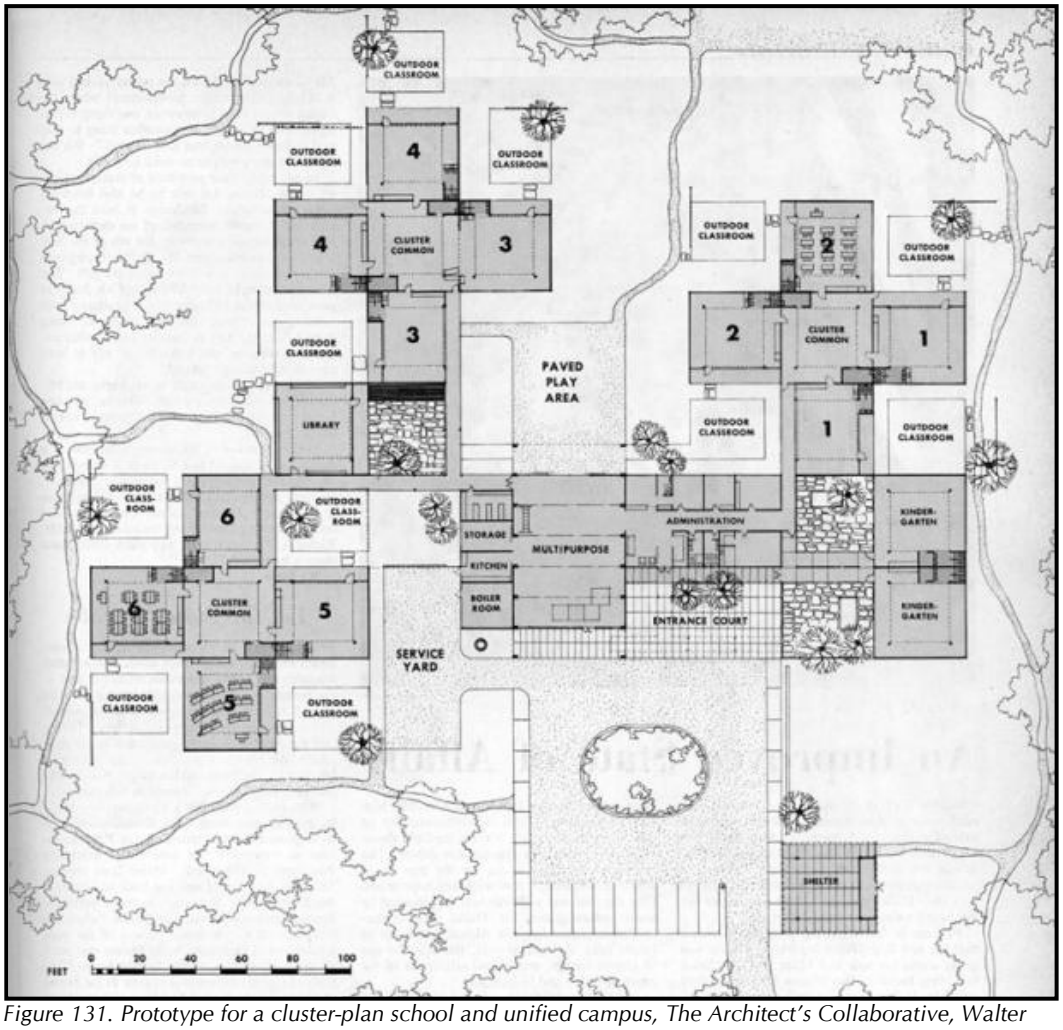
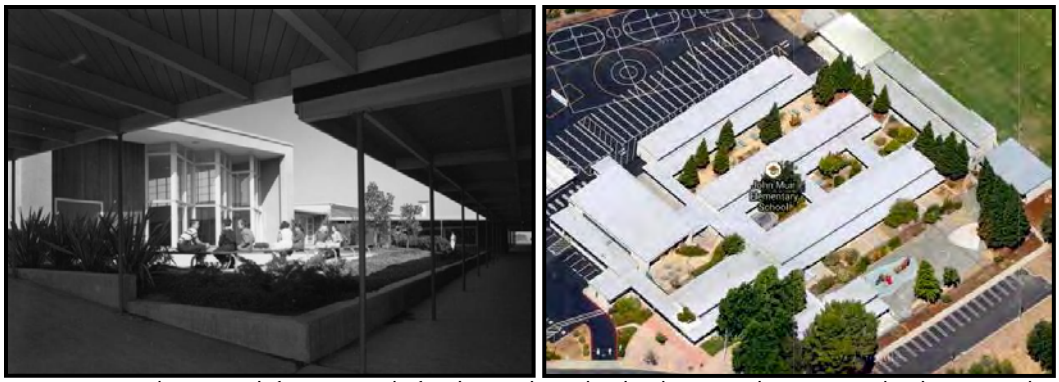


Figure 131. Prototype for a cluster-plan school and unified campus, The Architect's Collaborative, Walter Gropius, 1954. Source: Ogata, 2008.

1950s. The cluster-plan school offered a logical solution to these issues. It retained the low massing and indoor-outdoor access and views for all classrooms. But rather than extending wings along an axis, the plan called for grouping them as modular, standalone units around a shared central courtyard. Classrooms still had generous expanses of windows, but now views took in the courtyard and other classrooms, which provided a more communal, neighborhood-like setting. As architectural historian Amy Ogata observed, the plan type provided "both economy and a meaningful spatial experience. In organization and details, the prominent cluster schools of the early and mid-1950s reflected a new sensitivity to the child's perception."[117]

As with the finger-plan, the new typology was interpreted and designed in many different variations, but the basic ideas remained the same.

Even in California, with space to grow, the cluster-plan became the preferred typology in the 1950s. Finger-plan schools were still built—usually the condensed or modified typologies



Figures 132 and 133. On left: Courtyard of a cluster-plan school: John Muir Elementary School (1951), John Lyon Reid, Martinez, California (northern California). Source: Ogata, 2008. On right, aerial of John Lyon Reid, John Muir Elementary School. Source: Google Maps, 2013.

already emerging by the late 1940s. But by the early 1960s, the cluster-plan school had "almost universally replaced the finger plan concept."[118] In a five-year study of the state's school plants, the California Department of Education praised the cluster-plan for more efficient land utilization and for encouraging "cooperation between teachers by allowing them to share multiuse classrooms, resources center, and teacher preparation areas, all adjacent to their classrooms. … Better acoustical control and lighting is evident, and technology is enabling these comfort factors to be coordinated with flexible interiors."[119]

The advantages of this plan were many: more child-friendly in its scale and setting, especially for younger children; more communal, with more shared spaces; and easier to supervise. With this plan, what had been the corner of the room on the interior became the front row on the courtyard.

One early example in California was John Lyon Reid's 1951 John Muir Elementary School in Martinez, California, northeast of San Francisco. In his design, Reid employed a typical pavilion-like plan, with long one-story classrooms separated by patios and landscaping, accessed via sheltered walkways with wide eaves. The classroom wings are clustered around cross-wings, creating a courtyard setting. As with the Saarinens' Crow Island school, Reid's L-shaped classrooms created enclosed outdoor areas for outdoor play and recreation. In a demonstration of the nonhierarchical, informal campus, Reid also eliminated the formal auditorium and designed instead an all-purpose room, "for meetings, lunches, and play, that looked onto a central courtyard through large sharply angled windows."[120]

Within the Los Angeles City School District, Sumner Spaulding and John Rex's Orville Wright Middle School (originally Westchester High School) was another early example of a finger-plan and cluster-plan hybrid, this time for a high school campus. The school incorporated the best of midcentury modern design, by one of the region's renowned firms, with the newest design principles for school plants. Completed in stages between 1948 and 1952, Orville Wright Middle School was constructed for a growing residential community near one of Los Angeles's centers for the aerospace industry.



Figure 134. Orville Wright Middle School (originally Westchester High School), Spaulding & Rex, 1948-1952. Source: Getty Research Institute, Julius Shulman Archive.



Figure 135. Orville Wright Middle School. Bands of clerestory windows provide balanced lighting for classrooms. Source: Flight, Westchester High School Yearbook, 1956, www.e-yearbook.com.



Figure 136. Westchester High School (now Orville Wright Middle School), Spaulding & Rex (1948-1952), west Los Angeles. Source: J. Getty Trust, Getty Research Institute, Shulman Archives.

In a spare, modernist design, Spaulding & Rex incorporated the same modular design, low massing, and easy indoor-outdoor connections typical of the era (and midcentury modernism in Southern California). Cross-lighting was provided through bands of clerestories and single-pane fixed and casement windows. A network of canopied corridors linked buildings and facilities throughout the campus. In a nod to the aerospace industry employing much of the adjacent community, the campus cafeteria featured a circular, space-age design.

The campus overall displays a decentralized but unified plan, zoned for automobile and pedestrian-only areas, with pavilion-like classrooms wings "clustered" around courtyards. In the "Curating the City" program for modern architecture, the Los Angeles Conservancy noted that Spaulding and Rex's Westchester High School took the basic tenets of the International Style and Southern Californian educational architecture and "turned them into a spectacular example of a Mid-Century Modern school. … This campus is a wonderfully intact and very vibrant testament to the power of good 'design for learning.'"[121]

Another LAUSD example of a hybrid finger- and cluster-plan school is the George K. Porter Middle High in Granada Hills. Built in 1959 and designed by Rowland H. Crawford, the campus displays a pavilion-like plan, with axial classroom wings connected by a central corridor. Swaths of landscaped patios divide the classrooms. Interrupting the axis, the focal point of the campus is a landscaped quad, with an expansive lawn ringed by trees creating a neighborhood, park-like setting.

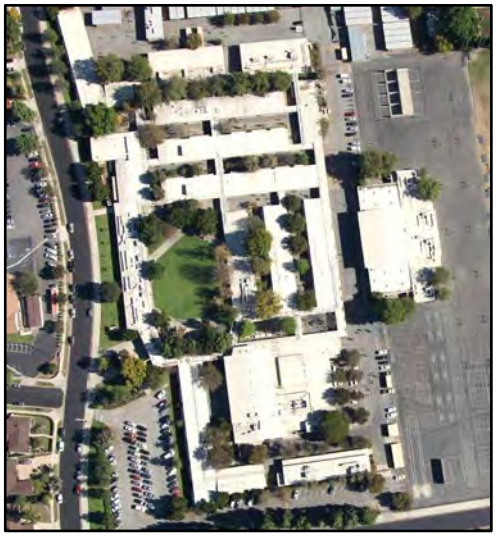


Figure 137. Combination cluster- and finger-plan, George K. Porter Middle School, Granada Hills, California, 1958. Source: LAUSD Porter Middle School Pre-Planning Survey, 2011.



Figure 138. 1953 aerial, Orville Wright Middle School. Source: USDA, www.historicaerials.com.



Figure 139. As of 2012, the campus plan of Spaulding & Rex's Orville Wright Middle School remains largely intact. Source: LAUSD Orville Wright Middle School Pre-Planning Survey, 2012.



Figure 140. George K. Porter Middle School (1958), Granada Hills, San Fernando Valley (extant). Source: Getty Research Institute, Julius Shulman Archives.

Typical of modern campus planning, and similar to Orville Wright Middle School, the site plan turns inward on itself. Automobile traffic and drop-off areas are located on the exterior, with extended canopied corridors providing access to the campus.

The George K. Porter Junior High also reflects how Los Angeles's still-expanding suburbs provided a testing ground for modern design and programming ideas school plants. The school is located in Granada Hills, also home of Joseph Eicher's celebrated midcentury modern tract of Balboa Highlands, now a Historic Preservation Overlay Zone in the City of Los Angeles. These buildings and so many others like them reflect how the suburbs continued to expand, especially throughout the San Fernando Valley, and how by the late 1950s midcentury modernism enjoyed wide acceptance among the public.

The 1960s and the Open-Plan School

Another wave of school plant reform in the early 1960s brought calls for more flexibility. To accommodate the new method of "team teaching," the focus became designing completely adaptable interiors, with movable walls and few built-ins, in a new typology known as the open-plan school.

In light of this new trend, the finger-plan of the 1940s—those "once-daring school plants with long corridors and classrooms located on one or both sides were now dismissed as hopelessly dull 'egg-crates.'"[122] Basic features like load-bearing interior walls came to be seen as too limiting. As the EFL wrote in a study, "'Old walls should not stifle new ideas. Identical boxes must not enforce the same program on all students and teachers; each is a unique individual. Fixed furnishings must not quash spontaneous inquiry.'"[123] The school capable of serving the needs of students, the EFL concluded, offered space to "accommodate groups of various sizes from 100 students down to one or two students studying by themselves" and "space allowing for the rapid shifting of group size or change in group's activity."[124]



Figure 141. Caudill, Rowlett, & Scott, Paul Klapper School, New York, 1966-1967. Source: Ogata, 2008.

EFL findings were well publicized and widely published, first finding audience in the nation's many education-related trade publications and into mass-market newspapers. Reporting on the findings of an EFL study, the *Los Angeles Times* wrote that "if you were to take the roof off most schools and look in, you would see a series of identical rooms, approximately 30x40 ft., strung along both sides of a corridor. This is the floor plan of an obsolete school."[125] This description, of course, fit the classic finger-plan school, and many cluster-plan schools, considered cutting-edge just one decade before.



Figure 142. Thurston School, Open Plan Model (1967), Flewelling & Mood. Source: Getty Research Institute, Julius Shulman Photography Archive.

What this meant in terms of school design was a less low-slung, spread-out campus; the buildings were more compact, with higher ceilings. The idea of cross-lighting and ventilation provided by the long rectangular classroom wing fell out of favor. They were no longer as essential, since, in the early 1960s, improved air-conditioning systems diminished the importance of cross-ventilation and less glazing was generally

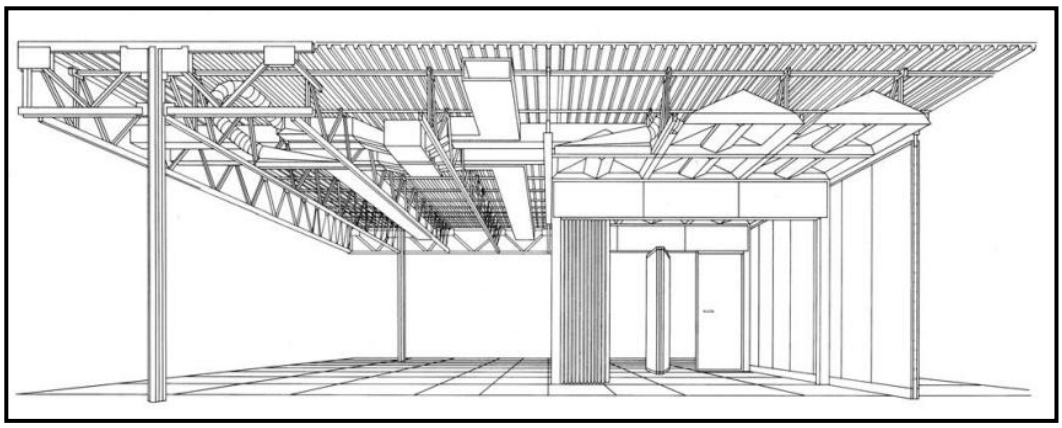


Figure 143. Standardized, demountable components for an open-school, School Construction Systems Development. Source: Ogata, 2008.

used. Since the open-plan school had to accommodate interior spaces separated by non-load-bearing walls, roof spans had to be long and high, with a steel structural system providing, essentially, a large high space into which the school's program could be designed. Massing increased, and corridors moved back inside.

Although the most obvious changes brought by the open-school plan were to school interiors, the shift was also discernible on the exterior. Some—but not all—open-plan schools adopted the circular form, with architect William Caudill arguing that the circular form best served team teaching, since the circular plan offered "continuous movement of children."[126]

Architects also experimented with hexagonal building shapes, either with self-enclosed campuses or smaller circular classrooms clustered around a common area or courtyards (in yet another variation bringing together two plan types). One of the "most adventurous examples" of the plan type, according to architectural historian Amy Ogata, was Caudill, Rowlett & Scott's Paul Klapper School in New York, constructed in 1966/1967.

School Construction Systems Development (SCSD)

In efforts to promote the open-plan school, the EFL awarded a substantial grant to develop "an economical, standardized building system" through its School Construction Systems Development (SCSD) program.[127] The program developed, standardized and manufactured modular components and structural systems for open-plan schools. The SCSD school components and infrastructure were standardized but aesthetically flexible, allowing for design and plan variations so that "architects were not limited in plan layout."[128] High roof spans of 60 to 70 feet provided the structural template into which the school's interior program could be designed.

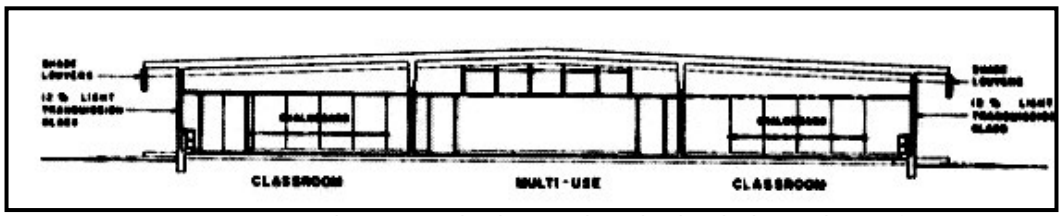


Figure 144. Section, Van Duzen Elementary School, open-plan school with cluster-plan configuration. Source: Gibson, 1965.

The SCSD system was promoted nationally. In 1962, the program "had the commitment of twelve California school districts to develop and build schools worth 25 million dollars."[129] Ultimately, 13 SCSD schools were constructed in California. The formation of the SCSD also grew out of the astronomical costs facing school districts and boards to keep up with demand; the goal was creating prototypes that offered economical, good design, reflecting the latest ideas in educational methods and school plant design. Modern school architects around the nation experimented with the new ideas.

Ultimately, in spite of high expectations, open-plan schools "faced problems of practicality and perception."[130] Problems related to acoustics plagued open schools, for example. The gap between theory and practice also became an issue, as the open-plan school did not in and of itself guarantee that teachers would adopt the creative, flexible team-teaching strategies that had prompted design reform in the first place. Much national debate and discussion about the open-plan school took place in the educational and architectural trade press. By the mid-1970s, the open-plan school had joined the finger-plan and cluster-core plan as experiments in school design that declining quickly in popularity.

As with the finger- and cluster-plans, there were many combinations of the main plan types. The Van Duzen Elementary School in Northern California, for example, represented one of first "cluster plan schools built in California with open planning."[131] Constructed in the early 1960s for a cooperative/team teaching program, the school consisted of three parallel classroom wings, open and flexible on the interior, but configured around an exterior courtyard, for the benefits of the clustered site plan.

Constructed in 1964, the Round Meadow Elementary School, in Hidden Hills, was another example of an open-plan school, this time in Southern California. Again, the cluster-plan idea played a role in the design: "This school is designed so that each building can work as a cluster-type 'little school.'"[132] At the center of each open-plan building was a multipurpose area, with a resource center and library. The buildings tended to be higher, with more wall space and fewer windows. The interior was made flexible through the use of folding walls, and a relative lack of windows was compensated for through a modern air-conditioning unit. As with the earlier postwar typologies, the open-plan type accommodated a variety of stylistic variations.



Figure 145. New community, new school: Hoover High School, Lakewood (1963). Source: The J. Paul Getty Trust, Getty Research Institute, Julius Shulman Archives.

LOS ANGELES CITY SCHOOL DISTRICTS | CONTEXT & DEVELOPMENTS

The Building Program

In the postwar period, the order of the day for Los Angeles City school districts was keeping up with demand. Overseeing the first decade of postwar expansion was Alfred Nibecker, who had served as chief architect for the architectural department of the district since the 1920s. As before, Nibecker oversaw design and construction of schools, with a variety of commissions still shared between area architects, in particular those who had begun to specialize in school design, and the in-house team of the district. In 1955, Nibecker was made an honorary member of the Structural Engineers Association of Southern California, the association's highest award. That same year, he retired. Following his retirement, the board appointed Ernst Raymond C. Billerbeck as district architect.[133]

As school construction expanded in the suburbs, however, enrollment figures at several downtown schools were in sharp decline, resulting in the closing of a number of campuses in the postwar period (among them Central Junior High, founded in 1911 and closed in 1946; and Lafayette Junior High, founded in 1911 and closed in 1955). Between 1946 and 1953, the enrollment of Lafayette Junior High dropped by one-half, falling from nearly 1,400 in 1946 to 700 in 1953/1954, reflecting the population shift from the city to the suburbs.[134]

During this period, standardized construction techniques and components, with variations reflecting differences in site conditions and demand, allowed the district to expedite construction. Standardization meant that many campuses throughout the district, in particular schools constructed during the 1950s, display identical or similar elements and features. Common modular components (for elementary, middle, and senior high schools) included classroom wings that are one-room deep, one story in height, with a finger-link rectangular plan. These buildings are often capped with a slightly sloped shed roof. Along one side (intended for southern exposure), clerestories span the building below the roof line. Shade is provided through either wide (usually cantilevered) roof eaves, in steel or wood, or a wide, sheltered arcade. These arcades generally rise to the level of roof clerestories and are supported on simple pipe supports.



Figure 146. San Fernando Valley expansion: Panorama City, Burton Elementary School, 1951. Source: The J. Paul Getty Trust, Getty Research Institute, Julius Shulman Archives.



Figure 147. Pacific Palisades Charter Senior High School (1961), Adrian Wilson & Associates, Pacific Palisades, west Los Angeles. Source: Sapphos Environmental, Inc., 2014.



Figures 148 and 149. Fernangeles Elementary School (1954), Sun Valley, San Fernando Valley. Image on the left shows the Administration Building and Auditorium; image on right shows the student lawn and landscaping, from the vantage point of sheltered outdoor dining area. Source: Sapphos Environmental, Inc., 2014.

Along the opposite side (meant for northern exposure), window glazing is generous, usually occupying 60 to 80 percent of the wall height in grouped, multi-light, operable windows. The grouping of windows marks the location of the classroom inside, and treatments vary, from wood-framed, multi-light double-hung sashes to steel-framed casements.

By the 1960s, it became more common to see double-loaded classroom wings (for senior high schools especially, but also for some elementary schools where demand was high and available acreage was scarce). By double-loading corridors but retaining the preferred one-story massing, schools accommodated more students while also providing a more domestic scaled, indoor-outdoor campus. Also in the early 1960s, for sites with less acreage, campuses incorporated more two-story buildings, with designs still drawing upon the postwar ideals for an informal, indoor-outdoor campus.

Many slight variations of another classic feature of postwar schools, sheltered corridors, appear on campuses throughout the district as well. Intended to move hallways outside, sheltered corridors might display wood plank and beam roof structures, resting on simple piers or steel pipe supports, capped with a flat or slightly sloped roof. Many examples form an elaborate network connecting all buildings and facilities of the campus.

Many LAUSD schools constructed during this period, from the late 1940s through the 1950s, also display standard campus components and site designs. Some basic elements include an auditorium, usually cited close to the public entrance to the campus, with a low, one-story entrance wing giving way to a two-story high interior. Stylistically, the auditorium generally reflects the character-defining features or influence of Mid-Century Modern design. Detailing is spare, and materials vary. For the auditorium, and usually for the equally public administration building, brick cladding and piers flank entrances and/or accenting building bases. Other typical materials include stucco, steel, and scored concrete.



Figure 150. Narbonne High School (1956), Daniel, Mann, Johnson & Mendenhall (DMJM), Lomita, southern Los Angeles. Image shows one example of the swaths of greenery and landscaping between classroom wings. Source: MSP Architects (McDonald, Soutar & Paz, Inc.).

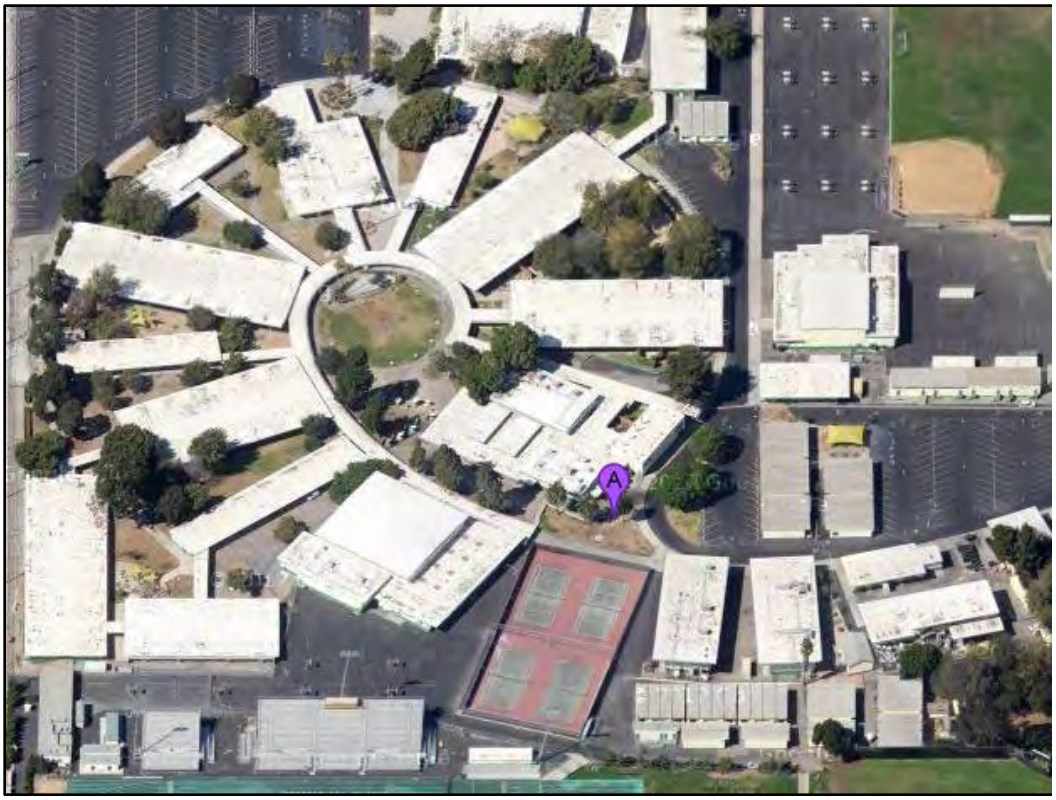


Figure 151. Narbonne High School (1956), aerial view. The finger-plan school forms a spiral, allowing for the benefits of the landscaped, expansive site plan and low, one- and two-story deep classroom wings providing easy outdoor access and views. The use of the spiral plan creates these features on a relatively restricted lot. Source: Google Maps, 2013.



Figure 152. Leapwood Avenue Elementary School (1962), Carson; image on left shows two-story, double-loaded classroom; image on right shows landscaping and patios between classrooms, connecting corridors, and wide arcade eaves. Source: Sapphos Environmental, Inc., 2014.

Other common features for elementary, middle, and senior high schools included the incorporation of a centrally located, sheltered outdoor dining area and adjacent Cafeteria/Multipurpose Building, outdoor assembly area and landscaped lawn/quad and recreation fields along the periphery of campus (the latter two features are more common for middle and senior high schools). Elementary schools often incorporated a separate area for kindergarten classes. Usually located near the Administration building, the kindergarten areas have their own patios and recreation areas, adjacent to the classroom wing.

Postwar Expansion and Educating the Baby Boom

After the tumult of Great Depression and World War II, the Board of Education of Los Angeles, in spite of a turn toward architectural modernism, shifted away from the experiments of the 1930s and back toward a more traditional, college-focused curriculum. In September 1945, the Board of Education added its voice to a movement to carry out district-wide achievement testing for students and reevaluate the curriculum, partly in order to stop the "'drift toward laissez-faire, experimental, and lax methods.'"[135] The curriculum was revamped, with a renewed emphasis on the "3 Rs" and additional coursework in American history and geography.

The biggest challenge facing the district at the time was keeping up with demand. In Southern California, one of the areas with the most rapid growth was the San Fernando Valley. Between 1930 and 1950, population expansion in the valley was remarkable even for Southern California. With new settlers drawn by the area's emerging aerospace and entertainment industries, residential expansion had already been under way by the 1920s and 1930s. By the onset of the Great Depression, for example, the valley had become one of the United States' most important hubs for the aviation industry. Given this concentration of jobs, population doubled from approximately 51,000 in 1930 to 112,000 by 1940. With the advent of World War II and an infusion of federal funds for wartime spending, these figures skyrocketed by another 50 percent in 5 years, from 112,000 in 1940 to 176,000 by 1945. Between 1945 and 1950, a nearly fourfold increase was recorded, with figures climbing to 402,000. Given the magnitude of this expansion, a majority of post-1945 school construction for the district overall took place throughout the San Fernando Valley.




Figures 153 and 154. Chatsworth High School (1963), San Fernando Valley. Double-loaded axial classroom wings fan out from a spoke-like plan, centered on a landscaped quad area. Photo on the right shows detail of courtyard spaces and landscaping lining all classrooms. Source: Sapphos Environmental, Inc., 2013.

This created another challenge for the Los Angeles City school district. Overcrowding led to the need to offer "half-day" sessions for children, where attendance happened in shifts of half-days. Bond issues in 1946, 1952, and 1955 addressed the pressing need for new school construction, and the resulting funds paid for the construction and expansion of numerous schools.[136] The 1946 bond issue provided $75 million, which helped generate 66 new schools, with a total of over 2,300 classrooms, over 480 cafeterias, gyms, auditoriums, and other ancillary buildings.[137] In addition, over $7.8 million went toward land for new schools, $3.2 million for maintenance and improvements to an aging stock of facilities, $4.5 million for grounds improvements, and $10.6 million for equipment. In spite of these investments, another $148 million was proposed for a 1952 bond issue.

In 1948, district-wide enrollment stood at 301,000 students; by 1949, this figure had increased by 15,000, with enrollment reaching over 316,000.[138] By the end of the 1950s baby boom, however, the student population of the Los Angeles City school district more than doubled, climbing from 316,000 to over 645,000. A further increase of 28,000 pupils was predicted for the school year 1960–1961.[139]

Although the district temporarily succeeded in decreasing the need for half-day sessions in 1948–1949, by 1952 the sheer numbers threaten to overwhelm its ability to keep up. Without a new building campaign, the number of students needing to attend half-day sessions was predicted to increase from 11,355 in 1952 to 100,000 by 1957.[140] By 1965, in the San Fernando Valley, demand was so great that school district officials began predicting that school plants would soon occupy high-rises, a trend that was not desired but seen as a possibility.



Figure 155. Chatsworth High School, aerial view of site plan and design. Source: Google Maps, 2013.





Figures 156 and 157. Colfax Avenue Elementary School (1950-1955), North Hollywood-Valley Village. Source: Sapphos Environmental, Inc., 2014.

Funding was not the only challenge facing the district. There was a pressing need for new construction, but also a shortage of trained architects in the immediate postwar years (this tide started to turn in the 1950s). In 1949, the State of California issued a "renewed plea for draftsman and designers," as the state's ambitious postwar building program for institutional construction was falling behind schedule due to a personnel shortage.[141]

These years profoundly impacted the growth and organization of the school district. The geographic area served by the school district fluctuated over time, expanding during the 1920s and 1930s as it annexed adjacent school districts and served new areas. As of 1935, the school district enrolled 300,000 students housed in 384 schools, including 293 elementary schools, 22 junior high schools, 35 high schools, a trade school, and a junior college; and it served an area of over 1,095 square miles.

During the late 1930s and 1940s, the general trend in school district organization was toward decentralization; as communities grew and developed their own identities, they might split off and form stand-alone districts. For example, between 1936 and 1945, the Beverly Hills, Torrance, Culver City, and William S. Hart Union High School districts formed after leaving the Los Angeles City School District.

Even so, throughout the district, enrollment steadily increased. Rapid postwar residential development perpetuated the need for funds for additional classroom space, facilities, equipment, and other resources. To examine apportionment of state aid to school districts, in 1954 the state legislature created the State Commission on School Districts and directed it to examine unification and other means of reorganization of school districts in the state. The state's policy thereafter was the encouragement of unification for reasons of streamlining administrative functions and costs, enlarging tax bases and reducing dependence on state aid. Developing suburbs were, accordingly, encouraged to align themselves with the existing Los Angeles City School District, further contributing to its growth.



Figure 158. Palisades Charter Senior High School (1961), Adrian Wilson & Associates, extant, Pacific Palisades. Source: The J. Paul Getty Trust, Getty Research Institute, Julius Shulman Archives.



Figure 159. Palisades Charter Senior High School (1961), Adrian Wilson & Associates, extant, Pacific Palisades. Source: Getty Research Institute, Julius Shulman Archives.




Figures 160 and 161. On left, Palisades Charter Senior High School (1961), Adrian Wilson & Associates. On right, Daniel Webster Middle School (1954-1958), Palms-Mar Vista. Source: Sapphos Environmental, Inc., 2014.

Formation of the Los Angeles Unified School District

Through the 1950s, the Los Angeles City School District remained organized as three separate entities: an Elementary School District, High School District, and Junior College District. In the late 1950s, calls for unifying Los Angeles's elementary and high school districts into one unified entity began gathering momentum. The movement for district consolidation was seen throughout the region and state in this era. As of 1959, the State of California spent upwards of $1.5 billion for public education, spread across 1,721 separate districts, "a maze related to the state's unending growth."[142]

Supported by the State Board of Education, the Los Angeles City School District and Board of Education, as well as California's governor at the time, Edmund Brown, district unification would "bring advantages in curriculum, staff and financing."[143] Proponents of the measure argued that unification would help bring costs under control by streamlining administrative procedures and eliminating duplication. In addition, a unified district would also provide a "continuity of education along a solid plane from the kindergarten to the senior year," as Los Angeles City School District superintendent Ellis Jarvis argued.[144]

These efforts culminated in three ballot measures, Propositions C, D, and E, included in the 1960 national primary elections. The propositions easily passed. As of July 1961, the LAUSD came into being as the second largest school system in the United States, and the Los Angeles Junior College District became an independent entity.

Changing Times: LAUSD in the 1950s and 1960s

In 1960, the *Los Angeles Times* education editor, Dick Turpin, observed that "growth, the word most nearly synonymous with California, has brought many problems to the state and education has had a major share of them."[145] At this juncture for LAUSD, enrollment in 1959–1960 stood at 645,000; by 1960–1961, enrollment figures were expected to climb by 28,000 pupils.[146] The school year 1960–1961 also brought the opening and staffing of 15 new schools.



Figure 162. The 1960s arrive at LAUSD. Caption, left image: Teachers on strike, circa 1969. Source: LAPL, Shades of LA, #00003951. Caption, right image: "Thousands of teachers and supporters staged a mass demonstration in front of city hall." 19 September 1969. Source: LAPL, Shades of LA, #00058154.

The extended postwar boom of school construction and expansion had brought dozens of new schools to the district. Between 1946 and 1962, a total of $649.5 million in bond issues had funded the expansion. But population growth continued through the 1960s, exerting a constant pressure for new classrooms.

In 1962, the *Los Angeles Times* reported that California had become the most populous state in the nation and that this population boom was having a negative impact on the state's schools. As a result, LAUSD had increased half-day sessions for the first time since the 1950s, during the height of the baby boom. Half-day sessions had hit a high mark in 1957, with over 48,000 classes adopting the partial schedule; this number had steadily dropped in the intervening years. But by 1962, the numbers were again on the rise, with an estimated 20,000 half-day sessions needed in the fall of 1962. Other solutions, such as the temporary fix of busing students from overcrowded to less crowded schools, was one proposed but problematic solution in the early 1960s.

Even as the need to expand and upgrade continued, signs of voter fatigue for school bond measures were becoming evident. In 1962, a defeated bond measure of $128 million would have funded new schools and expansion in areas most impacted by enrollment increases and/or overcrowding, among them, the San Fernando Valley and central Los Angeles. By 1963, for example, enrollment in the San Fernando Valley accounted for one-third of the total for the district.[147] Even with the additional funds, keeping up with demand still would have proved onerous: "Had the measures passed," reported *Los Angeles Times* education editor Dick Turpin, "the city school system could barely have kept pace with the city's surging enrollment wave. Now additional half-day sessions are certain."[148]

Through the 1960s, however, the tide continued to turn against school bond measures. In 1969, for the fourth time in a row, Los Angeles voters rejected a tax increase to provide funding for "the already troubled Los Angeles city schools. A bond issue for the construction of new schools was also a victim of nonsupport."[149] This trend was statewide: joining Los Angeles voters in this rejection of school bond measures were Culver City, Ventura, and San Diego, among many others. Between 1966 and 1968, "52 percent of all propositions designed to provide more funds for California schools ... have been defeated."[150]

In an editorial in the *Los Angeles Times*, Warren L. Steinberg, a consultant with LAUSD's Center for Planned Change, commented on the trend:

> California businessmen and politicians—in addition to exploiting the beauties of the California scenery and climate—have long attributed much of the success in luring business to the state to an educational system that provides a large source of skilled manpower. Again, why do Californians reject support for one of the state's most precious assets—schools? Some will answer that it is a taxpayers' revolt, that school taxes are the only taxes on which the average citizen gets to vote and that there is no other way that the individual can show his wrath at the steadily climbing tax bite.

Steinberg captured the mood of the era, not just with respect to funding, in his concluding comments in the piece:

> Our children need to ponder basic educational problems: When will equal educational opportunity be a reality, what is the place of religion in the school, what should be taught in the schools, how much is good education worth, what is the role of home and school, how free should academic freedom be, what part should students have in determining the education they will receive? Unless schools turn out a better educational product and begin to teach students the history and place of education in our society, we can expect more propositions to fail their ABCs. [151]

As the decade ended, though, the "voter revolt" against school bond measures continued, and Los Angeles city schools were tasked with serving a substantial student population with ever-diminishing resources. In 1969, for the first time in its history, LAUSD's student enrollment dropped. The news made headlines in the *Los Angeles Times*: "'This is a new development for us,' said a surprised Asst. Supt. Frederick Fox. 'The trend (of growth) has been broken.'"[152]



Figures 163 and 164. School busing, 1964. On left: Loyola Village School, Playa del Rey, welcomes 82 pupils from Manchester Avenue School. Source: LAPL Herald-Examiner Collection, #00042149. On right: "Miss Ina Metcalfe, principal of Osage Avenue School, greets some of 69 pupils who were transferred to Osage from the 66th Street School. The transfer of 151 pupils from two predominantly African American schools to two all-white schools was accomplished without incident." Source: LAPL Herald-Examiner Collection, #00055171.

Civil Rights and School Integration

As the 1960s ended with this novel news—of an enrollment decrease—school officials cited the dual causes of decreasing birth rates as well as the widespread move of many families to new suburban areas outside the district. An additional factor in this shift was increasing racial tension and growing pressure on the district to correct the racial imbalance that had become evident in many schools.

In the postwar period, addressing and correcting decades of de facto racial segregation represented a significant challenge for LAUSD.[153] By the 1960s, as the Civil Rights movement gained momentum, this long-brewing issue finally came to a head and formed an important part of the social context shaping the district during this time.

Throughout the early twentieth century, racial discrimination and segregation in housing had been reflected in the demographics of Southern Californian schools. A new wave of openly discriminatory housing practices in the 1930s helped maintain and worsen these divisions. In the mid- to late 1930s, surveyors for the Home Owners Loan Corporation (HOLC) studied the demographic breakdown of communities throughout the United States, including in Southern California. The HOLC provided long-term mortgage loans to, mostly, Anglo-American clients. In addition to discriminating against potential clients, the HOLC's "security maps" helped lenders discriminate against entire neighborhoods. In this climate, ethnic diversity was considered to be a security risk.

In order to document the presence of what they termed "subversive races," HOLC surveyors went block by block throughout Los Angeles, interviewing residents and creating neighborhood profiles describing, among other things, racial composition. Hundreds of data sheets, with detailed demographic information, were created for Los Angeles alone. Neighborhoods would be assigned a color denoting the level of risk, with an inordinate amount of weight being assigned on the basis of who lived there: green usually meant that a

neighborhood was entirely Anglo-American; yellow meant that a few ethnic minority members lived in the neighborhood; and red was reserved for neighborhoods with predominantly minority populations, usually African-American.



Figure 165. 1963 hunger strike by school integrationists: "A year-long study on the subject of de facto segregation was scheduled to be presented to the Board of Education." Source: LAPL, Shades of Los Angeles, #00041605.

This practice, which became known as "redlining," fueled discrimination and racially restrictive lending practices and intensified segregation in Los Angeles.[154] As restrictive housing and lending practices continued in the postwar period, racial segregation became particularly pronounced in newly constructed suburbs, in particular in the San Fernando Valley. The student populations of schools reflected this: "The Valley, regardless of the region—North, East, or West—was by far the most racially segregated region of the Los Angeles School District," according to a 1967 report released by the school district.[155] Among thousands of students at Birmingham, Canoga Park, Chatsworth, Cleveland, Granada Hills, Grant, Reseda, Taft, and Van Nuys high schools, there was a combined total of 19 African-American students.[156]

However, additional factors contributed to the marked racial imbalance in so many Los Angeles public schools. As architectural historian Teresa Grimes, et al., noted:

> According to Josh Sides, school segregation in Southern California was the product of racial geography, willful neglect, and racial gerrymandering. In this respect, the civil rights battle over education was very much tied to housing. If black families were restricted to living in certain areas with substandard schools, there was de facto school segregation.
>
> While the LAUSD officially mandated that students attend the school closest to them, white students in racially mixed neighborhoods were able to seek a waiver and attend a predominately white school. This practice, combined with segregated residential patterns, resulted in de facto segregation well into the 1950s. When the NAACP started investigating the schools system in 1953 and U.S. Supreme Court handed down the landmark Brown v. Board of Education case in 1954, schools became a central focus of the Los Angeles civil rights movement. Resistance from both the LAUSD and white parents in affected neighborhoods throughout the city led to a protracted battle over school desegregation well into the 1970s.[157]



Figure 166. The "East LA Blow Out," Lincoln High School, 16 September 1968. Students protested for "better schools for Mexican Americans. Sal Castro was a teacher there and spearheaded the movement." Source: LAPL, Herald-Examiner Collection, 00041327.

In the early 1960s, the NAACP and the American Civil Liberties Union (ACLU), along with a coalition of other organizations, launched a campaign of sit-ins, marches, and other nonviolent action, calling upon the Los Angeles Board of Education to adopt policies aimed at correcting racial segregation and broadening the curriculum. This coalition asserted the need for (1) the Los Angeles Board of Education to redraw its school boundaries, (2) black students in overcrowded schools to elect to attend predominantly white schools, and (3) black teachers to be hired throughout the district.[158] By the mid-1960s, a variety of groups joined forces, arguing for classes and subjects more reflective of the diverse histories and cultures of LAUSD students.

The issue also touched on school boundaries. In 1963, African-American leaders in Los Angeles staged protests, asking that "elementary and secondary school boundaries be redrawn around these 'Negro districts,' that that minority students be transferred from crowded schools to less crowded ones in a 15-mile radius, and that "barriers" to promotion of certified Negro personnel be eliminated."[159] With the Watts uprising in 1965, attitudes were intensified on all sides of the integration issue. Some citizens became more adamant that de facto segregation should remain in place, while other community members, activists, and students began arguing for and asserting the legal rights of all students to equal educational facilities and opportunities.

In 1968, Latin-American students in East Los Angeles staged a series of school strikes popularly known as the "East L.A. Blowout."[160] During the first week of March 1968, approximately 15,000 students walked out of classes at Woodrow Wilson, Garfield, Abraham Lincoln, Theodore Roosevelt, Belmont, Venice, and Jefferson high schools with demands for an "equal, qualitative, and culturally relevant education."[161]

Early Litigation

In 1954, in the landmark case *Brown v. Topeka Board of Education,* the U.S. Supreme Court declared that separate public schools for black and white children were "inherently unequal" and therefore violated the constitutional rights for equal protection for minority children.[162] Impacts of this decision were felt in Southern California. The Los Angeles Board of Education had cited "color-blindness" as its official policy, stating that racial segregation in housing patterns was beyond their control.[163] However, when the policies of the nearby Pasadena School Board (which mirrored those of Los Angeles) were challenged in a 1963 lawsuit brought by the National Association for the Advancement of Colored People (NAACP), the California Supreme Court ruled that school boards must attempt to eliminate racial segregation, regardless of its causes.[164]

In 1963 in Los Angeles, the ACLU filed *Crawford v. Los Angeles City Board of Education*, a class-action school desegregation lawsuit filed behalf of two African-American high school students, Mary Ellen Crawford and Inita Watkins.[165] The lawsuit highlighted two schools—both located in the southern portion of the district, only one mile apart—with pronounced racial imbalance: Jordan Senior High School in Watts, whose student population was 99 percent African-American, and South Gate Senior High School, which had 97 percent Anglo-American students.[166]

The case of *Crawford v. Los Angeles City Board of Education* became a watershed for Los Angeles schools. Filed in 1963, and effectively ending in the U.S. Supreme Court in 1982, the case "encapsulated and propelled the legal and political framework of an era."[167] As a result of the lawsuit, the California Supreme Court ordered LAUSD to formulate a plan to correct de facto racial imbalance in the schools. The most controversial solution proposed and implemented was busing students; programs were first established on a voluntary basis, then in a mandatory program that was hotly debated from the 1960s through the early 1980s, when a constitutional amendment passed by California's voters and affirmed by the U.S. Supreme Court ended the practice.

Crawford v. Los Angeles City Board of Education initially sought to halt the expenditure of public funds to renovate Jordan Senior High School until it was desegregated.[168] The suit was filed in 1963 but amended twice: in 1966, it was broadened to include Mexican-American students, and in 1968, the ACLU further amended the case to call for district-wide desegregation.[169] In 1970, as a result of lawsuit, a Los Angeles City Superior Court affirmed the presence of segregated schools in Los Angeles and ordered the district to take steps to correct racial imbalance. This prompted "a protracted fight over how to desegregate the increasingly diverse and increasingly racially segregated Los Angeles Unified School District."[170]

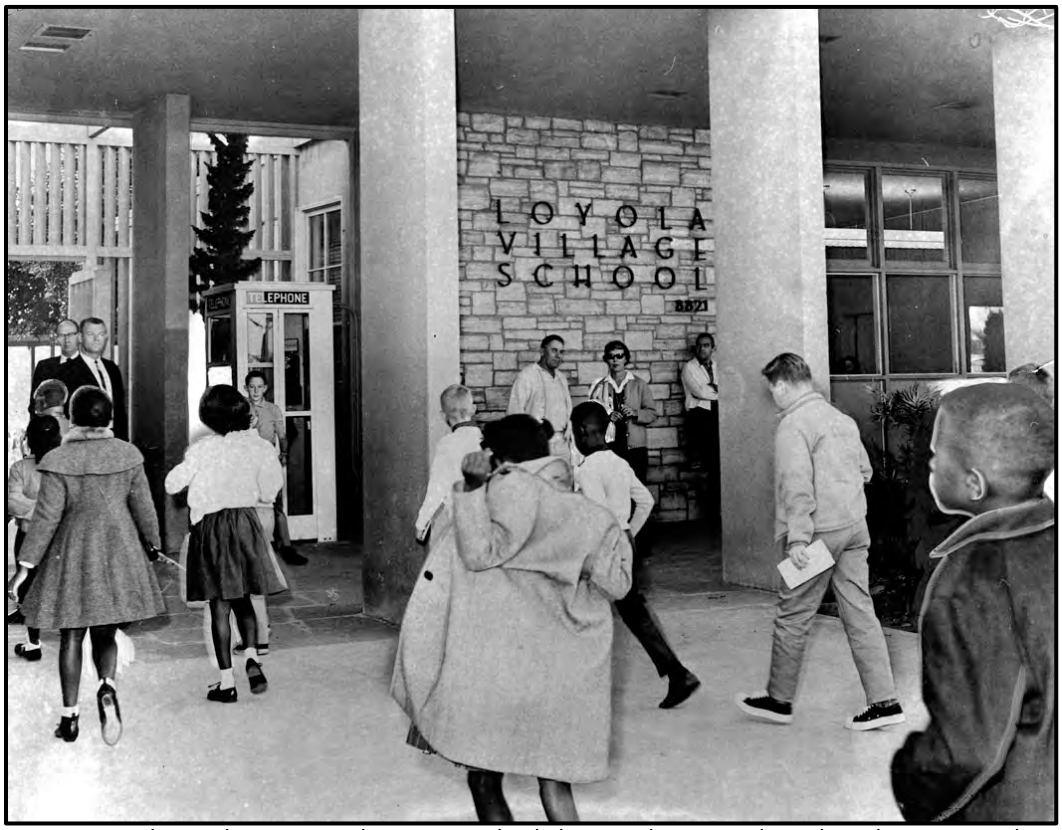


Figure 167. Voluntary busing as a solution to racial imbalance and overcrowding: This February 1964 photo shows children from Manchester Avenue School entering Loyola Village School. The caption read, "The transfer program is designed to cut half-day sessions at schools which are overcrowded by transporting pupils to schools with undersized classes." Source: LAPL, Herald-Examiner Collection, #LAPL00041639.

As mentioned, the most controversial solution involved busing students to correct racial imbalance as well as overcrowding. As early as the 1950s, and increasing in the 1960s, many communities and schools within LAUSD began exploring busing programs. In 1964, much attention was paid to a busing exchange program between relatively new schools in western Los Angeles (Loyola Village Elementary School and Osage Avenue School) and schools in older, more urbanized sections of Los Angeles (Manchester Avenue Elementary School and 66th Street School). In September 1967, a parents' group in Pacoima, in the San Fernando Valley, succeeded in establishing a busing program for 60 Pacoima students; the students would be taken by bus to the predominantly Anglo-American Encino Elementary School.[171]

During this period, in the late 1970s, two schools launched a voluntary, experimental program. Hobart Boulevard Elementary School, a multiracial school within the City of Los Angeles, partnered with Dixie Canyon Elementary School in the San Fernando Valley. In a program funded for a limited time by the Los Angeles School Board, approximately 70 second- and third-grade students from each school made the half-hour trip by bus to attend their partner school for a semester. The next semester, a new group of children would participate in the program. When the program was approved, the *Los Angeles Times* described it as "two schools, and one big step to integration": "The Anglo parents sat for more than two hours making a decision. Carefully, thoughtfully, they weighed the arguments. … But when the meeting was over, more than 100 parents of children in Dixie Canyon Elementary School in the San Fernando Valley agreed to participate in a voluntary two-way integration plan with Hobart Boulevard Elementary School, a multiracial inner-city school."[172] Writing in support of the program in the *Los Angeles Times*, Judith R. Birnberg, a Dixie Canyon Elementary School parent, stated that

> Socially, Hobart couldn't be more ideal: children attending the school have come from 42 different countries, and such a mix is already affecting my son. …Too many parents base their resistance to integration on the unknown. They assume minority schools are inferior, they assume the time traveling by bus will be a burden to their children; they assume children are haunted by the same fears clouding their own lives. But the time has come for parents to learn from their children.[173]

In 1977, in response to a California Supreme Court ruling calling for a "reasonable and feasible" integration plan, the Los Angeles Board of Education designed a program for mandatory busing. Under the plan, approximately 55,000 fourth- through eighth-grade students would be bused to school in 1978, with an estimated 112,000 students to follow in 1979.[174] The program was controversial and contested on a number of fronts. Just two years after the Los Angeles Board of Education proposed its plan, California's Proposition 1 sought to reverse it through a constitutional ban on mandatory busing. On the ballot in November 1979, Proposition 1 passed handily, with 70 percent of voters supporting the end of the practice.[175] On appeal in 1982, the US Supreme Court found Proposition 1 constitutional and upheld the ban on mandatory busing.

While this ruling solved one question, the issue of racial imbalance, cultural sensitivity in hiring practices and curricula, and encouraging diversity continued to shape the local- and state-level conversations about public schools through the 1960s, into the 1980s, and beyond. This issue continued to unfold in the courts on many fronts, as well as local and state governmental offices, school boards and classrooms, communities and families throughout Southern California. In this way, civil rights, ethnic identity, culture, and equal access shaped the sociopolitical context for school districts such as LAUSD in this period.

Summary: The Postwar Modern, Functional School Plant

In the postwar period, the functional modern school plant quickly became the norm throughout the United States and in Los Angeles. As school districts struggled to keep up with demand, architects had ample opportunities to test new ideas. The emphasis on the child-friendly school meant a continuing focus on improving and standardizing environmental controls, such as lighting, ventilation, heating and cooling systems, and interior design. While three main plan types emerged during this era—the finger-plan, cluster-plan, and open-plan school—there were many combinations and variations on the basic themes. Stylistically, as well, postwar schools might exhibit textbook features of the International Style, more regionally inflected modernism, or variations on the styles popular in the postwar period.

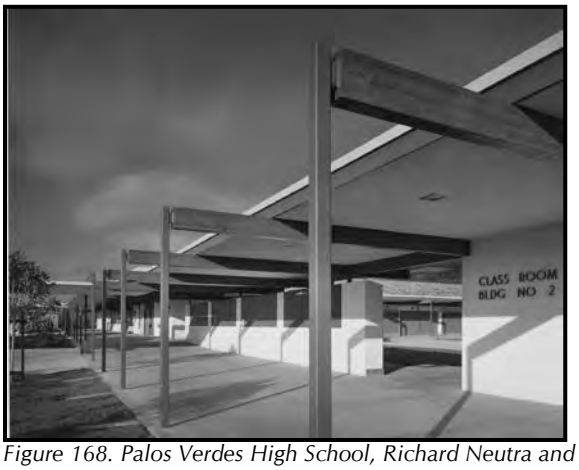


Figure 168. Palos Verdes High School, Richard Neutra and Robert Alexander (1961). Source: The J. Paul Getty Trust, Getty Research Institute, Julius Shulman Archives.

First and foremost, the postwar school was designed to be more informal, accessible, and child-friendly. A more accessible school generally signaled lower massing, though junior and high schools might still climb two or three stories, especially given the pressing need for more schools. In general, the preferred, more domestic scale was reflected in one-story massing and low ceilings, which made classrooms more intimate. Generous panels of glazing provided light and outdoor access, with larger windows on north elevations and often clerestory windows on southern sides, to balance cross-lighting. With the advent of air-conditioning, schools in the early 1960s tended to diminish generous expanses of glazing. The need for economical construction and finely tuned environmental features and controls accompanied a continued national call for standardization of school design.

Campus planning and site-specific design also became increasingly important, as new residential areas emerged from former agricultural lands, and school builders and planners had the acreage to plan an entire campus created for new residential communities. In this era, ideas about planning at the scale of the neighborhood included the generous use of outdoor spaces and landscaping and a zoned design that turned the campus inward and separated pedestrians and automobile traffic, for safety and accessibility. Although many variations were proposed, the modern campus plan called for "small separate units connected by arcades or passageways and attractively grouped. This type of arrangement is quite flexible and eliminates much of the institutional atmosphere of the large compact structures."[176]

SECTION IV ARCHITECTURAL CHARACTER

As described in Section III, early-twentieth-century reform brought a more functional approach to school design throughout the United States. Priorities shifted, and designing according to function rather than style became the starting point for architects and builders. In this way, Los Angeles's public schools generally display a scale and function that are unique to their purpose as educational facilities. Even so, as the focal point for the community's identity and commitment to education, public schools also showcased outstanding architectural design by the region's leading practitioners. Throughout the twentieth century, the public schools of Los Angeles have reflected both the increased emphasis on functionality as well as the significant stylistic trends of the day.

The following summary of the typical architectural styles reflected in LAUSD schools serves to introduce the topic and sketch the main character-defining features and eras for each style. This section draws upon and expands the architectural character section of the 2002 LAUSD Historic Context Statement and presentation prepared by Leslie Heumann & Associates and Science Applications International Corporation of Pasadena, California.[177] This updated version draws upon additional field observations, as well as recognized guides and studies.[178]

In order to ensure cross-agency compatibility, the authors of this section also considered and adapted, where appropriate, the standards used by the City of Los Angeles Office of Historic Resources and Department of Planning for historic resource surveys.

This section is not intended to be an exhaustive list of styles but rather an introduction and general framework for understanding the principal styles, as well as stylistic evolution, of LAUSD school plants. Descriptions of each style include the general period during which the style was used and its typical character-defining features.

The broad stylistic categories presented here were compiled with an understanding that architectural design is more dynamic than a fixed label might suggest. Styles and trends come together through a combination of architectural precedent, historical interpretation, creative license of designers, and the agency of clients. Therefore, architectural styles are best understood as cultural hybrids incorporating elements from a variety of sources. In this way, these descriptions offer a broad palette for identify stylistic influences and character.



Figure 169. Old Vernon Avenue School (1876).
Source: Heumann & Associates and SAIC for LAUSD.



Figure 170. Old Canyon School (1894).
Source: Heumann & Associates/SAIC for LAUSD.

LATE-NINETEENTH-CENTURY STYLES

Some of the earliest schoolhouses built in Los Angeles were one- and two-story, vernacular-type wood buildings, generally modeled at the scale of domestic and small civic buildings and easily enlarged or modified to accommodate growth or multiple uses. During this era of school construction, the bell tower, echoing church design, was introduced as a signature element. Three known examples of Los Angeles's early wood-framed schoolhouses have survived; in Los Angeles, this construction type was in use from the earliest years of the district through approximately 1910. The library building at Canyon Elementary School, for example, was built in 1894.

Typical Character-Defining Features:

- One- to two-story massing
- Wood-framed construction
- Horizontal wood or wood shingle siding
- Open cupola or bell tower
- Simple vernacular exteriors, or Queen Anne or Colonial Revival detailing
- Wood-framed, double-hung sash windows, often in groupings

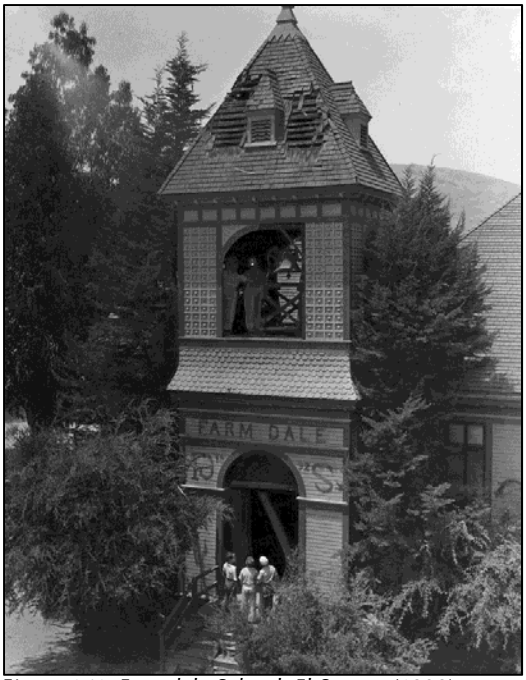


Figure 171. Farmdale School, El Sereno (1892).
Source: LAPL Photo Archive.

EARLY TWENTIETH CENTURY: BEAUX-ARTS CLASSICISM & NEO-CLASSICAL REVIVAL

Early twentieth-century buildings brought a new architectural vocabulary to LAUSD school design. The monumental classical motifs of Beaux Arts Classicism, evident in courthouses and city halls accommodated a new scale of two and three stories. This scale was demanded by expanding enrollment and a need for increased capacity and rooms differentiated by grade level and curriculum.

Beaux Arts Classicism and Neo-Classical Revival styles were especially favored by designers following the lead of McKim, Mead and White and other prominent national firms. The impressive porticos, with classical orders and colossal columns, advertised the importance placed on public education. Primarily of masonry construction, most of these schools fell victim to the 1933 Long Beach Earthquake. The San Fernando Middle School Auditorium, constructed as part of a 6-year high school in 1916, is one of the few remaining examples of this era.



Figure 172. A rare remnant of the Neo-Classical era in school design: San Fernando Middle School, Auditorium, John C. Austin, architect (1916). Source: Heumann & Associates and SAIC for LAUSD.



Figure 173. Detail, San Fernando Middle School (1916). Source: Heumann & Associates and SAIC for LAUSD.

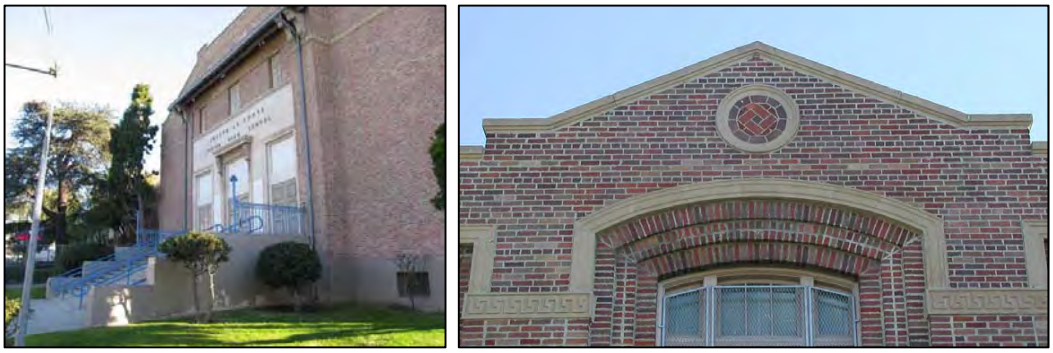
Typical Character-Defining Features:

- Monumental scale
- Formal, symmetrical design composition
- Smooth stone, masonry, or concrete exteriors (often scored to resemble masonry)
- Elaborated entrance, often featuring portico with columns
- Classical detailing, such as use of gables and entablature, columns, and pilasters
- Multilight grouped windows with wood surrounds

EARLY TWENTIETH CENTURY: INDIGENOUS REVIVAL STYLES AND THE ERA OF HISTORIC ECLECTICISM

As of 2013, a substantial number of LAUSD's remaining school buildings were constructed between the early 1920s and World War II. These schools reflect the eclectic menu of revival styles popular at the time for a range of building types. Period-revival styles seen in LAUSD schools include Italian Renaissance Revival, Collegiate Gothic Revival, and Tudor Revival. In addition, for Southern California's emerging architectural profession and academy, this era brought a new emphasis on the region's indigenous architectural traditions and a desire to infuse design with local character. Indigenous revival styles that rose in popularity during this period included, most notably for LAUSD public schools, the Spanish Colonial and Mission Revival. Designers expressed regional character and flavor by relating buildings to the outdoors, with one-story schools easily opened to exterior spaces, and by providing open loggias and arcades for circulation.

Where design was a priority, the stylistic program of the school is generally most clearly expressed in the campus's public buildings, such as the auditorium or administration building, and at primary entrances to buildings or classroom wings.



Figures 174 and 175. Renaissance Revival Style: Joseph Le Conte Middle School, Edgar Cline (1922). Source: LAUSD Le Conte Middle School Pre-Planning Survey, 2012 (left) Heumann & Associates and SAIC for LAUSD (right).



Figures 176 and 177. Northern Italian Renaissance: Hamilton Senior High School Administration Building, John C. Austin & Frederick C. Ashley, (1931). Source: LAUSD Hamilton Senior High School Pre-Planning Survey, 2010 (left) Heumann & Associates and SAIC for LAUSD (right).

MISSION REVIVAL AND SPANISH COLONIAL REVIVAL

Beginning with efforts to restore California's missions in the late nineteenth century, Southern Californian architects began looking toward regional history for stylistic cues. The region's climate and Hispanic heritage figured prominently in these new directions. The Mission Revival vocabulary, most popular between 1890 and 1920, drew inspiration from Southwestern missions. Identifying features include curved parapets and red tiled, low-pitched roofs. Arches were used liberally, and wall surfaces commonly displayed smooth stucco. The Spanish Colonial Revival flourished between 1915 and 1940, reaching its apex during the 1920s and 1930s. This movement was catalyzed by architect Bertram Goodhue's 1915 designs for Panama-California Exposition in San Diego. The Spanish Colonial Revival style became one of the most popular idioms for a range of building types. Architects and builders embraced the style, which was employed for many LAUSD schools. The rise in popularity of the Spanish Colonial Revival style also coincided with the move toward more child-scaled schools, with lower massing and open, expansive campuses. With its emphasis on arcaded corridors and patios, the style fit this movement particularly well.

Spanish Colonial Revival buildings tend to be asymmetrical and sheathed with smooth stucco. Roofs generally consist of gabled, gabled and flat, and (less commonly) hipped roofs, clad in red clay tiles. Arched openings, whether for windows, doors, or gates, are a textbook feature. Secondary materials—including wood, wrought iron, and polychromatic tile—provide decorative accents. Windows are generally wood framed or metal, with molded wood surrounds or lintels.

Typical Character-Defining Features:

- Stucco-clad walls (usually smooth finish); occasionally might have brick or cast stone
- Asymmetrical design
- Use of towers, turrets, or cupolas
- Low-pitched gabled or hipped roof covered in red clay tiles or flat roof with parapet wall
- Shallow eaves or deeper eaves, lined with exposed carved wood brackets
- Arched openings for windows, doors, and use of arcades
- Secondary materials can include wrought iron, polychromatic tile, and cast stone
- Exterior patios and courtyards



Figure 178. Post-earthquake Mission Revival Style: Reseda Elementary School (1936). Source: Heumann & Associates and SAIC for LAUSD.



Figure 179. Late example of Spanish Colonial Revival: Verdugo Hills High School (1948). Source: Heumann & Associates and SAIC for LAUSD.

RENAISSANCE REVIVAL STYLE

In the late nineteenth and early twentieth centuries, the Renaissance Revival style began as a fairly literal translation of sixteenth-century Italian *palazzi* into two- and three-story buildings. The style evolved into one of the most popular of the 1920s, in particular for midrise office buildings. McKim, Mead, and White designed some of the United States' most elegant expressions of the revival during its earlier years. During the 1920s, local architects such as Walker and Eisen and John and Donald Parkinson designed many of Los Angeles's best examples.

Renaissance Revival buildings in Southern California are generally sheathed in brick or stucco. Facades are symmetrical or highly regular and divided into bays by the fenestration pattern or by piers, which are often treated as columns with bases and capitals. Variations in surface finishes, fenestration, and level of detail visually distinguish each section, creating a horizontal emphasis that is reinforced by prominent belt courses. A cornice, set above a frieze and/or architrave, traditionally tops a Renaissance Revival building. Windows on top stories are often distinguished from lower stories by different surrounds and configuration.



Figure 180. El Sereno Middle School, originally Woodrow Wilson High School (1937). Source: Heumann & Associates and SAIC for LAUSD.

Typical Character-Defining Features:

- Rectangular massing
- Brick, stucco, and concrete, with trim of terra cotta or cast stone and bases of granite or masonry
- Horizontal emphasis; differentiated treatment of stories
- Symmetry and regularity
- Brick, stucco, or concrete exterior, often scored to resemble masonry
- Gabled and/or hipped roof, often sheathed in clay tiles
- Linear fenestration pattern
- Belt courses and cornices
- Classical detailing
- Cast stone or terra cotta architectural ornament



Figure 181. University High School (1924). A spring located on the school campus is registered as California Historical Landmark No. 522; the spring marks the location of three significant events: where the Portola Expedition camped in 1769, Father Junipero Serra gave Mass in 1770, and where the City of Santa Monica once obtained its water supply. Source: Heumann & Associates and SAIC for LAUSD.

GOTHIC REVIVAL / COLLEGIATE GOTHIC

Popularized by writers and art critics such as John Ruskin (1819–1900), the English Gothic Revival movement looked back to and idealized the preindustrial Medieval era as a more pure and moral golden age, for society as well as for architecture. First popularized for religious buildings and for school buildings—the "Collegiate Gothic"—the style began appearing in the Los Angeles area in the late 1800s. Few buildings were constructed locally in this style, and even fewer remain.

Most extant Collegiate Gothic schools in Los Angeles were constructed during the height of the period-revival era. In the 1930s, in school design, the style fell out of favor as more up-to-date architectural idioms began emerging. The 1933 Long Beach earthquake, and then the 1934 Field Act, hastened the need for widespread school repairs and new construction, which accelerated the stylistic shift during this period.

Gothic Revival schools share the same emphasis on verticality that characterizes other applications of the style. The emphasis on the vertical is often expressed through the use of uninterrupted piers or attached ornament, which extend from the ground to the roof. The style also makes liberal use of mullions, towers, spires, and pinnacles. Windows are arranged in vertical channels of glass, sometimes topped with pointed arches. Brick and concrete were the materials of choice, often accented by cast stone.

Typical Character-Defining Features:

- Concrete or brick exterior
- Emphasis on the vertical axis
- Attenuated windows and openings
- Use of full-length columns or pilasters
- Steeply gabled roof
- Liberal use of cast stone or terra cotta ornament and sculptural detailing
- Stylized openings, with Tudor, pointed, or round arches
- Windows and doorways outlined with archivolts and topped with decorative crowns
- Windows with mullions



Figure 182. John Marshall High School, George Lindsey, architect (1931). Source: Heumann & Associates and SAIC for LAUSD.





Figures 183 and 184. Huntington Park High School, Administration Building (1936). Source: Heumann & Associates and SAIC for LAUSD.

ART DECO

As architects and designers began exploring alternatives to historic revival styles, one of the earliest modern alternatives was Art Deco. The term grew out of the 1925 exposition in Paris showcasing the "nouveau," or new directions in design and decorative arts, at the *Le Musee des Arts Decoratifs*.

The idiom is highly decorative but rejects copying or adapting historical revival styles. Instead, ornamentation draws on geometric and foliate patterns and motifs, such as zigzags and chevrons, light, and color. Primarily in use between the 1920s and 1930s, the style was used most often in commercial, industrial, and institutional buildings.

Typical Character-Defining Features:

- Emphasis on verticality through building massing, applied exterior features, and ornament
- Use of stylized, geometric motifs and decorative features, such as zigzags and chevrons
- Generally features smooth stucco- or concrete-clad wall surfaces
- Often features towers or other elements projecting beyond the roofline
- Often features steel-frame casement and fixed windows



Figure 185. PWA Moderne with Art Deco influence: Florence Nightingale Middle School, John C. Austin & Frederick M. Ashley, architects (1937-1939). Source: Heumann & Associates and SAIC for LAUSD.



Figure 186. Streamline Moderne: Thomas Jefferson High School, Stiles O. Clements (1933). Source: LAUSD.

STREAMLINE MODERNE | MODERNE

The Streamline Moderne became a popular style during the Great Depression and World War II period. Its clean lines and minimalist ornament both celebrated the modern machine-age and signaled the period of austerity triggered by the Great Depression. Compared with its more ornamental predecessor, the Art Deco style, Streamline Moderne is more restrained in its ornamental program and emphasizes the horizontal rather than the vertical. This is achieved through incorporating bands of windows, decorative raised or grooved horizontal lines, flat canopies with banded fascia, and narrow coping at the roofline. Other characteristics include smooth wall surfaces, usually clad in stucco, glass block or porthole windows, and rounded corners. Reference to aerodynamic design is a signature of the style.

Compared with the Streamline Moderne, Moderne buildings also tend to be horizontal in emphasis but more clean-lined and rectilinear in their massing and detailing. Moderne designs are generally characterized by flat roofs, smooth stucco exteriors, and use of metal casement windows that often meet at the corners of the building.

Typical Character-Defining Features:

- Horizontal emphasis, massing, and accents, such as moldings and continuous sill courses
- Smooth stucco or concrete exterior finish
- Curvilinear/rounded wall surfaces, corners, and features
- Recessed windows with no surrounds
- Flat or nearly flat roof


Figure 187. Moderne: Venice High School, Austin & Ashley, architects (1935-1937). Source: Heumann & Associates and SAIC for LAUSD.



Figure 188. Hollenbeck Middle School, Alfred P. Rosenheim, architect (1936). Source: Heumann & Associates and SAIC for LAUSD.



Figure 189. Hollywood Union High School, Marsh, Smith & Powell (1934-1935). Source: Heumann & Associates and SAIC for LAUSD.

PWA MODERNE

Created by the National Industrial Recovery Act, the Public Works Administration (PWA) was founded within a few months of the March 1933 Long Beach Earthquake. Following widespread damage to Los Angeles public schools in the wake of the earthquake, much school reconstruction work was funded by the PWA. Consequently, a substantial number of Los Angeles public schools either built or remodeled during this time exhibit some degree of PWA Moderne styling. Also referred to as "Stripped Classicism," the PWA Moderne often incorporates elements of a number of styles, including Classical Revival, Spanish Colonial Revival, Art Deco, and Streamline Moderne.

Compared with the Streamline Moderne, the PWA Moderne was more formal and symmetrical in its overall design, with less emphasis on curvilinear shapes and horizontality. This style is found throughout the United States, particularly for institutional buildings funded through the PWA. Although the PWA program was terminated in 1943, buildings continued to display these stylistic features.

Typical Character-Defining Features:

- Emphasis on the vertical axis
- Symmetrical, formal design composition and massing
- Smooth wall surfaces, generally exhibiting stucco, concrete, and/or polished stone (rarely includes brick exterior elements)
- Usually displays a flat roof
- Piers, often fluted or reeded, separating recessed window channels
- Incorporation of shallow relief panels and interior murals



Figure 190. PWA Moderne meets Spanish Colonial Revival style: Canoga Park High School Auditorium (1939). Source: Heumann & Associates and SAIC for LAUSD.




Figures 191 and 192. Emerson Middle School, Richard Neutra, architect (1937-1940). Source: LAUSD Emerson Middle School Pre-Planning Survey.

EARLY MODERNISM | INTERNATIONAL STYLE (PRE-1945)

This style coincides with the emergence of modern architectural design and culture in Los Angeles, at a time when modernism was still in an experimental stage and carried out by a relatively small group of architects and designers. Although many of these same ideas informed postwar modern styles, this era was unique and experimental. The City of Los Angeles Office of Historic Resources describes this stylistic theme as follows:

> With precedents in Europe dating to the first decades of the twentieth century, Los Angeles was one of the first American centers of the International Style due in large part to the import of ideas by Viennese expatriates Rudolph Schindler and Richard Neutra. Although never catching on as a widely-accepted style for domestic architecture, the International Style was embraced and regionalized by a number of Los Angeles architects and designers who established a formidable local Modernist tradition.
>
> Rudolph Schindler came to Los Angeles from Austria in 1920 to oversee construction on the Barnsdall House (Hollyhock House) for the office of Frank Lloyd Wright. Fellow Austrian Richard Neutra came to Los Angeles at Schindler's urging in 1925. Schindler, Lloyd Wright and Neutra and the architects of the so-called "Second Generation" architects continued to design buildings in Los Angeles in the postwar years; however, by this time the work of these architects and their protégés took on an expression of a more regional modernism (see Mid-Century Modernism).[179]

Typical Character-Defining Features:

- Horizontal emphasis
- Use of simple, geometric volumes
- Smooth, unadorned wall surfaces, often sheathed in stucco or concrete
- Flat or nearly flat roof, often with cantilevered eaves
- Use of corner and casement windows, often with steel frames
- Windows generally set flush with the wall plane, with minimal trim or surrounds
- Continuous bands of windows emphasize the horizontal axis




Figures 193 and 194. On left, Fernangeles Elementary School (1954), Sun Valley. On right, Parmlee Avenue Elementary School (1962), southeastern Los Angeles. Source: Sapphos Environmental, Inc., 2014.

MID-CENTURY MODERNISM / REGIONAL MODERNISM (POST-1945)

Mid-Century Modernism, or Regional Modernism, represents a middle ground between the formal, machine-age aesthetic of the International Style and a regional idiom reflecting local precedent and identity. In the postwar period through the 1960s, as practiced in Southern California, Mid-Century Modernism took its cues from the region's first-generation modernist architects such as Richard Neutra, Rudolph Schindler, Gregory Ain, Frank Lloyd Wright, and Harwell Hamilton Harris. In the postwar period, second-generation practitioners such as Raphael Soriano, Whitney Smith, and A. Quincy Jones, among many others, established Los Angeles as a center for innovative architectural design and culture.

Mid-Century Modernism is characterized by an honest expression of structure and function, with little applied ornament. Aesthetic effect is achieved through an asymmetrical but balanced, rhythmic design composition, often expressed in modular post-and-beam construction. Whether wood or steel, post-and-beam construction allowed for open floor plans, ease of expansion, and generous expanses of glazing to heighten indoor-outdoor integration. Infill panels of wood or glass are common, with glazing often extending to the gable. Buildings are generally one to two-stories, with an emphasis on simple, geometric forms. Capped with low-pitched gabled or flat roofs, a Mid-Century Modern building often displays wide eaves and cantilevered canopies, supported on spider-leg or post supports. Sheathing materials vary, with wood, stucco, brick and stone, or steel-framing and glass. Windows are generally flush-mounted, with metal frames.



Figure 195. Pacoima Middle School, Administrative Building (1955), Wilmington. Source: LAUSD Pacoima Middle School Pre-Planning Survey, 2010.




Figures 196 and 197. Grover Cleveland High School, Administrative Building (left) and typical classroom wing (right), Matcham & Granger and Associates (1959), Reseda. Source: Sapphos Environmental, Inc., 2013.

This style was seen in postwar institutional and commercial buildings, as well as residences, from 1945 until circa 1975, when Title 24 restrictions on the use of glass curtailed the expansive glazing that characterizes the style.

Typical Character-Defining Features:

- Horizontal design composition and massing; generally one to two stories
- Simple, geometric volumes
- Flat or shed roof, often with wide, cantilevered overhangs
- Exterior materials include stucco, brick, or concrete
- Modular design and planning
- Aesthetic qualities derive from use of simply treated materials and excellent craftsmanship
- Direct expression of structural systems, often in wood or steel post-and-beam
- Lack of historicizing ornament
- Generous expanses of fenestration, including bands of grouped multi-light windows
- Extensive use of sheltered exterior corridors, with flat or slightly sloped roofs supported by posts, piers, or pipe columns



Figure 198. Orville Wright Middle School, Cafeteria, Spaulding & Rex (1951). Source: LAUSD Wright Middle School Pre-Planning Survey, 2012.



Figure 199. Palisades Charter High School, Wilson & Associates (1961). Source: LAUSD Palisades Charter High School Pre-Planning Survey, 2012.

Mid-Century Modernism | Expressionistic/Organic Subtype:

- Combines sculptural forms with basic geometric volumes
- Curved, sweeping wall surfaces
- Expressionistic roof forms, including butterfly, folded plate or barrel vault roof forms

ILLUSTRATIONS OF LAUSD ARCHITECTURAL STYLES

COLLEGIATE GOTHIC




Figures 200 and 201. John Marshall High School, George Lindsey (1931). Source: Heumann & Associates and SAIC for LAUSD.

TUDOR REVIVAL



Figure 202. Gulf Avenue Elementary School, Henry Harwood Hewitt & Norman Miller (1926). Source: Heumann & Associates and SAIC for LAUSD.



Figure 203. John Muir Middle School, John C. Austin (1922). Source: Heumann & Associates and SAIC for LAUSD.

MEDITERRANEAN REVIVAL




Figures 204 and 205. Mediterranean Revival: Hamasaki Elementary School, originally Riggin School (1927). Source: Heumann & Associates and SAIC for LAUSD.

RENAISSANCE REVIVAL STYLE



Figure 206. Ritter Elementary School (1932). Source: Heumann & Associates and SAIC for LAUSD.



Figure 207. University High School (circa 1922). Source: Heumann & Associates and SAIC, LAUSD.



Figure 208. Italian Renaissance Revival: South Gate High School, George Lindsey & Erwood Elden (1930). Source: Heumann & Associates and SAIC for LAUSD.



Figure 209. Renaissance-inspired Walter Reed Middle School, originally North Hollywood Junior High School, John Austin (1939). Source: Heumann & Assoc. and SAIC for LAUSD.





Figures 210 and 211. John Burroughs Middle School (1922). Source: Heumann & Associates and SAIC for LAUSD.

SPANISH COLONIAL REVIVAL



Figure 212. Eagle Rock Elementary School (circa 1919). Source: Heumann & Associates and SAIC for LAUSD.



Figure 213. North Hollywood High School, Hunt & Chambers (1926). Source: Heumann & Associates and SAIC for LAUSD.



Figure 214. Aldama Elementary School, Charles Plummer (1924). Source: Heumann & Associates and SAIC for LAUSD.



Figure 215. Pacific Palisades Elementary School, Albert Nibecker (1930). Source: Heumann & Associates and SAIC for LAUSD.



Figure 216. Spanish Eclectic: Horace Mann Middle School (1926). Source: Heumann & Associates and SAIC for LAUSD.



Figure 217. Canoga Park Elementary School, Sumner Spaulding (1935). Source: Heumann & Associates and SAIC for LAUSD.

ARCHITECTS

Since the early years of the district, the school buildings and campuses of LAUSD have been designed by some of the region's most prominent master architects region as well as the district's own architectural department. The following architects and firms were responsible for numerous designs of extant buildings throughout the district, since the early twentieth century:

- Thornton Abell
- Ain, Johnson & Day (Gregory Ain, Joseph Johnson, and Alfred Day)
- Robert Evans Alexander
- Allison & Allison (David Clark Allison and James Edward Allison)
- John C. Austin
- Austin and Ashley (John C. Austin and Frederic Ashley)
- Austin, Field & Fry (John C. Austin, Robert Field, Jr., Charles Eugene Fry)
- Edwin Bergstrom
- Daniel, Mann, Johnson & Mendenhall, DMJM (Phillip Daniel, Arthur Mann, Kenneth Johnson, Irvan Mendenhall)
- Stiles O. Clements
- Roland Coate
- Edelman and Zimmerman
- Sidney Eisenshtat
- Henry L. Gogerty
- Heitschmidt & Thompson (Earl Heitschmidt and Whiting Thompson)
- Frank Hudson
- Hudson & Munsell
- Stewart S. Granger
- Myron Hunt
- Hunt & Chambers
- Hunt & Burns
- Gordon B. Kaufmann
- George Lindsey
- Marsh, Smith, & Powell (Norman Marsh, David Smith, and Herbert James Powell)
- A. C. Martin
- Matcham & Granger (Charles O. Matcham Sr. and Stewart S. Granger)
- Alfred S. Nibecker
- Richard Neutra
- C.E. Noerenberg and Johnson
- Parkinson and Parkinson
- Charles Plummer
- Alfred Rosenheim
- Sumner Spaulding
- Spaulding & Rex (Sumner Spaulding and John Rex)
- William Stockwell
- Whiting Thompson
- Walker and Eisen
- Adrian Wilson & Associates

SECTION V THEMES OF SIGNIFICANCE

CONTEXT: PUBLIC AND PRIVATE INSTITUTIONAL DEVELOPMENT | EDUCATION
THEME: LAUSD | FOUNDING YEARS

Property Type:	Institutional/Educational
Property Subtypes:	Wood-Framed School House
Period of Significance:	1872 to 1894
Area of Significance:	Education
Geographic Location:	Citywide (rare)
Area of Significance:	A/1

Eligibility Standards:

- Is a rare example of an educational facility from the founding years of the Los Angeles City School District

Character-Defining Features:

- Retains most of the essential physical features from the period of significance
- Wood siding
- Bell tower; some Victorian-era ornamental detailing
- One-story massing
- Wood-framed, double-hung windows

Integrity Considerations:

- Should retain integrity of Design, Feeling, and Association from the period of significance
- Some materials may have been removed or altered
- Modern lighting and fencing of site acceptable alterations



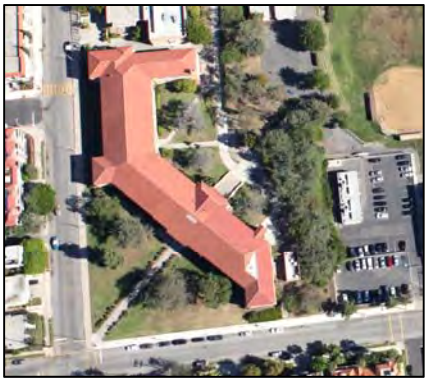
Figure 218. Old Vernon Avenue School, built in 1876. Source: LAUSD.



Figure 219. Old Canyon School, built in 1894. Source: LAUSD.

THEME: LAUSD | PRE-1933 LONG BEACH EARTHQUAKE SCHOOL PLANTS, 1920-1933

Pictorial Overview




Figures 220 and 221. The expansive plan and Renaissance Revival-style of University High School (1924). Designed open spaces have been retained for nearly a century. Source: LAUSD University High School Pre-Planning Survey, 2011.




Figures 222 and 223. Vernon City Elementary School (1929), with courtyards and Spanish Colonial Revival arcades placing school corridors outside. Source: LAUSD Vernon City Elementary School Pre-Planning Survey, 2011.



Figure 224. One-story scale and E-shaped plan of Fishburn Avenue Elementary School (1926), in 1927 aerial photo. Source: LAPL Photo Collection.

CONTEXT: PUBLIC AND PRIVATE INSTITUTIONAL DEVELOPMENT | EDUCATION
THEME: LAUSD | PRE–1933 LONG BEACH EARTHQUAKE SCHOOL PLANTS, 1910–1933

Property Type:	Institutional/Educational
Property Subtypes:	Elementary, Junior High, and High School Buildings and Campuses
Period of Significance:	1910 to 1933
Area of Significance:	Education
Geographic Location:	Citywide
Area of Significance:	A/1

Eligibility Standards:

- Embodies LAUSD school planning and design ideals and principles of the era
- One of few remaining schools from the pre–1933 Long Beach earthquake era that was not substantially altered or remodeled
- Retains most of the associative and character-defining features from the period of significance

Character-Defining Features | Buildings/Structures:

- Articulated buildings plans, facilitating the creation of outdoor spaces (often T-shaped, E-shaped, U-shaped, and H-shaped plans)
- Generally low massing, usually one to two stories (with two to three stories more common for middle and senior high schools)
- Includes designed outdoor spaces, such as courtyards and patios, adjacent to classroom wings
- Exteriors usually lined with rows of grouped windows, including wood-framed multilight windows; expanses of windows often mark the location of classrooms
- Designed in popular period-revival styles of the era (including Spanish Colonial Revival, Renaissance Revival, Mediterranean Revival, and Collegiate Gothic)
- Often designed by prominent architects of the era

Character-Defining Features | Campus/District:

- Emphasis on a more spread-out site plan, with designed outdoor spaces
- More varied collection of buildings, differentiated by function and use (rather than a single building with all functions inside)
- Might include an elaborate administration building, usually the focal point of the campus, as well as classroom wings, auditoriums, gymnasiums, and outdoor recreation areas
- Middle or senior high schools might include a gymnasium designed in the style of the campus overall

Integrity Considerations:

- Most pre-1933 schools were substantially remodeled following the Long Beach earthquake
- Designed outdoor spaces, such as courtyards and patios, should be intact in use, if not with landscape design and hardscaping; development pressures over the years often resulted in these open spaces being in-filled with new construction; overall sense of relationship of building to designed outdoor spaces should be intact
- Should retain integrity of Materials, Design, Workmanship, Feeling, and Association from its period of significance
- Intact campus groupings from a single period of time are not common
- Some materials and features may have been removed or altered
- Modern lighting and fencing of site acceptable

Comments:
Schools from this period generally include additional buildings and structures added after the period of significance (in particular after World War II), which may be non-contributing.

Eligible properties under this theme may be a single building (generally the Administration Building, in combination with a classroom wings) or a grouping (campus) of buildings constructed during the period of significance.

Buildings and campuses exhibiting distinctive design features might also qualify under Criteria C/3, as the embodiment of the distinctive characteristics of a type, period, region, or method of construction, an excellent example of the work of a master architect, or for high artistic values.



Figure 225. Marshall Senior High School (1931). The school has expanded over the years but also retains many of its designed open spaces and courtyards. Source: LAUSD Marshall Senior High School Pre-Planning Survey, 2010.

CONTEXT: PUBLIC AND PRIVATE INSTITUTIONAL DEVELOPMENT | EDUCATION
THEME: LAUSD | POST–1933 LONG BEACH EARTHQUAKE SCHOOL PLANTS, 1933–1945

Property Type:	Institutional/Educational
Property Subtypes:	Elementary, Junior High, and High School Buildings and Campuses
Period of Significance:	1933 to 1945
Area of Significance:	Education
Geographic Location:	Citywide
Area of Significance:	A/1

Eligibility Standards:

- Exemplifies post–Long Beach earthquake school planning and design concepts of the period, including requirements under the 1934 Field Act
- One-story massing for elementary schools; up to two-stories for junior/high schools
- Retains most of the associative and character-defining features from the period of significance

Character-Defining Features | Buildings/Structures:

- One-story massing for elementary schools; up to two stories for middle and senior high schools
- Reinforced concrete, steel- or wood-frame construction
- Classroom wings designed for easy access and views to outdoors—with variations including L-, H-, T-shaped building plans
- Generous expanses of windows, including steel- and wood-framed multilight windows, awning and hopper casements, clerestories, and large-pane fixed windows; window groupings often mark the location of classrooms
- Stylistically more streamlined and less ornamental than 1920s period-revival styles
- Emphasis on "traditional Southern Californian" styles, such as Spanish Colonial and Mission Revival
- Styles can also include PWA Streamline Moderne, Art Deco, Late Moderne, and proto-modern styles
- May have been partially or fully funded through Works Progress Administration (WPA), 1935 to 1943
- WPA projects may include significant interior artwork such as murals, paintings and sculpture
- May have been designed by a prominent architect of the period

Character-Defining Features | Campus/District:

- Unified site plan consisting of buildings and structures designed and sited according to their use
- Use of designed outdoor and landscaped spaces, for outdoor study, recreation and dining
- Often displays connecting sheltered corridors throughout campus
- Emphasis on a more expansive site plan
- Varied collection of buildings, differentiated by function and use (rather than a single building with all functions inside)
- Might include an elaborate administration building, located near the campus entrance; administration buildings usually serve as the focal point of the campus
- Campus often composed of groupings of classroom wings, auditoriums, gymnasiums, cafeterias, and outdoor recreation and dining areas
- Middle or senior high schools might include a gymnasium designed in the style of the campus overall

Integrity Considerations:

- Should retain most of the essential physical features from the period of significance
- Some materials may have been removed or altered
- Modern lighting and fencing of site acceptable
- Schools from this period generally include buildings constructed after the period of significance, in particular post-World War II buildings, which may be non-contributing
- Eligible properties under this theme may be a single building, if it exemplifies the design ideals of the era, or a grouping (campus) of buildings constructed during the period of significance
- Intact campus groupings from the pre-1945 era are not common
- Many pre-1933 schools were substantially remodeled following the Long Beach earthquake—may retain a 1920s plan but with 1930s stylistic detailing.
- Pre-1933 schools rehabilitated post-1933 might exhibit added seismic supports of steel columns, beams, or diagonal bracing; original masonry might be covered by concrete/stucco sheathing
- Should retain integrity of Materials, Design, Workmanship, Feeling, and Association from its period of significance

Comments: Buildings exhibiting distinctive design features might also qualify under Criteria C/3, as the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values.

CONTEXT: PUBLIC AND PRIVATE INSTITUTIONAL DEVELOPMENT | EDUCATION
THEME: LAUSD | EARLY EXPERIMENTS IN THE MODERN, FUNCTIONALIST SCHOOL PLANT, 1933–1945

Property Type:	Institutional/Educational
Property Subtypes:	Elementary Schools, Junior High Schools, and High Schools
Period of Significance:	1933 to 1945
Area of Significance:	Education
Geographic Location:	Citywide; rare
Area of Significance:	A/1

Eligibility Standards:

- Clearly expresses the experimental ideas emerging during this period for the modern, functionalist school plant
- One-story massing for elementary schools; up to two-stories for junior/high schools
- Classrooms, in detailing and plans, clearly express their function, with axial, finger-like wings, plentiful fenestration, and connections to the outdoors
- Retains most of the associative and character-defining features from the period of significance

Character-Defining Features | Buildings/Structures:

- One-story massing for elementary schools; up to two stories for middle and senior high schools
- Usually reinforced concrete, steel- or wood-frame construction, clad in cement/stucco
- Classrooms are often single- or double-loaded finger-like wings, arranged along a central axis or semicircle
- Classrooms open directly onto patios/play areas through glass doors or movable walls
- Varying elevations might display differentiated window sizes and configurations, in order to tailor interior light to sun patterns and create cross-lit classrooms
- Windows are plentiful and include steel- and wood-framed multilight windows, in double-hung sashes, awning and hopper casements, clerestories, and fixed panes
- Displays an informal, nonmonumental scale and spare ornamental program
- Stylistically modern; might display influence of Late Moderne or PWA Streamline Moderne
- May have been partially or fully funded through WPA, 1935 to 1943; WPA projects may include significant interior artwork such as murals, paintings and sculpture
- May have been designed by a prominent architect of the period

Character-Defining Features | Campus/District:

- A unified, nonmonumental, nonhierarchical site plan
- Displays inventive site plan incorporating buildings, landscaped courtyards, and circulation corridors into a unified campus design
- Swaths of landscaped patios and terraces adjacent to classroom wings
- Designed outdoor spaces, including patios, courtyards
- Use of outdoor corridors, with simple canopy supports and posts or *pilotis*, form links between classrooms and other buildings

Integrity Considerations:

- School expansion and new construction over the years, in particular in the postwar period, might have resulted in the addition of in-fill buildings and structures in areas that were originally designed open spaces. Such new additions should not interfere with or serve as a visual impairment to the designed connections between buildings, in particular classroom wings, and adjacent outdoor patios and spaces.
- Some materials may have been removed or altered
- Modern lighting and fencing of site acceptable
- Should retain integrity of Materials, Design, Workmanship, Feeling, and Association from its period of significance

Comments: Buildings exhibiting distinctive design features might also qualify under Criteria C/3, as the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values.

CONTEXT: PUBLIC AND PRIVATE INSTITUTIONAL DEVELOPMENT | EDUCATION
THEME: LAUSD | EDUCATING THE BABY BOOM: THE POSTWAR MODERN, FUNCTIONALIST SCHOOL PLANT, 1945–1969

Property Type:	Institutional/Educational
Property Subtypes:	Elementary Schools, Junior High Schools, and High Schools
Period of Significance:	1945 to 1969
Area of Significance:	Education
Geographic Location:	Citywide; with concentrations in the San Fernando Valley and west Los Angeles
Area of Significance:	A/1

Eligibility Standards:

- Clearly embodies the characteristics of a postwar modern functionalist school campus
- Displays a unified, functional site design, with buildings extending across the site and oriented in relation to outdoor spaces (courtyards, patios, outdoor play areas)
- One-story massing for elementary schools; up to two-stories for junior/high schools
- Classrooms, in detailing and plans, clearly express their function, with axial, finger-like wings, plentiful fenestration, and connections to the outdoors
- Retains most of the associative and character-defining features from the period of significance

Character-Defining Features | Buildings/Structures:

- Building plans and site design clearly express their function; classroom wings often exhibit one-story "finger-like" wings, arranged on an axis
- Easily identifiable indoor-outdoor spaces, connections to classrooms through the incorporation of patios, courtyards, and outdoor canopied corridors
- One-story massing, particularly for elementary schools; up to two to three stories for junior and high schools
- Building types and plans expressive of postwar ideals in school design; these can include (1) finger-plan schools (usually in 1940s through 1950s); (2) cluster-plan schools (beginning in 1950s); and (3) variations and combinations of these typologies clearly expressive of the ideals for informality, indoor-outdoor connections, and zoned planning for the site
- Varying elevations might display differentiated window sizes and configurations, in order to tailor interior light to sun patterns and create cross-lit classrooms

Character-Defining Features | Campus/District:

- Unified campus design includes most or all of the following attributes: lack of formality and monumentality; low massing (usually one stories for classrooms and up to two stories for auditoriums/multipurpose rooms); strong geometric ordering of buildings and outdoor spaces; decentralized, pavilion-like layout; rational, function-driven site design; buildings extend across the site; buildings are oriented to outdoor spaces (courtyards, patios, outdoor areas), purposeful indoor-outdoor integration
- Automobile traffic/drop-off areas separated from campus; linked to interior via extended canopied corridors
- Buildings often turn inward, toward green spaces and courtyards, lawns
- Outdoor corridors, sheltered beneath simple canopies, forming links between the buildings of the campus
- Classrooms often consist of a series of axial, modular units
- An informal, domestic scale for the buildings and campus might be especially evident in elementary schools
- Swaths of patios, terraces, and plantings adjacent to and alternating with buildings
- Generous expanses of windows, including steel- and wood-framed multilight windows, in awning and hopper casements, clerestories, and fixed panes
- Flat roof or broken-plane roof often used for lighting and acoustical issues
- Modular design, with a rhythmic, asymmetrical but balanced composition
- Usually displays a modern design idiom, usually either regional modernist (with use of native materials such as stone, brick, and wood siding and/or framing), International Style modernist, or, by the early 1960s, Late Modern (more expressive and sculptural)
- Some examples might include some degree of historicist detailing or styles popular in the postwar period (such as American Colonial Revival); these are less common than modernist examples
- May have been designed by a prominent architect of the period
- Often associated with post–World War II suburbanization and growth near major employment centers beyond the city periphery (such as the San Fernando Valley and southwest Los Angeles)
- Often built in residential neighborhoods on large expanses of land, with swaths of land devoted to landscape design and playing fields (in particular for high school campuses)

Integrity Considerations:

- Retains most of the essential physical features from the period of significance
- School expansion and new construction over the years, in particular in the postwar period, might have resulted in the addition of in-fill buildings and structures in areas that were originally designed open spaces. Such new additions should not interfere with or serve as a visual impairment to the designed connections between buildings, in particular classroom wings, and adjacent outdoor patios and spaces.
- Many postwar schools were designed to be easily expandable as enrollment increased; the original site design and building types and plans should be readily discernible. If additional wings were added or the campus extended, the additions should be compatible with and visually subordinate to the original.
- Some materials may have been removed or altered
- Modern lighting and fencing of site acceptable
- Should retain integrity of Setting, Materials, Design, Workmanship, Feeling, and Association from its period of significance
- Addition of portable or permanent buildings after the period of significance acceptable as long as original campus design is intact

Comments: This theme would most often apply to a campus evaluated as a historic district. Individual buildings and/or campuses exhibiting distinctive design features might also qualify under Criteria C/3, as the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values.

CONTEXT: PUBLIC AND PRIVATE INSTITUTIONAL DEVELOPMENT | EDUCATION
THEME: LAUSD AND THE CIVIL RIGHTS MOVEMENT, 1954–1980

Property Type:	Institutional/Educational
Property Subtypes:	Elementary Schools, Junior High Schools, and High Schools
Period of Significance:	1954 to 1980
Area of Significance:	Education/Ethnic Heritage
Geographic Location:	Citywide
Area of Significance:	A/1 and/or B/2

Eligibility Standards:

- Was constructed during the theme of significance
- Was the site of significant integration initiatives, challenges, or activities related to the Civil Rights Movement and school integration
- Directly reflects the movement for equal access to schools and/or to employment opportunities in LAUSD schools
- Has a well-established, long-term association with a figure who was significant in the Civil Rights Movement and school integration (eligibility under B/2)

Character-Defining Features:

- Retains most of the associative and character-defining features from the period of significance

Integrity Considerations:

- Retains integrity of Location, Design, Setting, Feeling, Association
- Some materials may have been removed or altered
- If there are multiple buildings on campus constructed during the period of significance, these should be evaluated as a potential historic district

SECTION VI CONCLUSION | RECOMMENDATIONS

LAUSD is the second largest public school system in the United States and encompasses nearly 800 campuses distributed across more than 700 miles. Since its founding in 1872, the district has commissioned, designed, and acquired a remarkable collection of buildings, campuses, and facilities. These properties reflect more than a century of social, architectural, and technological advances, as well as ongoing educational and curricular reform. Extant properties range from a few late-nineteenth-century, wood-framed schoolhouses to mid-twentieth-century superblock campuses exemplary of modernist architectural design.

This Historic Context Statement represents a first step in creating a framework for context-driven evaluations of educational facilities in Los Angeles (and beyond). As LAUSD begins planning for campus-wide redevelopment and modernization under Measure Q, to be launched in 2014, this study provides a guide for conducting evaluations of LAUSD's many historically significant buildings and campuses.

Through research conducted for this study, four distinct periods emerged: (1) Founding Years, 1870s through 1909; (2) Progressive Education Movement: Standardization and Expansion, 1910 to 1933; (3) Era of Reform: Great Depression, Earthquake, and Early Experiments in the Modern, Functionalist School Plant, 1933 to 1944; and (4) Educating the Baby Boom: Postwar Expansion and the Modern, Functionalist School Plant, 1945 to 1969. Specific themes of significance associated with each era were prepared for this study, along with eligibility standards, character-defining features, and integrity thresholds for each.

Given the project need and parameters, this study focused on the potential eligibility of school buildings and campuses under Criteria A/1, as outstanding examples of LAUSD design ideals and principles, according to the era under consideration. Because the postwar era largely fell outside the scope of 2002 survey work, and postwar schools will be the focus of much of the modernization work for LAUSD in the coming years, the postwar era was explored in detail in the present study.

In addition, by identifying the character-defining features that lend campuses historic significance, this study also establishes a framework for the development of district-wide design guidelines. The guidelines are being prepared by Sapphos Environmental, Inc. to be included in environmental compliance documentation currently being prepared by LAUSD.

Recommendations | Areas for Further Research

Additional research on areas and topics beyond the current scope would further broaden the framework for evaluating significant events, people, and the architectural legacy of LAUSD. Recommendations related to the Historic Context Statement and historic resources survey are as follows:

1. **Expand the LAUSD Historic Context Statement and Historic Resources Survey to include the period to 1980**
   Pursuant to Measure Q, district-wide modernization and redevelopment will unfold gradually, over many years. Broadening the LAUSD Historic Context Statement and survey to consider all schools constructed in the past 35 years (rather than 45 years) would allow the district to take proactive steps to identify historically significant campuses (and therefore historic resources under CEQA) prior to redevelopment planning and work. This would also bring the LAUSD Comprehensive Historic Resources Survey up to date with the City of Los Angeles Office of Historic Resources citywide survey, SurveyLA.

2. **Conduct additional archival research to expand property eligibility under additional criteria**
   In the current scope, campus-specific work included research on events, patterns of development, and significant people associated with the schools included in the accompanying survey. However, project limitations precluded extensive research on LAUSD's history that might result in eligibility under Criteria A/1 (such as LAUSD and the Civil Rights Movement) and Criteria B/2 (for an association with significant figures in the history of public schools in Los Angeles). These areas represent excellent areas for further study. (The context of the Civil Rights Movement and Los Angeles schools was addressed, however, in the National Register of Historic Places Multiple Property Documentation form for African-Americans in Los Angeles.[180])

3. **Expand study of school plant property types and subtypes**
   As a general framework, this treated senior high, middle, and elementary schools, as well as other LAUSD educational facilities, with a broad brush, as a single property type. Noteworthy distinctions, generally in scale and massing, were noted throughout the context. Should subsequent survey work reveal significant distinctions among educational property types, these differences could be incorporated into an updated Historic Context Statement.

4. Update and expand the LAUSD Historic Resources Survey

Sapphos Environmental, Inc. also recommends that LAUSD take proactive steps to update its comprehensive historic resources survey, in order to consider all as-yet unevaluated LAUSD assets. With planning for district-wide modernization work under way, it will be critical that the LAUSD survey be comprehensively updated.

The survey could be initially broadened to include all post-1945 school buildings and campuses that have not yet been subject to context-driven evaluation. According to the *Los Angeles Unified School District History of Schools, 1855 to 1972*, this includes roughly 175 campuses constructed between 1955 and 1969, as well as approximately 125 campuses constructed between 1945 and 1954.[181] (The current scope with Sapphos Environmental, Inc. covers 55 campuses.)

A comprehensive survey update would help streamline and guide district-wide redevelopment plans and help LAUSD in its continuing stewardship of its many historically significant school buildings and campuses.

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ENDNOTES

1. Lee, Antoinette, and Linda F. McClelland, U.S. Department of the Interior, National Park Service, "How to Complete the National Register Multiple Property Documentation Form," *National Register Bulletin* No. 16B (1999).
2. Local criteria were not included in this study. Under the provisions of California State Government Code, Section 53094, the properties of California school districts, including LAUSD, are statutorily exempt from most provisions of local ordinances, including landmark designation. California State Government Code, Section 53094 permits "the governing board of a school district, by vote of two-thirds of its members . . . [to] render a city or county zoning ordinance inapplicable to a proposed use of property by such school district . . . ." The legislative history of Section 53094 indicates that "the Legislature deliberately accorded different treatment to school districts than to other local agencies because it was well aware that school construction was subject to almost complete control by the state. . . . The Legislature accordingly provided in section 53094 that school districts, as opposed to other local agencies, should retain the right to exempt themselves from local zoning ordinances (*Santa Clara, supra*, 22 Cal.App.3d at p. 158 fn. 3.)," Court of Appeal, State of California, Second Appellate District, Division 7, *Los Angeles Unified School District, Petitioner and Appellant, v. City of Maywood, et al.*, Respondents and Defendants, Nos. B238629, B238630, Los Angeles Superior Court, filed 13 February 2013.
3. California Office of Historic Preservation, "California Register and National Register: A Comparison (for Purposes of Determining Eligibility for the California Register)," *Technical Assistance Series* No. 6. (Sacramento, CA, 14 March 2006). Available at: http://ohp.parks.ca.gov/pages/1056/files/06CalReg&NatReg_090606.pdf
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6. Gibson, Charles D., *California School Buildings, 1960 to 1965* (Sacramento: California State Department of Education, 1966), 1.
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8. Hille, R. Thomas, *Modern Schools: A Century of Design for Education* (Hoboken, NJ: John Wiley & Sons, 2011), 13.
9. Eales, John R., "A Brief, General History of the Los Angeles City School System," Doctoral Dissertation (Los Angeles: University of California, June 1956), 78.
10. Ibid., 78.
11. Ibid., 78.
12. Bhatia, "Modern Concept," 30.
13. Briggs, Warren Richard, *Modern American School Buildings* (New York: J. Wiley & Sons, 1906), 8.
14. Hille, *Modern Schools*, 13–14.
15. See, for example, Baker, Lindsay, "A History of School Design and Its Indoor Environmental Standards, 1900 to Today," PhD Dissertation (Berkeley: Department of Architecture, Center for the Built Environment, University of California, Berkeley, January 2012).

16. Engelhardt, N.L., Jr., "Trends in School Architecture and Design," *Review of Educational Research* 12, no. 2 (April 1942): 171–77, at 174.
17. Baker, "A History of School Design," 4.
18. Science Applications International Corporation, *Historic Context Statement: Los Angeles Unified School District*, 12.
19. Ibid.
20. Turner, Timothy G., "Rediscovering Los Angeles," *Los Angeles Times*, 13 April 1936.
21. "Course of Study: What Methods Best in Our Schools? All Citizens, Good and True, Appealed to by Committee of Ten," *Los Angeles Times*, 17 May 1900.
22. Eales, "A Brief, General History," 63.
23. Los Angeles Board of Education, *Annual Report, 1884-85*, cited in Eales, "A Brief, General History," 62–63.
24. Eales, "A Brief, General History," 63.
25. Ibid.
26. Population figures from Fogelson, Robert M., *The Fragmented Metropolis: Los Angeles, 1850-1903* (Berkeley: University of California Press, 1967), 78.
27. "Los Angeles Public Schools," *Los Angeles Times*, 1 January 1898.
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29. Ibid.
30. Ogata, Amy F., "Building for Learning in Postwar American Elementary Schools," *Journal of the Society of Architectural Historians* 67, no. 4 (December 2008): 562–91, at 564.
31. Holmes, William Henry, *School Organization and the Individual Child: A Book for School Executives and Teachers* (Worcester, MA: The Davis Press, 1912), 1.
32. Howell-Ardila, Deborah, "Writing Our Own Program: The USC Experiment in Modern Architectural Pedagogy," Master of Historic Preservation Thesis (Los Angeles, CA: USC School of Architecture, December 2010)
33. Donovan, John J., *School Architecture: Principles and Practices* (New York: The MacMillan Company, 1921), ix.
34. Ogata, "Building for Learning," 564, emphasis added.
35. Donovan, *School Architecture*.
36. Hille, *Modern Schools*, 14.
37. Caudill, William Wayne, *Toward Better School Design* (New York: FW Dodge Corporation, 1954), 16. Caudill himself was an early leader in the community of reform-minded school architects and designers. In 1946, California Department of Education official Charles Gibson informed Caudill that his book, *Space for Teachin*g, was often used in Californian schools. Wrote Gibson to Caudill, "Your reputation as an authority on school design is already established in California. We use your Bulletin 'Space for Teaching' almost as a Bible in this state." Cited in Ogata, "Building for Learning," footnote 76.
38. Donovan, *School Architecture*, 96.
39. Hamlin, Alfred D. F., *Modern School Houses, Being a Series of Authoritative Articles on Planning, Sanitation, Heating and Ventilation*, vol. 1 (New York: The Swetland Publishing Company, 1910), 9. Cited in Baker, "A History of School Design," 6.
40. Hille, *Modern Schools*, p. 17.
41. Ibid.
42. Donovan, *School Architecture*, 48.
43. "In the Public Schools," *Los Angeles Times*, 3 December 1911. "In the Public Schools" was a weekly column with news and notes of interest from Southern Californian schools, published in the *Los Angeles Times* in the early 1910s.

44. Ibid. In the Los Angeles City School District, Bettinger singled out the outdoor study programs at Micheltoreno Street School, Griffin Avenue, Loreto Street, and 21st Street Intermediate School. Said Bettinger, "Nearly always at these schools the passer-by will note a happy group of children studying and discussing their lessons out in the fresh air and sunshine."
45. Donovan, *School Architecture*, 9.
46. Ibid.
47. Ibid.
48. Ibid., 6.
49. Ibid., 7.
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51. "City's Schools Highly Praised: Pamphlet Draws Comparisons Showing San Francisco System Interior," *Los Angeles Times*, 17 May 1914.
52. Barnhill, O.H., "The Los Angeles School's Business Department," *The American School Board Journal* (February 1927): 51–52.
53. Marquis, Neeta, "A Tour through a Great Modern Plant and a Glimpse into the Stupendous Development of the Mechanical and Business Side of Our Educational System," *Los Angeles Times*, 29 January 1928.
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55. Leslie Heumann & Associates and Anne Doehne, Science Applications International Corporation, March 2002, "Historic Schools of the Los Angeles Unified School District," a presentation prepared for LAUSD Facilities Services Division (March 2002), 6.
56. Population statistics are drawn from Fogelson, *Fragmented Metropolis*, 78. School-related statistics are drawn from Eales, "A Brief, General History," 172.
57. Los Angeles City Board of Education, *The Reconstruction Program of the Los Angeles City Schools, 1933 – 1935 (inclusive)* (1933), 5.
58. Eales, "A Brief, General History," 164.
59. Ibid., 165.
60. Ibid., 158.
61. Ibid., 155.
62. Ibid.
63. Holy, T.C., "Needed Research in the Field of School Buildings and Equipment," *Review of Educational Research* 5, no. 4 (1935): 406–11. Cited in Baker, "A History of School Design," 8–9.
64. Mock, Elizabeth, and Rudolf Mock, "Schools Are for Children," *The American School and University* 15 (1943): 37–42.
65. Baker, "A History of School Design," 8.

66. Throughout the United States, the Great Depression ushered in modern reform in many realms of architectural practice, pedagogy, and design. Two major examples in Southern California were in education and housing reform. In the early 1930s, Los Angeles's only collegiate school of architecture at USC shed its Beaux-Arts influenced curriculum and launched a modern curriculum. USC's design philosophy emphasized the same qualities advocated by school plant reformers: functional, modern design, thoughtful, integrated site planning, and indoor-outdoor integration as the key for the "good life." See Howell-Ardila, "Writing Our Own Program." In terms of housing reform, the Garden Apartment movement also emphasized these qualities as the key to providing better housing and living conditions for all. These movements shared practitioners and proponents, as well as the conviction that "modern" architecture was as much a social movement as it was an aesthetic one. For an outstanding history of the Garden Apartment movement in Los Angeles, see Architectural Resources Group, Inc., *Garden Apartments of Los Angeles Historic Context Statement*, prepared for the Los Angeles Conservancy (Los Angeles, CA, October 2012). Throughout the United States in the 1930s, these ideas occasioned a major shift in the national conversation about modern architecture.
67. Sachs, Avigail, "Research for Architecture: Building a Discipline and Modernizing the Profession," PhD Dissertation (Berkeley: University of California, 2009), 161.
68. Baker, "A History of School Design," 8.
69. Eales, "A Brief, General History," 228.
70. Ogata, "Building for Learning," 564.
71. Mock, Elizabeth, *Built in USA, 1932 – 1944: A Survey of Contemporary American Architecture*, The Museum of Modern Art (New York: Simon & Shuster, 1944), p. 41.
72. In 1938, Lescaze completed work on CBS Columbia Square in Los Angeles, another International Style building now enjoying Historic-Cultural Landmark status.
73. Lescaze, William, "The Functional Approach to School Planning," *Architectural Record* (June 1936): 481–97, at 481.
74. Ibid., 482.
75. McCoy, Esther, *Richard Neutra* (New York: G. Braziller, 1960), 20.
76. Mock, *Built in USA, 1932 – 1944*.
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78. Hille, *Modern Schools*, 81–82.
79. "Progress in School Design, As Evidenced in the Work of Marsh, Smith & Powell, Architects," *The Architect & Engineer* (November 1938): 14–22.
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82. Los Angeles City Board of Education, *The Reconstruction Program of the Los Angeles City Schools, 1933 – 1935 (inclusive)* (Los Angeles, CA: 1933), 5.
83. Engelhardt, "Trends in School Architecture and Design," 176.
84. Ibid.
85. "Safety, Simplicity and Old-California Beauty Combined in Mission-Type Schools of Reconstruction Program," *Los Angeles Times*, 9 January 1934.
86. Ibid.
87. *Southwest Builder and Contractor*, 8 October 1937, 12.
88. Eales, "A Brief, General History," 272.
89. Ibid., 208.

90. *Los Angeles Herald-Examiner*, 14 September 1943.
91. Eales, "A Brief, General History," 277.
92. Ibid.
93. Ibid., 236.
94. Quoted in Engelhardt, "Trends in School Architecture and Design," 175.
95. Ogata, "Building for Learning," 1.
96. Ibid.
97. Engelhardt, "Trends in School Architecture and Design," 175.
98. Ibid.
99. Ogata, "Building for Learning," 570.
100. Ibid., 581.
101. Diamond, Robert S., "'Ugly Duckling' School Wins Design Honors," *Los Angeles Times*, 12 August 1965.
102. "Educators Will Take Air Tour," *Los Angeles Times*, 21 June 1964.
103. Ogata, "Building for Learning," 581.
104. Murphy, Jean, "Panel Views New Trends in Education," *Los Angeles Times*, 22 February 1968.
105. Caudill, *Toward Better School Design*, 16.
106. Ibid., 17.
107. Greg Hise describes the origins of the movement for "a new conception of modern houses," and the work of Farwell Bemis, one of the early authors of the movement to place manufacturing technology in the service of housing. Hise, Greg, *Magnetic Los Angeles: Planning the Twentieth-Century Metropolis* (Baltimore, MD: Johns Hopkins University Press, 1997), 56–85.
108. "Case Studies" and "Pioneer School Has Proved the Value of Its Scientific Design," *Architectural Forum* 91 (October 1949): 103–14, at 104.
109. Tanner, C. K., and J. A. Lackney, *Educational Facilities Planning* (Boston: Pearson, Allyn & Bacon, 2005), 12; cited in Baker, "A History of School Design," 11.
110. "Case Studies" and "Pioneer School."
111. Ibid.
112. McQuade, Walter, *Schoolhouse: A Primer about the Building of the American Public School Plant* (New York: Simon &Schuster, 1958), 206.
113. Mock, *Built in USA, 1932 – 1944*, 41.
114. McCoy, *Richard Neutra*, 22.
115. If the finger-plan school remained the dominant trend for so long in spite of these shortcomings, it is in large part because the plan represented the perfect counterpoint to what reformers were still reacting against: the institutional "big block schools with internal corridors and windowless classrooms" (Gibson, *California School Buildings*, 1) These words came from the California Department of Education in 1965, long after the battle against the late-nineteenth-century big-block school had already been won. It is noteworthy that, even as late as 1965, the specter of the unfriendly, institutional school still provided the antithesis against which new ideas were measured.
116. Lopez, Frank G., "Schools: Architectural Record's Building Types Study Number 184: Some Trends in School Design," *Architectural Record* (March 1952): 132–141, 150–154.
117. Ogata, "Building for Learning," 572.
118. Gibson, *California School Buildings*, 1.
119. Ibid.
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121. Los Angeles Conservancy, "Curating the City: Modern Architecture in Los Angeles," Westchester High School. Available at: https://www.laconservancy.org/locations/orville-wright-middle-school.
122. Ogata, "Building for Learning," 581.

123. Ibid., 581–82.
124. "'Flexible' School Called Teamwork Aid," *Los Angeles Times*, 24 November 1961.
125. Ibid.
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127. Ibid., 582.
128. Rydeen, James E., "Standardizing Schools," *American School and University* 75, no. 1 (September 2002): 50.
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130. Ibid., 583.
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132. Ibid., 106.
133. "Prominent Architect Honored by Engineers," *Los Angeles Times*, 1 January 1956.
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135. Los Angeles Board of Education, *Minutes*, 10 September 1945, 5–6. Quoted in Eales, "A Brief, General History," 279.
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141. "State Renews Appeal for Architects," *Los Angeles Times*, 18 April 1949.
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145. Turpin, "School Unity Map Plug Tax Drain."
146. Turpin, Dick, "1960-61 School Budget of $254,589,414 OKd."
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149. Steinberg, Warren L., "Down to Defeat Again: Education Tax and Bonds Victims of Our Ignorance," *Los Angeles Times*, 6 April 1969.
150. Ibid.
151. Ibid.
152. McCurdy, Jack, "L.A. City School Enrollments Drop for First Time in History," *Los Angeles Times*, 3 October 1969.
153. While a comprehensive history of the topic is beyond the scope of the current study, a topic is addressed in various secondary sources, including the in-depth study provided in Sosa, Herbert R, "Fragmented Diversity: School Desegregation, Student Activism, and Busing in Los Angeles, 1963–1982" (PhD dis., University of Michigan, Ann Arbor, 2013).
154. Nicolaides, Becky M., *My Blue Heaven: Life and Politics in the Working-Class Suburbs of Los Angeles, 1920–1965* (Chicago, IL: University of Chicago Press, 2002), 179.

155. Public Information Office of the LACSD, Results Announced of Mandated Racial, Ethnic Survey in Schools, 16 January 1967, fol. Race Question Genl Cont, 1966–1967 Part VII, Box 964, RQC-LAUSD; Sosa, "Fragmented Diversity."
156. Ibid.
157. Grimes, "Historic Resources Associated with African Americans in Los Angeles."
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166. Nicolaides, *My Blue Heaven*, 288–9.
167. Sosa, "Fragmented Diversity," xiv.
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169. Sosa, "Fragmented Diversity," 19.
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174. Lindsey, Robert, "Los Angeles Schools Plan Busing Amid White Flight," *New York Times*, 11 October 1977.
175. Ettinger, David S., "The Quest to Desegregate Los Angeles Schools," *Los Angeles Lawyer* (March 2003), 56; *Crawford v. Board of Educ. of the City of Los Angeles*, 113 Cal. App. 3d 633, 642 & n.2 (1980), 62–3.
176. Engelhardt, "Trends in School Architecture and Design," 176.
177. The scope of the 2002 survey included a detailed look at all pre-1945 LAUSD campuses, with a focus on representative architectural styles and their character-defining features. This study reframes those results to ensure continuity. Photos in this section attributed to Heumann & Associates are drawn from: Leslie Heumann & Associates and Anne Doehne, Science Applications International Corporation, "Historic Schools of the Los Angeles Unified School District."
178. Blumenson, John J.-G., *Identifying American Architecture* (New York: W.W. Norton & Company, 1977); Gebhard, David, and Robert Winter, *A Guide to Architecture in Los Angeles and Southern California* (Santa Barbara, CA: Peregrine Smith, Inc., 1977), 683–708; Harris, Cyril M., *American Architecture: An Illustrated Encyclopedia* (New York: W.W. Norton & Company, 1998); McAlester, Virginia, and Lee McAlester, *A Field Guide to American House* (New York: Alfred A. Knopf, 2004); and Whiffen, Marcus, *American Architecture since 1780: A Guide to the Styles* (Cambridge, MA: MIT Press, 1981).

179. These descriptions are drawn and adapted from the City of Los Angeles Office of Historic Resources guidelines for evaluating modern resources in Los Angeles. Excerpts in this passage were drawn from: Architectural Resources Group, "Pre-War Modernism," prepared for the City of Los Angeles Office of Historic Resources (Los Angeles, CA, n.d.). The "Early Modern" category fits within the SurveyLA context as follows: Context: Architecture and Engineering, 1850 – 1980; Sub-Context: LA Modernism, 1919 – 1975; Theme: Pre-War Modernism, 1919 – 1945, International Style, 1920 – 1945.
180. Grimes, "Historic Resources Associated with African Americans in Los Angeles."
181. These figures are drawn from: Los Angeles Unified School District, Educational Housing Branch, School Planning Division, Los Angeles Unified School District History of Schools, 1855 to 1972 (January 1973).

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Appendices

C-2.

Preliminary Historic Resource Evaluation Report

Appendices

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Memorandum

TO: Gwenn Godek, Contract Professional/CEQA Project Manager, Los Angeles Unified School District (LAUSD)

DATE: June 28, 2016

FROM: Margarita Jerabek, Ph.D., Director of Historic Resources, Amanda Kainer, M.S., Senior Architectural Historian

RE: **PRELIMINARY HISTORIC RESOURCE EVALUATION REPORT (HRE) FOR JOHN H. FRANCIS POLYTECHNIC HIGH SCHOOL, 12431 ROSCOE BOULEVARD, SUN VALLEY, CALIFORNIA, 91352**

INTRODUCTION

PCR Services Corporation (PCR) appreciates the opportunity to prepare a Preliminary Historic Resource Evaluation Report ("HRE") for John H. Francis Polytechnic High School ("Poly HS") located at 12431 Roscoe Boulevard in Sun Valley, Los Angeles, California. Constructed between 1956 and 1957, Poly HS is older than forty-five years, and therefore meets the age threshold for consideration as a historical resource under CEQA. PCR's Historic Resources Division conducted an intensive pedestrian survey, research and evaluation of Poly HS in November 2015 to January 2016. This HRE includes a discussion of the methodology used, a brief historic context, description of existing conditions, and a significance evaluation of the subject property.

PROPERTY DESCRIPTION

Located in Sun Valley, California, in the San Fernando Valley region of the City of Los Angeles, the legal description of the subject property is Assessor's ID Number 2634-019-900, Tract #19166, Lot 1. The irregularly shaped subject property is approximately 37.20 acres and improved with a multiple-building school campus, originally built as a high school between 1956 and 1957. At the northern corner of the parcel is the Lewis Continuation High School built in 1994. The subject parcel is bounded by Sharp Avenue to the northeast, Peoria Street to the southeast, Arleta Avenue to the southwest, and Wicks Street to the northwest. The neighborhood around the school is primarily comprised of modest single-family homes, with commercial buildings sited along Roscoe Boulevard.

METHODOLOGY

The HRE was conducted by PCR's Historic Resources Division personnel Margarita Jerabek, Ph.D., Director of Historic Resources, and Amanda Y. Kainer, M.S., Senior Architectural Historian, who meet and exceed the Secretary of the Interior's Professional Qualification

Standards in history and architectural history.[1] Professional qualifications are provided in Attachment C of this HRE.

The following tasks were performed by PCR for the study:

- A pedestrian survey and digital photography was undertaken to document the existing conditions of the subject property. PCR utilized the survey methodology of the State Office of Historic Preservation ("OHP").

- Conducted site-specific research on the school sites utilizing Sanborn Fire Insurance Maps, historical photographs and plans, California Index, Avery Index, Online Archive of California, USC Digital Collections, historical *Los Angeles Times*, American Institute of Architects ("AIA") historical directory, and other published sources.

- Reviewed and applied methodology, eligibility standards and integrity considerations presented in the LAUSD Historic Context Statement.[2]

- Reviewed and analyzed ordinances, statutes, regulations, bulletins, and technical materials relating to federal, state, and local historic preservation, designation assessment processes, and related programs.

- Conducted a preliminary evaluation of the potential historic resource based upon criteria used by the National Register of Historic Places ("National Register") and California Register of Historical Resources ("California Register").

- The results of this evaluation were recorded on a Department of Parks and Recreation ("DPR") form, provided in Attachment A.

PREVIOUS EVALUATIONS

Poly HS was recommended ineligible during the 2013/2014 LAUSD Historic Resources Survey conducted by Sapphos Environmental, Inc. and assigned a California Historical Resources ("CHR") Status Code status of 6Z. The evaluation stated:

> Campus plan and buildings have many of the typical character-defining features of postwar LAUSD schools. However, taken as a whole, the campus is a common but not

[1] The Professional Qualification Standards are requirements used by the National Park Service and have been published in the Code of Federal Regulations ("CFR"), 36 CFR Part 61.

[2] Sapphos Environmental, Inc., *Los Angeles Unified School District: Historic Context Statement, 1870 to 1969* (March 2014).



outstanding exemplification of postwar LAUSD design ideas. In terms of eligibility under Criteria A/1, research did not show that this campus was the site of a significant event or representative of a significant pattern of development. In terms of eligibility under Criteria B/2, research did not show that the campus was associated with a person of significance in the community, state, or nation. In terms of eligibility under Criteria C/3, the campus and its buildings are not an outstanding or distinctive example of architectural design or the work of a master architect.[3]

In August 2015, SurveyLA (the City of Los Angeles Office of Historic Resources citywide survey) found Polytechnic High School eligible under Criteria A/1 and C/3 for federal, state, and local landmark listing as a historic district.4 SurveyLA recommended the school eligible as an "Excellent example of a post-World War II Los Angeles Unified School District high school campus, reflecting LAUSD school planning and design concepts of the postwar period and the increase in facilities to accommodate postwar growth in the San Fernando Valley."5 The SurveyLA evaluation was conducted from the public right-of-way and limited research was conducted. The SurveyLA records form for Poly HS is provided in Attachment A.

The current intensive-level evaluation, conducted from on-campus, concurs with the 2014 finding of ineligibility by Sapphos Environmental, Inc. Polytechnic HS exhibits a number of character-defining features typical of the postwar indoor-outdoor school plant, as described in the "LAUSD Historic Context Statement, 1870-1969." As assessed from on campus, however, the buildings and site plan overall do not exhibit the scale, character, or cohesiveness of the best examples of schools from the era and do not meet the eligibility standards outlined in the "LAUSD Historic Context Statement, 1870-1969." In addition, the campus does not appear to be a distinctive or outstanding example of its type or style and does not appear to be a notable example of Austin, Field, and Fry's work. Research to date has not yet revealed a potential association with a significant individual of importance to the nation, region, state, or city. Therefore, because the current evaluation was conducted from on-campus and additional research was undertaken to document the construction history using newspaper databases and historic architectural drawings, PCR agrees with the 2014 finding of ineligibility by Sapphos Environmental, Inc.

[3] Sapphos Environmental, Inc., *Los Angeles Unified School District: Historic Context Statement, 1870 to 1969* (March 2014): 48.

[4] Historic Resources Group, *Sun Valley – La Tuna Canyon: Historic Districts, Planning Districts, and Multi-Property Resources*, Prepared for the City of Los Angeles Department of City Planning Office of Historic Resources (August 5, 2015): 7-8.

[5] Ibid.

HISTORIC OVERVIEW

Educating the Baby Boom-The Postwar Modern, Functionalist School Plant (1945-1969)

At the close of World War II, the United States entered a period of unprecedented growth, with booms to both the economy and the population. This sudden shift from the austerity of the Great Depression and the war years into a period of great prosperity meant that demand far outstripped supply for most commodities and services, including that of public schools. This was especially true in California, which experienced not only the baby boom but an influx of new residents coming in from other states for jobs in California's various industries.[6]

In the 1950s, the population of the West San Fernando Valley was growing with extreme rapidity. The communities of Sun Valley, Northridge, Reseda, and Tarzana proved especially problematic in terms of providing adequate public school facilities for the ever-increasing number of families moving into the area. The population of these three communities exploded in a very short period, from about 32,000 in 1950 to over 80,000 by 1954. This massive increase in population resulted in numerous building projects carried out in the area by LAUSD, including the construction of a new campus for Poly HS (Figure 1) in the San Fernando Valley between 1955 and 1957, with its official opening in February 1957. Poly HS was established in 1905, with its original campus located at the corner of Washington Boulevard and Flower Street in downtown Los Angeles.[7] Poly HS moved from its former site in 1935, and the school was renamed from Polytechnic High School to John H. Francis Polytechnic High School in honor of the school's founder and first principle.[8]

[6] Sapphos Environmental, Inc., *Los Angeles Unified School District: Historic Context Statement, 1870 to 1969* (March 2014): 71.

[7] Poly HS originally opened in 1897 as a commercial branch of Los Angeles High School, the only high school at the time in LA. This campus was located on South Beaudry Avenue in Los Angeles. In 1905, the school moved to the corner of Washington Boulevard and Flower Street, also in downtown Los Angeles.

[8] "About US," Francis Polytechnic Senior High, http://www.polyhigh.org/about_us.jsp?rn=2995860, accessed January 12, 2016.

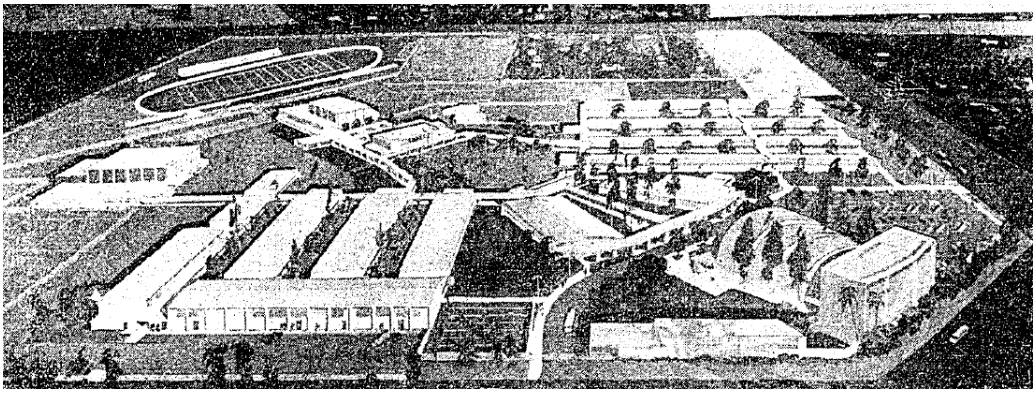

Figure 1. Rendering of Poly HS Published in the *Los Angeles Times*, 1955
("Great New School," *Los Angeles Times* (January 2, 1955): F1.)

Modern architecture came to dominate public school buildings constructed during this period, both in California and across the United States. The primary consideration in school design became function rather than style, with architects largely rejecting the historicist, hierarchical design elements that had traditionally held sway. Emphasis shifted to the experience of the pupil, and architects attempted to provide environments appropriate to the age of the student. Therefore, decentralization, informality, easy outdoor access and smaller scale prevailed. Indoor-outdoor integration of space, once considered experimental, became a staple of school design, especially in California where the climate was suited to year-round indoor-outdoor living. Modular, prefabricated design made schools more affordable and supported the design sensibilities of the period.[9]

Two new school site plan typologies emerged in the 1940s and 1950s, the finger-plan and the cluster-plan. The finger-plan actually originated in the late 1930s, but was not fully embraced until after the end of World War II. The basic concept of this type of site plan was a layout that resembled a tree trunk with branches extending out on either side. This type of plan relied upon standardized classrooms, all with the same (preferably north) orientation, and was popular for both its flexibility and expandability. However, the design could also be difficult to adapt to different topographies, required large amounts of land, and tended to increase time spent traveling from one part of the school to another. Therefore, in the 1950s, the cluster-plan school emerged as a more universally usable and cost-effective option. Cluster-plan schools were oriented around a central courtyard, rather than along an axis. The experience of the school was therefore more communal and could also be built on smaller and more topographically

[9] Sapphos Environmental, Inc., *Los Angeles Unified School District: Historic Context Statement, 1870 to 1969* (March 2014): 73-81.

varied lots. Furthermore, the plan allowed for more shared spaces and easier supervision of students. Many schools were also designed as hybrids of these two popular plans.[10]

Poly HS Construction History

The initial plans for Poly HS were drawn between 1955 and 1957 by the architecture firm of Austin, Field and Fry and landscape architect Clifford G. Schoen.[11] There are five sets of drawings archived in the LAUSD drawing archive covering the intial design of the campus spanning the period of May 1955 to December 1957. On January 2, 1955 the *Los Angeles Times* announced the first phase of the project was under construction and included an architectural rendering (Figure 1) of the proposed school.[12] The article stated the first phase of the project would house 1,000 students, with the ultimate school capacity being 2,500 students, and cost approximately $2,500,000. Two years later, the school construction was published again in the *Los Angeles Times* on May 12, 1957 claiming all of the "administrative and classroom buildings in the $5,000,000 project have been completed and the only structure yet to be finished is the auditorium….funds for the new school were obtained from $233,000,000 Los Angeles city school bond issues approved in two elections over the past five years."[13] The architectural sketch of the school accompanying this article is presented in Figure 2.

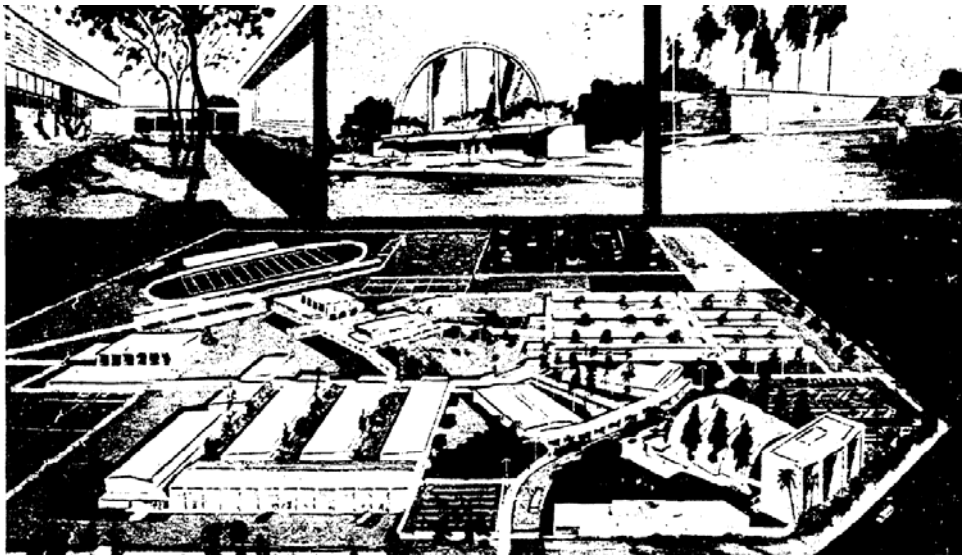

Figure 2. Rendering of Poly HS Published in the *Los Angels Times*, 1957
("Sun Valley Project," *Los Angeles Times* (May 12, 1957): F1.)

[10] *Ibid., 82-93.*
[11] 6700.03.000 December 1, 1953, New Plant – (Role #1 – SHTS 1-114)
[12] "Great New School," *Los Angeles Times* (January 2, 1955): F1.
[13] "Sun Valley Project," *Los Angeles Times* (May 12, 1957): F1.

As discussed in the previous paragraph, there appears to be phases of design work covered in five sets of architectural plans. The first design phase covered in the architectural set dated May 13, 1955 included the overall layout of the campus and the plans, elevations, and sections for the Administration, Music, Homemaking, Art, Industrial Arts, Science, Agriculture, Cafeteria, Bookstore and two Classroom Buildings.[14] The spatial layouts for the site plans for the future were indicated on the plot plans. The layout of the school was known as "campus type," where all buildings are one-story and open to outdoor hallways, and the plan was a combination of both the cluster plan and finger plan types.

The second set of plans dated January 16, 1956 provides drawings for the Boys Gymnasium and Girl's Gymnasium located in the north and northwest portions of the campus.[15] In September of 1956 two sets of drawings were produced. A set of drawings dated September 1, 1956 included the specifications for the rows of classroom buildings and Library located to the east and west of the Administration Building.[16] This set of plans also included landscape designs by Clifford F. Schoen. Also, in 1956 a plan set was produced for the temporary buildings constructed to the west of the agricultural area. These buildings would later be replaced by a two-story classroom building built in 2005.[17] Finally, in 1957 a set of drawings provide the specification for the Auditorium buildings added at the southern portion of the campus.[18] Upon completion of Poly HS, it was featured in an architectural exhibit of Austin, Field, and Fry's "buildings of special historical and architectural interest" hosted at the Building Center at 7933 W 3rd Street, Los Angeles in April of 1958.[19]

It appears that the school campus has undergone very few major alterations since its initial construction. In 1968, Classroom Building 39/N was added in 1968. A number of repairs were made to the Administration Building (Building 9) following a fire as specified in a November 1982 plan set.[20] After the Northridge earthquake of 1994, repair of earthquake damage to various buildings, arcade, playground and parking was conducted.[21] The windows

[14] Drawing Set Number 8636.03, DSA Number A12575, New Plant (ADM, Music, Homemaking, Art, Industrial Arts, Science, Agriculture, Cafeteria Buildings), LAUSD Drawing Archive – Vault, May 13, 1955.

[15] Drawing Set Number 8636.04, DSA Number A13586, Boys Gymnasium and Girls Gymnasium, LAUSD Drawing Archive – Vault, January 16, 1956

[16] Drawing Set Number 8636.06, DSA Number A14460, New Facilities (Music, Homemaking, Art, Business, Classroom, Industrial Arts, Library, Science, Lath, Booths), LAUSD Drawing Archive – Vault, September 1, 1956

[17] Drawing Set Number 8636.05, DSA Number A14979 A14980, New 1956 type classroom (AA-1564 Thru AA-1568) and sanitary (J-240) buildings, LAUSD Drawing Archive – Vault, September 18, 1956

[18] Drawing Set Number 8636.08, DSA Number A16326, Auditorium Building, LAUSD Drawing Archive – Vault, December 1, 1957

[19] "Architectural Display Reflects State History," *Los Angeles Times* (April 6, 1958): F6.

[20] Drawing Set Number 8636.12, DSA Number A44358, Fire Damage Repairs to Administration Building, LAUSD Drawing Archive – Vault, November 1, 1982

[21] Drawing Set Number 8636.15, Earthquake damage repair to various buildings, arcade, playground and parking, LAUSD Drawing Archive – Vault, March 1, 1995

were replaced in the Cafeteria building to include new serving windows and coiling counter doors in 1996.[22] To the north of Building 5 and north of Building 46 (Boy's Gymnasium) portable units were added in 1962, 1972, 1997 and 2000.

Architecture Firm of Austin, Field and Fry

The architectural and engineering firm of Austin, Field, and Fry were the architects of the Poly HS. The firm was comprised of John Corneby Wilson Austin (1870-1963), Robert Alexander Field, Jr. (1902-1984), and Charles Eugene Fry (1906 -1998) was established in Los Angeles in 1946.[23]

The firm's founding principal, John Corneby Wilson Austin (1870-1963), was born in Oxfordshire, England, educated at English schools, and apprenticed under the architect William Sampson Barwick. He immigrated to the United States from England in 1888. For three years, he lived in San Francisco, until 1895 when he moved to Los Angeles where he became a renowned architect and community leader. He is known to have worked briefly for the firm of Morgan and Walls before opening his own office. He worked alone and in partnership with Chauncey F. Skilling, W.C. Pennell, Frederick M. Ashley, and after the Second World War with Robert Field and Charles Fry. He was president of the first State Planning Board, member of the State Board of Architectural Examiners, president and on the board of directors of the Chamber of Commerce, member of the Royal Society of Arts in Great Britain, and fellow of the American Institute of Architects. John C. Austin died in Los Angeles on September 3, 1963.

John C. Austin, a master architect of his period, specialized in the design of large-scale civic, educational, and ecclesiastical architecture that followed the trends in architecture. He is known as one of the most important architects practicing in the Los Angeles and Southern California region during the first quarter of the 20th century. A consummate professional and interpreter of several architectural styles, Austin pledged no allegiance to any particular style. As his architectural career spanned approximately 68 years, he adapted his designs to the changing styles and attitudes in architecture. His extant ecclesiastical projects include the Gothic Revival Holliston Avenue United Methodist Church (ca. 1899), located at the northwest corner of Holliston Avenue and Colorado Boulevard, Pasadena; the shingled Gothic Grace Methodist

[22] Drawing Set Number 8636.VG.880, Replace serving windows and new coiling counter doors in cafeteria building, LAUSD Drawing Archive – Vault, May 1, 1996.

[23] John Corneby Wilson Austin, ID 107, https://digital.lib.washington.edu/architect/architects/107/, Pacific Coast Architecture Database (PCAD), accessed January 10, 2012.
Robert Alexander Field, ID 4721Jr.Pacific Coast Architecture Database (PCAD), https://digital.lib.washington.edu/architect/architects/4721/, accessed January 10, 2012.
Charles Eugene Fry, ID 3557, Pacific Coast Architecture Database (PCAD), https://digital.lib.washington.edu/architect/architects/3557/, accessed January 10, 2012.
AIA Membership Files.



Episcopal Church (ca. 1906) at 200 N. Saint Louis Avenue, Boyle Heights; and he collaborated with A. M. Edelman, and G. Albert Lansburgh in the design of the Moorish Revival style Shrine Auditorium, also known as the Al Malaikah Temple at 665 W Jefferson Boulevard, Los Angeles (ca. 1920-26).[24]

John C. Austin's civic projects include the Griffith Park Observatory and Planetarium (ca. 1935), and Pico Gardens Public Housing (ca. 1941-42). His educational projects include the Frank Wiggins Trade School, Los Angeles High School, Monrovia High School (ca. 1928), the Administration Building at Hamilton High School (ca. 1931), the Administration Building at John Muir Middle School (ca. 1922), Venice High School (ca. 1913-1914), Walter Reed Middle School (1939), San Fernando Middle School (ca. 1916), and the Florence Nightingale Junior High School (ca. 1937-1939). Austin was associated with Frederic Morse Ashley (1870-1960), his partner in the firm Austin and Ashley, Architects, between 1929 and 1935.[25]

Following World War II, John C. Austin formed Austin, Field & Fry, an architecture and engineering firm, with Robert Field and Charles Fry in 1946.[26] Robert Field (1902-1984) was born in Chicago, Illinois in 1902, later attended Manual Art High School, Los Angeles, and graduated from University of Southern California in 1940. Charles Eugene Fry (1906-1996) was born in Los Angeles in 1906 and later attended Manual Art High School and received his B.S. in architecture at University of Southern California. In 1930, he began an apprenticeship with John C. Austin and F.M. Ashley, Architects as an Architectural Draftsman until World War II. During World War II he was in charge of airport design, construction, repairs and utilities for the United States Army Air Corps and obtained the rank of Colonel.

With their office headquartered at 2311 West 3rd Street, Austin, Field, and Fry planned and designed large-scale institutional and commercial projects including hospitals, industrial and business centers, and schools throughout Southern California. Notable projects include St. Vincent's Hospital (original 1927, additions in 1952, 1956); Superior Court of California, County of Los Angeles, Courthouse #4 (1958); California Electric Power Company (1958); First Federal Savings and Loan Association of Hollywood (1959); Western and Southern Life Insurance

[24] David Gebhard and Robert Winter, *An Architectural Guide to Los Angeles* (Salt Lake City: Gibbs Smith Publishers) 2003.
"Large Local Projects Planned by J. C. Austin." *Los Angeles Times* (February 10, 1938): 7.
[25] The Getty Grant Program. *Historic Schools of the Los Angeles Unified School District.* Prepared for the Los Angeles Unified School District Facilities Services Division (March 2002).
"Rites Set Today for Frederick M. Ashley," *Los Angeles Times* (February 4, 1960): B9.
[26] "New Partner," *Los Angeles Times* (January 14, 1979): I27.



Company (1960); Thiokol Chemical Corporation (1960); Shell Development Company (initial 1957, second unit 1962); and Josten Manufacturing Plant (1957).[27]

The firm specialized in the design and master planning of school campuses, elementary schools to colleges. A *Los Angeles Times* article reporting on the design of Torrance High School on July 23, 1961, noted the firm "has planned, design and engineered more than 75 major facilities at high schools and grammar schools throughout Southern California."[28] Notably they designed four buildings at the University of California, Los Angeles between 1948 and 1959, including Dodd Hall (1948), Campbell Hall (1954), Humanities Building (Rolfe Hall)(1956), and Faculty Center (1959). The design of the Humanities Building won an award citation award in the education category of an architectural design competition sponsored by *Progressive Architecture*, a national architectural magazine.[29] Other educational project include Highland Oaks School, Arcadia (1949);[30] Compton College (1953, and subsequent additions); Hugo Reid Elementary School, Arcadia (1956)[31]; Otis Art Institute (1957); Newhall Elementary School, Newhall (ca. 1959)[32]; Arcadia Unified School District's administration building (ca. 1961)[33]; Torrance High School (ca. 191)[34]; redevelopment of Mt. San Antonio College (1963)[35]; and Alhambra High School (1964) ; Suva and La Merced for the Montebello Unified School District (ca. 1973)[36] Within LAUSD, it appears Austin, Field and Fry designed a classroom building at Hamilton High School (ca. 1957) and Carson Senior High School (1969).

ARCHITECTURAL DESCRIPTION

Poly HS is sited on a 37.20-acres irregular-shaped lot, almost a polygon, improved with Mid-Century Modern style one-story campus type classroom buildings, an auditorium, cafeteria, library, and a boys and girls gymnasium. The rear of the property is improved with athletic fields, asphalt playgrounds, and tennis courts. The site plan turns inward on itself with permanent school buildings arranged in a combination cluster- and finger-plan within the southern portion of the lot. The buildings are grouped by function and are connected by

[27] Austin, Field, and Fry. ID 632, Pacific Coast Architecture Database (PCAD), https://digital.lib.washington.edu/architect/partners/632/, accessed January 10, 2012.
Charles Eugene Fry, AIA Membership File.
[28] "High School Planned for Torrance District," *Los Angeles Times* (July 23, 1961): I24.
[29] "Citation Won by Architects," *Los Angeles Times* (January 31, 1954): E11.
[30] "Arcadia School Bids to be Called," *Los Angeles Times* (December 28, 1949): B4.
[31] "A Million Must go to School," *Los Angeles Times* (January 3, 1956): D48.
[32] "$800,000 Project: New Grade School Slated for Newhall," *Los Angeles Times* (March 8, 1959): G19.
[33] "Architects Selected for School Design," *Los Angeles Times* (February 12, 1961): P18.
[34] "High School Planned for Torrance District," *Los Angeles Times* (July 23, 1961): I24.
[35] "Redevelopment of Campus Planned," *Los Angeles Times* (October 28, 1956): F11.
[36] "School Dispenses with Walls, Slashes Costs," *Los Angeles Times* (July 15, 1973): K21.

canopies to form a unified plan. Designed in the Postwar Modern style, Poly HS expresses the character-defining features of the style through its unified campus design, combination cluster- and finger-plan, low massing, flat roofs, outdoor corridors, courtyards, covered walkways, central quad, and modern materials. A current site plan with the building numbers is included in Figure 3 below.

Overall the permanent buildings are designed in the Postwar Modern style and are one-story (except for the Boy's Gymnasium (Building 46), Girl's Gymnasium (Building 45), Cafeteria (Building 23), Auditorium (Building 1), Building 4, Building 5, and Building 59). The buildings are characterized by concrete foundations, wood-frame construction, rectangular massing and plans, veneered brick and stucco wall finishes, metal sun louvres, and simplified volumes. Design emphasis is placed on maximizing the relationship of the building interiors to the outdoors, thus the buildings have multiple windows for natural light and open out onto outdoor courtyards. The fenestration includes fixed, awning, and double-hung wood-frame windows (alteration, windows are covered with metal security screens and some windows have been removed to accommodate AC units). The majority of doors are flat-panel doors with rectangular viewing windows (alteration, windows covered by metal security screens) with wood-frame transom windows (alteration, some of the windows are covered).



Figure 3. Current Aerial of Poly HS with Building Numbers

There are two school entrances (Figures 4 and 5) located near the southwest and southeast corners of the property at opposite ends. The entrances are connected by an access road that creates a division between the bottom southern end of the property, the more public sphere where the parking lots, auditorium and administration building are located, from the northern portion, the more private sphere, where the classroom buildings, gymnasiums and playing fields are located. Located in this southern portion are the Auditorium and building 2 flanked by two asphalt parking lots.

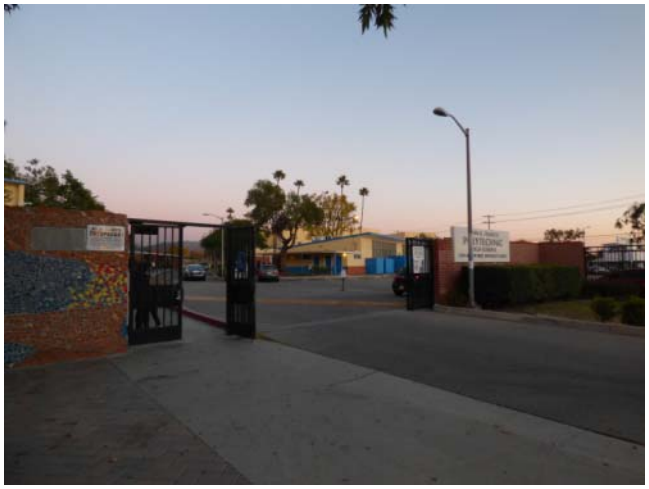


Figure 4 (Left). Southwest Entrance, View Northeast
Figure 5 (Right). Southeast Entrance, View Northwest

The Auditorium (Figures 6 and 7) is two-stories with an irregular T-shaped plan consisting of a rectangular portion for the back of the house functions connected to the main auditorium and stage. The Auditorium appears to be reinforced concrete construction with a smooth painted stucco finish. The primary (north) elevation is curved. The entrance story is veneered in brick while the heavy top story has regularly spaced vertical grooved recessed into the smooth concrete. Four pairs of flat-panel doors are recessed into the brick veneer interrupted by a central ticket window. To the west of the Auditorium is Building 2 (Figure 7) a simple building with a rectangular plan, covered by a shed roof, sheathed in stucco and brick veneer, and punctuated by awning windows, double hung windows, and flat panel doors.


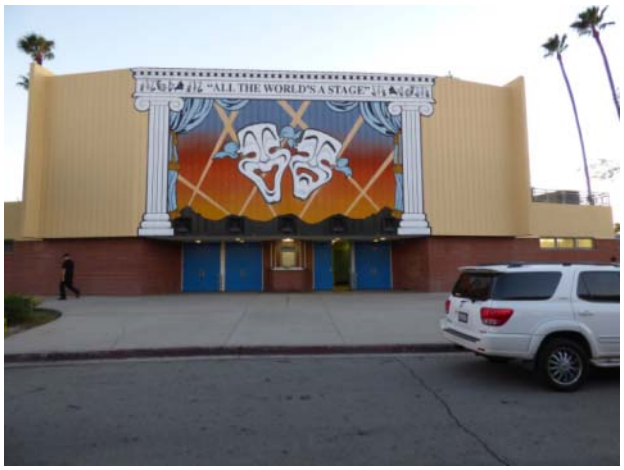

Figure 6 (Left). Auditorium and Building 2, View Southeast
Figure 7 (Right). Primary Elevation of Auditorium, View South

Located across from the auditorium building, on the north side of the access road, are the Administration and Library buildings connected by an east-west canopy supported by rectangular brick veneered piers. Situated centrally between the administration and library buildings is a north-south canopy aligned extending to the main canopy that connects all the classroom buildings. This north-south canopy along with the Auditorium, Library, Administration Building, Quad, Cafeteria, and Girl's Gymnasium are arranged along a north-south access centered in the middle of the lot.

The Administration Building (Figure 8 and 9) has a rectangular plan with a central corridor and is covered by a low-pitch front gable roof. The Administration Building is veneered in brick and has window openings on the east and west elevations covered by a deep roof overhang. Located on the north and south elevation are the entrances accessed through a pair of flat panel doors with side lights and transom windows. Located to the direct east of the administration building is the library.

The Library (Figures 10 and 11) has a T-shaped plan and is veneered in brick with entrances into the Library are located on the east elevation. The other elevations have double hung windows shielded by sun louvres and brick wing walls.





Figure 8 (Left). Administration Building, Primary Entrance on South Elevation, View Northeast
Figure 9 (Right). Side (East) Elevation and North Elevation, View Southwest





Figure 10 (Left). South and East Elevations of Library, View North West
Figure 11 (Right). East Elevation of Library, View West

The campus plan is anchored by a polygon shaped Central Quad (Figures 12 and 13). The quad is framed by covered walkways supported by slender metal posts, with the exception of the covered walkway at the north end attached to the cafeteria (Building 23), which is supported by rectangular brick veneered piers. The covered walkway is an important architectural feature that unifies the campus, provides access between buildings, defines the relationship of buildings and spaces, and provides a transition between indoor and outdoor space. At the south end of the quad is a concrete platform stage framed by an ornamental brick wall and at the north end is the Cafeteria Building 23. The Central Quad has concrete walkways stretching across the polygon at all five points and the spaces created between the walkways are planted with grass.





Figure 12 (Left). Central Quad, View South Towards Stage
Figure 13 (Right). Quad, View Northwest

Along the southeast and southwest sides of the quad are classroom buildings radiating out from the covered walkways at a forty-five-degree angle arranged in a finger plan. The southwest side has four classroom buildings (Buildings 6, 7, and 8), while the southeast side has six classroom buildings (Buildings 25, 26, 27, 28, 29, 30) arranged in three rows of two and one classroom building (Building 31) much wider with an interior hallway. Each row of classroom buildings has a sanitary building attached to the north end via a covered walkway that unites the classroom buildings and overall campus together. The classroom buildings have single-door openings, lockers, and clerestory windows shielded by sun louvres and a deep roof overhang supported by rectangular piers on the south elevations, while the opposite side is punctuated with double-hung wood-frame windows. The classrooms are sheathed with stucco and brick veneer and covered by flat roofs, except for Building 31 that has a front-gable roof and is completely veneered in brick. Representative photographs of the classroom buildings are provided in Figures 14 to 17 below. Classroom Buildings 6, 7 and 8 are protected from the street by two-story Buildings 4 and 5 (Figures 18 and 19) and are articulated with the same architectural details as the classroom buildings described above. Connected to the east elevation of Building 5 are Buildings 12 and 13.





Figure 14 (Left). South Elevation of Building 8, View Southwest
Figure 15 (Right). North Elevation of Building 7, View Southwest




Figure 16 (Left). Buildings 25 to 31, Building 31 in Forefront, View Northwest
Figure 17 (Right). Building 28, View East




Figure 18 (Left). Rear Elevations of Buildings 5 and 4, View East
Figure 19 (Right). South Elevation of Building 5, View North

Anchoring the north side of the quad is the Cafeteria. The two-story Cafeteria (Figures 20 to 23) has a rectangular plan, veneered with brick and is devoid of excess ornamentation. Attached to the south elevation is a canopy supported by large rectangular piers. The lunch shelter supported by square metal columns is attached to the west and rear (north) elevations under which there are pairs of double doors and lunch counter windows (alteration, replaced). In front of the lunch shelter is a row of three square planter boxes with trees and Building 22, the Student Store building.





Figure 20 (Left). South Elevation of Cafeteria, View North
Figure 21 (Right). View of Cafeteria, Building 22 and Girl's Gymnasium, View Northwest





Figure 22 (Left). Lunch Shelter, View Southwest
Figure 23 (Right). Underneath Lunch Shelter and West Elevation of Cafeteria, View East

Located directly behind the Cafeteria is the Girl's Gymnasium. The Girl's Gymnasium (Figures 24 to 25) has a rectangular plan and massing and is composed of at least three rectangular volumes. Veneered in brick, the primary two-story volume housing the gymnasium are onmented with concrete piers spaced at regular intervals. The rear and side elevations have awning and double-hung windows, as well as single and double flat panel doors some with transom windows.

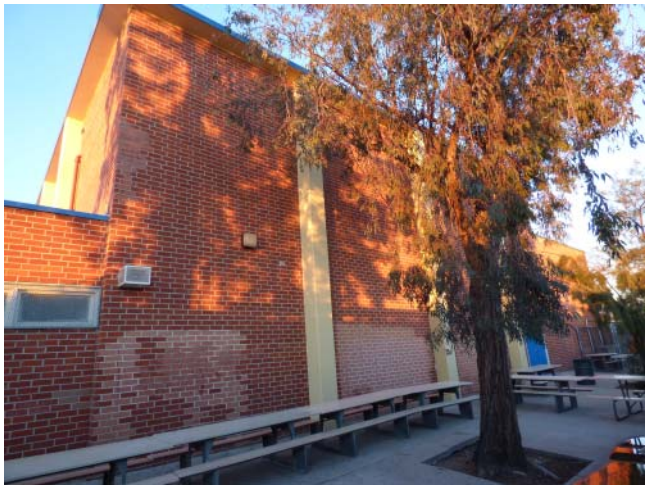


Figure 24 (Left) South Elevation of Girl's Gymnasium, View North
Figure 25 (Right). East and Elevation of Girl's Gymnasium, View Southwest

To the northeast of the quad is the one-and-two story utility building, Building 24. Veneered in brick and sheathed in stucco, Building 24 (Figure 26) has an irregular plan with a curved wall wrapping from the east to north elevations. Building 24 has louvre windows, flat panel doors, and awning and double-hung windows.



Figure 26. Utility Building, View South

The Boy's Gymnasium is located to the west of the Cafeteria and Girl's Gymnasium, has a rectangular plan, and is veneered in brick (alteration, some of the brick has been poorly patched). The Boy's gymnasium (Figures 27 and 28) is composed of four square volumes with varying heights, the tallest and largest volume containing the main gymnasium space. The gymnasium volume has concrete piers spaced at regular intervals embellishing the second floor of all four elevations. A canopy is attached to the primary elevation under which there are a

number of opening, single and double panel doors, into the various spaces. The side and rear elevations have awning and double-hung windows (alteration, covered by metal security screens).




Figure 27 (Left). Primary (South) Elevation of Boy's Gymnasium, View North
Figure 28 (Right). Side (East) and Rear (North) Elevation of Boy's Gymnasium, View Southwest

The Agricultural Area (Figures 29 to 30) is located at the southeast corner of the school site and is a rectangular parcel of land. Within the agricultural area are four simple buildings (Buildings 40, 41, 42, 43) constructed between 1956 and 1957.[37] This area is improved with many mature palm trees and planting beds.

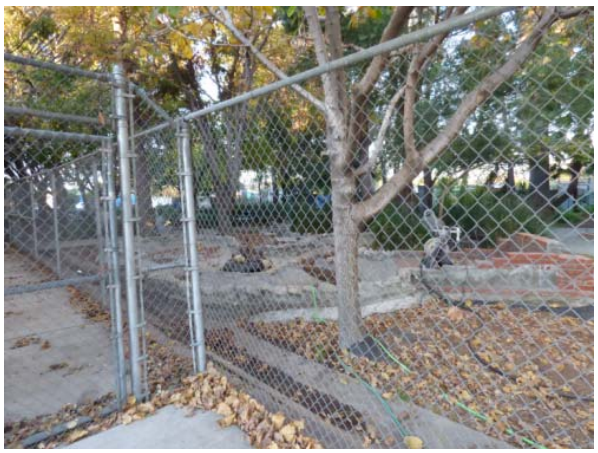


Figure 29 (Left). Agricultural Area, View Northeast
Figure 30 (Right). Agricultural Area, View Southeast

[37] PCR conducted the survey of the agricultural buildings from behind the chain link fence containing the agricultural area.



Integrity Analysis

Poly HS retains all seven aspects of integrity from its period of significance (1956-1958): location, materials, workmanship, design, setting, feeling, and association. The school occupies its original location. Regarding setting, the school retains its original setting including the landscape, canopies, relationship between the buildings and open space, and surrounding neighborhood context. The subject school expresses the Postwar Modern architectural aesthetic of simplicity of design, emphasis on the relationship of the buildings to the outdoors, geometric forms, and a unified site plan. Regarding materials, design and workmanship, Poly HS retains the majority of its character-defining buildings, features, spaces, materials, and overall plan. Alterations include the installation of metal security screens, infill of window openings with AC equipment, painting over of windows, handicap upgrades, painting over and patching of brick veneer, and replacement of the cafeteria serving windows. The overall plan of the school remains intact despite some open spaces being filled in with relocatable buildings. Despite these alterations, Poly HS retains integrity of materials, design and workmanship. Because the school has changed minimally since it was constructed between 1956 and 1958, it continues to express the aesthetic and historic feeling of a Postwar era school designed by Austin, Field and Fry and retains integrity of feeling. As a result, Poly HS conveys historical associations under the theme of Educating the Baby Boom-The Postwar Modern, Functionalist School Plant (1945-1969) developed within the LAUSD Historic Context Statement.

SIGNIFICANCE EVALUATION

Poly HS is representative of a Postwar Modern style school designed by the prominent Los Angeles architecture firm Austin, Field, and Fry. The period of significance is between 1956 and 1958, the span of time in which Poly HS was constructed. The school was evaluated against the theme of Educating the Baby Boom-The Postwar Modern, Functionalist School Plant (1945-1969) developed in the "LAUSD Historic Context Statement, 1870-1969." The subject school was evaluated within the context of this theme against the applicable national and state criteria.

In regards to the broad patterns of history, Poly HS does not reach the threshold for significance under Criterion A of the National Register or Criterion 1 of the California Register. Poly HS was constructed during a period of accelerated growth in Los Angeles. During the Postwar period, Los Angeles quickly grew outward and expanded into the San Fernando Valley where farmland was redeveloped into housing subdivisions. Because of the rapid increase in population in the San Fernando Valley, there was an increased demand for schools and as a result Poly HS was one of many new schools constructed in the San Fernando Valley during this period of accelerated growth. While Poly HS reflects a pattern of increased Postwar development resulting from the suburbanization of the San Fernando Valley, Poly HS does not appear to have made a significant contribution to the broad patterns of our history. The



construction of Poly HS was part of the larger development of the San Fernando Valley and its completion was not an important event, milestone or factor driving the Valley's popularity and exponential growth. Furthermore, it appears the design finger-plan and cluster-plan hybrid design of Poly HS did not influence the designs of other District schools, as these plan types were already established in the District by the time the construction of Poly HS in its entirety was completed in 1958.

Poly HS does not appear to satisfy National Register Criterion B or California Register Criterion 2 for eligibility related to a historic personage. Research within the *Los Angeles Times* and other databases has not identified Poly HS with the productive life of any significant individual District teachers, principals, administrators, students, or any other persons important in our past.

With regard to architecture, design or construction, Poly HS retains integrity and embodies the character-defining features of a Postwar Modern functionalist campus, such as the unified campus design, combination cluster-and finger plan, low massing, flat roofs, integration of outdoor rooms, corridors connecting buildings, central quad, and modern use of brick. While Poly HS represents the Postwar design trends for high schools, Poly HS does not appear to be a distinctive or innovative example of a Mid-Century Modern style campus. There are other more notable examples of Postwar Modern junior and high schools in the LAUSD constructed during the same period, such as Chatsworth Senior High School, Palisades Senior High School, Grover Cleveland High School, and Marina del Rey Junior High School. Furthermore, it appears there are better examples of the finger-and-cluster plan hybrid within the District, such as Sumner Spaulding and John Rex's Orville's design for Wright Middle School (originally Westchester High School) constructed between 1948 and 1952 and Roland H. Crawford's design for George K. Porter Middle High constructed in 1959. Both of these schools were designed by master architects who established architectural trends for school design and could be referred to as master architects. It appears that Austin, Field, and Fry, the architecture firm responsible for the design of Poly HS, was influenced by the Postwar designs established by other architects within the District, in addition to trends popularized in architectural journals.

While Poly HS was designed by Austin, Field and Fry, a prominent Southern California architectural firm, they were responsible for the design, planning, and engineering of over 75 educational projects throughout the firm's accomplished career. Within their overall body of work, Poly HS appears to be a representative example of their educational architecture and master planning of the mid to late 1950s, but does not appear to rise to the threshold of one of their better works. Their more notable educational projects include Compton College (1953, and subsequent additions); Otis Art Institute (1957); Mt. San Antonio College (1963); and Alhambra High School (1964); and four buildings for UCLA, Dodd Hall, Campbell Hall, Humanities Building and the Faculty Center, designed between 1948 and 1959. For the design of the Humanities



building UCLA, Austin, Field, and Fry won accolades from *Progressive Architecture*. Within the larger context of Austin, Field, and Fry's educational and institutional architecture, Poly HS does not appear to be a distinctive or notable project. Therefore, it appears Poly HS is not a notable work of the architecture firm of Austin, Field and Fry, and is not a distinctive example of a Postwar Modern functional campus. Thus, Poly HS is ineligible for listing under National Register Criterion C and California Criterion 3 for its architecture.

CONCLUSION

As a result of PCR's investigations, ESA concurs with the 2014 finding of ineligibility by Sapphos Environmental, Inc. and recommends Poly HS ineligible under National Register and California Register criteria due insufficient historical significance and architectural merit. Therefore, PCR reaffirms the previous CHR Status Code of 6Z assigned to the subject school during the 2013/2014 LAUSD Historic Resources Survey. The DPR form recording the results of these investigations is provided in Attachment B.

Attachments

Attachment A – SurveyLA Record Form (2015)
Attachment B – DPR Form (2016)
Attachment C – Professional Qualifications

ATTACHMENT A – SURVEYLA RECORD FORM (2015)

Name: John H. Francis Polytechnic High School



Description:

Located at 12431 Roscoe Blvd. the school occupies an irregularly-shaped parcel at the intersection of Roscoe Blvd. and Arleta Ave. The campus is composed of multiple one-story classroom buildings and an auditorium building, linked by covered walkways. Designed in the Mid-Century Modern style, building features include flat and shed roofs, smooth stucco cladding, double-hung metal windows, and slab doors. Other features of the site include paved playgrounds, an athletic field, and surface parking. The property is surrounded by a high chain-link fence and mature trees.

Significance:

Excellent example of a post-World War II Los Angeles Unified School District high school campus, reflecting LAUSD school planning and design concepts of the postwar period and the increase in facilities to accommodate postwar growth in the San Fernando Valley.

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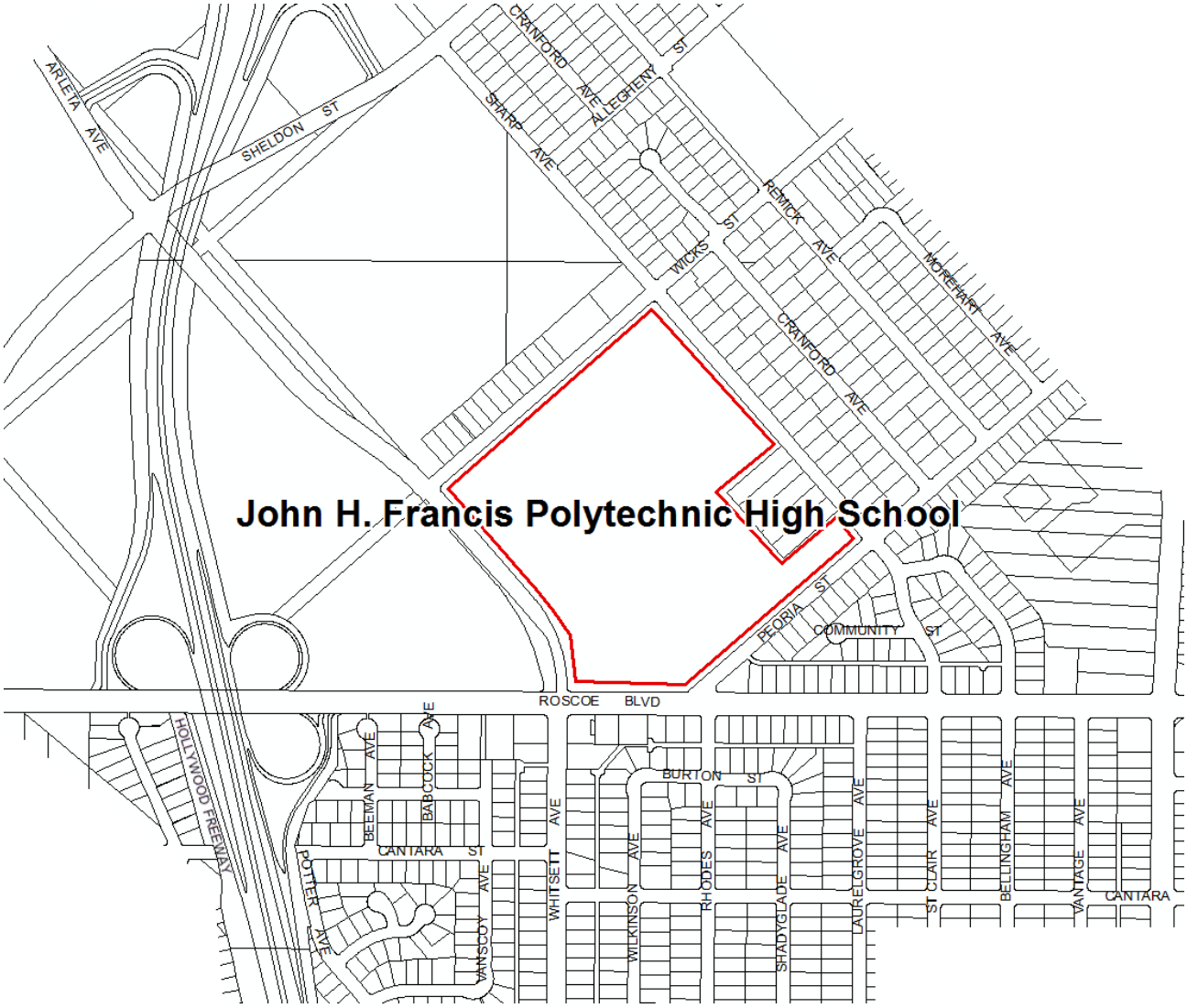

Context 1:

Context:	Public and Private Institutional Development, 1850-1980
Sub context:	Education, 1876-1980
Theme:	Public Schools and the LAUSD, 1876-1980
Sub theme:	Post WWII Schools, 1946-1966
Property type:	Institutional - Education
Property sub type:	Campus - High School
Criteria:	A/1/1&C/3/3
Status code:	3S;3CS;5S3
Reason:	Excellent example of a post-World War II Los Angeles Unified School District high school campus, reflecting LAUSD school planning and design concepts of the postwar period and the increase in facilities to accommodate postwar growth in the San Fernando Valley.

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Name: Laurel Canyon Mobile Estates



Description:

Mobile home park located at 9051 Laurel Canyon Blvd. The property contains multiple spaces occupied by mobile homes from various time periods, as well as a central community building, pool, and sales office. Property is not accessible to the public.

Significance:

Mobile home and trailer parks recorded for SurveyLA are those that appear to be good examples of the type as evidenced by their overall site design and planning, and inclusion of permanent features such as community buildings, swimming pools, and signage. Recorded mobile home/trailer parks may also be early examples of the type and may have evolved from earlier auto courts. However, since mobile home/trailer parks are not fully visible from the public right-of-way, more analysis is needed to assess significance and integrity. Therefore, the evaluation could not be completed.

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ATTACHMENT B – DPR FORM (2016)

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code | Reviewer | Date

*Resource Name or #: John H. Francis Polytechnic High School

P1. Other Identifier:

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County: Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Date: T ; R ; ¼ of ¼ of Sec ; M.D. B.M.

c. Address: 123431 Roscoe Boulevard City: Sun Valley Zip: 91352

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Poly HS is sited on a 37.20-acres irregular-shaped lot, almost a polygon, improved with Mid-Century Modern style one-story campus type classroom buildings, an auditorium, cafeteria, library, and a boys and girls gymnasium. The rear of the property is improved with athletic fields, asphalt playgrounds, and tennis courts. The site plan turns inward on itself with permanent school buildings arranged in a combination cluster- and finger-plan within the southern portion of the lot. The buildings are grouped by function and are connected by canopies to form a unified plan. Designed in the Postwar Modern style, Poly HS expresses the character-defining features of the style through its unified campus design, combination cluster-and finger-plan, low massing, flat roofs, outdoor corridors, courtyards, covered walkways, central quad, and modern materials.

Overall the permanent buildings are designed in the Postwar Modern style and are one-story (except for the Boy's Gymnasium (Building 46), Girl's Gymnasium (Building 45), Cafeteria (Building 23), Auditorium (Building 1), Building 4, Building 5, and Building 59). The buildings are characterized by concrete foundations, wood-frame construction, rectangular massing and plans, veneered brick and stucco wall finishes, metal sun louvres, and simplified volumes. Design emphasis is placed on maximizing the relationship of the building interiors to the outdoors, thus the buildings have multiple windows for natural light and open out onto outdoor courtyards. The fenestration includes fixed, awning, and double-hung wood-frame windows (alteration, windows are covered with metal security screens and some windows have been removed to accommodate AC units). The majority of doors are flat-panel doors with rectangular viewing windows (alteration, windows covered by metal security screens) with wood-frame transom windows (alteration, some of the windows are covered).

*P3b. Resource Attributes: HP15. Education Facility

*P4. Resources Present: ☐Building ☐Structure ☐Object ☐Site ☒District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
Central Quad, View North (PCR 2015)

*P6. Date Constructed/Age and Sources: ☒Historic
☐Prehistoric ☐Both
1955-1957

*P7. Owner and Address:
LAUSD
3333 S. Beaudry Avenue
Los Angeles, CA 90017

*P8. Recorded by:
PCR Services
201 Santa Monica Blvd, Ste 500
Santa Monica, CA 90401

*P9. Date Recorded: 6/ 28/ 2016

*P10. Survey Type: Intensive

*P11. Report Citation: PCR Services, Preliminary Historic Resource Evaluation Report (HRE) for John H. Francis Polytechnic High Shool. Prepared for LAUSD (June 28, 2016).

*Attachments: ☐NONE ☐Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** John H. Francis Polytechnic High Shool

B1. Historic Name: John H. Francis Polytechnic High Shool
B2. Common Name: Poly High School
B3. Original Use: High School
B4. Present Use: High School
***B5. Architectural Style:** Postwar Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations)
See continuation sheets

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:** n/ a
***B8. Related Features:** None

B9a. Architect: Austin, Field and Fry
b. Builder: Unknown
***B10. Significance: Theme:** Educating the Baby Boom-The Postwar Modern, Functionalist School Plant (1945-1969)
Area: Los Angeles County
Period of Significance: 1955-1957 **Property Type:** High School **Applicable Criteria:** None
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Poly HS is representative of a Postwar Modern style school designed by the prominent Los Angeles architecture firm Austin, Field, and Fry. The period of significance is between 1956 and 1958, the span of time in which Poly HS was constructed. The school was evaluated against the theme of Educating the Baby Boom-The Postwar Modern, Functionalist School Plant (1945-1969) developed in the LAUSD Historic Context Statement. The subject school was evaluated within the context of this theme against the applicable national and state criteria. As a result of PCR's investigations, Poly HS appears ineligible under National Register and California Register criteria due insufficient historical significance and architectural merit. Therefore, PCR reaffirms the previous NRHP Status Code of 6Z assigned to the subject school during the 2013/2014 LAUSD Historic Resources Survey. Greater detail is provided on the continuation sheets.

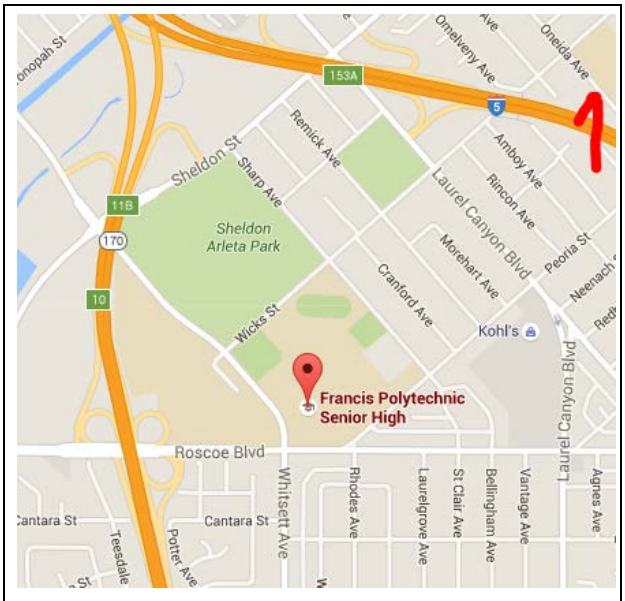
B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**
See continuation sheets

B13. Remarks:

***B14. Evaluator:** PCR Services

***Date of Evaluation:** 6/ 28/ 2016



(This space reserved for official comments.)

B6. Construction History

Historic Overview

At the close of World War II, the United States entered a period of unprecedented growth, with booms to both the economy and the population. This sudden shift from the austerity of the Great Depression and the war years into a period of great prosperity meant that demand far outstripped supply for most commodities and services, including that of public schools. This was especially true in California, which experienced not only the baby boom but an influx of new residents coming in from other states for jobs in California's various industries.[i]

In the 1950s, the population of the West San Fernando Valley was growing with extreme rapidity. The communities of Sun Valley, Northridge, Reseda, and Tarzana proved especially problematic in terms of providing adequate public school facilities for the ever-increasing number of families moving into the area. The population of these three communities exploded in a very short period, from about 32,000 in 1950 to over 80,000 by 1954. This massive increase in population resulted in numerous building projects carried out in the area by LAUSD, including the construction of a new campus for Poly HS (Figure 1) in the San Fernando Valley between 1955 and 1957, with its official opening in February 1957. Poly HS was established in 1905, with its original campus located at the corner of Washington Boulevard and Flower Street in downtown Los Angeles.[ii] Poly HS moved from its former site in 1935, and the school was renamed from Polytechnic High School to John H. Francis Polytechnic High School in honor of the school's founder and first principle.[iii]

Modern architecture came to dominate public school buildings constructed during this period, both in California and across the United States. The primary consideration in school design became function rather than style, with architects largely rejecting the historicist, hierarchical design elements that had traditionally held sway. Emphasis shifted to the experience of the pupil, and architects attempted to provide environments appropriate to the age of the student. Therefore, decentralization, informality, easy outdoor access and smaller scale prevailed. Indoor-outdoor integration of space, once considered experimental, became a staple of school design, especially in California where the climate was suited to year-round indoor-outdoor living. Modular, prefabricated design made schools more affordable and supported the design sensibilities of the period.[iv]

Two new school site plan typologies emerged in the 1940s and 1950s, the finger-plan and the cluster-plan. The finger-plan actually originated in the late 1930s, but was not fully embraced until after the end of World War II. The basic concept of this type of site plan was a layout that resembled a tree trunk with branches extending out on either side. This type of plan relied upon standardized classrooms, all with the same (preferably north) orientation, and was popular for both its flexibility and expandability. However, the design could also be difficult to adapt to different topographies, required large amounts of land, and tended to increase time spent traveling from one part of the school to another. Therefore, in the 1950s, the cluster-plan school emerged as a more universally usable and cost-effective option. Cluster-plan schools were oriented around a central courtyard, rather than along an axis. The experience of the school was therefore more communal and could also be built on smaller and more topographically varied lots. Furthermore, the plan allowed for more shared spaces and easier supervision of students. Many schools were also designed as hybrids of these two popular plans.[v]

Poly High Construction History

The initial plans for Poly HS were drawn between 1955 and 1957 by the architecture firm of Austin, Field and Fry and landscape architect Clifford G. Schoen.[vi] There are five sets of drawings archived in the LAUSD drawing archive covering the intial design of the campus spanning the period of May 1955 to December 1957. On January 2, 1955 the *Los Angeles Times* announced the first phase of the project was under construction and included an architectural rendering (Figure 1) of the proposed school.[vii] The article stated the first phase of the project would house 1,000 students, with the ultimate school capacity being 2,500 students, and cost approximately $2,500,000. Two years later, the school construction was published again in the *Los Angeles Times* on May 12, 1957 claiming all of the "administrative and classroom buildings in the $5,000,000 project have been completed and the only structure yet to be finished is the auditorium….funds for the new school were obtained from $233,000,000 Los Angeles city school bond issues approved in two elections over the past five years."[viii]

B6. Construction History (continued)

As discussed in the previous paragraph, there appears to be phases of design work covered in five sets of architectural plans. The first design phase covered in the architectural set dated May 13, 1955 included the overall layout of the campus and the plans, elevations, and sections for the Administration, Music, Homemaking, Art, Industrial Arts, Science, Agriculture, Cafeteria, Bookstore and two Classroom Buildings.[ix] The spatial layouts for the site plans for the future were indicated on the plot plans. The layout of the school was known as "campus type," where all buildings are one-story and open to outdoor hallways, and the plan was a combination of both the cluster plan and finger plan types.

The second set of plans dated January 16, 1956 provides drawings for the Boys Gymnasium and Girl's Gymnasium located in the north and northwest portions of the campus.[x] In September of 1956 two sets of drawings were produced. A set of drawings dated September 1, 1956 included the specifications for the rows of classroom buildings and Library located to the east and west of the Administration Building.[xi] This set of plans also included landscape designs by Clifford F. Schoen. Also, in 1956 a plan set was produced for the temporary buildings constructed to the west of the agricultural area. These buildings would later be replaced by a two-story classroom building built in 2005.[xii] Finally, in 1957 a set of drawings provide the specification for the Auditorium buildings added at the southern portion of the campus.[xiii] Upon completion of Poly HS, it was featured in an architectural exhibit of Austin, Field, and Fry's "buildings of special historical and architectural interest" hosted at the Building Center at 7933 W 3rd Street, Los Angeles in April of 1958.[xiv]

It appears that the school campus has undergone very few major alterations since its initial construction. In 1968, Classroom Building 39/N was added in 1968. A number of repairs were made to the Administration Building (Building 9) following a fire as specified in a November 1982 plan set.[xv] After the Northridge earthquake of 1994, repair of earthquake damage to various buildings, arcade, playground and parking was conducted.[xvi] The windows were replaced in the Cafeteria building to include new serving windows and coiling counter doors in 1996.[xvii] To the north of Building 5 and north of Building 46 (Boy's Gymnasium) portable units were added in 1962, 1972, 1997 and 2000.

Architecture Firm of Austin, Field and Fry

The architectural and engineering firm of Austin, Field, and Fry were the architects of the Poly HS. The firm was comprised of John Corneby Wilson Austin (1870-1963), Robert Alexander Field, Jr. (1902-1984), and Charles Eugene Fry (1906 - 1998) was established in Los Angeles in 1946.[xviii]

The firm's founding principal, John Corneby Wilson Austin (1870-1963), was born in Oxfordshire, England, educated at English schools, and apprenticed under the architect William Sampson Barwick. He immigrated to the United States from England in 1888. For three years, he lived in San Francisco, until 1895 when he moved to Los Angeles where he became a renowned architect and community leader. He is known to have worked briefly for the firm of Morgan and Walls before opening his own office. He worked alone and in partnership with Chauncey F. Skilling, W.C. Pennell, Frederick M. Ashley, and after the Second World War with Robert Field and Charles Fry. He was president of the first State Planning Board, member of the State Board of Architectural Examiners, president and on the board of directors of the Chamber of Commerce, member of the Royal Society of Arts in Great Britain, and fellow of the American Institute of Architects. John C. Austin died in Los Angeles on September 3, 1963.

John C. Austin, a master architect of his period, specialized in the design of large-scale civic, educational, and ecclesiastical architecture that followed the trends in architecture. He is known as one of the most important architects practicing in the Los Angeles and Southern California region during the first quarter of the 20th century. A consummate professional and interpreter of several architectural styles, Austin pledged no allegiance to any particular style. As his architectural career spanned approximately 68 years, he adapted his designs to the changing styles and attitudes in architecture. His extant ecclesiastical projects include the Gothic Revival Holliston Avenue United Methodist Church (ca. 1899), located at the northwest corner of Holliston Avenue and Colorado Boulevard, Pasadena; the shingled Gothic Grace Methodist Episcopal Church (ca. 1906) at 200 N. Saint Louis Avenue, Boyle Heights; and he collaborated with A. M. Edelman, and G. Albert Lansburgh in the design of the Moorish Revival style Shrine Auditorium, also known as the Al Malaikah Temple at 665 W Jefferson Boulevard, Los Angeles (ca. 1920-26).[xix]

Architecture Firm of Austin, Field and Fry (continued)

John C. Austin's civic projects include the Griffith Park Observatory and Planetarium (ca. 1935), and Pico Gardens Public Housing (ca. 1941-42). His educational projects include the Frank Wiggins Trade School, Los Angeles High School, Monrovia High School (ca. 1928), the Administration Building at Hamilton High School (ca. 1931), the Administration Building at John Muir Middle School (ca. 1922), Venice High School (ca. 1913-1914), Walter Reed Middle School (1939), San Fernando Middle School (ca. 1916), and the Florence Nightingale Junior High School (ca. 1937-1939). Austin was associated with Frederic Morse Ashley (1870-1960), his partner in the firm Austin and Ashley, Architects, between 1929 and 1935.[xx]

Following World War II, John C. Austin formed Austin, Field & Fry, an architecture and engineering firm, with Robert Field and Charles Fry in 1946.[xxi] Robert Field (1902-1984) was born in Chicago, Illinois in 1902, later attended Manual Art High School, Los Angeles, and graduated from University of Southern California in 1940. Charles Eugene Fry (1906-1996) was born in Los Angeles in 1906 and later attended Manual Art High School and received his B.S. in architecture at University of Southern California. In 1930, he began an apprenticeship with John C. Austin and F.M. Ashley, Architects as an Architectural Draftsman until World War II. During World War II he was in charge of airport design, construction, repairs and utilities for the United States Army Air Corps and obtained the rank of Colonel.

With their office headquartered at 2311 West 3rd Street, Austin, Field, and Fry planned and designed large-scale institutional and commercial projects including hospitals, industrial and business centers, and schools throughout Southern California. Notable projects include St. Vincent's Hospital (original 1927, additions in 1952, 1956); North American Aviation, Inc. (1957); Superior Court of California, County of Los Angeles, Courthouse #4 (1958); California Electric Power Company (1958); First Federal Savings and Loan Association of Hollywood (1959); Western and Southern Life Insurance Company (1960); Thiokol Chemical Corporation (1960); Shell Development Company (initial 1957, second unit 1962); and Josten Manufacturing Plant (1957).[xxii]

The firm specialized in the design and master planning of school campuses, elementary schools to colleges. A *Los Angeles Times* article reporting on the design of Torrance High School on July 23, 1961, noted the firm "has planned, design and engineered more than 75 major facilities at high schools and grammar schools throughout Southern California."[xxiii] Notably they designed four buildings at the University of California, Los Angeles between 1948 and 1959, including Dodd Hall (1948), Campbell Hall (1954), Humanities Building (Rolfe Hall)(1956), and Faculty Center (1959). The design of the Humanities Building won an award citation award in the education category of an architectural design competition sponsored by *Progressive Architecture*, a national architectural magazine.[xxiv] Other educational project include Highland Oaks School, Arcadia (1949);[xxv] Compton College (1953, and subsequent additions); Hugo Reid Elementary School, Arcadia (1956)[xxvi]; Otis Art Institute (1957); Newhall Elementary School, Newhall (ca. 1959)[xxvii]; Arcadia Unified School District's administration building (ca. 1961)[xxviii]; Torrance High School (ca. 191)[xxix]; redevelopment of Mt. San Antonio College (1963)[xxx]; and Alhambra High School (1964) ; Suva and La Merced for the Montebello Unified School District (ca. 1973)[xxxi] Within LAUSD, it appears Austin, Field and Fry designed a classroom building at Hamilton High School (ca. 1957) and Carson Senior High School (1969).

*Recorded by: PCR Services *Date: 6/28/2016 ☒ Continuation ☐ Update

P3a. Description (continued)

There are two school entrances (Figures 4 and 5) located near the southwest and southeast corners of the property at opposite ends. The entrances are connected by an access road that creates a division between the bottom southern end of the property, the more public sphere where the parking lots, auditorium and administration building are located, from the northern portion, the more private sphere, where the classroom buildings, gymnasiums and playing fields are located. Located in this southern portion are the Auditorium and building 2 flanked by two asphalt parking lots.

The Auditorium (Figures 6 and 7) is two-stories with an irregular T-shaped plan consisting of a rectangular portion for the back of the house functions connected to the main auditorium and stage. The Auditorium appears to be reinforced concrete construction with a smooth painted stucco finish. The primary (north) elevation is curved. The entrance story is veneered in brick while the heavy top story has regularly spaced vertical grooved recessed into the smooth concrete. Four pairs of flat-panel doors are recessed into the brick veneer interrupted by a central ticket window. To the west of the Auditorium is Building 2 (Figure 7) a simple building with a rectangular plan, covered by a shed roof, sheathed in stucco and brick veneer, and punctuated by awning windows, double hung windows, and flat panel doors.

Located across from the auditorium building, on the north side of the access road, are the Administration and Library buildings connected by an east-west canopy supported by rectangular brick veneered piers. Situated centrally between the administration and library buildings is a north-south canopy aligned extending to the main canopy that connects all the classroom buildings. This north-south canopy along with the Auditorium, Library, Administration Building, Quad, Cafeteria, and Girl's Gymnasium are arranged along a north-south access centered in the middle of the lot.

The Administration Building (Figure 8 and 9) has a rectangular plan with a central corridor and is covered by a low-pitch front gable roof. The Administration Building is veneered in brick and has window openings on the east and west elevations covered by a deep roof overhang. Located on the north and south elevation are the entrances accessed through a pair of flat panel doors with side lights and transom windows. Located to the direct east of the administration building is the library.

The Library (Figures 10 and 11) has a T-shaped plan and is veneered in brick with entrances into the Library are located on the east elevation. The other elevations have double hung windows shielded by sun louvres and brick wing walls.

The campus plan is anchored by a polygon shaped Central Quad (Figures 12 and 13). The quad is framed by covered walkways supported by slender metal posts, with the exception of the covered walkway at the north end attached to the cafeteria (Building 23), which is supported by rectangular brick veneered piers. The covered walkway is an important architectural feature that unifies the campus, provides access between buildings, defines the relationship of buildings and spaces, and provides a transition between indoor and outdoor space. At the south end of the quad is a concrete platform stage framed by an ornamental brick wall and at the north end is the Cafeteria Building 23. The Central Quad has concrete walkways stretching across the polygon at all five points and the spaces created between the walkways are planted with grass.

Along the southeast and southwest sides of the quad are classroom buildings radiating out from the covered walkways at a forty-five degree angle arranged in a finger plan. The southwest side has four classroom buildings (Buildings 6, 7, and 8), while the southeast side has six classroom buildings (Buildings 25, 26, 27, 28, 29, 30) arranged in three rows of two and one classroom building (Building 31) much wider with an interior hallway. Each row of classroom buildings has a sanitary building attached to the north end via a covered walkway that unites the classroom buildings and overall campus together. The classroom buildings have single-door openings, lockers, and clerestory windows shielded by sun louvres and a deep roof overhang supported by rectangular piers on the south elevations, while the opposite side is punctuated with double-hung wood-frame windows. The classrooms are sheathed with stucco and brick veneer and covered by flat roofs, except for Building 31 that has a front-gable roof and is completely veneered in brick. Representative photographs of the classroom buildings are provided in Figures 14 to 17 below. Classroom Buildings 6, 7 and 8 are protected from the street by two-story Buildings 4 and 5 (Figures 18 and 19) and are articulated with the same architectural details as the classroom buildings described above. Connected to the east elevation of Building 5 are Buildings 12 and 13.

*Recorded by: PCR Services *Date: 6/28/2016 ☒ Continuation ☐ Update

P3a. Description (continued)

Anchoring the north side of the quad is the Cafeteria. The two-story Cafeteria (Figures 20 to 23) has a rectangular plan, veneered with brick and is devoid of excess ornamentation. Attached to the south elevation is a canopy supported by large rectangular piers. The lunch shelter supported by square metal columns is attached to the west and rear (north) elevations under which there are pairs of double doors and lunch counter windows (alteration, replaced). In front of the lunch shelter is a row of three square planter boxes with trees and Building 22, the Student Store building.

Located directly behind the Cafeteria is the Girl's Gymnasium. The Girl's Gymnasium (Figures 24 to 25) has a rectangular plan and massing and is composed of at least three rectangular volumes. Veneered in brick, the primary two-story volume housing the gymnasium are onmented with concrete piers spaced at regular intervals. The rear and side elevations have awning and double-hung windows, as well as single and double flat panel doors some with transom windows.

To the northeast of the quad is the one-and-two story utility building, Building 24. Veneered in brick and sheathed in stucco, Building 24 (Figure 26) has an irregular plan with a curved wall wrapping from the east to north elevations. Building 24 has louvre windows, flat panel doors, and awning and double-hung windows.

The Boy's Gymnasium is located to the west of the Cafeteria and Girl's Gymnasium, has a rectangular plan, and is veneered in brick (alteration, some of the brick has been poorly patched). The Boy's gymnasium (Figures 27 and 28) is composed of four square volumes with varying heights, the tallest and largest volume containing the main gymnasium space. The gymnasium volume has concrete piers spaced at regular intervals embellishing the second floor of all four elevations. A canopy is attached to the primary elevation under which there are a number of opening, single and double panel doors, into the various spaces. The side and rear elevations have awning and double-hung windows (alteration, covered by metal security screens).

The Agricultural Area (Figures 29 to 30) is located at the southeast corner of the school site and is a rectangular parcel of land. Within the agricultural area are four simple buildings (Buildings 40, 41, 42, 43) constructed between 1956 and 1957. This area is improved with many mature palm trees and planting beds.

Integrity Analysis

Poly HS retains all seven aspects of integrity from its period of significance (1956-1958): location, materials, workmanship, design, setting, feeling, and association. The school occupies its original location. Regarding setting, the school retains its original setting including the landscape, canopies, relationship between the buildings and open space, and surrounding neighborhood context. The subject school expresses the Postwar Modern architectural aesthetic of simplicity of design, emphasis on the relationship of the buildings to the outdoors, geometric forms, and a unified site plan. Regarding materials, design and workmanship, Poly HS retains the majority of its character-defining buildings, features, spaces, materials, and overall plan. Alterations include the installation of metal security screens, infill of window openings with AC equipment, painting over of windows, handicap upgrades, painting over and patching of brick veneer, and replacement of the cafeteria serving windows. The overall plan of the school remains intact despite some open spaces being filled in with relocatable buildings. Despite these alterations, Poly HS retains integrity of materials, design and workmanship. Because the school has changed minimally since it was constructed between 1956 and 1958, it continues to express the aesthetic and historic feeling of a Postwar era school designed by Austin, Field and Fry and retains integrity of feeling. As a result, Poly HS conveys historical associations under the theme of Educating the Baby Boom-The Postwar Modern, Functionalist School Plant (1945-1969) developed within the LAUSD Historic Context Statement.

*Recorded by: PCR Services *Date: 6/28/2016 ☒ Continuation ☐ Update

B10. Significance (continued)

In regards to the broad patterns of history, Poly HS does not reach the threshold for significance under Criterion A of the National Register or Criterion 1 of the California Register. Poly HS was constructed during a period of accelerated growth in Los Angeles. During the Postwar period, Los Angeles quickly grew outward and expanded into the San Fernando Valley where farmland was redeveloped into housing subdivisions. Because of the rapid increase in population in the San Fernando Valley, there was an increased demand for schools and as a result Poly HS was one of many new schools constructed in the San Fernando Valley during this period of accelerated growth. While Poly HS reflects a pattern of increased Postwar development resulting from the suburbanization of the San Fernando Valley, Poly HS does not appear to have made a significant contribution to the broad patterns of our history. The construction of Poly HS was part of the larger development of the San Fernando Valley and its completion was not an important event, milestone or factor driving the Valley's popularity and exponential growth. Furthermore, it appears the design finger-plan and cluster-plan hybrid design of Poly HS did not influence the designs of other District schools, as these plan types were already established in the District by the time the construction of Poly HS in its entirety was completed in 1958.

Poly HS does not appear to satisfy National Register Criterion B or California Register Criterion 2 for eligibility related to a historic personage. Research within the *Los Angeles Times* and other databases has not identified Poly HS with the productive life of any significant individual District teachers, principals, administrators, students, or any other persons important in our past.

With regard to architecture, design or construction, Poly HS retains integrity and embodies the character-defining features of a Postwar Modern functionalist campus, such as the unified campus design, combination cluster-and finger plan, low massing, flat roofs, integration of outdoor rooms, corridors connecting buildings, central quad, and modern use of brick. While Poly HS represents the Postwar design trends for high schools, Poly HS does not appear to be a distinctive or innovative example of a Mid-Century Modern style campus. There are other more notable examples of Postwar Modern junior and high schools in the LAUSD constructed during the same period, such as Chatsworth Senior High School, Palisades Senior High School, Grover Cleveland High School, and Marina del Rey Junior High School. Furthermore, it appears there are better examples of the finger-and-cluster plan hybrid within the District, such as Sumner Spaulding and John Rex's Orville's design for Wright Middle School (originally Westchester High School) constructed between 1948 and 1952 and Roland H. Crawford's design for George K. Porter Middle High constructed in 1959. Both of these schools were designed by master architects who established architectural trends for school design and could be referred to as master architects. It appears the Austin, Field, and Fry, the architecture firm responsible for the design of Poly HS, was influenced by the Postwar designs established by other architects within the District, in addition to trends popularized in architectural journals.

While Poly HS was designed by Austin, Field and Fry, a prominent Southern California architectural firm, they were responsible for the design, planning, and engineering of over 75 educational projects throughout the firm's accomplished career. Within their overall body of work, Poly HS appears to be a representative example of their educational architecture and master planning of the mid to late 1950s, but does not appear to rise to the threshold of one of their better works. Their more notable educational projects include Compton College (1953, and subsequent additions); Otis Art Institute (1957); Mt. San Antonio College (1963); and Alhambra High School (1964); and four buildings for UCLA, Dodd Hall, Campbell Hall, Humanities Building and the Faculty Center, designed between 1948 and 1959. For the design of the Humanities building UCLA, Austin, Field, and Fry won accolades from *Progressive Architecture*. Within the larger context of Austin, Field, and Fry's educational and institutional architecture, Poly HS does not appear to be a distinctive or notable project. Therefore, it appears Poly HS is not a notable work of the architecture firm of Austin, Field and Fry, and is not a distinctive example of a Postwar Modern functional campus. Thus, Poly HS is ineligible for listing under National Register Criterion C and California Criterion 3 for its architecture.

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Figures

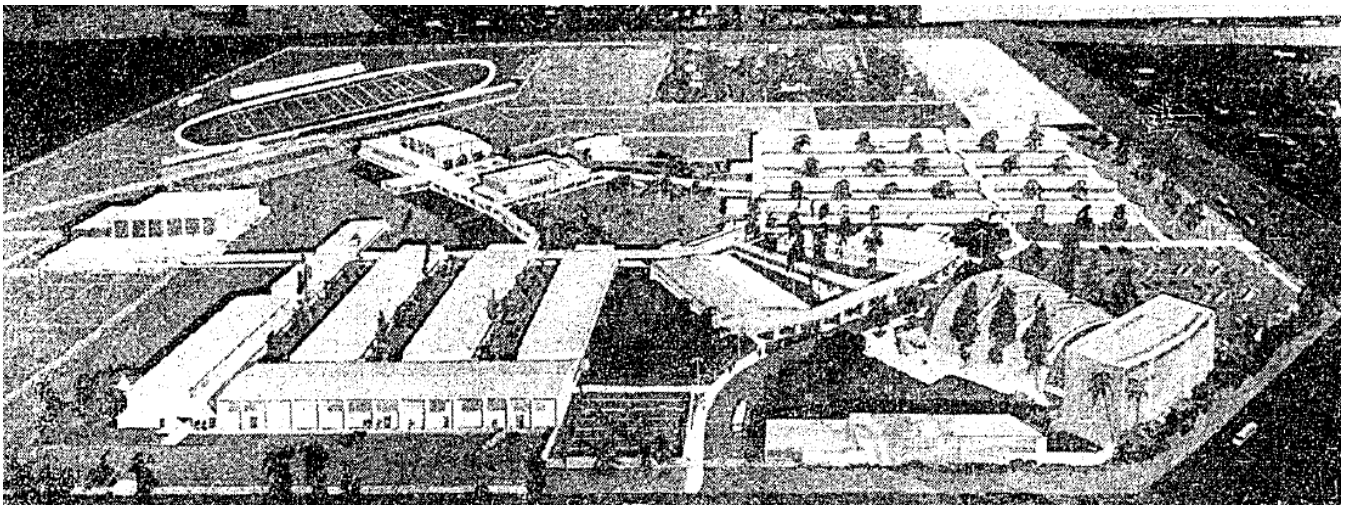


Figure 1. Rendering of Poly HS Published in the *Los Angeles Times*, 1955
("Great New School," Los Angeles Times (January 2, 1955): F1.)

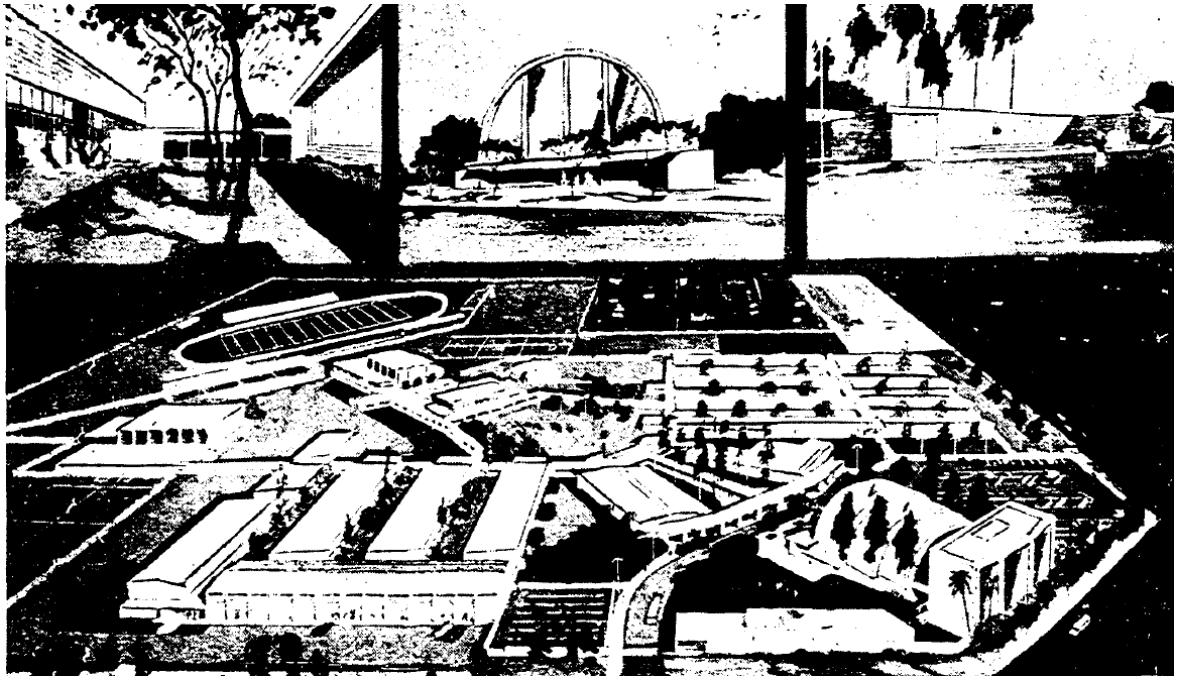


Figure 2. Rendering of Poly HS Published in the *Los Angels Times*, 1957
("Sun Valley Project," Los Angeles Times (May 12, 1957): F1.)

Figures



Figure 3. Current Aerial of Poly HS with Building Numbers

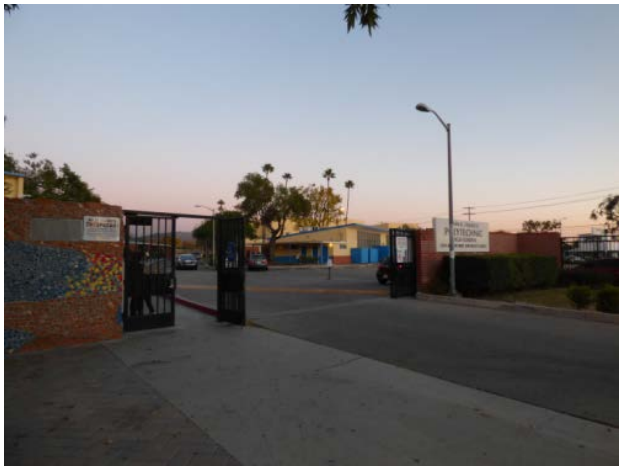




Figure 4 (Left). Southwest Entrance, View Northeast
Figure 5 (Right). Southeast Entrance, View Northwest

Figures





Figure 6 (Left). Auditorium and Building 2, View Southeast
Figure 7 (Right). Primary Elevation of Auditorium, View South





Figure 8 (Left). Administration Building, Primary Entrance on South Elevation, View Northeast
Figure 9 (Right). Side (East) Elevation and North Elevation, View Southwest





Figure 10 (Left). South and East Elevations of Library, View North West
Figure 11 (Right). East Elevation of Library, View West

Figures




Figure 12 (Left). Central Quad, View South Towards Stage
Figure 13 (Right). Quad, View Northwest




Figure 14 (Left). South Elevation of Building 8, View Southwest
Figure 15 (Right). North Elevation of Building 7, View Southwest




Figure 16 (Left). Buildings 25 to 31, Building 31 in Forefront, View Northwest
Figure 17 (Right). Building 28, View East

Figures




Figure 18 (Left). Rear Elevations of Buildings 5 and 4, View East
Figure 19 (Right). South Elevation of Building 5, View North




Figure 20 (Left). South Elevation of Cafeteria, View North
Figure 21 (Right). View of Cafeteria, Building 22 and Girl's Gymnasium, View Northwest




Figure 22 (Left). Lunch Shelter, View Southwest
Figure 23 (Right). Underneath Lunch Shelter and West Elevation of Cafeteria, View East

Figures

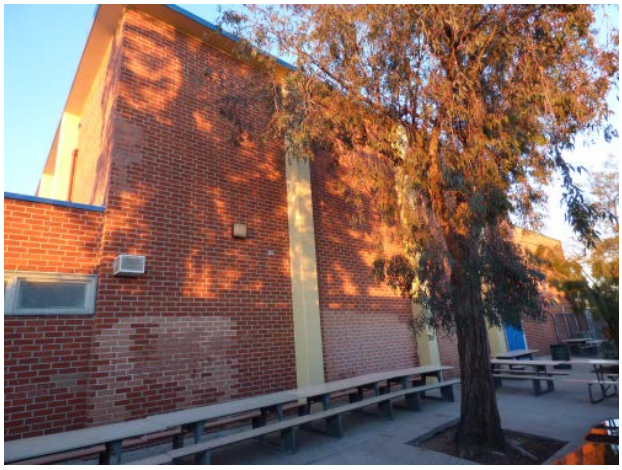



Figure 24 (Left) South Elevation of Girl's Gymnasium, View North
Figure 25 (Right). East and Elevation of Girl's Gymnasium, View Southwest



Figure 26. Utility Building, View South




Figure 27 (Left). Primary (South) Elevation of Boy's Gymnasium, View North
Figure 28 (Right). Side (East) and Rear (North) Elevation of Boy's Gymnasium, View Southwest

Figures





Figure 29 (Left). Agricultural Area, View Northeast
Figure 30 (Right). Agricultural Area, View Southeast

[i] Sapphos Environmental, Inc., *Los Angeles Unified School District: Historic Context Statement, 1870 to 1969* (March 2014): 71.
[ii] Poly HS originally opened in 1897 as a commercial branch of Los Angeles High School, the only high school at the time in LA. This campus was located on South Beaudry Avenue in Los Angeles. In 1905, the school moved to the corner of Washington Boulevard and Flower Street, also in downtown Los Angeles.
[iii] "About US," Francis Polytechnic Senior High, http://www.polyhigh.org/about_us.jsp?rn=2995860, accessed January 12, 2016.
[iv]Sapphos Environmental, Inc., *Los Angeles Unified School District: Historic Context Statement, 1870 to 1969* (March 2014): 73-81.
[v] Ibid., 82-93.
[vi] 6700.03.000 December 1, 1953, New Plant – (Role #1 – SHTS 1-114)
[vii] "Great New School," *Los Angeles Times* (January 2, 1955): F1.
[viii] "Sun Valley Project," *Los Angeles Times* (May 12, 1957): F1.
[ix] Drawing Set Number 8636.03, DSA Number A12575, New Plant (ADM, Music, Homemaking, Art, Industrial Arts, Science, Agriculture, Cafeteria Buildings), LAUSD Drawing Archive – Vault, May 13, 1955.
[x] Drawing Set Number 8636.04, DSA Number A13586, Boys Gymnasium and Girls Gymnasium, LAUSD Drawing Archive – Vault, January 16, 1956
[xi] Drawing Set Number 8636.06, DSA Number A14460, New Facilities (Music, Homemaking, Art, Business, Classroom, Industrial Arts, Library, Science, Lath, Booths), LAUSD Drawing Archive – Vault, September 1, 1956
[xii] Drawing Set Number 8636.05, DSA Number A14979 A14980, New 1956 type classroom (AA-1564 Thru AA-1568) and sanitary (J-240) buildings, LAUSD Drawing Archive – Vault, September 18, 1956
[xiii] Drawing Set Number 8636.08, DSA Number A16326, Auditorium Building, LAUSD Drawing Archive – Vault, December 1, 1957
[xiv] "Architectural Display Reflects State History," *Los Angeles Times* (April 6, 1958): F6.
[xv] Drawing Set Number 8636.12, DSA Number A44358, Fire Damage Repairs to Administration Building, LAUSD Drawing Archive – Vault, November 1, 1982
[xvi] Drawing Set Number 8636.15, Earthquake damage repair to various buildings, arcade, playground and parking, LAUSD Drawing Archive – Vault, March 1, 1995
[xvii] Drawing Set Number 8636.VG.880, Replace serving windows and new coiling counter doors in cafeteria building, LAUSD Drawing Archive – Vault, May 1, 1996.
[xviii] John Corneby Wilson Austin, ID 107, https://digital.lib.washington.edu/architect/architects/107/, Pacific Coast Architecture Database (PCAD), accessed January 10, 2012.
Robert Alexander Field, ID 4721Jr.Pacific Coast Architecture Database (PCAD), https://digital.lib.washington.edu/architect/architects/4721/, accessed January 10, 2012.
Charles Eugene Fry, ID 3557, Pacific Coast Architecture Database (PCAD), https://digital.lib.washington.edu/architect/architects/3557/, accessed January 10, 2012.
AIA Membership Files.
[xix] David Gebhard and Robert Winter, *An Architectural Guide to Los Angeles* (Salt Lake City: Gibbs Smith Publishers) 2003.
"Large Local Projects Planned by J. C. Austin." *Los Angeles Times* (February 10, 1938): 7.
[xx] The Getty Grant Program. *Historic Schools of the Los Angeles Unified School District.* Prepared for the Los Angeles Unified School District Facilities Services Division (March 2002).
"Rites Set Today for Frederick M. Ashley," *Los Angeles Times* (February 4, 1960): B9.
[xxi] "New Partner," *Los Angeles Times* (January 14, 1979): I27.
[xxii] Austin, Field, and Fry. ID 632, Pacific Coast Architecture Database (PCAD), https://digital.lib.washington.edu/architect/partners/632/, accessed January 10, 2012.
Charles Eugene Fry, AIA Membership File.
[xxiii] "High School Planned for Torrance District," *Los Angeles Times* (July 23, 1961): I24.
[xxiv] "Citation Won by Architects," *Los Angeles Times* (January 31, 1954): E11.
[xxv] "Arcadia School Bids to be Called," *Los Angeles Times* (December 28, 1949): B4.
[xxvi] "A Million Must go to School," *Los Angeles Times* (January 3, 1956): D48.
[xxvii] "$800,000 Project: New Grade School Slated for Newhall," *Los Angeles Times* (March 8, 1959): G19.
[xxviii] "Architects Selected for School Design," *Los Angeles Times* (February 12, 1961): P18.
[xxix] "High School Planned for Torrance District," *Los Angeles Times* (July 23, 1961): I24.
[xxx] "Redevelopment of Campus Planned," *Los Angeles Times* (October 28, 1956): F11.
[xxxi] "School Dispenses with Walls, Slashes Costs," *Los Angeles Times* (July 15, 1973): K21.

ATTACHMENT C – PROFESSIONAL QUALIFICATIONS

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code | Reviewer | Date

*Resource Name or #: John H. Francis Polytechnic High School

P1. Other Identifier:

*P2. Location: ☐ Not for Publication ☒ Unrestricted *a. County: Los Angeles

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad: Date: T ; R ; ¼ of ¼ of Sec ; M.D. B.M.

c. Address: 123431 Roscoe Boulevard City: Sun Valley Zip: 91352

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Poly HS is sited on a 37.20-acres irregular-shaped lot, almost a polygon, improved with Mid-Century Modern style one-story campus type classroom buildings, an auditorium, cafeteria, library, and a boys and girls gymnasium. The rear of the property is improved with athletic fields, asphalt playgrounds, and tennis courts. The site plan turns inward on itself with permanent school buildings arranged in a combination cluster- and finger-plan within the southern portion of the lot. The buildings are grouped by function and are connected by canopies to form a unified plan. Designed in the Postwar Modern style, Poly HS expresses the character-defining features of the style through its unified campus design, combination cluster-and finger-plan, low massing, flat roofs, outdoor corridors, courtyards, covered walkways, central quad, and modern materials.

Overall the permanent buildings are designed in the Postwar Modern style and are one-story (except for the Boy's Gymnasium (Building 46), Girl's Gymnasium (Building 45), Cafeteria (Building 23), Auditorium (Building 1), Building 4, Building 5, and Building 59). The buildings are characterized by concrete foundations, wood-frame construction, rectangular massing and plans, veneered brick and stucco wall finishes, metal sun louvres, and simplified volumes. Design emphasis is placed on maximizing the relationship of the building interiors to the outdoors, thus the buildings have multiple windows for natural light and open out onto outdoor courtyards. The fenestration includes fixed, awning, and double-hung wood-frame windows (alteration, windows are covered with metal security screens and some windows have been removed to accommodate AC units). The majority of doors are flat-panel doors with rectangular viewing windows (alteration, windows covered by metal security screens) with wood-frame transom windows (alteration, some of the windows are covered).

*P3b. Resource Attributes: HP15. Education Facility

*P4. Resources Present: ☐Building ☐Structure ☐Object ☐Site ☒District ☐Element of District ☐Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)
Central Quad, View North (PCR 2015)

*P6. Date Constructed/Age and Sources: ☒Historic
☐Prehistoric ☐Both
1955-1957

*P7. Owner and Address:
LAUSD
3333 S. Beaudry Avenue
Los Angeles, CA 90017

*P8. Recorded by:
PCR Services
201 Santa Monica Blvd, Ste 500
Santa Monica, CA 90401

*P9. Date Recorded: 6/ 28/ 2016

*P10. Survey Type: Intensive

*P11. Report Citation: PCR Services, Preliminary Historic Resource Evaluation Report (HRE) for John H. Francis Polytechnic High Shool. Prepared for LAUSD (June 28, 2016).

*Attachments: ☐NONE ☐Location Map ☐Sketch Map ☒Continuation Sheet ☒Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** John H. Francis Polytechnic High Shool

B1. Historic Name: John H. Francis Polytechnic High Shool
B2. Common Name: Poly High School
B3. Original Use: High School
B4. Present Use: High School
***B5. Architectural Style:** Postwar Modern
***B6. Construction History:** (Construction date, alterations, and date of alterations)
See continuation sheets

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:** n/ a
***B8. Related Features:** None

B9a. Architect: Austin, Field and Fry
b. Builder: Unknown
***B10. Significance: Theme:** Educating the Baby Boom-The Postwar Modern, Functionalist School Plant (1945-1969)
Area: Los Angeles County
Period of Significance: 1955-1957 **Property Type:** High School **Applicable Criteria:** None
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Poly HS is representative of a Postwar Modern style school designed by the prominent Los Angeles architecture firm Austin, Field, and Fry. The period of significance is between 1956 and 1958, the span of time in which Poly HS was constructed. The school was evaluated against the theme of Educating the Baby Boom-The Postwar Modern, Functionalist School Plant (1945-1969) developed in the LAUSD Historic Context Statement. The subject school was evaluated within the context of this theme against the applicable national and state criteria. As a result of PCR's investigations, Poly HS appears ineligible under National Register and California Register criteria due insufficient historical significance and architectural merit. Therefore, PCR reaffirms the previous NRHP Status Code of 6Z assigned to the subject school during the 2013/2014 LAUSD Historic Resources Survey. Greater detail is provided on the continuation sheets.

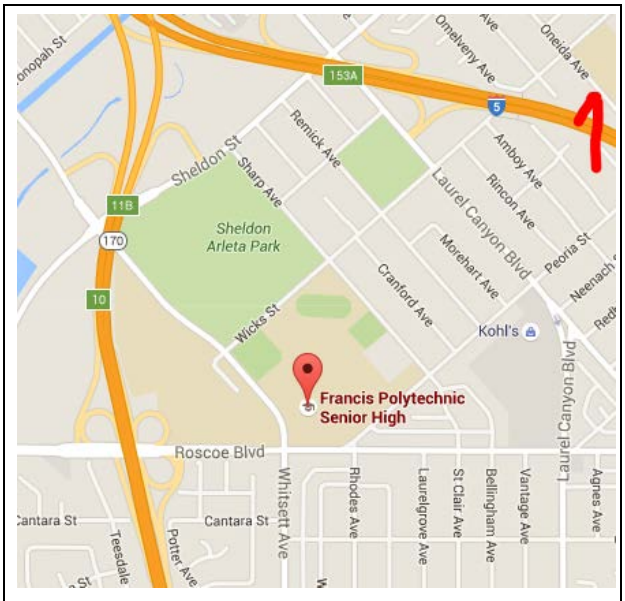
B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**
See continuation sheets

B13. Remarks:

***B14. Evaluator:** PCR Services

***Date of Evaluation:** 6/ 28/ 2016



(This space reserved for official comments.)

B6. Construction History

Historic Overview

At the close of World War II, the United States entered a period of unprecedented growth, with booms to both the economy and the population. This sudden shift from the austerity of the Great Depression and the war years into a period of great prosperity meant that demand far outstripped supply for most commodities and services, including that of public schools. This was especially true in California, which experienced not only the baby boom but an influx of new residents coming in from other states for jobs in California's various industries.[i]

In the 1950s, the population of the West San Fernando Valley was growing with extreme rapidity. The communities of Sun Valley, Northridge, Reseda, and Tarzana proved especially problematic in terms of providing adequate public school facilities for the ever-increasing number of families moving into the area. The population of these three communities exploded in a very short period, from about 32,000 in 1950 to over 80,000 by 1954. This massive increase in population resulted in numerous building projects carried out in the area by LAUSD, including the construction of a new campus for Poly HS (Figure 1) in the San Fernando Valley between 1955 and 1957, with its official opening in February 1957. Poly HS was established in 1905, with its original campus located at the corner of Washington Boulevard and Flower Street in downtown Los Angeles.[ii] Poly HS moved from its former site in 1935, and the school was renamed from Polytechnic High School to John H. Francis Polytechnic High School in honor of the school's founder and first principle.[iii]

Modern architecture came to dominate public school buildings constructed during this period, both in California and across the United States. The primary consideration in school design became function rather than style, with architects largely rejecting the historicist, hierarchical design elements that had traditionally held sway. Emphasis shifted to the experience of the pupil, and architects attempted to provide environments appropriate to the age of the student. Therefore, decentralization, informality, easy outdoor access and smaller scale prevailed. Indoor-outdoor integration of space, once considered experimental, became a staple of school design, especially in California where the climate was suited to year-round indoor-outdoor living. Modular, prefabricated design made schools more affordable and supported the design sensibilities of the period.[iv]

Two new school site plan typologies emerged in the 1940s and 1950s, the finger-plan and the cluster-plan. The finger-plan actually originated in the late 1930s, but was not fully embraced until after the end of World War II. The basic concept of this type of site plan was a layout that resembled a tree trunk with branches extending out on either side. This type of plan relied upon standardized classrooms, all with the same (preferably north) orientation, and was popular for both its flexibility and expandability. However, the design could also be difficult to adapt to different topographies, required large amounts of land, and tended to increase time spent traveling from one part of the school to another. Therefore, in the 1950s, the cluster-plan school emerged as a more universally usable and cost-effective option. Cluster-plan schools were oriented around a central courtyard, rather than along an axis. The experience of the school was therefore more communal and could also be built on smaller and more topographically varied lots. Furthermore, the plan allowed for more shared spaces and easier supervision of students. Many schools were also designed as hybrids of these two popular plans.[v]

Poly High Construction History

The initial plans for Poly HS were drawn between 1955 and 1957 by the architecture firm of Austin, Field and Fry and landscape architect Clifford G. Schoen.[vi] There are five sets of drawings archived in the LAUSD drawing archive covering the intial design of the campus spanning the period of May 1955 to December 1957. On January 2, 1955 the *Los Angeles Times* announced the first phase of the project was under construction and included an architectural rendering (Figure 1) of the proposed school.[vii] The article stated the first phase of the project would house 1,000 students, with the ultimate school capacity being 2,500 students, and cost approximately $2,500,000. Two years later, the school construction was published again in the *Los Angeles Times* on May 12, 1957 claiming all of the "administrative and classroom buildings in the $5,000,000 project have been completed and the only structure yet to be finished is the auditorium….funds for the new school were obtained from $233,000,000 Los Angeles city school bond issues approved in two elections over the past five years."[viii]

B6. Construction History (continued)

As discussed in the previous paragraph, there appears to be phases of design work covered in five sets of architectural plans. The first design phase covered in the architectural set dated May 13, 1955 included the overall layout of the campus and the plans, elevations, and sections for the Administration, Music, Homemaking, Art, Industrial Arts, Science, Agriculture, Cafeteria, Bookstore and two Classroom Buildings.[ix] The spatial layouts for the site plans for the future were indicated on the plot plans. The layout of the school was known as "campus type," where all buildings are one-story and open to outdoor hallways, and the plan was a combination of both the cluster plan and finger plan types.

The second set of plans dated January 16, 1956 provides drawings for the Boys Gymnasium and Girl's Gymnasium located in the north and northwest portions of the campus.[x] In September of 1956 two sets of drawings were produced. A set of drawings dated September 1, 1956 included the specifications for the rows of classroom buildings and Library located to the east and west of the Administration Building.[xi] This set of plans also included landscape designs by Clifford F. Schoen. Also, in 1956 a plan set was produced for the temporary buildings constructed to the west of the agricultural area. These buildings would later be replaced by a two-story classroom building built in 2005.[xii] Finally, in 1957 a set of drawings provide the specification for the Auditorium buildings added at the southern portion of the campus.[xiii] Upon completion of Poly HS, it was featured in an architectural exhibit of Austin, Field, and Fry's "buildings of special historical and architectural interest" hosted at the Building Center at 7933 W 3rd Street, Los Angeles in April of 1958.[xiv]

It appears that the school campus has undergone very few major alterations since its initial construction. In 1968, Classroom Building 39/N was added in 1968. A number of repairs were made to the Administration Building (Building 9) following a fire as specified in a November 1982 plan set.[xv] After the Northridge earthquake of 1994, repair of earthquake damage to various buildings, arcade, playground and parking was conducted.[xvi] The windows were replaced in the Cafeteria building to include new serving windows and coiling counter doors in 1996.[xvii] To the north of Building 5 and north of Building 46 (Boy's Gymnasium) portable units were added in 1962, 1972, 1997 and 2000.

Architecture Firm of Austin, Field and Fry

The architectural and engineering firm of Austin, Field, and Fry were the architects of the Poly HS. The firm was comprised of John Corneby Wilson Austin (1870-1963), Robert Alexander Field, Jr. (1902-1984), and Charles Eugene Fry (1906 - 1998) was established in Los Angeles in 1946.[xviii]

The firm's founding principal, John Corneby Wilson Austin (1870-1963), was born in Oxfordshire, England, educated at English schools, and apprenticed under the architect William Sampson Barwick. He immigrated to the United States from England in 1888. For three years, he lived in San Francisco, until 1895 when he moved to Los Angeles where he became a renowned architect and community leader. He is known to have worked briefly for the firm of Morgan and Walls before opening his own office. He worked alone and in partnership with Chauncey F. Skilling, W.C. Pennell, Frederick M. Ashley, and after the Second World War with Robert Field and Charles Fry. He was president of the first State Planning Board, member of the State Board of Architectural Examiners, president and on the board of directors of the Chamber of Commerce, member of the Royal Society of Arts in Great Britain, and fellow of the American Institute of Architects. John C. Austin died in Los Angeles on September 3, 1963.

John C. Austin, a master architect of his period, specialized in the design of large-scale civic, educational, and ecclesiastical architecture that followed the trends in architecture. He is known as one of the most important architects practicing in the Los Angeles and Southern California region during the first quarter of the 20th century. A consummate professional and interpreter of several architectural styles, Austin pledged no allegiance to any particular style. As his architectural career spanned approximately 68 years, he adapted his designs to the changing styles and attitudes in architecture. His extant ecclesiastical projects include the Gothic Revival Holliston Avenue United Methodist Church (ca. 1899), located at the northwest corner of Holliston Avenue and Colorado Boulevard, Pasadena; the shingled Gothic Grace Methodist Episcopal Church (ca. 1906) at 200 N. Saint Louis Avenue, Boyle Heights; and he collaborated with A. M. Edelman, and G. Albert Lansburgh in the design of the Moorish Revival style Shrine Auditorium, also known as the Al Malaikah Temple at 665 W Jefferson Boulevard, Los Angeles (ca. 1920-26).[xix]

Architecture Firm of Austin, Field and Fry (continued)

John C. Austin's civic projects include the Griffith Park Observatory and Planetarium (ca. 1935), and Pico Gardens Public Housing (ca. 1941-42). His educational projects include the Frank Wiggins Trade School, Los Angeles High School, Monrovia High School (ca. 1928), the Administration Building at Hamilton High School (ca. 1931), the Administration Building at John Muir Middle School (ca. 1922), Venice High School (ca. 1913-1914), Walter Reed Middle School (1939), San Fernando Middle School (ca. 1916), and the Florence Nightingale Junior High School (ca. 1937-1939). Austin was associated with Frederic Morse Ashley (1870-1960), his partner in the firm Austin and Ashley, Architects, between 1929 and 1935.[xx]

Following World War II, John C. Austin formed Austin, Field & Fry, an architecture and engineering firm, with Robert Field and Charles Fry in 1946.[xxi] Robert Field (1902-1984) was born in Chicago, Illinois in 1902, later attended Manual Art High School, Los Angeles, and graduated from University of Southern California in 1940. Charles Eugene Fry (1906-1996) was born in Los Angeles in 1906 and later attended Manual Art High School and received his B.S. in architecture at University of Southern California. In 1930, he began an apprenticeship with John C. Austin and F.M. Ashley, Architects as an Architectural Draftsman until World War II. During World War II he was in charge of airport design, construction, repairs and utilities for the United States Army Air Corps and obtained the rank of Colonel.

With their office headquartered at 2311 West 3rd Street, Austin, Field, and Fry planned and designed large-scale institutional and commercial projects including hospitals, industrial and business centers, and schools throughout Southern California. Notable projects include St. Vincent's Hospital (original 1927, additions in 1952, 1956); North American Aviation, Inc. (1957); Superior Court of California, County of Los Angeles, Courthouse #4 (1958); California Electric Power Company (1958); First Federal Savings and Loan Association of Hollywood (1959); Western and Southern Life Insurance Company (1960); Thiokol Chemical Corporation (1960); Shell Development Company (initial 1957, second unit 1962); and Josten Manufacturing Plant (1957).[xxii]

The firm specialized in the design and master planning of school campuses, elementary schools to colleges. A *Los Angeles Times* article reporting on the design of Torrance High School on July 23, 1961, noted the firm "has planned, design and engineered more than 75 major facilities at high schools and grammar schools throughout Southern California."[xxiii] Notably they designed four buildings at the University of California, Los Angeles between 1948 and 1959, including Dodd Hall (1948), Campbell Hall (1954), Humanities Building (Rolfe Hall)(1956), and Faculty Center (1959). The design of the Humanities Building won an award citation award in the education category of an architectural design competition sponsored by *Progressive Architecture*, a national architectural magazine.[xxiv] Other educational project include Highland Oaks School, Arcadia (1949);[xxv] Compton College (1953, and subsequent additions); Hugo Reid Elementary School, Arcadia (1956)[xxvi]; Otis Art Institute (1957); Newhall Elementary School, Newhall (ca. 1959)[xxvii]; Arcadia Unified School District's administration building (ca. 1961)[xxviii]; Torrance High School (ca. 191)[xxix]; redevelopment of Mt. San Antonio College (1963)[xxx]; and Alhambra High School (1964) ; Suva and La Merced for the Montebello Unified School District (ca. 1973)[xxxi] Within LAUSD, it appears Austin, Field and Fry designed a classroom building at Hamilton High School (ca. 1957) and Carson Senior High School (1969).

*Recorded by: PCR Services *Date: 6/28/2016 ☒ Continuation ☐ Update

P3a. Description (continued)

There are two school entrances (Figures 4 and 5) located near the southwest and southeast corners of the property at opposite ends. The entrances are connected by an access road that creates a division between the bottom southern end of the property, the more public sphere where the parking lots, auditorium and administration building are located, from the northern portion, the more private sphere, where the classroom buildings, gymnasiums and playing fields are located. Located in this southern portion are the Auditorium and building 2 flanked by two asphalt parking lots.

The Auditorium (Figures 6 and 7) is two-stories with an irregular T-shaped plan consisting of a rectangular portion for the back of the house functions connected to the main auditorium and stage. The Auditorium appears to be reinforced concrete construction with a smooth painted stucco finish. The primary (north) elevation is curved. The entrance story is veneered in brick while the heavy top story has regularly spaced vertical grooved recessed into the smooth concrete. Four pairs of flat-panel doors are recessed into the brick veneer interrupted by a central ticket window. To the west of the Auditorium is Building 2 (Figure 7) a simple building with a rectangular plan, covered by a shed roof, sheathed in stucco and brick veneer, and punctuated by awning windows, double hung windows, and flat panel doors.

Located across from the auditorium building, on the north side of the access road, are the Administration and Library buildings connected by an east-west canopy supported by rectangular brick veneered piers. Situated centrally between the administration and library buildings is a north-south canopy aligned extending to the main canopy that connects all the classroom buildings. This north-south canopy along with the Auditorium, Library, Administration Building, Quad, Cafeteria, and Girl's Gymnasium are arranged along a north-south access centered in the middle of the lot.

The Administration Building (Figure 8 and 9) has a rectangular plan with a central corridor and is covered by a low-pitch front gable roof. The Administration Building is veneered in brick and has window openings on the east and west elevations covered by a deep roof overhang. Located on the north and south elevation are the entrances accessed through a pair of flat panel doors with side lights and transom windows. Located to the direct east of the administration building is the library.

The Library (Figures 10 and 11) has a T-shaped plan and is veneered in brick with entrances into the Library are located on the east elevation. The other elevations have double hung windows shielded by sun louvres and brick wing walls.

The campus plan is anchored by a polygon shaped Central Quad (Figures 12 and 13). The quad is framed by covered walkways supported by slender metal posts, with the exception of the covered walkway at the north end attached to the cafeteria (Building 23), which is supported by rectangular brick veneered piers. The covered walkway is an important architectural feature that unifies the campus, provides access between buildings, defines the relationship of buildings and spaces, and provides a transition between indoor and outdoor space. At the south end of the quad is a concrete platform stage framed by an ornamental brick wall and at the north end is the Cafeteria Building 23. The Central Quad has concrete walkways stretching across the polygon at all five points and the spaces created between the walkways are planted with grass.

Along the southeast and southwest sides of the quad are classroom buildings radiating out from the covered walkways at a forty-five degree angle arranged in a finger plan. The southwest side has four classroom buildings (Buildings 6, 7, and 8), while the southeast side has six classroom buildings (Buildings 25, 26, 27, 28, 29, 30) arranged in three rows of two and one classroom building (Building 31) much wider with an interior hallway. Each row of classroom buildings has a sanitary building attached to the north end via a covered walkway that unites the classroom buildings and overall campus together. The classroom buildings have single-door openings, lockers, and clerestory windows shielded by sun louvres and a deep roof overhang supported by rectangular piers on the south elevations, while the opposite side is punctuated with double-hung wood-frame windows. The classrooms are sheathed with stucco and brick veneer and covered by flat roofs, except for Building 31 that has a front-gable roof and is completely veneered in brick. Representative photographs of the classroom buildings are provided in Figures 14 to 17 below. Classroom Buildings 6, 7 and 8 are protected from the street by two-story Buildings 4 and 5 (Figures 18 and 19) and are articulated with the same architectural details as the classroom buildings described above. Connected to the east elevation of Building 5 are Buildings 12 and 13.

*Recorded by: PCR Services *Date: 6/28/2016 ☒ Continuation ☐ Update

P3a. Description (continued)

Anchoring the north side of the quad is the Cafeteria. The two-story Cafeteria (Figures 20 to 23) has a rectangular plan, veneered with brick and is devoid of excess ornamentation. Attached to the south elevation is a canopy supported by large rectangular piers. The lunch shelter supported by square metal columns is attached to the west and rear (north) elevations under which there are pairs of double doors and lunch counter windows (alteration, replaced). In front of the lunch shelter is a row of three square planter boxes with trees and Building 22, the Student Store building.

Located directly behind the Cafeteria is the Girl's Gymnasium. The Girl's Gymnasium (Figures 24 to 25) has a rectangular plan and massing and is composed of at least three rectangular volumes. Veneered in brick, the primary two-story volume housing the gymnasium are onmented with concrete piers spaced at regular intervals. The rear and side elevations have awning and double-hung windows, as well as single and double flat panel doors some with transom windows.

To the northeast of the quad is the one-and-two story utility building, Building 24. Veneered in brick and sheathed in stucco, Building 24 (Figure 26) has an irregular plan with a curved wall wrapping from the east to north elevations. Building 24 has louvre windows, flat panel doors, and awning and double-hung windows.

The Boy's Gymnasium is located to the west of the Cafeteria and Girl's Gymnasium, has a rectangular plan, and is veneered in brick (alteration, some of the brick has been poorly patched). The Boy's gymnasium (Figures 27 and 28) is composed of four square volumes with varying heights, the tallest and largest volume containing the main gymnasium space. The gymnasium volume has concrete piers spaced at regular intervals embellishing the second floor of all four elevations. A canopy is attached to the primary elevation under which there are a number of opening, single and double panel doors, into the various spaces. The side and rear elevations have awning and double-hung windows (alteration, covered by metal security screens).

The Agricultural Area (Figures 29 to 30) is located at the southeast corner of the school site and is a rectangular parcel of land. Within the agricultural area are four simple buildings (Buildings 40, 41, 42, 43) constructed between 1956 and 1957. This area is improved with many mature palm trees and planting beds.

Integrity Analysis

Poly HS retains all seven aspects of integrity from its period of significance (1956-1958): location, materials, workmanship, design, setting, feeling, and association. The school occupies its original location. Regarding setting, the school retains its original setting including the landscape, canopies, relationship between the buildings and open space, and surrounding neighborhood context. The subject school expresses the Postwar Modern architectural aesthetic of simplicity of design, emphasis on the relationship of the buildings to the outdoors, geometric forms, and a unified site plan. Regarding materials, design and workmanship, Poly HS retains the majority of its character-defining buildings, features, spaces, materials, and overall plan. Alterations include the installation of metal security screens, infill of window openings with AC equipment, painting over of windows, handicap upgrades, painting over and patching of brick veneer, and replacement of the cafeteria serving windows. The overall plan of the school remains intact despite some open spaces being filled in with relocatable buildings. Despite these alterations, Poly HS retains integrity of materials, design and workmanship. Because the school has changed minimally since it was constructed between 1956 and 1958, it continues to express the aesthetic and historic feeling of a Postwar era school designed by Austin, Field and Fry and retains integrity of feeling. As a result, Poly HS conveys historical associations under the theme of Educating the Baby Boom-The Postwar Modern, Functionalist School Plant (1945-1969) developed within the LAUSD Historic Context Statement.

*Recorded by: PCR Services *Date: 6/28/2016 ☒ Continuation ☐ Update

B10. Significance (continued)

In regards to the broad patterns of history, Poly HS does not reach the threshold for significance under Criterion A of the National Register or Criterion 1 of the California Register. Poly HS was constructed during a period of accelerated growth in Los Angeles. During the Postwar period, Los Angeles quickly grew outward and expanded into the San Fernando Valley where farmland was redeveloped into housing subdivisions. Because of the rapid increase in population in the San Fernando Valley, there was an increased demand for schools and as a result Poly HS was one of many new schools constructed in the San Fernando Valley during this period of accelerated growth. While Poly HS reflects a pattern of increased Postwar development resulting from the suburbanization of the San Fernando Valley, Poly HS does not appear to have made a significant contribution to the broad patterns of our history. The construction of Poly HS was part of the larger development of the San Fernando Valley and its completion was not an important event, milestone or factor driving the Valley's popularity and exponential growth. Furthermore, it appears the design finger-plan and cluster-plan hybrid design of Poly HS did not influence the designs of other District schools, as these plan types were already established in the District by the time the construction of Poly HS in its entirety was completed in 1958.

Poly HS does not appear to satisfy National Register Criterion B or California Register Criterion 2 for eligibility related to a historic personage. Research within the *Los Angeles Times* and other databases has not identified Poly HS with the productive life of any significant individual District teachers, principals, administrators, students, or any other persons important in our past.

With regard to architecture, design or construction, Poly HS retains integrity and embodies the character-defining features of a Postwar Modern functionalist campus, such as the unified campus design, combination cluster-and finger plan, low massing, flat roofs, integration of outdoor rooms, corridors connecting buildings, central quad, and modern use of brick. While Poly HS represents the Postwar design trends for high schools, Poly HS does not appear to be a distinctive or innovative example of a Mid-Century Modern style campus. There are other more notable examples of Postwar Modern junior and high schools in the LAUSD constructed during the same period, such as Chatsworth Senior High School, Palisades Senior High School, Grover Cleveland High School, and Marina del Rey Junior High School. Furthermore, it appears there are better examples of the finger-and-cluster plan hybrid within the District, such as Sumner Spaulding and John Rex's Orville's design for Wright Middle School (originally Westchester High School) constructed between 1948 and 1952 and Roland H. Crawford's design for George K. Porter Middle High constructed in 1959. Both of these schools were designed by master architects who established architectural trends for school design and could be referred to as master architects. It appears the Austin, Field, and Fry, the architecture firm responsible for the design of Poly HS, was influenced by the Postwar designs established by other architects within the District, in addition to trends popularized in architectural journals.

While Poly HS was designed by Austin, Field and Fry, a prominent Southern California architectural firm, they were responsible for the design, planning, and engineering of over 75 educational projects throughout the firm's accomplished career. Within their overall body of work, Poly HS appears to be a representative example of their educational architecture and master planning of the mid to late 1950s, but does not appear to rise to the threshold of one of their better works. Their more notable educational projects include Compton College (1953, and subsequent additions); Otis Art Institute (1957); Mt. San Antonio College (1963); and Alhambra High School (1964); and four buildings for UCLA, Dodd Hall, Campbell Hall, Humanities Building and the Faculty Center, designed between 1948 and 1959. For the design of the Humanities building UCLA, Austin, Field, and Fry won accolades from *Progressive Architecture*. Within the larger context of Austin, Field, and Fry's educational and institutional architecture, Poly HS does not appear to be a distinctive or notable project. Therefore, it appears Poly HS is not a notable work of the architecture firm of Austin, Field and Fry, and is not a distinctive example of a Postwar Modern functional campus. Thus, Poly HS is ineligible for listing under National Register Criterion C and California Criterion 3 for its architecture.

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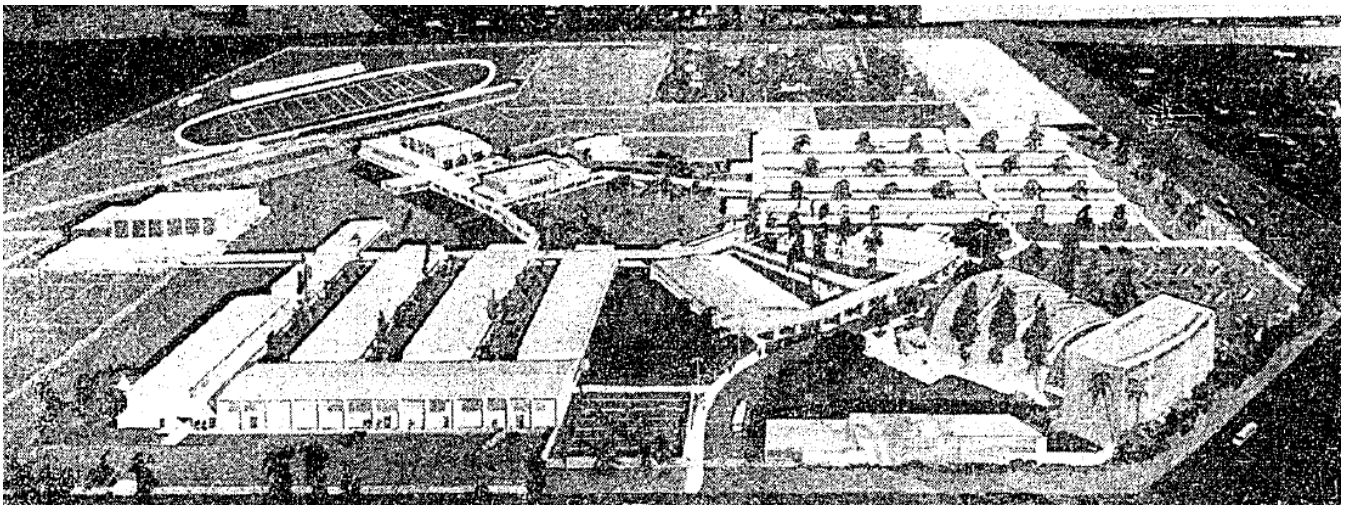

Figure 1. Rendering of Poly HS Published in the *Los Angeles Times*, 1955
("Great New School," Los Angeles Times (January 2, 1955): F1.)

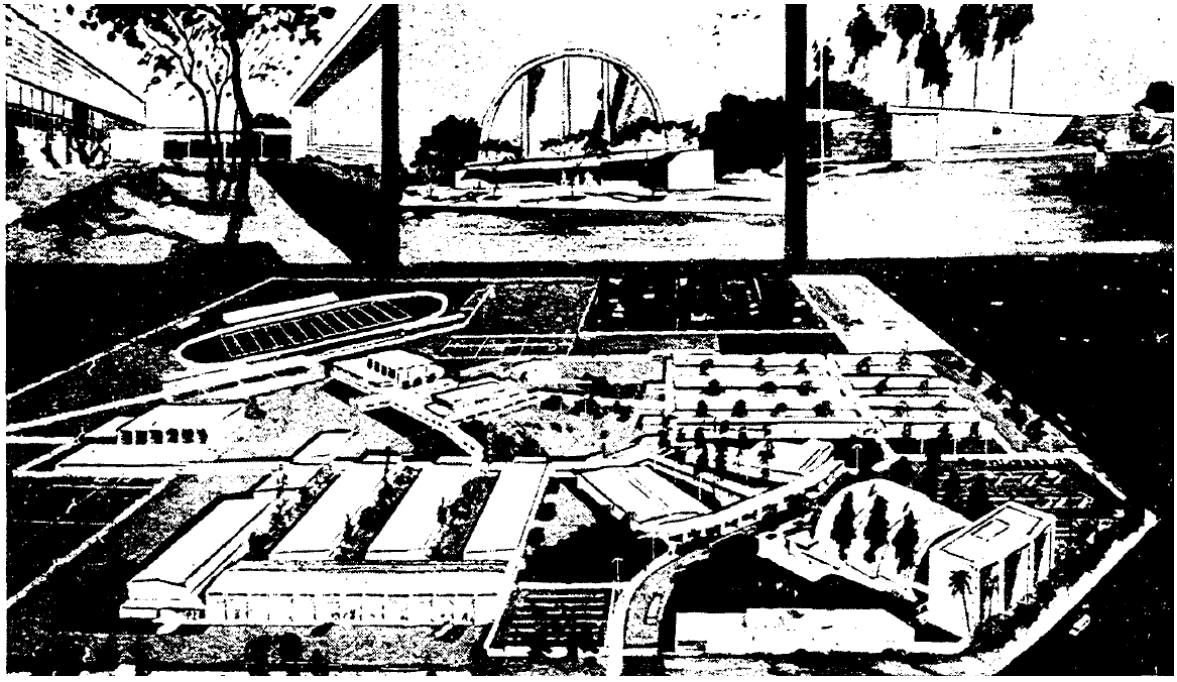

Figure 2. Rendering of Poly HS Published in the *Los Angels Times*, 1957
("Sun Valley Project," Los Angeles Times (May 12, 1957): F1.)

Figures



Figure 3. Current Aerial of Poly HS with Building Numbers

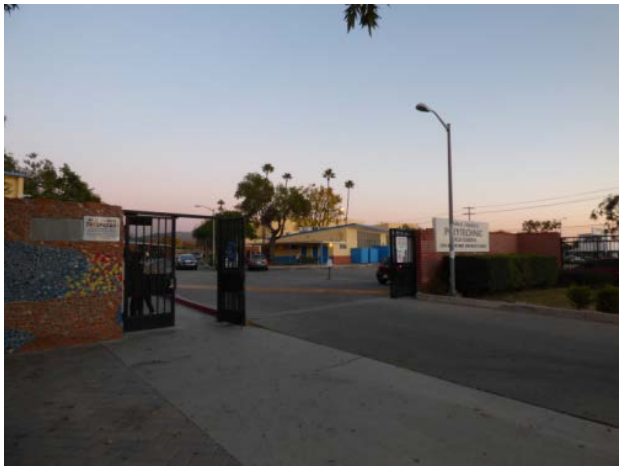



Figure 4 (Left). Southwest Entrance, View Northeast
Figure 5 (Right). Southeast Entrance, View Northwest

Figures





Figure 6 (Left). Auditorium and Building 2, View Southeast
Figure 7 (Right). Primary Elevation of Auditorium, View South





Figure 8 (Left). Administration Building, Primary Entrance on South Elevation, View Northeast
Figure 9 (Right). Side (East) Elevation and North Elevation, View Southwest





Figure 10 (Left). South and East Elevations of Library, View North West
Figure 11 (Right). East Elevation of Library, View West

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Figure 12 (Left). Central Quad, View South Towards Stage
Figure 13 (Right). Quad, View Northwest




Figure 14 (Left). South Elevation of Building 8, View Southwest
Figure 15 (Right). North Elevation of Building 7, View Southwest




Figure 16 (Left). Buildings 25 to 31, Building 31 in Forefront, View Northwest
Figure 17 (Right). Building 28, View East

Figures




Figure 18 (Left). Rear Elevations of Buildings 5 and 4, View East
Figure 19 (Right). South Elevation of Building 5, View North




Figure 20 (Left). South Elevation of Cafeteria, View North
Figure 21 (Right). View of Cafeteria, Building 22 and Girl's Gymnasium, View Northwest




Figure 22 (Left). Lunch Shelter, View Southwest
Figure 23 (Right). Underneath Lunch Shelter and West Elevation of Cafeteria, View East

Figures

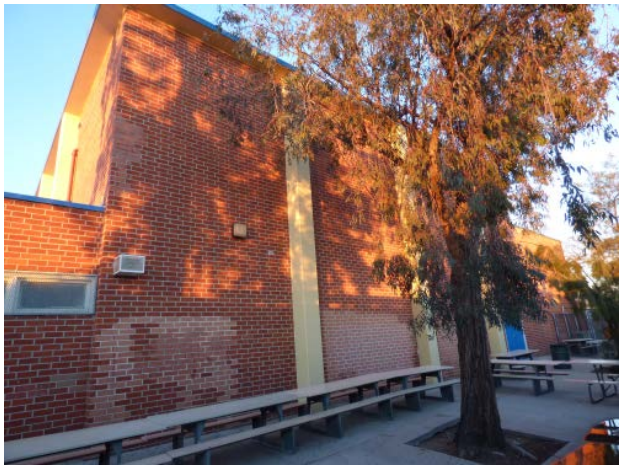


Figure 24 (Left) South Elevation of Girl's Gymnasium, View North
Figure 25 (Right). East and Elevation of Girl's Gymnasium, View Southwest



Figure 26. Utility Building, View South




Figure 27 (Left). Primary (South) Elevation of Boy's Gymnasium, View North
Figure 28 (Right). Side (East) and Rear (North) Elevation of Boy's Gymnasium, View Southwest

Figures





Figure 29 (Left). Agricultural Area, View Northeast
Figure 30 (Right). Agricultural Area, View Southeast

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[ii] Poly HS originally opened in 1897 as a commercial branch of Los Angeles High School, the only high school at the time in LA. This campus was located on South Beaudry Avenue in Los Angeles. In 1905, the school moved to the corner of Washington Boulevard and Flower Street, also in downtown Los Angeles.
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ATTACHMENT B – PROFESSIONAL QUALIFICATIONS

Margarita Jerabek, Ph.D.

ASSOCIATE PRINCIPAL, DIRECTOR OF HISTORIC RESOURCES

SUMMARY

Margarita Jerabek has 25 years of professional practice in the United States with an extensive background in historic preservation, architectural history, art history and decorative arts, and historical archaeology. She specializes in Visual Art and Culture, 19th-20th Century American Architecture, Modern and Contemporary Architecture, Architectural Theory and Criticism, Urbanism, and Cultural Landscape, and is a regional expert on Southern California architecture. Her qualifications and experience meet and exceed the Secretary of the Interior's Professional Qualification Standards in History, Archaeology, and Architectural History. She has managed and conducted a wide range of technical studies in support of environmental compliance projects, developed preservation and conservation plans, and implemented preservation treatment projects for public and private clients in California and throughout the United States.

EXPERIENCE

Dr. Jerabek has prepared a broad range of environmental documentation and conducted preservation projects throughout the Los Angeles metropolitan area and Southern California counties. She provides expert assistance to public agencies and private clients in environmental review, from due diligence through planning/design review and permitting and when necessary, implements mitigation and preservation treatment measures on behalf of her clients. As primary investigator and author of hundreds of technical reports, plan review documents, preservation and conservation plans, HABS/HAER/HALS reports, construction monitoring reports, salvage reports and relocation plans, she is a highly experienced practitioner and expert in addressing historical resources issues while supporting and balancing project goals.

She is an expert in the evaluation, management and treatment of historic properties for compliance with Sections 106 and 110 of the NHPA, NEPA, Section 4(f) of the Department of Transportation Act, CEQA, and local ordinances and planning requirements. Dr. Jerabek regularly performs assessments to ensure conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and assists clients with adaptive reuse/rehabilitation projects by providing preservation design and treatment consultation, agency coordination, legally defensible documentation, construction monitoring and conservation treatment.

She is a regional expert on Southern California architecture. She has prepared a broad range of environmental documentation and conducted preservation projects throughout the Los Angeles metropolitan area as well as in Ventura, Orange, Riverside, San Bernardino and San Diego counties. Beyond her technical skill, Dr. Jerabek is a highly experienced project manager with broad national experience throughout the United States. She currently manages PCR's on-call preservation services with the City of Santa Monica, County of San Bernardino Department of Public Works, City of Hermosa Beach, Los Angeles Unified School District, and Long Beach Unified School District.

Education

Ph.D., Art History, University of California, Los Angeles, 2005

M.A., Architectural History, School of Architecture, University of Virginia, Charlottesville, 1991

Certificate of Historic Preservation, School of Architecture, University of Virginia, Charlottesville, 1991

B.A., Art History, Oberlin College, Oberlin, Ohio, 1983

Awards/Recognition

2014 Preservation Award, *The Dunbar Hotel*, L.A. Conservancy

2014 Westside Prize, *The Dunbar Hotel*, Westside Urban Forum,

2014Design Award: *Tongva Park & Ken Genser Square*, Westside Urban Forum

2012 California Preservation Foundation Award, *RMS Queen Mary Conservation Management Plan*, California Preservation Foundation

Professional Affiliations

California Preservation Foundation

Santa Monica Conservancy

Los Angeles Conservancy

Society of Architectural Historians

National Trust for Historic Preservation Leadership Forum

American Institute of Architects (AIA), National Allied Member

American Architectural Foundation

Association for Preservation Technology

Amanda Kainer, M.S.

SENIOR ARCHITECTURAL HISTORIAN

SUMMARY

Amanda Kainer has more than eight years of professional and academic experience in the practice of historic preservation and architectural history. Ms. Kainer has conducted extensive archival research, field observation, recordation, and prepared survey documentation and assisted in database management for numerous PCR historic resources projects. She has training and substantial experience in the evaluation and conservation of art and architecture and passion for interior design.

EXPERIENCE

Ms. Kainer has completed and co-authored a wide range of architectural investigations including historic resources assessment and impacts analysis reports for compliance with CEQA, character-defining features reports, plan reviews, investment tax credit applications, Section 106 significance evaluations, and HABS documentations. She has also performed extensive research, survey work, and prepared numerous landmark and preliminary assessment reports as a part of PCR's On-Call Historic Preservation Contract with the City of Santa Monica.

She is involved a diverse set of projects and analyses. These include anything from a California Register nomination for the UCLA Faculty Center to a paint analysis for a Churrigueresque style 1920s commercial building in Santa Monica. She has co-authored Section 106 reports for the residential development in Thousand Oaks, Santa Monica Pier, Avalon Fuel Dock on Catalina Island, and a Mid-Century roadside motel in Bakersfield. For LAUSD, Ms. Kainer authored a character-defining features analysis for seven historic schools, provided historic analysis for an MND, and preliminary resource evaluations and plan reviews for various historic schools.

Historic Resources Assessments: Ms. Kainer has contributed to the research, site inspections, and report preparation of a number of historic resources assessments in the Los Angeles metropolitan area for compliance with CEQA. Ms. Kainer has evaluated a number of different types of potential historical resources, including single-family and multi-family residences, banks, commercial buildings, schools, hotels, and cultural landscapes in Beverly Hills, Venice, Los Angeles, and Santa Monica.

Large Scale Survey Experience: She was a contributing author for three major Community Redevelopment Agency of the City of Los Angeles–Adelante Eastside, Wilshire Center/Koreatown, and Normandie 5 Redevelopment Areas. Ms. Kainer also served as PCR Survey Team Leader and co-author for the comprehensive survey of over 4,000 objects of fine and decorative arts aboard the RMS Queen Mary in Long Beach. Additionally, Ms. Kainer helped complete the district-wide survey and evaluation of the Long Beach Unified School District and a windshield survey of Hermosa Beach for the Historic Resources Chapter of the Hermosa Beach General Plan Update.

Education

M.S., Historic Preservation (Emphasis: Conservation Science), Columbia University, New York, New York, 2008

B.S., Design (Emphasis: Interior Architecture), University of California, Davis, 2002

B.A., Art History, University of California, Davis, 2002

Awards/Recognition

Joel Polsky Academic Achievement Award, American Society of Interior Designers, 2008

Continuing Education

CEQA and Historic Resources: Thresholds, Mitigation & Case Studies, California Preservation Foundation Workshop, March 2011

Professional Affiliations

California Preservation Foundation

Los Angeles Conservancy

Santa Monica Conservancy (Volunteer Docent for the Shotgun House)

Docomomo SoCal

Association of Preservation Technology Western Chapter

Appendices

D.
Report of Geotechnical Investigation

Appendices

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REPORT OF GEOTECHNICAL INVESTIGATION PROPOSED SCHOOL MODERNIZATION

FRANCIS POLYTECHNIC SENIOR HIGH SCHOOL
12431 ROSCOE BOULEVARD
SUN VALLEY, CALIFORNIA

Prepared for:

LOS ANGELES UNIFIED SCHOOL DISTRICT

Los Angeles, California

November 7, 2016

Project 4953-16-1011



November 7, 2016

Mr. Peyman Soroosh Maghadam
Supervising Structural Engineer
Los Angeles Unified School District
333 South Beaudry Avenue, 22nd Floor
Los Angeles, California 90017

Subject: **LETTER OF TRANSMITTAL**
Report of Geotechnical Investigation
Proposed School Modernization
Francis Polytechnic Senior High School
12431 Roscoe Boulevard
Sun Valley, California
Amec Foster Wheeler Project 4953-16-1011

Dear Mr. Maghadam:

We are pleased to submit the results of our geotechnical investigation in support of the proposed modernization of Francis Polytechnic Senior High School in Sun Valley, California. This investigation was conducted in general accordance with our proposal dated April 10, 2015 and Task Order No. 003.01, dated August 4, 2016, under the Professional Services Agreement for Geotechnical Engineering Support Services (Contract No. 1590051/4400003490) between the Los Angeles Unified School District and our firm, dated April 1, 2015.

The scope of our services was planned with Ms. Cristina Cho of your office. Ms. Cho has furnished us with a general site plan for the planned modernization. Detailed information regarding the proposed structures, including size, location, and structural loading information, is not available at this time and will ultimately be determined by the selected design build team(s).

The results of our investigation and design recommendations are presented in this report. Please note that you or your representative should submit copies of this report to the appropriate governmental agencies for their review and approval prior to obtaining a building permit.

Correspondence:
Amec Foster Wheeler
6001 Rickenbacker Road
Los Angeles, California 90040
USA
Tel +1 (323) 889-5300
Fax +1 (323)721-6700
www.amecfw.com

It has been a pleasure to be of professional service to you. Please contact us if you have any questions or if we can be of further assistance.

Sincerely,

Amec Foster Wheeler Environment & Infrastructure, Inc.

Walter Lopez
Technical Professional Engineer II

Mark A. Murphy
Associate Geotechnical Engineer
Project Manager

Paul Elliott
Principal Engineering Geologist

Reviewed by:

Marshall Lew, Ph.D.
Principal Engineer
Vice President

P:\4953 Geotech\2016-proj\161011 LAUSD Polytechnic HS Modernization\4.0 Project Deliverables\4.1 Reports\Final Report\4953-16-1011r01.doc/WL:mm

(Submitted Electronically)

Attachments

REPORT OF GEOTECHNICAL INVESTIGATION
PROPOSED SCHOOL MODERNIZATION

FRANCIS POLYTECHNIC SENIOR HIGH SCHOOL
12431 ROSCOE BOULEVARD
SUN VALLEY, CALIFORNIA

Prepared for:

LOS ANGELES UNIFIED SCHOOL DISTRICT

Los Angeles, California

Amec Foster Wheeler

Los Angeles, California

November 7, 2016

Project 4953-16-1011

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4 Regional Geologic Map

5 Regional Fault and Seismicity Map

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7 Horizontal Response Spectra, Components of the Design Response Spectrum

EXECUTIVE SUMMARY

We have completed our geotechnical investigation for the proposed school modernization project on the campus of Francis Polytechnic Senior High School in Sun Valley, California. Our subsurface explorations, engineering analyses, and foundation design recommendations are summarized below.

The proposed modernization is planned to consist of the construction of several buildings at the site. Several existing structures will be demolished in order to accommodate the new construction. The remaining existing classroom buildings are planned to evaluated and modernized. The new buildings include an Administration Building, Library & Classroom Building, a Science & General Classroom Building, a lunch shelter, two Toilet Buildings, a Gymnasium Building, and an Auditorium & Performing Arts Building. The exact configuration of the new construction is still under development and will ultimately be determined by the selected design-build team(s). No subterranean construction is anticipated, the lowest finished floor elevations of new structures are anticipated to be at about the existing grade, and the proposed structures are anticipated to be one- to two-stories in height.

We explored the soil conditions by drilling a total of 18 borings at the site. Fill soils, up to 5½ feet thick, were encountered in our borings. The natural soils underlying the fill consist of silty sand at some locations within approximately the upper 5 feet. The fill and natural silty sand is underlain by predominantly medium dense to very dense well-graded sand with gravel and cobbles and poorly graded sand. The upper silty sand soils may be somewhat susceptible to hydroconsolidation and may become somewhat weaker and more compressible when wet. Groundwater was not encountered within the maximum 50-foot depth explored by our borings; the historic-high groundwater level is mapped at a depth of approximately 140 feet beneath the existing ground surface at the site. The corrosion tests indicate that the on-site soils are moderately corrosive to ferrous metals, aggressive to copper, and that the potential for sulfate attack on portland cement concrete is considered negligible.

Based on the available geologic data, active or potentially active faults with the potential for surface fault rupture are not known to be located directly beneath or projecting toward the site. Therefore, the potential for surface rupture due to fault plane displacement propagating to the surface at the site during the design life of the proposed project is considered low. The site could be subjected to strong ground shaking in the event of an earthquake, this hazard is common in Southern California and the effects of ground shaking can be mitigated by proper engineering design and construction in conformance with current building codes and engineering practices.

The relatively flat-lying topography at the site precludes both stability problems and the potential for lurching (earth movement at right angles to a cliff or steep slope during ground shaking). The school property is within a Methane Zone according to the City of Los Angeles. For new structures, a subsurface methane investigation would be required and if testing indicates that methane is present at the site, then a permanent methane gas control system may be necessary beneath proposed buildings at the site. According to the City and County of Los Angeles, the site is within potential dam inundation area. Dams are routinely inspected by state and federal agencies, therefore, the potential for inundation is low. The potential for other geologic-seismic hazards such as liquefaction,

tsunamis, seiches, flooding, asbestos, radon gas, and subsidence affecting the site is considered low. We estimate that the seismically-induced settlement could be on the order of ½ inch or less beneath the site in the event of maximum considered earthquake ground motions.

Records documenting the placement and compaction of the existing fill soils encountered within the project area are not available; therefore, the existing fill soils are not considered suitable for support of new structures on conventional spread/continuous footings. If the existing fill soils are excavated and replaced as properly compacted fill soils, the planned structures may be supported on conventional spread/continuous footings established on properly compacted fill soils and/or undisturbed natural soils and the floor slabs may be supported on grade. If the footings are established in the undisturbed natural well-graded or poorly graded sand materials, which may require deepening in some locations, a higher bearing value may be used in the design. The deepening of the footings could be accomplished by excavating the footing excavations to a greater depth than designed and backfilling the lower portion of the excavation with structural concrete (or sand-cement slurry containing at least 3 sacks of cement per cubic yard) up to the design bottom of footing elevation.

Ideally, to provide support for new paving and other exterior concrete walks and slabs on grade, all existing uncertified fill soils should be removed and replaced as properly compacted fill. However, if the risk of some settlement and greater than normal future maintenance is acceptable to LAUSD, then the removal of existing uncertified fill soils may be limited to the upper 2 feet beneath the pavement/slab section. However, after the 2-foot removal is completed, the exposed subgrade should be carefully observed by a representative of our firm to identify any soft areas that may require additional excavation and compaction.

We recommend that provisions for positive surface drainage away from foundations be incorporated into the site grading plans. Impoundment of stormwater run-off within the construction area should not be permitted within the immediate vicinity of the foundation construction area. We also recommend avoiding the placement of planters, underground water pipes, or any other source of additional water to the subsurface soils in the immediate vicinity of the foundations. If planter or landscaped areas are desired within 20 feet of the foundations, these areas should have impermeable bottoms. In addition, we recommend pressure testing of utility lines prior to backfilling to detect and eliminate leaks due to poor workmanship or material defects.

1.0 SCOPE

This report provided geotechnical recommendations in support of the proposed modernization of the Francis Polytechnic Senior High School campus in Sun Valley, California. The location of the site is illustrated on Figure 1, Vicinity Map. The locations of the existing buildings, our exploration borings, and the general locations of potential project elements are shown on Figure 2, Plot Plan.

We submitted the results of our preliminary geotechnical investigation for the proposed modernization in a report dated July 13, 2015 (our Job No. 4953-15-0432). The locations of our prior explorations borings are shown on Figure 2. The recommendations in the current report were developed in part using geotechnical information from our preliminary investigation.

This investigation was authorized to determine the static physical characteristics of the soils at the site, and to provide recommendations for design of foundations and minor retaining walls, for floor slab and paving support, and for grading. More specifically, the scope of our services included the following:

- Evaluate the current and previous subsurface explorations to determine the nature and stratigraphy of the subsurface soils within the subject site.
- Perform a geologic-seismic hazards evaluation in general conformance with Title 24 of the California Code of Regulations and with the California Geological Survey Checklist for Review of Geologic-Seismic Reports for California Public Schools, Hospitals, and Essential Services Buildings (CGS Note 48) to address geologic and seismic hazard considerations.
- Recommend an appropriate foundation system together with the necessary design parameters, including frictional resistance, passive resistance, and anticipated total and differential settlements.
- Determine the applicable seismic design parameters based on the current California Building Code (CBC), including a site-specific ground motion hazard analysis.
- Provide recommendations for subgrade preparation and floor slab support.
- Provide recommendations for design of minor retaining walls.

- Provide recommendations for design of asphalt and portland cement concrete paving.
- Provide recommendations for earthwork and grading.

The assessment of general site environmental conditions for the presence of contaminants in the soils and groundwater of the site was beyond the scope of this investigation.

Our recommendations are based on the results of our current and previous field explorations, laboratory tests, and appropriate engineering analyses. The results of the current field exploration and laboratory tests, which, together with the data obtained during our previous investigations, form the basis of our recommendations, are presented in Appendix A.

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing in this or similar localities. No other warranty, express or implied, is made as to the professional advice included in this report. This report has been prepared for Los Angeles Unified School District and their design consultants to be used solely for the proposed school modernization project. This report has not been prepared for use by other parties, and may not contain sufficient information for purpose of other parties or other uses.

2.0 PROJECT DESCRIPTION AND SITE CONDITIONS

The proposed modernization is planned to consist of the construction of several buildings at the site, as shown on Figure 2. Several existing structures will be demolished in order to accommodate the new construction. The remaining existing classroom buildings are planned to evaluated and modernized. The new buildings planned include an Administration Building, Library & Classroom Building, a Science & General Classroom Building, a lunch shelter, two Toilet Buildings, a Gymnasium Building, and an Auditorium & Performing Arts Building. The exact configuration of the new construction is still under development and will ultimately be determined by the selected design-build team(s).

No subterranean construction is anticipated; the lowest finished floor elevations of new structures are anticipated to be at about the existing grade. Structural loading information is not available for the proposed buildings. The buildings are anticipated to be one- to two-stories in height; accordingly, for the purposes of this report, we have assumed that the dead-plus-live column loads will not exceed approximately 200 kips.

The Francis Polytechnic Senior High School campus covers approximately 45 acres and consist of numerous structures (both permanent buildings and modular classroom buildings). The campus is mostly paved with asphalt with some landscape areas. The ground surface of the campus is relatively flat and various underground utilities cross the campus, including those associated with a methane detection system installed due to the proximity to the former Sheldon-Arleta Landfill located immediately to the northwest of the campus.

3.0 EXPLORATIONS AND LABORATORY TESTS

The soil conditions beneath the site were recently explored by drilling 10 borings to depths of 31 to 51 feet below the existing grade at the locations shown on Figure 2. In addition to the exploration borings, eight borings were drilled to depths of 15 to 20 feet below the existing grade for the purpose of determining the infiltration rate of the subsurface soils; the locations of these borings are also shown on Figure 2. Data were also available from borings drilled as part of our previous preliminary geotechnical investigation for the proposed modernization; the locations of these borings are also shown on Figure 2. Details of our current explorations and the logs of the exploration borings and infiltration test borings are presented in Appendix A. The results of our prior explorations on the campus are presented in Appendix B.

Laboratory tests were performed on selected samples obtained from our field exploration to aid in the classification of the soils and to determine the pertinent engineering properties of the foundation soils. The following tests were performed:

- Moisture content and dry density determinations.
- Fines content.
- Direct shear.
- Consolidation.
- Hydroconsolidation.
- Grain size distribution.
- Stabilometer (R-value).
- Corrosivity.

All testing was performed in general accordance with applicable ASTM specifications at the time of testing. Details of our current laboratory testing program and test results are presented in Appendix A. The results of our prior laboratory testing are presented in Appendix B.

In addition to the geotechnical laboratory testing described above, as requested, agricultural soil testing was also performed on samples obtained from our exploratory borings. The testing was performed for us by A&L Western Agricultural Laboratories. The results of the tests are presented in Appendix C.

4.0 SOIL CONDITIONS

Fill soils, up to 5½ feet thick, were encountered in our recent borings. The fill soils encountered in our borings consisted primarily of combinations of silty sand and sand with some gravel and were not uniformly well compacted. Deeper fill could occur between borings and in other unexplored areas, particularly in areas where existing buildings and utilities are present.

The natural soils underlying the fill consist of silty sand at some locations within approximately the upper 5 feet. The fill and natural silty sand is underlain by predominantly medium dense to very dense well-graded sand with gravel and cobbles and poorly graded sand. The upper silty sand soils may be somewhat susceptible to hydroconsolidation and may become somewhat weaker and more compressible when wet.

Groundwater was not encountered within the maximum 50-foot depth explored by our borings. Based on the Seismic Hazard Zone Report for the Van Nuys 7.5-Minute Quadrangle published by the California Division of Mines and Geology (CDMG, 1997), the historic-high groundwater level is at a depth of approximately 140 feet beneath the existing ground surface at the site.

The corrosion tests indicate that the on-site soils are moderately corrosive to ferrous metals, aggressive to copper, and that the potential for sulfate attack on portland cement concrete is considered negligible.

5.0 GEOLOGY

5.1 GEOLOGIC SETTING

The site is located in the eastern portion of the San Fernando Valley. The San Fernando Valley is an elliptical-shaped alluvium-filled basin, approximately 23 miles wide and 12 miles long, formed by deposition from streams and rivers that have transported sediments from the surrounding upland areas. The alluvium is mainly derived from the Santa Monica Mountains to the south, the Santa Susana Mountains to the northwest, the Simi Hills to the west, the San Gabriel Mountains to the northeast, and the Verdugo Mountains to the east.

Regionally, the site is located in the Transverse Ranges geomorphic province. This province is characterized by east-west trending geologic structures that include the east-west trending Santa Monica Mountains and the east-west trending active San Fernando fault zone. The trend of the San Fernando Valley reflects the overall trend of the Transverse Ranges, where major structural features exhibit an east-west orientation in contrast to the northwest-southeast trend that dominates in the rest of California. The San Fernando Valley is an area of compression between the San Gabriel Mountains on the northeast and the Santa Monica Mountains on the south. The east-west trend is reflected by the nearby San Fernando fault zone located approximately 4.4 miles to the north-northeast.

The site in relation to topographic features is depicted in Figure 1, Vicinity Map. The relationship of the site to the local geologic conditions is depicted in Figure 3, Local Geologic Map. Figure 4, Regional Geologic Map, shows the geology of the area on a regional scale. The location of major faults and earthquake epicenters in Southern California are shown on Figure 5, Regional Fault and Seismicity Map.

5.2 GEOLOGIC MATERIALS

Based on the materials encountered in our exploration borings, the site is locally mantled with artificial fill to a depth of 5½ feet. Deeper and undocumented fill may be encountered between borings due to prior grading. The fill consists primarily of silty sand and sand with silt and gravel, and is underlain by late Pleistocene- to Holocene-age alluvial deposits. As

encountered in our current and prior borings drilled at the campus, the alluvial deposits generally consist of poorly graded to well graded sand with varying amounts of gravel and cobbles. Below approximately 35 feet below ground surface (bgs), the sand deposits generally decrease in gravel content and increase slightly in silt content. The sandy deposits are generally medium dense to very dense.

5.3 GROUNDWATER

The site is located in the San Fernando Valley Groundwater Basin of the South Coast Hydrologic Region according to the California Department of Water Resources (DWR, 2003). According to the California Geological Survey (CGS), formerly the California Division of Mines and Geology (CDMG), the historical high groundwater level in the area is approximately 140 feet bgs (CDMG, 1997). Water level measurements for Los Angeles County Well No. 4897, located 0.1 mile northwest of the site, indicate the most recent measured depth to groundwater was 328.8 feet bgs on December 3, 2009 (County of Los Angeles, 2016). This depth corresponds to a water surface elevation of 488.2 feet above mean sea level (MSL). The shallowest water recorded in this well was measured on August 3, 1993 with a depth of 186.9 and corresponding water surface elevation of 630.1 feet above MSL. This has recorded groundwater levels from 1958 to 2009.

Groundwater was not encountered in our borings, which were drilled to a maximum depth of 51 feet bgs.

5.4 FAULTS

The numerous faults in Southern California include active, potentially active, and inactive faults. The criteria for these major groups are based on criteria developed by the CGS for the Alquist-Priolo Earthquake Fault Zoning Program (Bryant and Hart, 2007). By definition, an active fault is one that has had surface displacement within Holocene time (about the last 11,700 years). A potentially active fault is a fault that has demonstrated surface displacement of Quaternary age deposits (last 1.6 million years). Inactive faults have not moved in the last 1.6 million years. A list of nearby active faults and the distance in miles between the site and the nearest point on the fault, the maximum magnitude, and

the slip rate for the fault is given in Table 1. A similar list for potentially active faults is presented in Table 2. The faults in the vicinity of the site are shown in Figure 5, Regional Faults and Seismicity Map.

Active Faults

Verdugo Fault Zone

The closest active fault to the site, the Verdugo fault zone, is composed of several faults including the Verdugo fault, the San Rafael fault, and the Eagle Rock fault. The Verdugo fault is located approximately 1.3 miles northeast of the site. The most recent documented activity along this fault occurs in the Holocene age alluvial deposits along the western flank of the Verdugo Mountains in the Burbank area (County of Los Angeles Seismic Safety Element, 1990). Additionally, this portion of the fault is considered active by the State (Jennings and Bryant, 2010). An Alquist-Priolo Earthquake Fault Zone has not been established for the Verdugo fault by the State. According to the CGS, the Verdugo fault is capable of a magnitude 6.9 (M_w) earthquake and has a slip rate of 0.4 millimeters per year (Cao et al., 2003; Field et al., 2013).

San Fernando Fault Zone

The active Mission Wells segment of the San Fernando fault zone, located approximately 4.4 miles to the north-northeast. The San Fernando fault zone comprises one of a number of left lateral/reverse frontal faults bounding the southern margin of the San Gabriel and Santa Susana Mountains. An earthquake of magnitude 6.6 occurred along this fault zone on February 9, 1971. Surface rupture occurred along the Tujunga, Sylmar, and Mission Wells segments of the San Fernando fault zone during this earthquake. According to Cao et al., 2003, and Field et al., 2013, the San Fernando fault is capable of a magnitude 6.7 (M_w) earthquake and has a slip rate of 2.0 millimeters per year.

Santa Susana Fault

The active Santa Susana fault is part of the larger frontal Sierra Madre Fault Zone and is located approximately 6.9 miles north of the site. This fault extends northeastward from the Santa Susana Mountains across San Fernando Pass and into the San Gabriel

Mountains dipping about 80° to the north. Most of the fault is poorly exposed due to the low angle fault plane and extensive landsliding. According to the CGS, the Santa Susana is capable of a magnitude 6.7 (M_w) and has a slip rate of 6.0 millimeters per year (Cao et al., 2003; Field et al., 2013).

Sierra Madre Fault Zone

The active Sierra Madre fault is located 7.3 miles east-northeast of the proposed site. This fault zone borders the southern front of the San Gabriel Mountains and consists of a series of discontinuous reverse faults that separate pre-Tertiary crystalline rocks on the north from Tertiary and Quaternary sedimentary deposits on the south. The various faults exhibit northerly dips from 15 degrees to vertical, with the crystalline rocks thrust upward toward the south over sediments as young as mid-Pleistocene age. The Sierra Madre fault zone extends approximately 50 miles along the southern flank of the San Gabriel Mountains from Big Tujunga Canyon on the west to Cajon Pass on the east. The fault zone, which includes the active Cucamonga fault, consists of a series of reverse fault segments that are believed to have been active at different times in the geologic past (Crook et al., 1987). The moderate M5.8 1991 Sierra Madre earthquake is believed to be a result of movement on a small portion of the Sierra Madre fault zone. Recent paleoseismic investigations by Rubin et al. (1998) in Altadena have shown that the Sierra Madre fault fails in large, infrequent earthquakes. The past two ruptures in Altadena produced about 4.5 to 5 m of slip at the ground surface and occurred within the past ~18,000 years. Farther east in San Dimas, Tucker and Dolan (2001) documented the occurrence of two large-slip earthquakes during the period between ~8,000 and ~24,000 years ago. The most recent event on the eastern portion of the Sierra Madre fault zone occurred prior to ~8,000 years ago. The CGS considers the Sierra Madre fault to be capable of a magnitude 7.2 (M_w) earthquake and estimates an annual slip rate of 2 millimeters per year (Cao et al. 2003; Field et al. 2013).

San Gabriel Fault Zone

The active San Gabriel fault zone is located about 8.5 north-northeast of the site. This fault zone extends southeasterly approximately 80 miles from near Bear Mountain in Ventura County to San Antonio Canyon in San Bernardino County (Weber, 1982).

Estimates of approximately 6 miles of right lateral displacement of total offset along the fault zone have been made (Weber, 1982). The Saugus-Newhall segment of the San Gabriel fault zone is included within an Alquist-Priolo Earthquake Fault Zone. According to Cao et al., 2003 and Field et al., 2013, the San Gabriel fault is capable of a magnitude 7.2 (M_w) earthquake and has a slip rate of 0.4 millimeters per year.

Hollywood Fault

The active Hollywood fault approximately trends east-west along the base of the Santa Monica Mountains from the West Beverly Hills Lineament in the West Hollywood-Beverly Hills area (Dolan and Sieh, 1992) to the Los Feliz area of Los Angeles. The Hollywood fault zone is approximately 8.6 miles south-southeast of the site. The fault is a groundwater barrier within Holocene sediments (Converse et al., 1981). Studies by several investigators (Dolan et al., 2000a; Dolan et al., 1997; Dolan and Sieh, 1992; and Crook and Proctor, 1992) have indicated that the fault is active, based on geomorphic evidence, stratigraphic correlation between exploratory borings, and fault trenching studies. As of November 6, 2014, the Hollywood fault zone within the Hollywood 7.5 minute quadrangle has been included in an Earthquake Fault Zone by the CGS (CGS, 2014).

Until recently, the approximately 15 kilometer-long Hollywood fault zone was considered to be expressed as a series of linear scarps and faceted south-facing ridges along the south margin of the eastern Santa Monica Mountains and the Hollywood Hills. Multiple recent fault rupture hazard investigations have shown that the Hollywood fault zone is located south of the faceted ridges and bedrock outcrops along Sunset Boulevard (Harza, 1998, William Lettis & Associates, 1998). Active deposition of numerous small alluvial fans at the mountain front and a lack of fan incision suggest late Quaternary uplift of the Santa Monica Mountains along the Hollywood fault zone (Dolan et al., 2000b, Dolan et al., 1997, Dolan and Seih, 1992, Crook et al., 1983). The fault dips steeply to the north and has juxtaposed Tertiary and Cretaceous age rocks over young sedimentary deposits of the northern Los Angeles basin. The Hollywood fault zone has not produced any damaging earthquakes during the historical period and has had relatively minor micro-seismic activity. An average slip rate of 0.9 mm/yr and a maximum magnitude of 6.4 (M_w) are estimated by the CGS (Cao et al., 2003; Field et al., 2013) for the Hollywood fault.

Newport-Inglewood Fault Zone

The Newport-Inglewood fault zone is located zone is located about 9.9 miles south-southwest of the site. The Newport-Inglewood fault zone is composed of a series of discontinuous northwest-trending en echelon faults extending from Ballona Gap southeastward to the area offshore from Newport Beach. The Newport-Inglewood fault zone is reflected at the surface by a line of geomorphically young anticlinal hills and mesas formed by the folding and faulting of a thick sequence of Pleistocene age sediments and Tertiary age sedimentary rocks (Barrows, 1974). Fault-plane solutions for 39 small earthquakes (between 1977 and 1985) show mostly strike-slip faulting with some reverse faulting along the north section (north of Dominguez Hills) and some normal faulting along the south section (south of Dominguez Hills to Newport Beach) (Hauksson, 1987). Investigations by Law/Crandall (1993) in the Huntington Beach area indicate that the North Branch section of the Newport-Inglewood fault zone offsets Holocene age alluvial deposits in the vicinity of the Santa Ana River. An average slip rate of 1.0 mm/yr and a maximum magnitude of 7.1 (M_w) are estimated by the CGS (Cao et al., 2003; Field et al., 2013) for the Newport-Inglewood fault.

Raymond Fault

The Raymond fault located approximately 11 miles southeast of the site. The fault is primarily a left-lateral strike-slip fault with a minor component of high-angle reverse offset, placing basement rocks north of the fault over alluvial sediments south of the fault. The Raymond fault has long been recognized as a groundwater barrier in the Pasadena/San Marino area and numerous geomorphic features along its entire length (such as fault scarps, sag ponds, springs, and pressure ridges) attest to the fault's activity during the Holocene epoch (last 11,700 years). Within the last 36,000 to 41,000 years, five to eight separate earthquake events have been recognized along the Raymond fault (Crook et al., 1987, Weaver and Dolan, 2000). The most recent fault movement, based on radiocarbon ages from materials collected in an excavation exposing the fault, occurred sometime between 2,160 ± 105 and 1,630 ± 100 years before present (LeRoy Crandall and Associates, 1978; Crook et al., 1987; Weaver and Dolan, 2000). An average slip rate of 2.0 mm/yr and a maximum moment magnitude of 6.5 (M_w) are estimated by the CGS (Cao et al., 2003; Field et al., 2013) for the Raymond fault.

Santa Monica Fault

The north strand of the Santa Monica fault, a left lateral, reverse oblique slip fault, is located approximately 11 miles south of the project site. The Santa Monica and Hollywood fault zones form a portion of the Transverse Ranges Southern Boundary fault system. The Transverse Ranges Southern Boundary fault system also includes the Malibu Coast-Anacapa-Dume faults to the west of the Santa Monica fault and the Raymond and Cucamonga faults to the east of the Hollywood fault (Dolan et al., 2000). The Santa Monica fault zone is the western segment of the Santa Monica-Hollywood fault zone. The fault zone trends east - west from the Santa Monica coastline on the west to the Hollywood area on the east. Urbanization and development within the greater Los Angeles area has resulted in a poor understanding of the lateral extent, location, and rupture history of the Santa Monica fault zone. However, the surface expression of the Santa Monica fault zone includes fault-related geomorphic features, offset stratigraphy, and ground water barriers within late Quaternary deposits (Hill et al., 1979, and Dolan et al., 2000).

Although the Santa Monica fault is considered active, it has not yet been included in an Alquist-Priolo Earthquake Fault Zone, however, it is expected to be zoned in the near future. An average slip rate of 1.0 mm/yr and a maximum magnitude of 6.6 (M_w) are estimated by the CGS (Cao et al., 2003; Field et al., 2013) for the Santa Monica fault.

Simi-Santa Rosa Fault Zone

The active Simi fault of the Simi-Santa Rosa fault zone is located about 12 miles west-northwest of the site. The Simi fault is a left-oblique reverse fault within the Simi-Santa Rosa fault zone, a series of north dipping reverse faults (Hitchcock, et al., 2001). There have been no historic earthquakes associated with this fault. However, investigation (Hitchcock, et al. 2001) demonstrates faulting and warping of Holocene sediments. The CGS considers the Simi fault to be active and has established an Alquist-Priolo Earthquake Fault Zone for the fault. According to the CGS, the Simi-Santa Rosa fault zone is capable of a moment magnitude 7.0 (M_w) earthquake and has a slip rate of 0.7 millimeters per year (Cao et al., 2003; Field et al., 2013).

San Andreas Fault Zone

The Mojave section of the active San Andreas fault zone is located about 27 miles north-northeast of the site. This fault zone, California's most prominent geological feature, trends generally northwest for almost the entire length of the state. The 1857 Fort Tejon earthquake was the last major earthquake along the San Andreas fault zone in Southern California. According to the CGS, the Mojave section of the San Andreas fault is capable of a magnitude 7.4 (M_w) earthquake and has a slip rate of 34 millimeters per year (Cao et al., 2003; Field et al., 2013).

Blind Thrust Faults

Several buried thrust faults, commonly referred to as blind thrusts, underlie the Los Angeles Basin at depth. These faults are not exposed at the ground surface and are typically identified at depths greater than 3 kilometers. These faults do not present a potential surface fault rupture hazard. However, the following described blind thrust faults are considered active and potential sources of future earthquakes.

Northridge Thrust

The Northridge Thrust, as defined by Petersen et al. (1996), is a deep thrust fault that is considered the eastern extension of the Oak Ridge fault. The Northridge Thrust is located beneath the majority of the San Fernando Valley and was the causative fault of the January 17, 1994, magnitude 6.7 (M_w) Northridge earthquake. This thrust fault is not exposed at the surface and does not present a potential surface fault rupture hazard. However, the Northridge Thrust is an active feature that can generate future earthquakes. The closet point to the surface projection of the Northridge Thrust fault is approximately 1 mile west-northwest (WGCEP, 2016). According to the CGS, the Northridge Thrust is capable of a magnitude 7.0 (M_w) earthquake and has a slip rate of 1.5 millimeters per year (Cao et al., 2003; Field et al., 2013)

Compton Thrust

The Compton blind thrust has been defined from seismic reflection profiles and borehole data (Leon et al., 2009) as a northeast-dipping structure. This blind thrust fault system extends approximately 28 miles from southwest Los Angeles County to northern Orange County in a southeastern direction. Leon et al. (2009) has correlated blind faulting at depth to near-surface folding. Several uplift events have been observed by investigating deformed Holocene layers along buried fold scarps. The cumulative uplift from the observed events ranged from 2 to 6 feet or approximately 4 to 14 feet of thrust displacement with magnitudes (M_w) of 7.0 to 7.4 (Leon et al., 2009). Slip rate is estimated to be 0.9 mm/yr (Field et al., 2013). The closet point to the surface projection of the Compton Thrust fault is approximately 2.8 miles west-southwest (WGCEP, 2016).

Upper Elysian Park

The Upper Elysian Park fault is a blind thrust fault that overlies the Los Angeles and Santa Fe Springs segments of the Puente Hills Thrust (Oskin et al., 2000 and Shaw et al., 2002). The eastern edge of the Upper Elysian Park fault is defined by the northwest-trending Whittier fault zone. The vertical surface projection of the Upper Elysian Park fault is located about 8 miles east-southeast of the site (WGCEP, 2016). Like other blind thrust faults in the Los Angeles area, the Upper Elysian Park fault is not exposed at the surface and does not present a potential surface rupture hazard; however, the Upper Elysian Park fault is considered an active feature capable of generating future earthquakes. An average slip rate of 1.9 mm/yr and a moment magnitude of 6.4 ($M_{w)}$ are estimated by the CGS for the Upper Elysian Park fault (Cao et al., 2003; Field et al., 2013).

Puente Hills Blind Thrust

The Puente Hills Blind Thrust (PHBT) is defined based on seismic reflection profiles, petroleum well data, and precisely located seismicity (Shaw et al., 2002). This blind thrust extends eastward from downtown Los Angeles to Brea (in northern Orange County). The PHBT includes three north-dipping segments, named from east to west as the Coyote Hills segment, the Santa Fe Springs segment, and the Los Angeles segment. These segments are overlain by folds expressed at the surface as the Coyote Hills, Santa Fe Springs Anticline, and the Montebello Hills. The Santa Fe Springs segment of the PHBT

was the causative fault of the October 1, 1987 Whittier Narrows Earthquake (Shaw et al., 2002). The PHBT is located about 8.2 miles east-southeast of the site at its closest point projected to the surface (WGCEP, 2016). Postulated earthquake scenarios for the PHBT include single segment fault ruptures capable of producing an earthquake of magnitude 6.5 to 6.6 (M_w) and a multiple segment fault rupture capable of producing an earthquake of magnitude 7.1 (M_w). The PHBT is not exposed at the ground surface and does not present a potential for surface fault rupture. However, based on deformation of late Quaternary age sediments above this fault system and the occurrence of the Whittier Narrows earthquake, the PHBT is considered an active fault capable of generating future earthquakes beneath the Los Angeles Basin. An average slip rate of 0.9 mm/yr and a magnitude of 7.1 (M_w) are estimated by the CGS for the PHBT (CGS Cao et al., 2003 and Field et al., 2013).

Potentially Active Faults

Northridge Hills Fault

The closest potentially active fault to the site is the Northridge Hills fault located approximately 3.6 miles west-northwest. The Northridge Hills fault is a reverse fault and its location is based primarily on the numerous oil test holes that have been drilled in the Northridge Hills. Geomorphic evidence, such as scarps in the Pleistocene age alluvial deposits, has been identified on aerial photographs (Weber, 1980). A paleoseismic study (Baldwin et al., 2000) found evidence of monoclonal warping of relatively young (early Holocene to late Pleistocene) shallow surficial deposits. Their borehole data suggest that an unconformity developed on the Plio-Pleistocene Saugus Formation is warped into a south-facing monocline with 13 $\pm$ 2 meters of vertical separation. Evidence of surface rupture was not observed. They suggest the fault could be seismogenic, producing earthquakes of magnitude 6.0 to 6.4 (M_w), as well as undergoing secondary deformation during and/or following large magnitude earthquakes on nearby structures, such as the Northridge blind thrust.

Mission Hills Fault

The potentially active Mission Hills fault is a 6.2 mile long reverse fault in the northern San Fernando Valley extending from Pacoima to Granada Hills. It is postulated that the fault has ruptured in the late Quaternary, and possibly as recent as the Holocene. A slip rate of 0.5 mm/yr has been approximated (Southern California Earthquake Center, 2015). The Mission Hills fault is approximately 4.9 miles northwest of the site.

Chatsworth Fault

The potentially active Chatsworth fault is a 12 mile long reverse fault in the western San Fernando Valley. The fault runs northeasterly from Bell Canyon towards Chatsworth. It is north dipping and capable of a magnitude 6.0 to 6.8 ($M_{w)}$ earthquake (Southern California Earthquake Center, 2016). The Chatsworth fault is approximately 11 miles west-northwest of the site.

5.5 GEOLOGIC-SEISMIC HAZARDS

Fault Rupture

The site is not within a currently established Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards. The closest active fault to the site with the potential for surface fault rupture is the Verdugo fault zone, is located approximately 1.3 miles northeast of the site. The closest Alquist-Priolo Earthquake Fault Zone, established for a portion San Fernando fault zone, is located approximately 4.4 miles north-northeast of the site.

Based on the available geologic data, active or potentially active faults with the potential for surface fault rupture are not known to be located directly beneath or projecting toward the site. Therefore, the potential for surface rupture due to fault plane displacement propagating to the surface at the site during the design life of the proposed development is considered low.

Seismicity

Earthquake Catalog Data

The seismicity of the region surrounding the site was determined from research of an electronic database of seismic data (Southern California Seismographic Network, 2015). This database includes earthquake data compiled by the California Institute of Technology from 1932 through 2015 and data for 1812 to 1931 compiled by Richter and the U.S. National Oceanic Atmospheric Administration (NOAA). The search for earthquakes that occurred within 100 kilometers of the site indicates that 469 earthquakes of magnitude 4.0 and greater occurred from 1932 through 2016; 1 earthquake of magnitude 6.0 or greater occurred between 1906 and 1931; and 1 earthquakes of magnitude 7.0 or greater occurred between 1812 and 1905. A list of these earthquakes is presented as Table 3. Epicenters of moderate and major earthquakes (greater than magnitude 5.0) are shown in Figure 5, Regional Faults and Seismicity Map.

The information for each earthquake includes date and time in Greenwich Civil Time (GCT), location of the epicenter in latitude and longitude, quality of epicentral determination (Q), depth in kilometers, distance from the site in kilometers, and magnitude. Where a depth of 0.0 is given, the solution was based on an assumed 16-kilometer focal depth. The explanation of the letter code for the quality factor of the data is presented on the first page of the table.

Historic Earthquakes

A number of earthquakes of moderate to major magnitude have occurred in the Southern California area within the last 84 years. A partial list of these earthquakes is included in the following table.

List of Historic Earthquakes

Earthquake (Oldest to Youngest)	Date of Earthquake	Magnitude	Distance to Epicenter (miles)	Direction to Epicenter
Long Beach	11-Mar-33	6.4	48	SE
Tehachapi	21-Jul-52	7.5	64	NW
San Fernando	9-Feb-71	6.6	13	NNE
Whittier Narrows	1-Oct-87	5.9	22	SE

Sierra Madre	28-Jun-91	5.8	24	E
Landers	28-Jun-92	7.3	112	ESE
Big Bear	28-Jun-92	6.4	90	ESE
Northridge	17-Jan-94	6.7	7	W
Hector Mine	16-Oct-99	7.1	125	NE
Sierra El Mayor	4-Apr-10	7.2	239	SE
La Habra	28-Mar-14	5.1	34	SE
Borrego Springs	10-Jun-16	5.2	136	SE

The site is located in an area that has historically experienced strong ground shaking (as a result of the 1971 San Fernando and the 1994 Northridge Earthquakes) and could experience strong ground shaking in the future. However, this hazard is common in Southern California and the effects of ground shaking can be mitigated by proper engineering design and construction in conformance with current building codes and engineering practices.

Slope Stability

The relatively flat-lying topography at the site precludes both stability problems and the potential for lurching (earth movement at right angles to a cliff or steep slope during ground shaking). According to the County of Los Angeles Seismic Safety Element (1990) and the City of Los Angeles Safety Element (1996), the site is not within an area identified as having a potential for slope instability. There are no known landslides near the site, nor is the site in the path of any known or potential landslides. Additionally, the site is not located within an area identified as having a potential for seismic slope instability (CDMG, 1998).

Liquefaction and Seismic-Induced Settlement

Liquefaction potential is greatest where the groundwater level is shallow, and submerged loose, fine sands occur within a depth of about 50 feet or less. Liquefaction potential decreases as grain size and clay and gravel content increase. As ground acceleration and shaking duration increase during an earthquake, liquefaction potential increases.

According to the County of Los Angeles 2014 Draft Seismic Safety Element (2014), the City of Los Angeles (2015), and the CGS (CDMG, 1998), the site is not within an area identified as having a potential for liquefaction. Based on groundwater level

measurements in nearby wells, groundwater has historically been at a depth greater than 100 feet. Therefore, the potential for liquefaction and the associated ground deformation beneath the site is considered to be low.

Seismically-induced settlement is often caused by loose to medium-dense granular soils densified during ground shaking. Uniform settlement beneath a given structure would cause minimal damage; however, because of variations in distribution, density, and confining conditions of the soils, seismically-induced settlement is generally non-uniform and can cause serious structural damage. Dry and partially saturated soils as well as saturated granular soils are subject to seismically-induced settlement. To evaluate the site-specific potential for seismically-induced settlement above the historic-high groundwater level, we have computed the geometric mean peak ground acceleration (PGA) for the maximum considered earthquake, which is consistent with the requirements of the 2016 CBC and ASCE 7-10 for liquefaction evaluations. This ground motion was corrected to be compatible with a Magnitude 7.5 earthquake. The Magnitude 7.5-compatible PGA computed in this manner for the subject site is 0.61g for the maximum considered earthquake.

We have computed the potential for seismically-induced settlement above the postulated historic-high groundwater level in accordance with the methodology of Tokimatsu and Seed (1987) using the results of the Standard Penetration Tests (SPTs) performed in our borings performed at the site. Based on the results of our analyses, we estimate that the seismically-induced settlement could be on the order of ½ inch or less beneath the site in the event of the maximum considered earthquake. Differential seismically-induced settlement is estimated to be on the order of ¼ inch or less.

Tsunamis, Inundation, Seiches, and Flooding

The site is not within a coastal area at a median elevation of 828 feet above mean sea level (NAVD 88). Therefore, tsunamis (seismic sea waves) are not considered a hazard at the site.

According to the Safety Element of the City of Los Angeles (1996) and the Los Angeles County Safety Element (1990), the site is located within a potential dam inundation area

for the Hansen Flood Control Basin. The site could be adversely affected in the event of an earthquake-induced dam failure or seiche (wave oscillations in an enclosed or semi-enclosed body of water). However, this dam, as well as others in California, is continually monitored by various governmental agencies (such as the State of California Division of Safety of Dams and the U.S. Army Corps of Engineers) to guard against the threat of dam failure. Therefore, the potential for inundation at the site as a result of an earthquake-induced dam failure is considered low.

The site is located outside the 0.2% annual chance flood (Zone X) as designated by the Federal Emergency Management Association (FEMA, 2008). Therefore, the potential for flooding to affect the site is considered low.

Subsidence

The site is not within an area of known subsidence associated with fluid withdrawal (groundwater or petroleum), peat oxidation, or hydrocompaction.

Oil Wells

The site is not located within the limits of an oil field according to the well finder system of the California Division of Gas and Geothermal Resources (DOGGR, 2016). Plugged and abandoned oil exploration holes are not known to be located near the site; however, there is a remote possibility that undocumented wells could be encountered during construction. According to DOGGR, the closest known oil production well is approximately 3 miles southeast of the site; the well is categorized as “active producer.” Any well encountered would need to be properly abandoned in accordance with the current requirements of DOGGR.

Methane Gas

According to the City of Los Angeles (2016), the site is located within a Methane Zone due to its proximity to the former Sheldon-Arleta Landfill. Therefore, there is a potential for methane and other volatile gases to occur beneath the site. For any new structures, a subsurface methane investigation would be required and if testing indicates that methane

is present at the site, then a permanent methane gas control system may be necessary beneath proposed buildings at the site.

Volcanic Eruption

The site is not located in an area of recent volcanism. Therefore, the potential for volcanic activity is low.

Radon Gas

According to the CGS, the site is located in an area of low potential for indoor radon levels above 4.0 picocuries per liter (CGS, 2005). Therefore, the potential for radon gas to be encountered is low.

Naturally Occurring Asbestos

The site is not located in an area of naturally occurring asbestos (CGS, 2011).

5.6 GEOLOGIC CONCLUSIONS

Based on the available geologic data, active or potentially active faults with the potential for surface fault rupture are not known to be located directly beneath or projecting toward the site. Therefore, the potential for surface rupture due to fault plane displacement propagating to the surface at the site during the design life of the proposed project is considered low. The site could be subjected to strong ground shaking in the event of an earthquake, this hazard is common in Southern California and the effects of ground shaking can be mitigated by proper engineering design and construction in conformance with current building codes and engineering practices.

The relatively flat-lying topography at the site precludes both stability problems and the potential for lurching (earth movement at right angles to a cliff or steep slope during ground shaking). The school property is within a Methane Zone according to the City of Los Angeles. For any new structures, a subsurface methane investigation would be required and if testing indicates that methane is present at the site, then a permanent methane gas control system may be necessary beneath proposed buildings at the site.

According to the City and County of Los Angeles, the site is within potential dam inundation area. Dams are routinely inspected by state and federal agencies, therefore, the potential for inundation is low. The potential for other geologic-seismic hazards such as liquefaction, tsunamis, seiches, flooding, asbestos, radon gas, and subsidence affecting the site is considered low. We estimate that the seismically-induced settlement could be on the order of ½ inch or less beneath the site in the event of the maximum considered earthquake.

6.0 RECOMMENDATIONS

6.1 GENERAL

Records documenting the placement and compaction of the existing fill soils encountered within the project area are not available; therefore, the existing fill soils are not considered suitable for support of new structures on conventional spread/continuous footings. If the existing fill soils are excavated and replaced as properly compacted fill soils, the planned structures may be supported on conventional spread/continuous footings established on properly compacted fill soils and/or undisturbed natural soils and the floor slabs may be supported on grade. If the footings are established in the undisturbed natural well-graded or poorly graded sand materials, which may require deepening in some locations, a higher bearing value may be used in the design. The deepening of the footings could be accomplished by excavating the footing excavations to a greater depth than designed and backfilling the lower portion of the excavation with structural concrete (or sand-cement slurry containing at least 3 sacks of cement per cubic yard) up to the design bottom of footing elevation.

Ideally, to provide support for new paving and other exterior concrete walks and slabs on grade, all existing uncertified fill soils should be removed and replaced as properly compacted fill. However, if the risk of some settlement and greater than normal future maintenance is acceptable to LAUSD, then the removal of existing uncertified fill soils may be limited to the upper 2 feet beneath the pavement/slab section. However, after the 2-foot removal is completed, the exposed subgrade should be carefully observed by a representative of our firm to identify any soft areas that may require additional excavation and compaction.

We recommend that provisions for positive surface drainage away from foundations be incorporated into the site grading plans. Impoundment of stormwater run-off within the construction area should not be permitted within the immediate vicinity of the foundation construction area. We also recommend avoiding the placement of planters, underground water pipes, or any other source of additional water to the subsurface soils in the immediate vicinity of the foundations. If planter or landscaped areas are desired within 20 feet of the foundations, these areas should have impermeable bottoms. In addition, we

recommend pressure testing of utility lines prior to backfilling to detect and eliminate leaks due to poor workmanship or material defects.

6.2 FOUNDATIONS

Bearing Value

If the existing fill soils are excavated and replaced as properly compacted fill soils, the proposed buildings may be supported on conventional spread/continuous footings underlain by properly compacted fill and/or undisturbed natural soils. Such footings, carried at least 2 feet below the lowest adjacent grade or floor level, may be designed to impose a net dead-plus-live load pressure of 2,500 pounds per square foot.

The above bearing value may also be used for preliminary analyses of existing spread/continuous footing foundations supporting existing campus buildings. If necessary, this value can be further refined/revised based on a review of as-built drawings and/or test pits adjacent to existing foundations for specific existing structures.

Where the footings of a structure are deepened to extend into the undisturbed natural sandy soils, such spread/continuous footings carried at least 2 feet below the lowest adjacent grade or floor level may be designed to impose a net dead-plus-live load pressure of 5,000 pounds per square foot.

The excavations should be deepened as necessary to extend into satisfactory soils. A one-third increase may be used for wind or seismic loads. The recommended bearing values are net values, and the weight of concrete in the footings may be taken as 50 pounds per cubic foot; the weight of soil backfill may be neglected when determining the downward loads.

Settlement

Building settlements will depend on the magnitude of the structural loads. However, it is anticipated that the settlement of new structures, supported on spread footings in the manner recommended above, will be on the order of 1 inch or less with differential settlements on the order of ¼ inch between adjacent columns. The proposed structures

should also be designed to accommodate the dynamic settlement, as discussed previously, in addition to the static settlements given above.

Lateral Resistance

Lateral loads may be resisted by soil friction and by the passive resistance of the soils. A coefficient of friction of 0.4 may be used between the footings and the floor slab and the supporting soils. The passive resistance of the soils may be assumed to be equal to the pressure developed by a fluid with a density of 300 pounds per cubic foot. A one-third increase in the passive value may be used for wind or seismic loads. The frictional resistance and the passive resistance of the soils may be combined without reduction in determining the total lateral resistance.

Ultimate Design Factors

When considering an ultimate design approach, the recommended design values provided in the previous sections may be multiplied by the factors shown:

Design Item	Ultimate Design Factor
Bearing Value	3.0
Passive Pressure	1.5
Coefficient of Friction	1.5

In no event, however, shall foundation sizes be less than those required for dead-plus-live loads when using the working stress design values.

6.3 DYNAMIC SITE CHARACTERISTICS

Mapped Seismic Design Parameters

We have determined the seismic design parameters in accordance with the 2016 CBC and ASCE 7-10 Standard (ASCE, 2010) using the United States Geological Survey (USGS) Seismic Design Maps Web Application. The CBC Site Class was determined to be Site Class “D” based on the results of our explorations and a review of the local soil and geologic conditions. The mapped seismic parameters are presented in the following table:

Parameter	Mapped Value
S_S (0.2 second period, Site Class B)	2.26g
S_1 (1.0 second period, Site Class B)	0.84g
Site Class	D
F_a	1.0
F_v	1.5
$S_{MS} = F_a S_S$ (0.2 second period)	2.26g
$S_{M1} = F_v S_1$ (1.0 second period)	1.26g
$S_{DS} = 2/3 \times S_{MS}$ (0.2 second period)	1.51g
$S_{D1} = 2/3 \times S_{M1}$ (1.0 second period)	0.84g

By: WL 11/7/16, Checked By: MM 11/07/16

Site-Specific Ground Motion Hazard Analysis

We have performed a Probabilistic Seismic Hazard Analyses (PSHA) and a Deterministic Seismic Hazard Analyses (DSHA) using the computer program EZ-FRISK (Risk Engineering, 2014) in order to develop site-specific response spectra in accordance with the 2016 CBC and Chapter 21 of ASCE 7-10. For the DSHA, a composite deterministic response spectrum was compiled from the maximum of the 84th percentile spectral ordinates computed for known nearby faults. In addition to known fault sources, background seismicity was also included in the PSHA. The computed PSHA and DSHA ground motions were converted to maximum direction ground motions using the multiplication factors recommended in Shahi and Baker (2013).

The site-specific probabilistic and deterministic response spectra were developed using the average ground motions obtained from the Next Generation Attenuation (NGA) West1 relationships of Abrahamson and Silva (2008), Boore and Atkinson (2008), Campbell and Bozorgnia (2008), Chiou and Youngs (2008). For all four NGA relationships, we have used an average shear wave velocity in the upper 30 meters equal to 270 meters per second based on a review of the local soil and geologic conditions. We have used a depth to a shear wave velocity of 1,000 meters per second beneath the site ($Z_{1.0}$) of 600 meters and a depth to a shear wave velocity of 2,500 meters per second ($Z_{2.5}$) of 3.5 kilometers based on the available geologic data.

In accordance with Chapter 21 of ASCE 7-10, the probabilistic Risk-Targeted Maximum Considered Earthquake (MCE_R) response spectrum was taken as the maximum direction

response spectrum with a 2% probability of being exceeded in 50 years multiplied by the risk coefficients C_{RS} and C_{R1}. The risk-targeted coefficients, C_{RS} and C_{R1} were taken from Figures 22-17 and 22-18 in ASCE 7-10. The value of C_{RS} was applied for periods less than or equal to 0.2 second, the value of C_{R1} was applied for periods greater than or equal to 1.0 second, and linear interpolation was used to determine the risk coefficient between 0.2 second and 1.0 second. The C_{RS} and C_{R1} values for this project were determined to be 0.992 and 1.004, respectively.

ASCE 7-10 defines the deterministic MCE_R response spectrum as the maximum of the composite deterministic response spectrum and the deterministic lower limit, as defined on Figure 21.2-1 of ASCE 7-10. The site-specific MCE_R response spectrum was then taken as a composite of the probabilistic and deterministic MCE_R response spectra, determined as described above, which consisted of the lesser of the spectral ordinates between the two spectra. The 5% damped site-specific MCE_R response spectrum and its components are shown on Figure 6. The site-specific design response spectrum was computed by multiplying the ordinates of the site-specific MCE_R response spectrum by two-thirds, with a lower limit at all periods of 80% of the spectral ordinates of the general design response spectrum determined in accordance with Section 11.4.5 of ASCE 7-10. The 5% damped site-specific design response spectrum and its components are shown on Figure 7. The site-specific MCE_R and design response spectra are presented in digitized form for 5% of critical structural damping in Table 4.

Based on the results of our analyses, the site-specific design acceleration parameters, as defined in Section 21.4 of ASCE 7-10, S_{DS} and S_{D1}, may be taken as 1.29g and 1.09g, respectively, and the site-specific MCE_R acceleration parameters, S_{MS} and S_{M1}, may be taken as 1.93g and 1.63g, respectively.

6.4 FLOOR SLAB SUPPORT

If the subgrade is prepared as recommended in the following section on grading, the building floor slabs may be supported on grade.

Construction activities and exposure to the environment can cause deterioration of the prepared subgrade. Therefore, we recommend that our field representative observe the

condition of the final subgrade soils immediately prior to slab-on-grade construction, and, if necessary, perform further density and moisture content tests to determine the suitability of the final prepared subgrade.

If vinyl or other moisture-sensitive floor covering is planned, we recommend that the floor slab in those areas be underlain by a capillary break consisting of a vapor-retarding membrane over a 4-inch-thick layer of gravel. A 2-inch-thick layer of sand should be placed between the gravel and the membrane to decrease the possibility of damage to the membrane. We suggest the following gradation for the gravel:

Sieve Size	Percent Passing
¾″	90–100
No. 4	0–10
No. 100	0–3

A low-slump concrete should be used to minimize possible curling of the slab. A 2-inch-thick layer of coarse sand should be placed over the vapor retarding membrane to reduce slab curling. If this sand bedding is used, care should be taken during the placement of the concrete to prevent displacement of the sand. The concrete slab should be allowed to cure properly before placing vinyl or other moisture-sensitive floor covering.

6.5 MINOR RETAINING WALLS

Lateral Earth Pressure

For design of cantilevered retaining walls, where the surface of the backfill is level, it may be assumed that drained soils will exert a lateral pressure equal to that developed by a fluid with a density of 30 pounds per cubic foot. In addition to the recommended earth pressure, the walls should be designed to resist any applicable surcharges due to foundation or storage loads.

In addition to the recommended earth pressure, walls adjacent to areas subject to vehicular traffic should be designed to resist a uniform lateral pressure of 100 pounds per square foot, acting as a result of an assumed 300 pounds per square foot surcharge behind the walls due to normal vehicular traffic. If the traffic is kept back at least 10 feet

(or a distance equal to the height of the wall, whichever is less) from the walls, the traffic surcharge may be neglected.

Seismic Lateral Earth Pressure

It is anticipated that any minor retaining walls planned for the project will be less than 6 feet in height. Based on the anticipated wall height, the strength characteristics of the on-site soils, and the design level of ground shaking, it is our opinion that the seismic lateral earth pressures will be negligible.

Drainage

Retaining walls should be designed to resist hydrostatic pressures or be provided with a drain pipe or weepholes. The drain could consist of a 4-inch-diameter perforated pipe placed with perforations down at the base of the wall. The pipe should be sloped at least 2 inches in 100 feet and surrounded by ¾-inch crushed rock or gravel separated from the on-site soils by an appropriate filter fabric. The crushed rock or gravel should have less than 5% passing a No. 200 sieve.

6.6 PAVING

To provide support for paving, the subgrade soils should be prepared as recommended in the following section on grading. Compaction of the subgrade, including trench backfills, to at least 90%, and achieving a firm, hard, and unyielding surface will be important for paving support. The preparation of the paving area subgrade should be done immediately prior to placement of the base course. Proper drainage of the paved areas should be provided since this will reduce moisture infiltration into the subgrade and increase the life of the paving.

To provide data for design of asphalt paving, the R-value of a sample of the upper soils was determined. The test results, which indicate R-values of 57, are presented in Appendix A. The paving sections presented below are also suitable to support emergency vehicle traffic.

Asphalt Concrete Paving

The required paving and base thicknesses will depend on the expected wheel loads and volume of traffic (Traffic Index or TI). Assuming that the paving subgrade will consist of the on-site or comparable soils compacted to at least 90% as recommended, the minimum recommended paving thicknesses are presented in the following table.

Assumed Traffic Index	Asphalt Concrete (Inches)	Base Course (Inches)
4 (Automobile Parking)	3	3
5 (Driveways with Light Truck Traffic)	3	4
6 (Driveways with Heavy Truck Traffic)	4	5

The asphalt paving sections were determined using the Caltrans design method. We can determine the recommended paving and base course thicknesses for other Traffic Indices if required. Careful inspection is recommended to verify that the recommended thicknesses or greater are achieved, and that proper construction procedures are followed.

Portland Cement Concrete Paving

Portland cement concrete paving sections were determined in accordance with procedures developed by the Portland Cement Association. Concrete paving sections for a range of Traffic Indices are presented in the following table. We have assumed that the portland cement concrete will have a compressive strength of at least 3,000 pounds per square inch.

Assumed Traffic Index	Concrete Paving (Inches)	Base Course (Inches)
4 (Automobile Parking)	6½	4
5 (Driveways with Light Truck Traffic)	7	4
6 (Driveways with Heavy Truck Traffic)	7½	4

The paving should be provided with joints at regular intervals no more than 15 feet in each direction. Load transfer devices, such as dowels or keys, are recommended at joints in the paving to reduce possible offsets. The paving sections in the above table have

been developed based on the strength of unreinforced concrete. Steel reinforcing may be added to the paving to reduce cracking and to prolong the life of the paving.

Base Course

The base course should conform to requirements of Section 26 of State of California Department of Transportation Standard Specifications (Caltrans), latest edition, or meet the specifications for untreated base as defined in Section 200-2 of the latest edition of the Standard Specifications for Public Works Construction (Green Book). The base course should be compacted to at least 95% of the maximum dry density obtainable by the ASTM Designation D1557 method of compaction.

6.7 FIELD PERCOLATION TESTING

Test Preparation

Eight borings (Borings P-1 through P-8) were drilled throughout the campus for the purpose of percolation testing at the requested depths. All borings were drilled using 8-inch diameter hollow-stem-auger drilling equipment. As requested, the borings were drilled to a depth of approximately 20 feet below the existing grade; the boring locations are shown on Figure 2. The logs of these borings are included in Appendix A.

Test Setup

Our percolation testing was intended to be performed in general accordance with the "Boring Percolation Test Procedure" outlined in the County of Los Angeles Department of Public Works "Guidelines for Design, Investigation, and Reporting Low Impact Development Stormwater Infiltration." However, based on the soil conditions encountered and the results of initial testing, the test method was modified to comply with the "High Flowrate Percolation Test Procedures" outlined in the same county document.

For each test, the test setup was as follows:

- Drilling a boring to the requested depth;

- Installing a 2-inch diameter pipe (with the lower 5-feet being perforated pipe) with a solid end cap surrounded by well-draining sand;

- The 2-inch diameter solid pipe extended from the top of the test zone to the ground surface in order to direct water from the surface into the test zone.

Test Results

As previously stated, the tests were performed in accordance with guidelines provided by the County of Los Angeles. The infiltration rates obtained from the tests are presented in the table below.

Boring No.	Test Zone (feet)	Infiltration Rate (inches per hour)
P-1	15-20	15.0
P-2	15-20	19.5
P-3	15-20	15.7
P-4	15-20	16.2
P-5	15-20	11.7
P-6	15-20	15.3
P-7	15-20	15.9
P-8	15-20	14.1

Correction Factors

The County of Los Angeles guidelines specify three categories of correction factors that are to be applied to the measured percolation rate in order to determine the design infiltration rate. The correction factors are as follows:

Description	Factor
Test-specific correction factor	CF_t
Correction factor for site variability, number of tests, and thoroughness of subsurface investigation	CF_v
Long-term siltation, plugging, and maintenance	CF_s

The test-specific correction factor, CF_t, has been included in the test result values presented on the preceding page. The site variability factor, CF_v, may be taken as 1.0; the long-term siltation, plugging, and maintenance factor, CF_s, should be determined by the civil engineer based on the county guidelines, type of infiltration facility to be installed, and the planned maintenance program for the facility.

Conclusion and Recommendations

The results of our percolation tests indicate that infiltration is feasible within the soil layers tested. The infiltration system should be designed by the project civil engineer depending on the volume of water expected to be discharged into the infiltration system. Recommendations provided by the governing regulatory agency, including the guidelines provided in the City of Los Angeles Department of Building and Safety Information Bulletin 2014-118, "Guidelines for Storm Water Infiltration," should be followed in selecting locations, designing, installing, and maintaining the infiltration system. All stormwater infiltration facilities should be set back at least 20 feet horizontally from existing and proposed structures and other settlement-sensitive features.

6.8 GRADING

The existing fill soils are not considered suitable for support of floor slabs on grade, paving, other exterior concrete walks and slabs on grade, or new structures on conventional spread/continuous footings. The existing fill soils should be excavated and replaced as properly compacted fill to provide support for structures on spread/continuous footings and for floor slabs on grade.

Ideally, to provide support for new paving and other exterior concrete walks and slabs on grade, all existing uncertified fill soils should be removed and replaced as properly compacted fill. However, if the risk of some settlement and greater than normal future maintenance is acceptable to LAUSD, then the removal of existing uncertified fill soils may be limited to the upper 2 feet beneath the pavement/slab section. However, after the 2-foot removal is completed, the exposed subgrade should be carefully observed by a representative of our firm to identify any soft areas that may require additional excavation and compaction.

All required fill should be uniformly well compacted and observed and tested during placement. The on-site soils may be used in any required fill. Any concrete, steel, and other construction materials and debris from previous construction on the site should be removed prior to grading.

Site Preparation

After the site is cleared and any existing fill soils are excavated as recommended, the exposed natural soils should be carefully observed for the removal of all unsuitable deposits. Next, the exposed soils should be scarified to a depth of 6 inches, brought to near-optimum moisture content, and rolled with heavy compaction equipment. At least the upper 6 inches of the exposed soils should be compacted to at least 90% of the maximum dry density obtainable by the ASTM Designation D1557 method of compaction.

We recommend that provisions for positive surface drainage away from the foundation be incorporated into the site grading plans. Impoundment of stormwater run-off within the construction area should not be permitted within the immediate vicinity of the foundation construction area. We also recommend avoiding the placement of planters, underground water pipes, or any other source of additional water to the subsurface soils in the immediate vicinity of the foundations. If planter or landscaped areas are desired within 20 feet of the foundations, these areas should have impermeable bottoms. In addition, we recommend pressure testing of utility lines prior to backfilling to detect and eliminate leaks due to poor workmanship or material defects.

Excavations and Temporary Slopes

Where excavations are deeper than about 4 feet, the sides of the excavations should be sloped back at 1:1 (horizontal:vertical) or shored for safety. Unshored excavations should not extend below a plane drawn at 1½:1 (horizontal to vertical) extending downward from adjacent existing footings. We would be pleased to present data for design of shoring if required.

Excavations should be observed by personnel of our firm so that any necessary modifications based on variations in the soil conditions can be made. All applicable safety requirements and regulations, including OSHA regulations, should be met.

Compaction

The required fill should be placed in loose lifts not more than 8-inches-thick and compacted. The fill should be compacted to at least 90% of the maximum density obtainable by the ASTM Designation D1557 method of compaction. The moisture content of the on-site soils at the time of compaction should vary no more than 2% below or above optimum moisture content.

Backfill

All required backfill should be mechanically compacted in layers; flooding should not be permitted. Proper compaction of backfill will be necessary to minimize settlement of the backfill and to reduce settlement of overlying slabs and paving. Backfill should be compacted to at least 90% of the maximum dry density obtainable by the ASTM Designation D1557 method of compaction. The on-site soils may be used in the compacted backfill. The exterior grades should be sloped to drain away from the foundations to prevent ponding of water.

Some settlement of the backfill should be expected, and any utilities supported therein should be designed to accept differential settlement, particularly at the points of entry to the buildings. Also, provisions should be made for some settlement of concrete walks supported on backfill.

Material for Fill

The on-site soils, less any debris or organic matter, may be used in the required fills. Cobbles larger than 4 inches in diameter should not be used in the fill. Any required import material should consist of relatively non-expansive soils with an expansion index of less than 35. The imported materials should contain sufficient fines (at least 15% passing the No. 200 sieve) so as to be relatively impermeable and result in a stable subgrade

when compacted. All proposed import materials should be approved by our personnel prior to being placed at the site.

6.9 GEOTECHNICAL OBSERVATION

The reworking of the upper soils and the compaction of all required fill should be observed and tested during placement by a representative of our firm. Our representative should perform at least the following duties:

- Observe the clearing and grubbing operations for proper removal of all unsuitable materials.
- Observe the exposed subgrade in areas to receive fill and in areas where excavation has resulted in the desired finished subgrade. The representative should also observe proofrolling and delineation of areas requiring overexcavation.
- Evaluate the suitability of on-site and import soils for fill placement; collect and submit soil samples for required or recommended laboratory testing where necessary.
- Observe the fill and backfill for uniformity during placement.
- Test backfill for field density and compaction to determine the percentage of compaction achieved during backfill placement.
- Observe and probe foundation materials to confirm that suitable bearing materials are present at the design foundation depths.

The governmental agencies having jurisdiction over the project should be notified prior to commencement of grading so that the necessary grading permits can be obtained and arrangements can be made for required inspection(s). The contractor should be familiar with the inspection requirements of the reviewing agencies.

7.0 BASIS FOR RECOMMENDATIONS

The recommendations provided in this report are based upon our understanding of the described project information and on our interpretation of the data collected during our current and previous subsurface explorations and investigations performed by another firm. We have made our recommendations based upon experience with similar subsurface conditions under similar loading conditions. The recommendations apply to the specific project discussed in this report; therefore, any change in the structure configuration, loads, location, or the site grades should be provided to us so that we can review our conclusions and recommendations and make any necessary modifications.

The recommendations provided in this report are also based upon the assumption that the necessary geotechnical observations and testing during construction will be performed by representatives of our firm. The field observation services are considered a continuation of the geotechnical services and essential to verify that the actual soil conditions are as expected. This also provides for the procedure whereby the client can be advised of unexpected or changed conditions that would require modifications of our original recommendations. In addition, the presence of our representative at the site provides the client with an independent professional opinion regarding the geotechnically-related construction procedures. If another firm is retained for the geotechnical observation services, our professional responsibility and liability would be limited to the extent that we would not be the geotechnical engineer of record.

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TABLES

Table 1
Major Named Faults Considered to be Active
in Southern California

Fault (in increasing distance)	Maximum Magnitude (Mw)	Fault Geometry	Slip Rate (mm/yr.)	Sources	Distance From Site (miles)	Direction From Site
Northridge Thrust	7.0	BT	1.5	(a,c)	1.0**	WNW
Verdugo	6.9	RO	0.4	(a)	1.3	NE
Compton Thrust	6.8	BT	0.9	(a)	2.8**	WSW
San Fernando	6.7	RO	2.0	(a)	4.4	NNE
Santa Susana	6.7	RO	6.0	(a)	6.9	N
Sierra Madre	7.2	RO	2.0	(a)	7.3	ENE
Upper Elysian Park Thrust	6.4	RO	1.9	(a,c)	8.0**	ESE
Puente Hills Thrust	7.1	BT	0.9	(a,c)	8.2**	ESE
San Gabriel	7.2	SS	0.4	(a)	8.5	NNE
Hollywood	6.4	RO	0.9	(a)	8.6	SSE
Newport-Inglewood Zone	7.1	SS	1.0	(a)	9.9	SSW
Raymond	6.5	RO	2.0	(a)	11	SE
Santa Monica	6.6	RO	1.0	(a)	11	S
Simi-Santa Rosa	7.0	RO	0.7	(a)	12	WNW
Anacapa-Dume	7.5	RO	0.4	(a)	14	SSW
Holser	6.5	RO	0.4	(a)	15	NNW
Malibu Coast	6.7	RO	0.3	(a)	19	SW
Palos Verdes	7.3	SS	3.0	(a)	22	SW
Clamshell-Sawpit	6.5	RO	0.4	(a)	22	ESE
Oak Ridge	7.0	RO	4.0	(a)	22	NW
Whittier	6.8	SS	2.5	(a)	25	SE
San Andreas (Mojave Section)	7.4	SS	34.0	(a)	27	NNE
Cucamonga	6.9	RO	1.5	(a)	42	ESE
Chino	6.7	NO	1.0	(a)	44	ESE
San Joaquin Hills Thrust	6.6	BT	0.6	(a,c)	45**	SSE
Elsinore (Glen Ivy Section)	6.8	SS	5.0	(a)	49	SE

(a) Cao et al., 2003; Field et al., 2013
(b) Southern California Earthquake Center, 2016
(c) Working Group on California Earthquake Probabilities, 2016
SS Strike Slip
NO Normal Oblique
RO Reverse Oblique
BT Blind Thrust
(*) Site is within the surface projection of thrust fault
(**) Distance from thrust fault surface projection

Prepared by: JO 9/24/16
Checked by: PER 11/7/16

Table 2
Major Named Faults Considered to be Potentially Active
in Southern California

Fault (in increasing distance)	Maximum Magnitude (Mw)	Fault Geometry	Slip Rate (mm/yr.)	Sources	Distance From Site (miles)	Direction From Site
Northridge Hills	n/a	RO	1.3	(a)	3.6	WNW
Mission Hills	n/a	SS	n/a		4.9	NW
Chatsworth fault	6.0-6.8	RO	n/a	(b)	11	WNW
Overland Avenue fault	n/a	RO	n/a	(a)	13.2	S
San Jose	6.4	RO	0.4	(a)	32	ESE

(a) Cao et al., 2003; Field et al., 2013
(b) Southern California Earthquake Center, 2016

Prepared by: JO 9/24/16
Checked by: PER 11/7/16

SS Strike Slip
NO Normal Oblique
RO Reverse Oblique
BT Blind Thrust
N No Data

Table 3
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
03-11-1933	01:54:07	33.62 N	117.97 W	A	78	.0	6.4
03-11-1933	02:04:00	33.75 N	118.08 W	C	60	.0	4.9
03-11-1933	02:05:00	33.75 N	118.08 W	C	60	.0	4.3
03-11-1933	02:09:00	33.75 N	118.08 W	C	60	.0	5.0
03-11-1933	02:10:00	33.75 N	118.08 W	C	60	.0	4.6
03-11-1933	02:11:00	33.75 N	118.08 W	C	60	.0	4.4
03-11-1933	02:16:00	33.75 N	118.08 W	C	60	.0	4.8
03-11-1933	02:17:00	33.60 N	118.00 W	E	78	.0	4.5
03-11-1933	02:22:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	02:27:00	33.75 N	118.08 W	C	60	.0	4.6
03-11-1933	02:30:00	33.75 N	118.08 W	C	60	.0	5.1
03-11-1933	02:31:00	33.60 N	118.00 W	E	78	.0	4.4
03-11-1933	02:52:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	02:57:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	02:58:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	02:59:00	33.75 N	118.08 W	C	60	.0	4.6
03-11-1933	03:05:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	03:09:00	33.75 N	118.08 W	C	60	.0	4.4
03-11-1933	03:11:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	03:23:00	33.75 N	118.08 W	C	60	.0	5.0
03-11-1933	03:36:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	03:39:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	03:47:00	33.75 N	118.08 W	C	60	.0	4.1
03-11-1933	04:36:00	33.75 N	118.08 W	C	60	.0	4.6
03-11-1933	04:39:00	33.75 N	118.08 W	C	60	.0	4.9
03-11-1933	04:40:00	33.75 N	118.08 W	C	60	.0	4.7
03-11-1933	05:10:22	33.70 N	118.07 W	C	66	.0	5.1
03-11-1933	05:13:00	33.75 N	118.08 W	C	60	.0	4.7
03-11-1933	05:15:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	05:18:04	33.58 N	117.98 W	C	82	.0	5.2
03-11-1933	05:21:00	33.75 N	118.08 W	C	60	.0	4.4
03-11-1933	05:24:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	05:53:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	05:55:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	06:11:00	33.75 N	118.08 W	C	60	.0	4.4

NOTE: Q IS A FACTOR RELATING THE QUALITY OF EPICENTRAL DETERMINATION

A = +- 1 km horizontal distance; +- 2 km depth
B = +- 2 km horizontal distance; +- 5 km depth
C = +- 5 km horizontal distance; no depth restriction
D = >+- 5 km horizontal distance

Event qualities are highly suspect prior to 1990. Many of these event qualities are based on incomplete information according to Caltech.

Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
03-11-1933	06:18:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	06:29:00	33.85 N	118.27 W	C	43	.0	4.4
03-11-1933	06:35:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	06:58:03	33.68 N	118.05 W	C	68	.0	5.5
03-11-1933	07:51:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	07:59:00	33.75 N	118.08 W	C	60	.0	4.1
03-11-1933	08:08:00	33.75 N	118.08 W	C	60	.0	4.5
03-11-1933	08:32:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	08:37:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	08:54:57	33.70 N	118.07 W	C	66	.0	5.1
03-11-1933	09:10:00	33.75 N	118.08 W	C	60	.0	5.1
03-11-1933	09:11:00	33.75 N	118.08 W	C	60	.0	4.4
03-11-1933	09:26:00	33.75 N	118.08 W	C	60	.0	4.1
03-11-1933	10:25:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	10:45:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	11:00:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	11:04:00	33.75 N	118.13 W	C	58	.0	4.6
03-11-1933	11:29:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	11:38:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	11:41:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	11:47:00	33.75 N	118.08 W	C	60	.0	4.4
03-11-1933	12:50:00	33.68 N	118.05 W	C	68	.0	4.4
03-11-1933	13:50:00	33.73 N	118.10 W	C	61	.0	4.4
03-11-1933	13:57:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	14:25:00	33.85 N	118.27 W	C	43	.0	5.0
03-11-1933	14:47:00	33.73 N	118.10 W	C	61	.0	4.4
03-11-1933	14:57:00	33.88 N	118.32 W	C	38	.0	4.9
03-11-1933	15:09:00	33.73 N	118.10 W	C	61	.0	4.4
03-11-1933	15:47:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	16:53:00	33.75 N	118.08 W	C	60	.0	4.8
03-11-1933	19:44:00	33.75 N	118.08 W	C	60	.0	4.0
03-11-1933	19:56:00	33.75 N	118.08 W	C	60	.0	4.2
03-11-1933	22:00:00	33.75 N	118.08 W	C	60	.0	4.4
03-11-1933	22:31:00	33.75 N	118.08 W	C	60	.0	4.4
03-11-1933	22:32:00	33.75 N	118.08 W	C	60	.0	4.1
03-11-1933	22:40:00	33.75 N	118.08 W	C	60	.0	4.4
03-11-1933	23:05:00	33.75 N	118.08 W	C	60	.0	4.2
03-12-1933	00:27:00	33.75 N	118.08 W	C	60	.0	4.4
03-12-1933	00:34:00	33.75 N	118.08 W	C	60	.0	4.0
03-12-1933	04:48:00	33.75 N	118.08 W	C	60	.0	4.0
03-12-1933	05:46:00	33.75 N	118.08 W	C	60	.0	4.4
03-12-1933	06:01:00	33.75 N	118.08 W	C	60	.0	4.2
03-12-1933	06:16:00	33.75 N	118.08 W	C	60	.0	4.6
03-12-1933	07:40:00	33.75 N	118.08 W	C	60	.0	4.2
03-12-1933	08:35:00	33.75 N	118.08 W	C	60	.0	4.2

NOTE: Q IS A FACTOR RELATING THE QUALITY OF EPICENTRAL DETERMINATION

A = +- 1 km horizontal distance; +- 2 km depth
B = +- 2 km horizontal distance; +- 5 km depth
C = +- 5 km horizontal distance; no depth restriction
D = >+- 5 km horizontal distance

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Table 3 (continued)
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DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
03-12-1933	15:02:00	33.75 N	118.08 W	C	60	.0	4.2
03-12-1933	16:51:00	33.75 N	118.08 W	C	60	.0	4.0
03-12-1933	17:38:00	33.75 N	118.08 W	C	60	.0	4.5
03-12-1933	18:25:00	33.75 N	118.08 W	C	60	.0	4.1
03-12-1933	21:28:00	33.75 N	118.08 W	C	60	.0	4.1
03-12-1933	23:54:00	33.75 N	118.08 W	C	60	.0	4.5
03-13-1933	03:43:00	33.75 N	118.08 W	C	60	.0	4.1
03-13-1933	04:32:00	33.75 N	118.08 W	C	60	.0	4.7
03-13-1933	06:17:00	33.75 N	118.08 W	C	60	.0	4.0
03-13-1933	13:18:28	33.75 N	118.08 W	C	60	.0	5.3
03-13-1933	15:32:00	33.75 N	118.08 W	C	60	.0	4.1
03-13-1933	19:29:00	33.75 N	118.08 W	C	60	.0	4.2
03-14-1933	00:36:00	33.75 N	118.08 W	C	60	.0	4.2
03-14-1933	12:19:00	33.75 N	118.08 W	C	60	.0	4.5
03-14-1933	19:01:50	33.62 N	118.02 W	C	76	.0	5.1
03-14-1933	22:42:00	33.75 N	118.08 W	C	60	.0	4.1
03-15-1933	02:08:00	33.75 N	118.08 W	C	60	.0	4.1
03-15-1933	04:32:00	33.75 N	118.08 W	C	60	.0	4.1
03-15-1933	05:40:00	33.75 N	118.08 W	C	60	.0	4.2
03-15-1933	11:13:32	33.62 N	118.02 W	C	76	.0	4.9
03-16-1933	14:56:00	33.75 N	118.08 W	C	60	.0	4.0
03-16-1933	15:29:00	33.75 N	118.08 W	C	60	.0	4.2
03-16-1933	15:30:00	33.75 N	118.08 W	C	60	.0	4.1
03-17-1933	16:51:00	33.75 N	118.08 W	C	60	.0	4.1
03-18-1933	20:52:00	33.75 N	118.08 W	C	60	.0	4.2
03-19-1933	21:23:00	33.75 N	118.08 W	C	60	.0	4.2
03-20-1933	13:58:00	33.75 N	118.08 W	C	60	.0	4.1
03-21-1933	03:26:00	33.75 N	118.08 W	C	60	.0	4.1
03-23-1933	08:40:00	33.75 N	118.08 W	C	60	.0	4.1
03-23-1933	18:31:00	33.75 N	118.08 W	C	60	.0	4.1
03-25-1933	13:46:00	33.75 N	118.08 W	C	60	.0	4.1
03-30-1933	12:25:00	33.75 N	118.08 W	C	60	.0	4.4
03-31-1933	10:49:00	33.75 N	118.08 W	C	60	.0	4.1
04-01-1933	06:42:00	33.75 N	118.08 W	C	60	.0	4.2
04-02-1933	08:00:00	33.75 N	118.08 W	C	60	.0	4.0
04-02-1933	15:36:00	33.75 N	118.08 W	C	60	.0	4.0
05-16-1933	20:58:55	33.75 N	118.17 W	C	57	.0	4.0
08-04-1933	04:17:48	33.75 N	118.18 W	C	56	.0	4.0
10-02-1933	09:10:17	33.78 N	118.13 W	A	55	.0	5.4
10-02-1933	13:26:01	33.62 N	118.02 W	C	76	.0	4.0
10-25-1933	07:00:46	33.95 N	118.13 W	C	39	.0	4.3
11-13-1933	21:28:00	33.87 N	118.20 W	C	44	.0	4.0
11-20-1933	10:32:00	33.78 N	118.13 W	B	55	.0	4.0
01-09-1934	14:10:00	34.10 N	117.68 W	A	68	.0	4.5
01-18-1934	02:14:00	34.10 N	117.68 W	A	68	.0	4.0

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Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
01-20-1934	21:17:00	33.62 N	118.12 W	B	72	.0	4.5
04-17-1934	18:33:00	33.57 N	117.98 W	C	82	.0	4.0
10-17-1934	09:38:00	33.63 N	118.40 W	B	65	.0	4.0
11-16-1934	21:26:00	33.75 N	118.00 W	B	64	.0	4.0
06-11-1935	18:10:00	34.72 N	118.97 W	B	75	.0	4.0
06-19-1935	11:17:00	33.72 N	117.52 W	B	99	.0	4.0
07-13-1935	10:54:16	34.20 N	117.90 W	A	47	.0	4.7
12-25-1935	17:15:00	33.60 N	118.02 W	B	78	.0	4.5
02-23-1936	22:20:42	34.13 N	117.34 W	A	99	10.0	4.5
02-26-1936	09:33:27	34.14 N	117.34 W	A	99	10.0	4.0
08-22-1936	05:21:00	33.77 N	117.82 W	B	74	.0	4.0
10-29-1936	22:35:36	34.38 N	118.62 W	C	27	10.0	4.0
11-29-1936	05:54:45	34.84 N	118.99 W	A	87	10.0	4.0
01-15-1937	18:35:47	33.56 N	118.06 W	B	80	10.0	4.0
03-19-1937	01:23:38	34.11 N	117.43 W	A	91	10.0	4.0
07-07-1937	11:12:00	33.57 N	117.98 W	B	82	.0	4.0
09-01-1937	13:48:08	34.21 N	117.53 W	A	81	10.0	4.5
09-01-1937	16:35:33	34.18 N	117.55 W	A	79	10.0	4.5
05-21-1938	09:44:00	33.62 N	118.03 W	B	75	.0	4.0
07-05-1938	18:06:55	33.68 N	117.55 W	A	99	10.0	4.5
08-06-1938	22:00:55	33.72 N	117.51 W	B	100	10.0	4.0
08-31-1938	03:18:14	33.76 N	118.25 W	A	53	10.0	4.5
11-29-1938	19:21:15	33.90 N	118.43 W	A	36	10.0	4.0
12-07-1938	03:38:00	34.00 N	118.42 W	B	25	.0	4.0
12-27-1938	10:09:28	34.13 N	117.52 W	B	82	10.0	4.0
02-23-1939	08:45:51	34.91 N	118.97 W	A	93	10.0	4.5
02-23-1939	09:18:46	34.89 N	119.00 W	A	92	10.0	4.5
03-07-1939	19:53:31	34.84 N	119.03 W	A	90	10.0	4.0
05-08-1939	02:48:05	34.90 N	119.04 W	A	95	10.0	4.5
11-04-1939	21:41:00	33.77 N	118.12 W	B	57	.0	4.0
12-27-1939	19:28:49	33.78 N	118.20 W	A	52	.0	4.7
01-13-1940	07:49:07	33.78 N	118.13 W	B	55	.0	4.0
02-08-1940	16:56:17	33.70 N	118.07 W	B	66	.0	4.0
02-11-1940	19:24:10	33.98 N	118.30 W	B	28	.0	4.0
04-18-1940	18:43:43	34.03 N	117.35 W	A	99	.0	4.4
05-18-1940	09:15:12	34.60 N	118.90 W	C	62	.0	4.0
07-20-1940	04:01:13	33.70 N	118.07 W	B	66	.0	4.0
10-11-1940	05:57:12	33.77 N	118.45 W	A	51	.0	4.7
10-12-1940	00:24:00	33.78 N	118.42 W	B	49	.0	4.0
10-14-1940	20:51:11	33.78 N	118.42 W	B	49	.0	4.0
11-01-1940	07:25:03	33.78 N	118.42 W	B	49	.0	4.0
11-01-1940	20:00:46	33.63 N	118.20 W	B	68	.0	4.0
11-02-1940	02:58:26	33.78 N	118.42 W	B	49	.0	4.0
01-30-1941	01:34:46	33.97 N	118.05 W	A	43	.0	4.1
03-22-1941	08:22:40	33.52 N	118.10 W	B	83	.0	4.0

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Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
03-25-1941	23:43:41	34.22 N	117.47 W	B	86	.0	4.0
04-11-1941	01:20:24	33.95 N	117.58 W	B	81	.0	4.0
09-21-1941	19:53:07	34.87 N	118.93 W	A	86	.0	5.1
10-22-1941	06:57:18	33.82 N	118.22 W	A	48	.0	4.8
11-14-1941	08:41:36	33.78 N	118.25 W	A	51	.0	4.8
04-16-1942	07:28:33	33.37 N	118.15 W	C	98	.0	4.0
09-03-1942	14:06:01	34.48 N	118.98 W	C	61	.0	4.5
09-04-1942	06:34:33	34.48 N	118.98 W	C	61	.0	4.5
04-06-1943	22:36:24	34.68 N	119.00 W	C	75	.0	4.0
06-19-1944	00:03:33	33.87 N	118.22 W	B	43	.0	4.5
06-19-1944	03:06:07	33.87 N	118.22 W	C	43	.0	4.4
02-24-1946	06:07:52	34.40 N	117.80 W	C	59	.0	4.1
06-01-1946	11:06:31	34.42 N	118.83 W	C	45	.0	4.1
03-01-1948	08:12:13	34.17 N	117.53 W	B	80	.0	4.7
04-16-1948	22:26:24	34.02 N	118.97 W	B	57	.0	4.7
10-03-1948	02:46:28	34.18 N	117.58 W	A	76	.0	4.0
01-11-1950	21:41:35	33.94 N	118.20 W	A	36	.4	4.1
01-24-1950	21:56:59	34.67 N	118.83 W	C	63	.0	4.0
02-26-1950	00:06:22	34.62 N	119.08 W	C	76	.0	4.7
08-22-1950	22:47:58	34.15 N	119.35 W	B	88	.0	4.2
09-22-1951	08:22:39	34.12 N	117.34 W	A	99	11.9	4.3
07-21-1952	12:19:36	34.95 N	118.87 W	A	91	.0	5.3
07-21-1952	21:53:09	34.87 N	119.02 W	A	91	.0	4.3
07-22-1952	07:44:55	34.87 N	118.87 W	A	83	.0	4.1
07-22-1952	08:16:24	35.08 N	118.58 W	A	97	.0	4.4
07-22-1952	14:30:18	34.90 N	119.05 W	A	96	.0	4.3
07-22-1952	21:02:11	35.07 N	118.77 W	A	99	.0	4.2
07-23-1952	07:53:19	35.00 N	118.83 W	A	95	.0	5.4
07-23-1952	18:13:51	35.00 N	118.83 W	A	95	.0	5.2
07-23-1952	23:51:36	35.07 N	118.62 W	A	96	.0	4.0
07-24-1952	09:50:32	34.98 N	118.90 W	A	96	.0	4.3
07-30-1952	11:02:55	34.97 N	118.95 W	A	97	.0	4.1
08-01-1952	13:04:30	34.90 N	118.95 W	A	90	.0	5.1
08-04-1952	05:35:00	35.08 N	118.58 W	A	97	.0	4.0
08-20-1952	08:47:47	34.88 N	119.03 W	A	93	.0	4.2
08-23-1952	06:03:03	35.00 N	118.73 W	A	91	.0	4.3
08-23-1952	10:09:07	34.52 N	118.20 W	A	38	13.1	5.1
08-26-1952	20:56:40	35.06 N	118.42 W	A	93	-.8	4.4
09-02-1952	20:45:56	34.97 N	119.00 W	A	99	.0	4.7
09-26-1952	20:21:20	35.10 N	118.62 W	A	99	.0	4.0
10-16-1952	12:22:07	34.95 N	118.95 W	A	95	.0	4.3
11-11-1952	18:12:25	34.95 N	119.02 W	A	98	.0	4.1
11-27-1952	15:36:41	34.97 N	118.95 W	A	97	.0	4.0
12-01-1952	05:26:10	35.00 N	118.83 W	A	95	.0	4.4
03-23-1953	17:06:37	34.98 N	118.90 W	A	96	.0	4.0

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Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
04-29-1953	12:47:45	35.00 N	118.73 W	A	91	.0	4.7
05-01-1953	06:48:20	35.12 N	118.48 W	A	99	2.4	4.1
10-07-1953	14:59:21	35.03 N	118.85 W	A	99	.0	4.9
02-10-1954	23:58:38	34.93 N	119.07 W	A	100	.0	4.5
05-23-1954	23:52:43	34.98 N	118.98 W	A	100	.0	5.1
11-17-1954	23:03:51	34.50 N	119.12 W	B	73	.0	4.4
01-15-1955	01:03:06	34.93 N	118.97 W	A	94	9.1	4.3
05-15-1955	17:03:25	34.12 N	117.48 W	A	86	7.6	4.0
05-29-1955	16:43:35	33.99 N	119.06 W	B	66	17.4	4.1
02-07-1956	02:16:56	34.53 N	118.64 W	B	41	16.0	4.2
02-07-1956	03:16:38	34.59 N	118.61 W	A	45	2.6	4.6
03-25-1956	03:32:02	33.60 N	119.11 W	A	94	8.2	4.2
03-18-1957	18:56:28	34.12 N	119.22 W	B	76	13.8	4.7
06-28-1960	20:00:48	34.12 N	117.47 W	A	86	12.0	4.1
10-04-1961	02:21:31	33.85 N	117.75 W	B	73	4.3	4.1
10-20-1961	19:49:50	33.65 N	117.99 W	B	74	4.6	4.3
10-20-1961	20:07:14	33.66 N	117.98 W	B	74	6.1	4.0
10-20-1961	21:42:40	33.67 N	117.98 W	B	73	7.2	4.0
10-20-1961	22:35:34	33.67 N	118.01 W	B	71	5.6	4.1
11-15-1961	05:38:55	34.94 N	118.99 W	B	96	10.7	4.9
11-20-1961	08:53:34	33.68 N	117.99 W	B	71	4.4	4.0
03-01-1963	00:25:57	34.93 N	118.98 W	B	95	13.9	4.5
03-04-1963	20:10:42	34.95 N	118.97 W	B	96	8.5	4.0
09-14-1963	03:51:16	33.54 N	118.34 W	B	76	2.2	4.2
08-30-1964	22:57:37	34.27 N	118.44 W	B	6	15.4	4.0
01-01-1965	08:04:18	34.14 N	117.52 W	B	82	5.9	4.4
04-15-1965	20:08:33	34.13 N	117.43 W	B	91	5.5	4.5
07-16-1965	07:46:22	34.49 N	118.52 W	B	31	15.1	4.0
01-08-1967	07:37:30	33.63 N	118.47 W	B	66	11.4	4.0
01-08-1967	07:38:05	33.66 N	118.41 W	C	62	17.7	4.0
06-15-1967	04:58:05	34.00 N	117.97 W	B	47	10.0	4.1
02-28-1969	04:56:12	34.57 N	118.11 W	A	46	5.3	4.3
05-05-1969	16:02:09	34.30 N	117.57 W	B	77	8.8	4.4
10-27-1969	13:16:02	33.55 N	117.81 W	B	93	6.5	4.5
09-12-1970	14:10:11	34.27 N	117.52 W	A	82	8.0	4.1
09-12-1970	14:30:52	34.27 N	117.54 W	A	80	8.0	5.2
09-13-1970	04:47:48	34.28 N	117.55 W	A	79	8.0	4.4
02-09-1971	14:00:41	34.41 N	118.40 W	B	21	8.4	6.6
02-09-1971	14:01:08	34.41 N	118.40 W	D	21	8.0	5.8
02-09-1971	14:01:33	34.41 N	118.40 W	D	21	8.0	4.2
02-09-1971	14:01:40	34.41 N	118.40 W	D	21	8.0	4.1
02-09-1971	14:01:50	34.41 N	118.40 W	D	21	8.0	4.5
02-09-1971	14:01:54	34.41 N	118.40 W	D	21	8.0	4.2
02-09-1971	14:01:59	34.41 N	118.40 W	D	21	8.0	4.1
02-09-1971	14:02:03	34.41 N	118.40 W	D	21	8.0	4.1

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Table 3 (continued)
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(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
02-09-1971	14:02:30	34.41 N	118.40 W	D	21	8.0	4.3
02-09-1971	14:02:31	34.41 N	118.40 W	D	21	8.0	4.7
02-09-1971	14:02:44	34.41 N	118.40 W	D	21	8.0	5.8
02-09-1971	14:03:25	34.41 N	118.40 W	D	21	8.0	4.4
02-09-1971	14:03:46	34.41 N	118.40 W	D	21	8.0	4.1
02-09-1971	14:04:07	34.41 N	118.40 W	D	21	8.0	4.1
02-09-1971	14:04:34	34.41 N	118.40 W	C	21	8.0	4.2
02-09-1971	14:04:39	34.41 N	118.40 W	D	21	8.0	4.1
02-09-1971	14:04:44	34.41 N	118.40 W	D	21	8.0	4.1
02-09-1971	14:04:46	34.41 N	118.40 W	D	21	8.0	4.2
02-09-1971	14:05:41	34.41 N	118.40 W	D	21	8.0	4.1
02-09-1971	14:05:50	34.41 N	118.40 W	D	21	8.0	4.1
02-09-1971	14:07:10	34.41 N	118.40 W	D	21	8.0	4.0
02-09-1971	14:07:30	34.41 N	118.40 W	D	21	8.0	4.0
02-09-1971	14:07:45	34.41 N	118.40 W	D	21	8.0	4.5
02-09-1971	14:08:04	34.41 N	118.40 W	D	21	8.0	4.0
02-09-1971	14:08:07	34.41 N	118.40 W	D	21	8.0	4.2
02-09-1971	14:08:38	34.41 N	118.40 W	D	21	8.0	4.5
02-09-1971	14:08:53	34.41 N	118.40 W	D	21	8.0	4.6
02-09-1971	14:10:21	34.36 N	118.31 W	B	18	5.0	4.7
02-09-1971	14:10:28	34.41 N	118.40 W	D	21	8.0	5.3
02-09-1971	14:16:12	34.34 N	118.33 W	C	15	11.1	4.1
02-09-1971	14:19:50	34.36 N	118.41 W	B	15	11.8	4.0
02-09-1971	14:34:36	34.34 N	118.64 W	C	25	-2.0	4.9
02-09-1971	14:39:17	34.39 N	118.36 W	C	19	-1.6	4.0
02-09-1971	14:40:17	34.43 N	118.40 W	C	23	-2.0	4.1
02-09-1971	14:43:46	34.31 N	118.45 W	B	11	6.2	5.2
02-09-1971	15:58:20	34.33 N	118.33 W	B	14	14.2	4.8
02-09-1971	16:19:26	34.46 N	118.43 W	B	26	-1.0	4.2
02-10-1971	03:12:12	34.37 N	118.30 W	B	19	.8	4.0
02-10-1971	05:06:36	34.41 N	118.33 W	A	22	4.7	4.3
02-10-1971	05:18:07	34.43 N	118.41 W	A	23	5.8	4.5
02-10-1971	11:31:34	34.38 N	118.46 W	A	19	6.0	4.2
02-10-1971	13:49:53	34.40 N	118.42 W	A	20	9.7	4.3
02-10-1971	14:35:26	34.36 N	118.49 W	A	17	4.4	4.2
02-10-1971	17:38:55	34.40 N	118.37 W	A	20	6.2	4.2
02-10-1971	18:54:41	34.45 N	118.44 W	A	25	8.1	4.2
02-21-1971	05:50:52	34.40 N	118.44 W	A	20	6.9	4.7
02-21-1971	07:15:11	34.39 N	118.43 W	A	19	7.2	4.5
03-07-1971	01:33:40	34.35 N	118.46 W	A	15	3.3	4.5
03-25-1971	22:54:09	34.36 N	118.47 W	A	16	4.6	4.2
03-30-1971	08:54:43	34.30 N	118.46 W	A	10	2.6	4.1
03-31-1971	14:52:22	34.29 N	118.51 W	A	12	2.1	4.6
04-01-1971	15:03:03	34.43 N	118.41 W	A	23	8.0	4.1
04-02-1971	05:40:25	34.28 N	118.53 W	A	13	3.0	4.0

NOTE: Q IS A FACTOR RELATING THE QUALITY OF EPICENTRAL DETERMINATION

A = +- 1 km horizontal distance; +- 2 km depth
B = +- 2 km horizontal distance; +- 5 km depth
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Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
04-15-1971	11:14:32	34.26 N	118.58 W	B	17	4.2	4.2
04-25-1971	14:48:06	34.37 N	118.31 W	B	18	-2.0	4.0
06-21-1971	16:01:08	34.27 N	118.53 W	B	13	4.1	4.0
07-27-1972	00:31:17	34.78 N	118.90 W	A	77	8.0	4.4
02-21-1973	14:45:57	34.06 N	119.04 W	B	61	8.0	5.3
03-09-1974	00:54:31	34.40 N	118.47 W	C	21	24.4	4.7
08-14-1974	14:45:55	34.43 N	118.37 W	A	23	8.2	4.2
01-01-1976	17:20:12	33.97 N	117.89 W	A	56	6.2	4.2
04-08-1976	15:21:38	34.35 N	118.66 W	A	27	14.5	4.6
08-12-1977	02:19:26	34.38 N	118.46 W	B	18	9.5	4.5
09-24-1977	21:28:24	34.46 N	118.41 W	C	27	5.0	4.2
05-23-1978	09:16:50	33.91 N	119.17 W	C	78	6.0	4.0
01-01-1979	23:14:38	33.94 N	118.68 W	B	40	11.3	5.2
10-17-1979	20:52:37	33.93 N	118.67 W	C	40	5.5	4.2
10-19-1979	12:22:37	34.21 N	117.53 W	B	81	4.9	4.1
06-22-1981	04:57:47	35.10 N	118.51 W	A	98	1.6	4.0
09-04-1981	15:50:50	33.65 N	119.09 W	C	90	6.0	5.5
10-23-1981	17:28:17	33.64 N	119.01 W	C	85	6.0	4.6
10-23-1981	19:15:52	33.62 N	119.02 W	A	88	14.8	4.6
04-13-1982	11:02:12	34.06 N	118.97 W	A	55	12.1	4.0
05-25-1982	13:44:30	33.55 N	118.21 W	A	77	12.6	4.3
01-08-1983	07:19:30	34.13 N	117.45 W	A	88	7.8	4.1
02-27-1984	10:18:15	33.47 N	118.06 W	C	89	6.0	4.0
06-12-1984	00:27:52	34.54 N	118.99 W	A	64	11.7	4.1
10-26-1984	17:20:43	34.02 N	118.99 W	A	58	13.3	4.6
04-03-1985	04:04:50	34.38 N	119.04 W	A	61	24.9	4.0
02-21-1987	23:15:29	34.13 N	117.45 W	A	89	8.5	4.0
10-01-1987	14:42:20	34.06 N	118.08 W	A	35	9.5	5.9
10-01-1987	14:45:41	34.05 N	118.10 W	A	34	13.6	4.7
10-01-1987	14:48:03	34.08 N	118.09 W	A	33	11.7	4.1
10-01-1987	14:49:05	34.06 N	118.10 W	A	33	11.7	4.7
10-01-1987	15:12:31	34.05 N	118.09 W	A	35	10.8	4.7
10-01-1987	15:59:53	34.05 N	118.09 W	A	35	10.4	4.0
10-04-1987	10:59:38	34.07 N	118.10 W	A	33	8.3	5.3
10-24-1987	23:58:33	33.68 N	119.06 W	A	86	12.2	4.1
02-11-1988	15:25:55	34.08 N	118.05 W	A	37	12.5	4.7
06-10-1988	23:06:43	34.94 N	118.74 W	A	86	6.8	5.4
06-26-1988	15:04:58	34.14 N	117.71 W	A	65	7.9	4.7
11-20-1988	05:39:28	33.51 N	118.07 W	C	85	6.0	4.9
12-03-1988	11:38:26	34.15 N	118.13 W	A	26	14.3	5.0
01-19-1989	06:53:28	33.92 N	118.63 W	A	40	11.9	5.0
02-18-1989	07:17:04	34.01 N	117.74 W	A	66	3.3	4.1
03-29-1989	09:29:49	34.91 N	118.99 W	A	94	14.3	4.3
04-07-1989	20:07:30	33.62 N	117.90 W	A	81	12.9	4.7
06-12-1989	16:57:18	34.03 N	118.18 W	A	30	15.6	4.6

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Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
06-12-1989	17:22:25	34.02 N	118.18 W	A	31	15.5	4.4
12-28-1989	09:41:08	34.19 N	117.39 W	A	94	14.6	4.3
02-28-1990	23:43:36	34.14 N	117.70 W	A	66	4.5	5.4
03-01-1990	00:34:57	34.13 N	117.70 W	A	66	4.4	4.0
03-01-1990	03:23:03	34.15 N	117.72 W	A	64	11.4	4.7
03-02-1990	17:26:25	34.15 N	117.69 W	A	66	5.6	4.7
04-17-1990	22:32:27	34.11 N	117.72 W	A	64	3.6	4.8
06-28-1991	14:43:54	34.27 N	117.99 W	A	38	9.1	5.8
06-28-1991	17:00:55	34.25 N	117.99 W	A	38	9.5	4.3
07-05-1991	17:41:57	34.50 N	118.56 W	A	33	10.9	4.1
01-17-1994	12:30:55	34.21 N	118.54 W	A	12	18.4	6.7
01-17-1994	12:30:55	34.22 N	118.54 W	A	12	17.4	6.6
01-17-1994	12:31:58	34.27 N	118.49 W	C	10	6.0	5.9
01-17-1994	12:34:18	34.31 N	118.47 W	C	11	6.0	4.4
01-17-1994	12:39:39	34.26 N	118.54 W	C	13	6.0	4.9
01-17-1994	12:40:09	34.32 N	118.51 W	C	14	6.0	4.8
01-17-1994	12:40:36	34.34 N	118.61 W	C	23	6.0	5.2
01-17-1994	12:54:33	34.31 N	118.46 W	C	11	6.0	4.0
01-17-1994	12:55:46	34.28 N	118.58 W	C	17	6.0	4.1
01-17-1994	13:06:28	34.25 N	118.55 W	C	14	6.0	4.6
01-17-1994	13:26:45	34.32 N	118.46 W	C	12	6.0	4.7
01-17-1994	13:28:13	34.27 N	118.58 W	C	17	6.0	4.0
01-17-1994	13:56:02	34.29 N	118.62 W	C	21	6.0	4.4
01-17-1994	14:14:30	34.33 N	118.44 W	C	13	6.0	4.5
01-17-1994	15:07:03	34.30 N	118.47 W	A	11	2.6	4.2
01-17-1994	15:07:35	34.31 N	118.47 W	A	11	1.6	4.1
01-17-1994	15:54:10	34.38 N	118.63 W	A	27	13.0	4.8
01-17-1994	17:56:08	34.23 N	118.57 W	A	16	19.2	4.6
01-17-1994	19:35:34	34.31 N	118.46 W	A	11	2.3	4.0
01-17-1994	19:43:53	34.37 N	118.64 W	A	27	13.9	4.1
01-17-1994	20:46:02	34.30 N	118.57 W	C	17	6.0	4.9
01-17-1994	22:31:53	34.34 N	118.44 W	C	13	6.0	4.1
01-17-1994	23:33:30	34.33 N	118.70 W	A	29	9.8	5.6
01-17-1994	23:49:25	34.34 N	118.67 W	A	28	8.4	4.0
01-18-1994	00:39:35	34.38 N	118.56 W	A	23	7.2	4.4
01-18-1994	00:40:04	34.39 N	118.54 W	A	23	.0	4.2
01-18-1994	00:43:08	34.38 N	118.70 W	A	32	11.3	5.2
01-18-1994	04:01:26	34.36 N	118.62 W	A	25	.9	4.3
01-18-1994	07:23:56	34.33 N	118.62 W	A	24	14.8	4.0
01-18-1994	11:35:09	34.22 N	118.61 W	A	19	12.1	4.2
01-18-1994	13:24:44	34.32 N	118.56 W	A	18	1.7	4.3
01-18-1994	15:23:46	34.38 N	118.56 W	A	23	7.7	4.8
01-19-1994	04:40:48	34.36 N	118.57 W	A	22	2.6	4.3
01-19-1994	04:43:14	34.37 N	118.71 W	C	32	6.0	4.0
01-19-1994	09:13:10	34.30 N	118.74 W	A	32	13.0	4.1

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Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
01-19-1994	14:09:14	34.22 N	118.51 W	A	10	17.5	4.5
01-19-1994	21:09:28	34.38 N	118.71 W	A	33	14.4	5.1
01-19-1994	21:11:44	34.38 N	118.62 W	A	26	11.4	5.1
01-21-1994	18:39:15	34.30 N	118.47 W	A	10	10.6	4.5
01-21-1994	18:39:47	34.30 N	118.48 W	A	11	11.9	4.0
01-21-1994	18:42:28	34.31 N	118.47 W	A	12	7.9	4.2
01-21-1994	18:52:44	34.30 N	118.45 W	A	10	7.6	4.3
01-21-1994	18:53:44	34.30 N	118.46 W	A	10	7.7	4.3
01-23-1994	08:55:08	34.30 N	118.43 W	A	9	6.0	4.1
01-24-1994	04:15:18	34.35 N	118.55 W	A	19	6.5	4.6
01-24-1994	05:50:24	34.36 N	118.63 W	A	26	12.1	4.3
01-24-1994	05:54:21	34.36 N	118.63 W	A	26	10.9	4.2
01-27-1994	17:19:58	34.27 N	118.56 W	A	16	14.9	4.6
01-28-1994	20:09:53	34.38 N	118.49 W	A	19	.7	4.2
01-29-1994	11:20:35	34.31 N	118.58 W	A	19	1.1	5.1
01-29-1994	12:16:56	34.28 N	118.61 W	A	20	2.7	4.3
02-03-1994	16:23:35	34.30 N	118.44 W	A	9	9.0	4.0
02-05-1994	08:51:29	34.37 N	118.65 W	A	28	15.4	4.0
02-06-1994	13:19:27	34.29 N	118.48 W	A	10	9.3	4.1
02-25-1994	12:59:12	34.36 N	118.48 W	A	16	1.2	4.0
03-20-1994	21:20:12	34.23 N	118.47 W	A	7	13.1	5.2
05-25-1994	12:56:57	34.31 N	118.39 W	A	10	7.0	4.4
06-15-1994	05:59:48	34.31 N	118.40 W	A	10	7.4	4.1
12-06-1994	03:48:34	34.29 N	118.39 W	A	8	9.0	4.5
02-19-1995	21:24:18	34.05 N	118.92 W	A	51	15.6	4.3
06-26-1995	08:40:28	34.39 N	118.67 W	A	31	13.3	5.0
12-31-1995	21:48:23	35.10 N	118.31 W	A	98	7.9	4.0
03-20-1996	07:37:59	34.36 N	118.61 W	A	25	13.0	4.1
05-01-1996	19:49:56	34.35 N	118.70 W	A	31	14.4	4.1
10-23-1996	22:09:29	34.48 N	119.35 W	A	92	14.5	4.2
04-26-1997	10:37:30	34.37 N	118.67 W	A	29	16.5	5.1
04-26-1997	10:40:29	34.37 N	118.67 W	A	30	14.6	4.0
04-27-1997	11:09:28	34.38 N	118.65 W	A	28	15.2	4.8
06-28-1997	21:45:25	34.17 N	117.34 W	A	99	10.0	4.2
01-05-1998	18:14:06	33.95 N	117.71 W	A	71	11.5	4.3
08-20-1998	23:49:58	34.37 N	117.65 W	A	72	9.0	4.4
07-22-1999	09:57:24	34.40 N	118.61 W	A	27	11.6	4.0
03-07-2000	00:20:28	33.81 N	117.72 W	A	79	11.3	4.0
12-24-2000	01:04:21	34.92 N	119.02 W	A	96	13.9	4.4
01-14-2001	02:26:14	34.28 N	118.40 W	A	7	8.8	4.3
01-14-2001	02:50:53	34.29 N	118.40 W	A	7	8.4	4.0
09-09-2001	23:59:18	34.06 N	118.39 W	A	18	7.9	4.2
10-28-2001	16:27:45	33.92 N	118.27 W	A	36	21.1	4.0
12-14-2001	12:01:35	33.95 N	117.75 W	A	68	13.8	4.0
01-29-2002	05:53:28	34.36 N	118.66 W	A	28	14.1	4.2

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Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
09-03-2002	07:08:51	33.92 N	117.78 W	A	67	12.9	4.8
07-24-2004	12:55:19	34.38 N	119.44 W	A	97	3.6	4.3
01-06-2005	14:35:27	34.13 N	117.44 W	A	90	4.2	4.4
08-09-2007	07:58:49	34.30 N	118.06 W	A	33	7.6	4.7
10-16-2007	08:53:44	34.38 N	117.64 W	A	73	8.1	4.2
03-09-2008	09:22:32	34.14 N	117.46 W	A	87	3.7	4.0
07-29-2008	18:42:15	33.95 N	117.76 W	A	66	14.7	5.4
04-24-2009	03:27:50	33.89 N	117.79 W	A	67	4.2	4.0
05-02-2009	01:11:13	34.07 N	118.88 W	A	47	14.2	4.4
05-08-2009	20:27:13	34.44 N	119.18 W	A	76	7.6	4.2
05-18-2009	03:39:36	33.94 N	118.34 W	A	32	13.9	4.7
05-19-2009	22:49:11	33.93 N	118.33 W	A	33	12.8	4.0
03-16-2010	11:04:00	33.99 N	118.08 W	A	39	18.9	4.4
08-24-2010	05:42:17	33.51 N	119.03 W	A	98	16.9	4.0
09-01-2011	20:47:08	34.34 N	118.47 W	A	14	7.3	4.2
05-30-2012	05:14:00	33.69 N	119.06 W	A	84	16.4	4.0
06-14-2012	03:17:15	33.91 N	117.79 W	A	66	9.8	4.0
08-08-2012	06:23:34	33.90 N	117.79 W	A	67	10.1	4.5
08-08-2012	16:33:22	33.90 N	117.79 W	A	67	10.4	4.5
08-29-2012	20:31:00	33.91 N	117.79 W	A	67	9.2	4.1
05-15-2013	20:00:06	33.66 N	118.37 W	A	63	1.2	4.1
01-15-2014	09:35:18	34.14 N	117.44 W	A	89	3.6	4.4
03-17-2014	13:25:36	34.13 N	118.49 W	A	12	9.5	4.4
03-29-2014	04:09:42	33.93 N	117.92 W	A	55	4.8	5.1
03-29-2014	21:32:45	33.96 N	117.89 W	A	55	9.4	4.1
06-02-2014	02:36:43	34.10 N	118.49 W	A	16	4.4	4.2
01-04-2015	03:18:09	34.62 N	118.63 W	A	48	7.8	4.3
07-25-2015	12:54:06	34.09 N	117.44 W	A	90	5.1	4.2
12-30-2015	01:48:57	34.19 N	117.41 W	A	91	7.0	4.4

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Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(CAL TECH DATA 1932-2015)

S E A R C H O F E A R T H Q U A K E D A T A F I L E 1

SITE: Sun Valley, CA

COORDINATES OF SITE	34.2227 N 118.4042 W
DISTANCE PER DEGREE	110.9 KM-N 92.1 KM-W
MAGNITUDE LIMITS	4.0 - 8.5
TEMPORAL LIMITS	1932 - 2015
SEARCH RADIUS (KM)	100
NUMBER OF YEARS OF DATA	84.00
NUMBER OF EARTHQUAKES IN FILE	4616
NUMBER OF EARTHQUAKES IN AREA	469

Amec Foster Wheeler Environment & Infrastructure, Inc.

Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
RICHTER DATA 1906-1931)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
10-23-1916	02:44:00	34.90 N	118.90 W	D	88	.0	6.0

S E A R C H O F E A R T H Q U A K E D A T A F I L E 2

SITE: Sun Valley, CA

COORDINATES OF SITE	34.2227 N 118.4042 W
DISTANCE PER DEGREE	110.9 KM-N 92.1 KM-W
MAGNITUDE LIMITS	6.0 - 8.5
TEMPORAL LIMITS	1906 - 1931
SEARCH RADIUS (KM)	100
NUMBER OF YEARS OF DATA	26.00
NUMBER OF EARTHQUAKES IN FILE	35
NUMBER OF EARTHQUAKES IN AREA	1

Amec Foster Wheeler Environment & Infrastructure, Inc.

Table 3 (continued)
List of Historic Earthquakes of Magnitude 4.0 or Greater Within 100 Km of the Site
(NOAA/CDMG DATA 1812-1905)

DATE	TIME	LATITUDE	LONGITUDE	Q	DIST	DEPTH	MAGNITUDE
02-09-1890	04:06:00	34.00 N	117.50 W	D	87	.0	7.0

S E A R C H O F E A R T H Q U A K E D A T A F I L E 3

SITE: Sun Valley, CA

COORDINATES OF SITE	34.2227 N	118.4042 W
DISTANCE PER DEGREE	110.9 KM-N	92.1 KM-W
MAGNITUDE LIMITS	7.0 - 8.5	
TEMPORAL LIMITS	1812 - 1905	
SEARCH RADIUS (KM)	100	
NUMBER OF YEARS OF DATA	94.00	
NUMBER OF EARTHQUAKES IN FILE	9	
NUMBER OF EARTHQUAKES IN AREA	1	

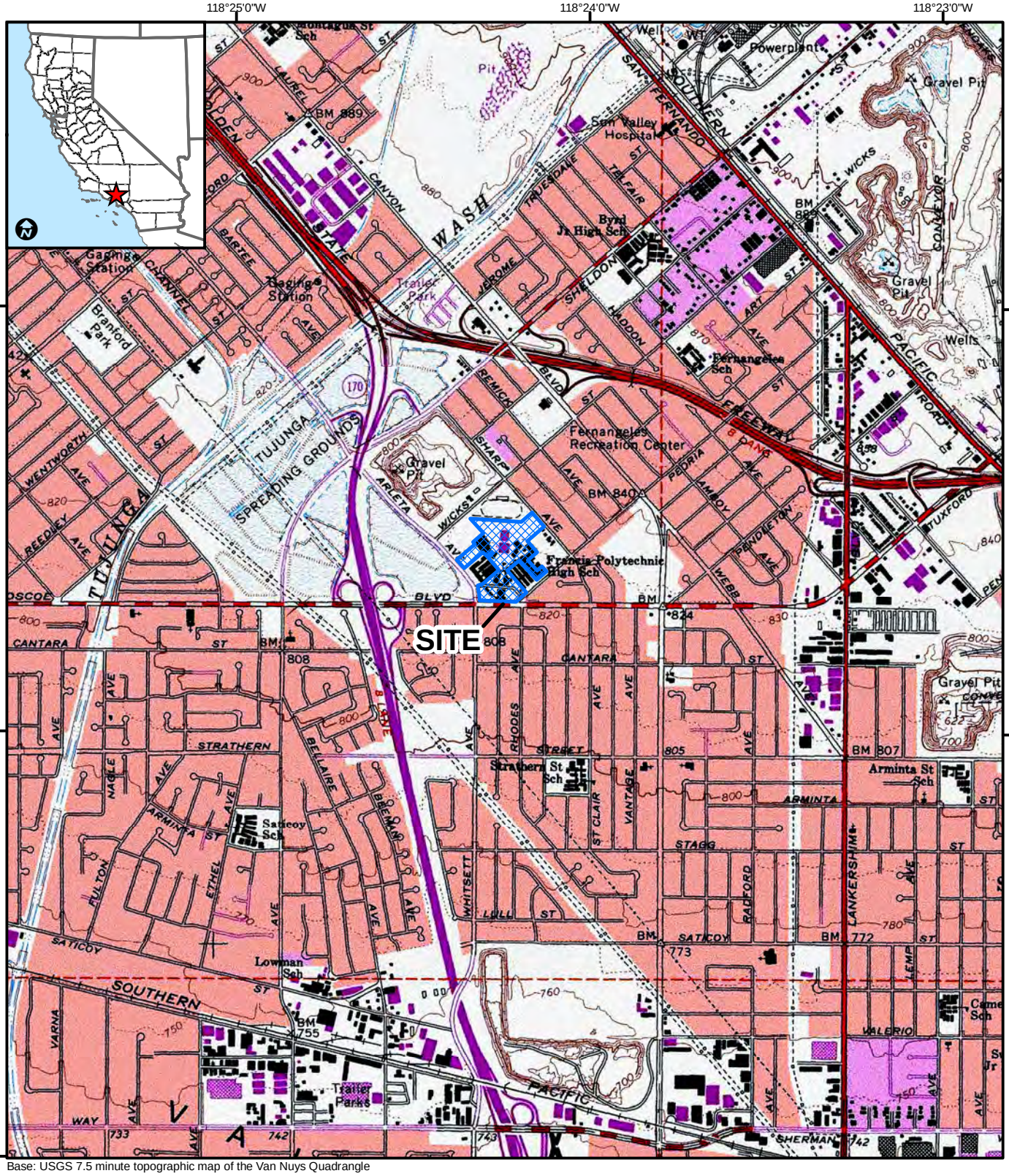
Amec Foster Wheeler Environment & Infrastructure, Inc.

Table 4. Horizontal Response Spectra
Pseudospectral Acceleration in g

	5% Damping	
Period in Seconds	Maximum Considered Earthquake	Design
0.010	0.92	0.61
0.020	0.93	0.62
0.030	0.98	0.67
0.050	1.05	0.80
0.075	1.22	0.96
0.100	1.40	1.12
0.112	-	1.20
0.150	1.72	1.20
0.170	-	1.20
0.200	1.92	1.28
0.250	2.06	1.37
0.300	2.11	1.41
0.400	2.15	1.43
0.500	2.08	1.39
0.750	1.78	1.19
1.000	1.49	1.00
1.500	1.08	0.72
2.000	0.82	0.54
3.000	0.51	0.34
4.000	0.36	0.24

By: WL 11/7/16
Chkd: MM 11/7/16

FIGURES



Base: USGS 7.5 minute topographic map of the Van Nuys Quadrangle

0 1,000 2,000 4,000 Feet

amec foster wheeler

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Los Angeles, California 90040
Tel: 323.889.5300
Fax: 323.721.6700

Proposed School Modernization
Francis Polytechnic Senior High School
Sun Valley, California

LAT:	34.2227
LON:	-118.4042
SCALE:	1:24,000
DRAWN:	JO
CHECK:	PER
DATE:	09-23-2016

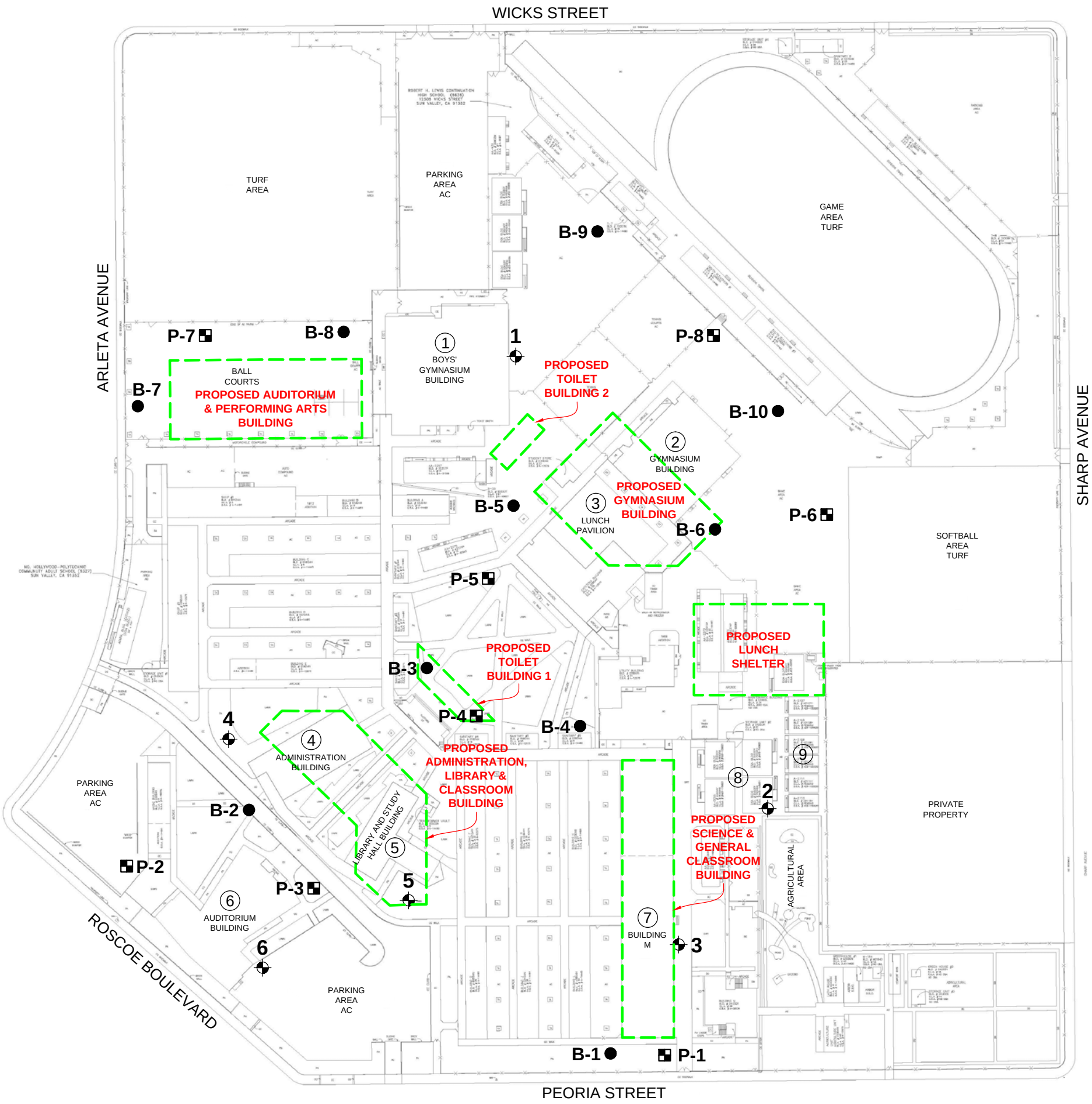
SITE VICINITY MAP

FIGURE: **1**

PROJECT: 4953-16-1011

G:\4953 Geotech\2016\161011 Francis Polytechnic Modernization\GIS\1601011 Figure 1 Site Vicinity Map.mxd

Path: G:\4953_Geotech\2016\161011 Francis Polytechnic Modernization\CAD\DWG\4953-16-1011_Fig-2_Plot-Plan.dwg [B-17x11]
Date: November 07, 2016 - 4:14pm By: vo.nguyen



LEGEND:

B-10 ● BORING LOCATIONS

P-8 ■ FIELD PERMEABILITY TEST LOCATIONS

6 ⌖ PRIOR BORING LOCATIONS (JOB NO. 4953-15-0432)

[ ] APPROXIMATE PROPOSED BUILDING LOCATIONS

REFERENCE:

PLOT PLAN DATED JULY 1, 2003 PROVIDED BY LAUSD.

0 75' 150' 300'

SCALE: 1" = 150'

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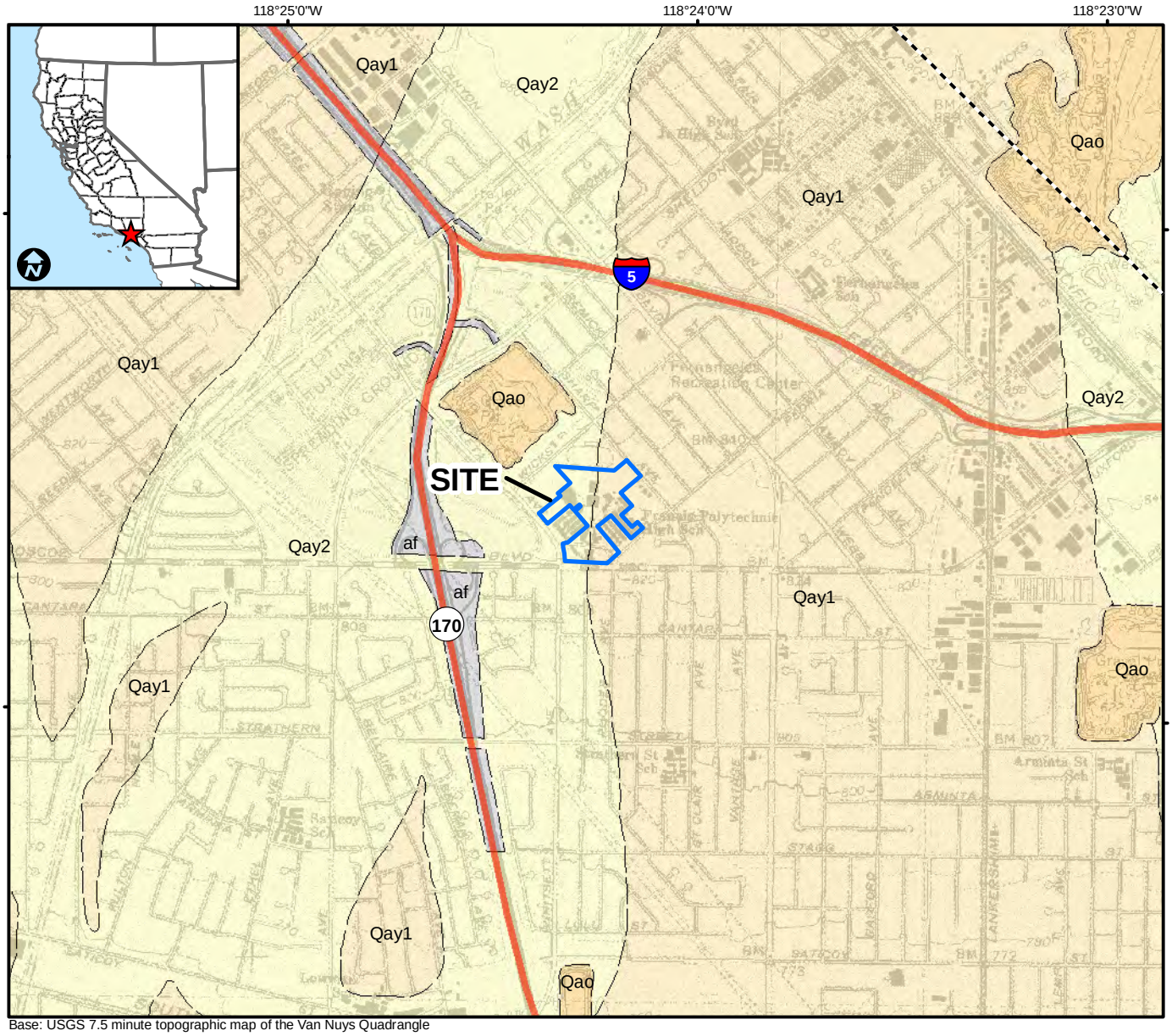
PROPOSED MODERNIZATION
FRANCIS POLYTECHNIC, SENIOR HIGH SCHOOL
12431 ROSCOE BOULEVARD, SUN VALLEY, CALIFORNIA

LT,LNG:	
PREPARED BY:	VMN
SCALE:	1" = 150'
DRAWN:	AR
CHKD:	WL
DATE:	11/3/2016

PLOT PLAN

FIGURE NO. **2**

PROPOSED NO. 4953-16-1011



Base: USGS 7.5 minute topographic map of the Van Nuys Quadrangle

Geologic Units

Unit - Description (Age)

af - Artificial Fill (late Holocene)
Qay2 - Alluvium underlying historically flooded areas (late Holocene)
Qay1 - Undifferentiated Holocene Alluvium (Holocene)
Qao- Older Alluvium: gravel, sand, silt, and clay (Late Pleistocene)

0 1,000 2,000 4,000 Feet

Contacts:

— – contact, location approximate
----- fault, location concealed

Reference:
Yerkes, R.F., 1997, Preliminary geologic map of the Van Nuys 7.5' quadrangle, southern California: a digital database: U.S. Geological Survey, Open-File Report OF-97-165, scale 1:24,000.

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Proposed School Modernization
Francis Polytechnic Senior High School
Sun Valley, California

LAT:	34.2227
LON:	-118.4042
SCALE:	1:24,000
DRAWN:	PER
CHECK:	PER
DATE:	9/24/16

LOCAL GEOLOGIC MAP

FIGURE: 3

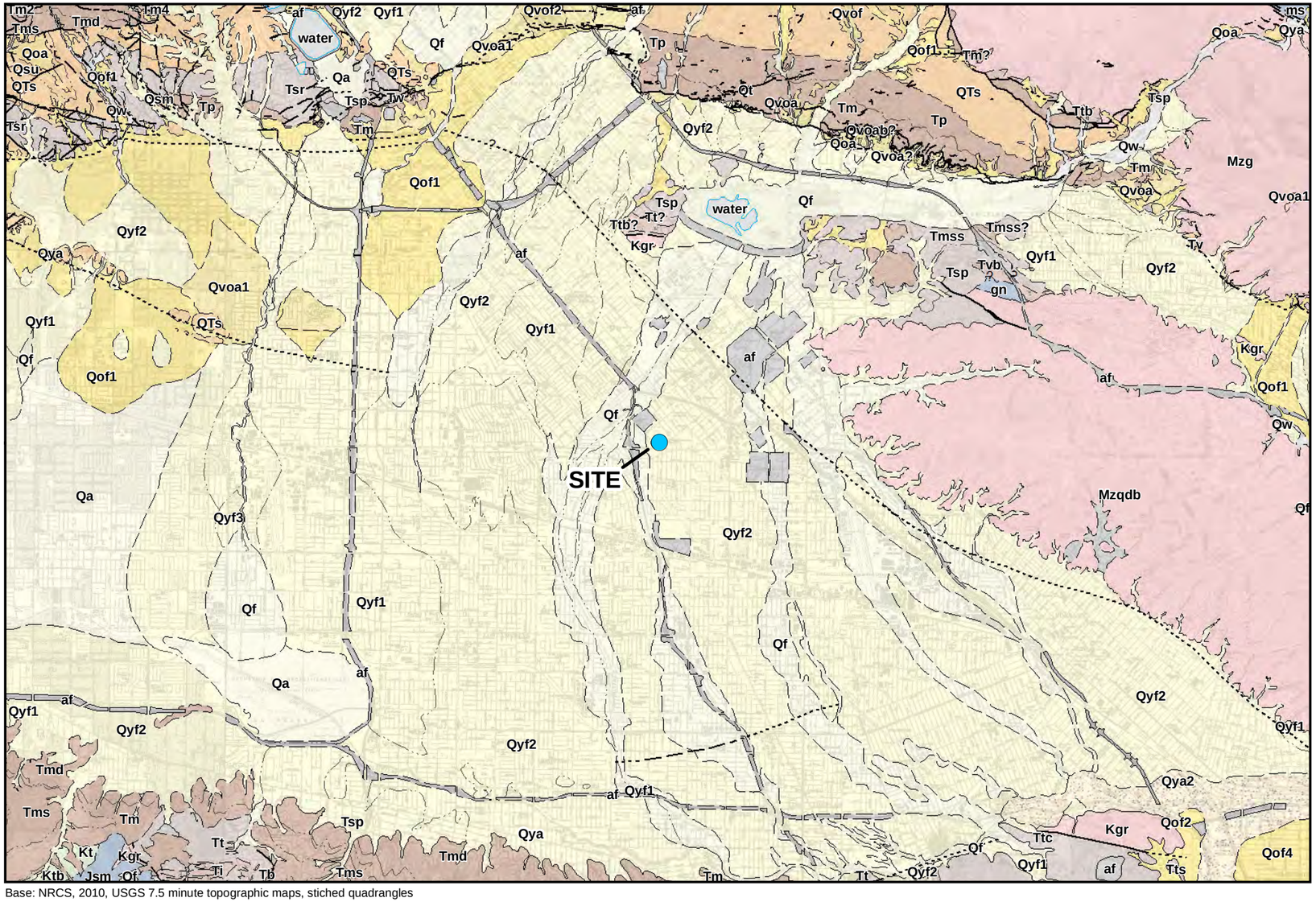
PROJECT: 4953-16-1011

Path: G:\4953 Geotech\2016\161011 Francis Polytechnic Modernization\GIS\1601011 Figure 3 Local Geologic Map.mxd

Geologic Units:

Qaf - Artificial fill (late Holocene)
Qls - Very young landslide deposits (late Holocene)
Qe - Eolian and dune deposits (late Holocene)
Qye - Young eolian and dune deposits (Holocene and late Pleistocene)
Qa - Alluvial flood-plain deposits (late Holocene)
Qw - Alluvial Wash Deposits (late Holocene)
Qya- Young alluvial-fan and valley deposits (Holocene and late Pleistocene)
Qyfs - Young alluvial-fan and valley deposits (Holocene and late Pleistocene)
Qyf - Young alluvial-fan and valley deposits (Holocene and late Pleistocene)
Qoa - Old axial-channel deposits (late Pleistocene)
Qoe - Old eolian and dune deposits (late to middle Pleistocene)
Qof- Old alluvial-fan deposits (mid Pleistocene)
Qsh- Ingelwood Formation, siltstone, fine sandstone (early Pleistocene)
Qsp - San Pedro Formation, undivided; sand and silty sand (early Pleistocene)
Qi - Inglewood Formation, siltstone (early Pleistocene)
Qpi - Inglewood Formation, siltstone, fine sandstone (early Pleistocene)
Qsp - San Pedro Formation, undivided; sand and silty sand (early Pleistocene)
Tfl - Fernando Formation, lower member, silty sandstone and siltstone, conglomerate (Pliocene)
Tfuc - Fernando Formation, sandstone, conglomerate (Pliocene)
Ttuc Fernando Formation, sandstone, conglomerate (Pliocene)
Tfuf Fernando Formation, fossiliferous sandstone (Pliocene)
Tfuc Fernando Formation, sandstone, conglomerate (Pliocene)
Tms Modelo Formation, undivided, mudstone, siltstone, shale (late Miocene)
Tpsl Puente Formation, siltstone and very fine sandstone (late Miocene)
Tpss - Puente Formation, sandstone (late Miocene)
Tpsl - Puente Formation, siltstone and very fine sandstone (late Miocene)
Tpds - Puente Formation, diatomaceous shale (late Miocene)
Ttsl - Topanga Canyon Formation, siltstone, sandstone and siliceous shale (middle Miocene)
Tt -Topanga Group, undivided, sedimentary and volcanic rocks (middle Miocene)
Ttcg Topanga Group, conglomerate (middle Miocene)
Ttss Topanga Canyon Formation, sandstone, (middle Miocene)
Tb -Basalt dikes, flows and breccias (Miocene)
Tpsh - Puente Formation, La Vida Member, shale (Miocene)
Tm - Monterey Formation, marine siltstone (Miocene)
Tss -Santa Susana Formation, clay and mudrock (early to late Paleocene)
Kgr - Granitic rocks (late Cretaceous)
Kt- Tuna Canyon Formation, undivided marine sandstone, siltstone, conglomerate (late Cretaceous)
Jsm - Santa Monica Slate (late Jurassic)
Jsms - Santa Monica Slate, spotted (late Jurassic)
Jsp - Santa Monica Slate, phyllite (late Jurassic)

Note: Only core geologic units shown for some units



Base: NRCS, 2010, USGS 7.5 minute topographic maps, stiched quadrangles

Geologic Contacts

- contact, identity and existence certain, location accurate
- contact, identity and existence certain, location approximate
- contact, identity and existence certain, location concealed
- contact, identity and existence certain, location inferred
- fault, identity and existence certain, location accurate
- fault, identity and existence certain, location approximate
- fault, identity and existence certain, location concealed
- fault, identity and existence certain, location inferred
- fault, identity or existence questionable, location accurate
- fault, identity or existence questionable, location concealed

(Queried where contacts are questionable)



0 0.5 1 2 3 4 Miles

References:
Bedrossian, T.L., Roffers, P., Hayhurst, C.A., 2010, "Geologic Compilation of Quaternary Surficial Deposits in Southern California", California Geological Survey, vector spatial data, Special Report 217, July 2010.
Morton, D.M., "Preliminary Digital Geologic Map of the Los Angeles 30' x 60' Quadrangle, Southern California," Version 1.0, USGS Open File Report 2005-1019.

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Proposed School Modernization
Francis Polytechnic Senior High School
Sun Valley, California

LAT: 34.2227
LON: -118.4042
SCALE: 1:100,000
DRAWN: JO
CHECK: PER
DATE: 11/7/16

REGIONAL GEOLOGIC MAP

FIGURE: 4
PROJECT: 4953-16-1011

Path: G:\4953_Geotech\2016\161011 Francis Polytechnic Modernization\GIS\161011_Figure_4_Regional_Geologic_Map.mxd

Blind Thrusts

1 Northridge Thrust
2 Compton Thrust
3 San Joaquin Hills Thrust
4 Upper Elysian Park Thrust
5 Puente Hills Thrust

Explanation

SITE

Earthquakes

Approximate Epicentral Area of Earthquake

Events ≥ 7.0

Events 6.0 - 6.9

Events 5.0 - 5.9

Faults

Blind Thrust Faults (surface projection)

Historic Fault Displacement

Holocene Fault Displacement

Evidence of Late Quaternary Fault Displacement

Undivided Quaternary Faults

Bar and ball on downthrown side (relative or apparent)

Arrows along fault indicate relative or apparent direction of lateral movement

Arrows on fault indicates direction of dip

Low angle fault identified with barbs on upper plate. Fault surface generally dips less than 45°but locally may have been subsequently steepened.

REFERENCES:
Jennings, C.W. and Bryant, W.A., 2010,"Fault Activity Map of California,":California Geological Survey, GDM-006, May 2010
Earthquake Catalogs: California Geological Survey, 1769-1932;
Southern California Earthquake Center, 1932-2016.
Working Group on California Earthquake Probabilities (WGCEP), 2016, Fault Database Tools, <http://www.wgcep.org/tools-fault_db>

0 10 20 40 Miles

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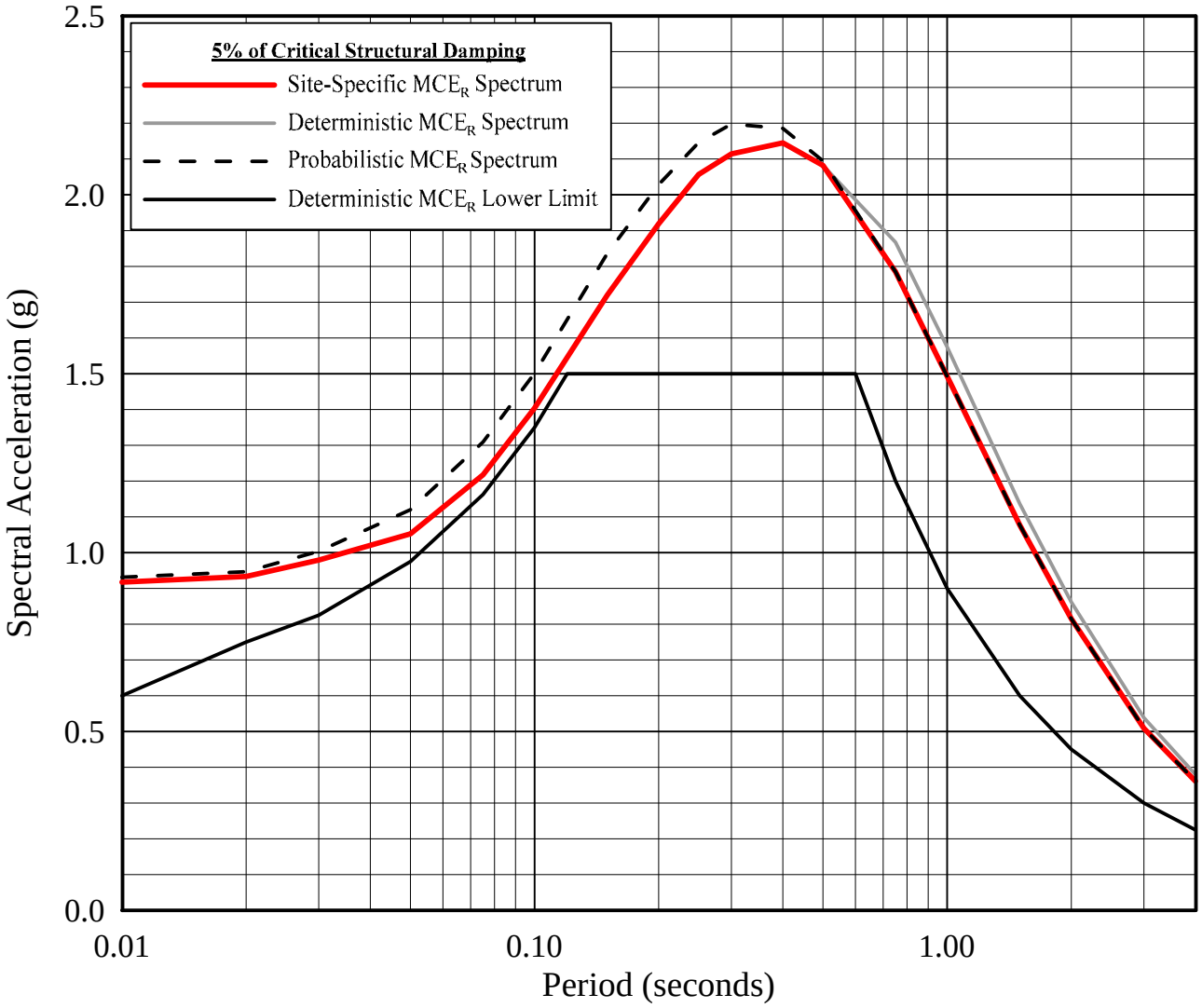
Proposed School Modernization
Francis Polytechnic Senior High School
Sun Valley, California

LAT: 34.2227
LON: -118.4042
SCALE: 1:750,000
DRAWN: JO
CHECK: PER
DATE: 11/7/2016

REGIONAL FAULT AND SEISMICITY MAP

FIGURE: 5
PROJECT: 4953-16-1011

Path: G:\4953_Geotech\2016\161011 Francis Polytechnic Modernization\GIS\161011_Figure_5_Faults_Seismicity_Map_thrusts.mxd

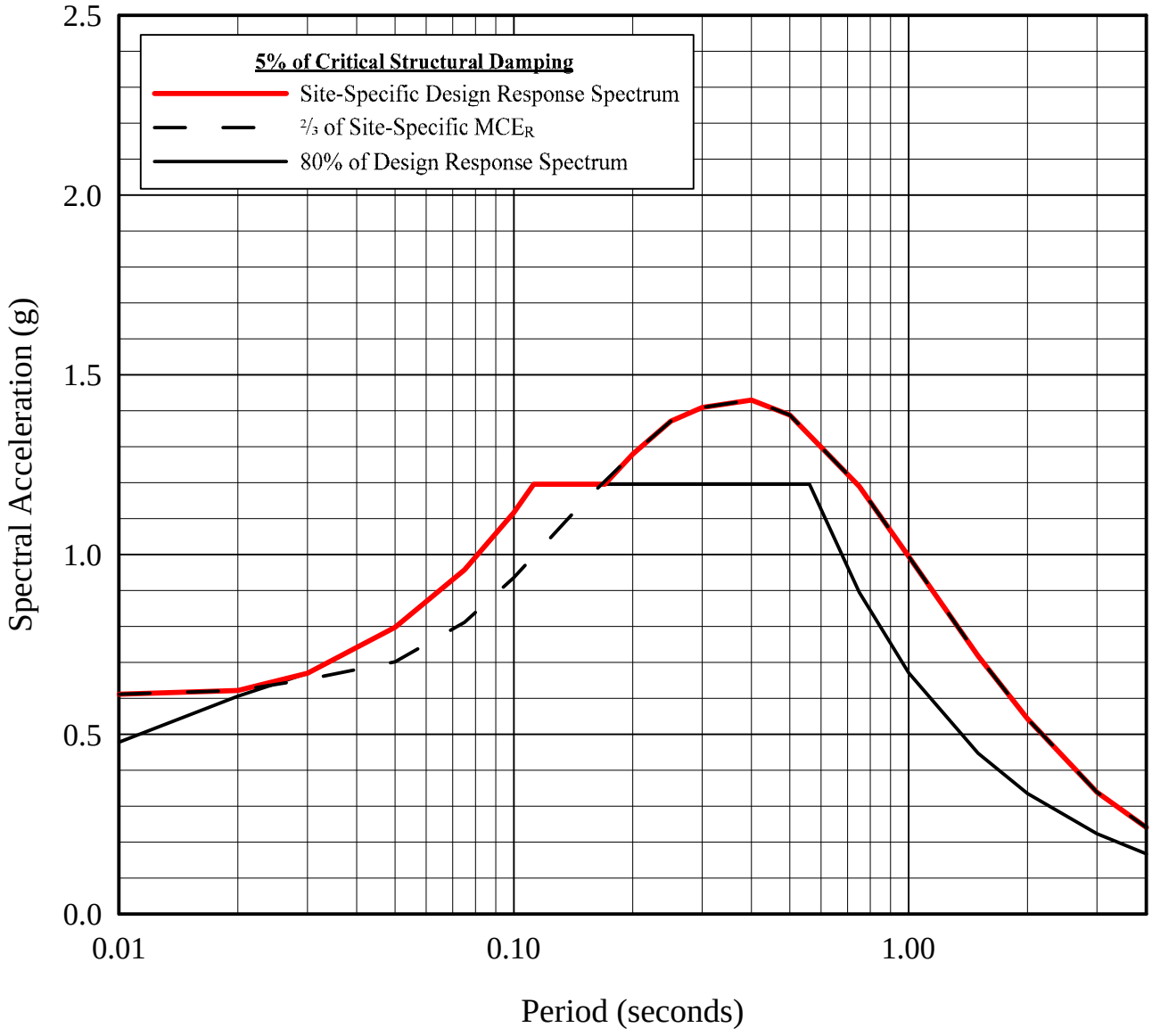


NOTES: Probabilistic MCE$_R$ spectrum was computed for a ground motion level expected to achieve a 1% probability of collapse within a 50 year period.

Deterministic MCE$_R$ spectrum is governed by:
- Magnitude 6.9 earthquake on the Northridge Fault at periods up to 0.4 second.
- Magnitude 6.9 earthquake on the Verdugo Fault at periods larger than 0.4 second.

Prepared/Date: WL 11/7/2016
Checked/Date: MM 11/7/2016

Proposed School Modernization Francis Polytechnic Senior High School 12431 Roscoe Boulevard Sun Valley, California	amec foster wheeler	Horizontal Response Spectra Components of the Risk-Targeted Maximum Considered Earthquake (MCE$_R$) Project No. 4953-15-0302 Figure 6



Prepared/Date: WL 11/7/2016
Checked/Date: MM 11/7/2016

Proposed School Modernization Francis Polytechnic Senior High School 12431 Roscoe Boulevard Sun Valley, California	amec foster wheeler	Horizontal Response Spectra Components of the Design Response Spectrum Project No. 4953-15-0302 Figure 7

APPENDIX A

CURRENT FIELD EXPLORATIONS AND LABORATORY TEST RESULTS

APPENDIX A

CURRENT FIELD EXPLORATIONS AND LABORATORY TEST RESULTS

CURRENT FIELD EXPLORATIONS

The soil conditions beneath the site were explored by drilling 10 borings at the locations shown on Figure 2. The borings were drilled to depths of 31 to 51 feet below the existing grade. In addition to the exploration borings, eight borings were drilled to depths of 15 to 20 feet below the existing grade for the purpose of determining the infiltration rate of the subsurface soils; the locations of these borings are also shown on Figure 2. All borings were drilled using truck-mounted 8-inch-diameter hollow stem auger drilling equipment.

The soils encountered were logged by our field technician and undisturbed and bulk samples were obtained for laboratory inspection and testing. The logs of the borings are presented on Figures A-1.1 through A-1.18; the depths at which undisturbed samples were obtained are indicated to the left of the boring logs. The number of blows required to drive the Crandall sampler 12 inches using a 140 pound automatic hammer falling 30 inches is indicated on the logs. In addition to obtaining undisturbed samples, standard penetration tests (SPT) were performed several of the borings; the results of the tests are indicated on the logs. The soils are classified in the accordance with the Unified Soil Classification System described on Figure A-2.

LABORATORY TESTS

Laboratory tests were performed on selected samples obtained from the borings to aid in the classification of the soils and to determine their engineering properties.

The field moisture content and dry density of the soils encountered were determined by performing tests on the undisturbed samples. The results of the tests are shown to the left on the boring logs.

Direct shear tests were performed on selected undisturbed samples to determine the strength of the soils. The tests were performed at near saturation moisture content and at various surcharge pressures. The values determined from the direct shear tests are presented on Figure A-3, Direct Shear Test Data.

Confined consolidation tests were performed on six relatively undisturbed samples to determine the compressibility of the soils. Water was added to the samples during the tests to illustrate the effect of moisture on the compressibility. The results of the tests are presented on Figures A-4.1 through A-4.6, Consolidation Test Data.

The optimum moisture content and maximum dry density of the upper soils were determined by performing a compaction test on two samples. The tests were performed in accordance with the ASTM Designation D1557 method of compaction. The results of the tests are presented on Figure A-5, Compaction Test Data.

Hydroconsolidation test were performed on undisturbed samples to determine the hydroconsolidation potential of the on-site soils. The results of the tests are presented on Figure A-6, Hydroconsolidation Test Data.

To determine the particle size distribution of the soils and to aid in classifying the soils, mechanical analyses were performed on one sample. The results of the mechanical analyses are presented on Figure A-7, Particle Size Distribution.

In addition to the full mechanical analyses, tests to determine the percentage of fines (material passing through a -200 sieve) in selected samples were performed. The results of these tests are presented on the boring logs.

To provide information for paving design, a stabilometer test (“R” value test) was performed on two samples of the upper soils. The tests were performed for us by LaBelle·Marvin Professional Pavement Engineering. The results of the test are presented on Figure A-8.

Soil corrosivity tests were performed on three samples of the on-site soils. The results of the tests are presented on Figures A-9.1 through A-9.3.

BORING 1

DATE DRILLED: September 13, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	5		0.8	115	25	
			2.1	112	28	
	10		1.9	107	29	
		26				
	15		2.9	109	34	
		24				
	20		6.8	107	79	
	25	36				
					74	
	30	65				
	35		4.0	98	71	
		76/10"				
	40					

Landscaping area
FILL - SILTY SAND - moist, brown, fine to medium grained, fine gravel

SW — WELL-GRADED SAND with GRAVEL - medium dense, moist, light gray, fine to coarse grained

Alternating Poorly Graded Sand and Well-Graded Sand, more gravel

Cobble fragment (up to 3 inches in size)

More cobble fragment (up to 4 inches in size)

More coarse gravel

No recovery

Becomes very dense

(CONTINUED ON FOLLOWING FIGURE)

Field Tech: AR
Prepared By: WL
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

amec foster wheeler

LOG OF BORING
Project: 4953-16-1011 Figure: A-1.1a

B12SOIL_CRANDALL(DECIMAL_ELE) L:\70131 GEOTECH\GINT\WLIBRARY AMEC JUNE2012.GLB
P:\4953 GEOTECH\2016-PRO\16101 LAUSD POLYTECHNIC HS MODERNIZATION\3.2 ALL FIELD NOTES\4953-16-1011B.GPJ 11/7/16

BORING 1 (Continued)

DATE DRILLED: September 13, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	45		2.9	113	85	
		55				
	50		2.0	114	65	
	55					
	60					
	65					
	70					
	75					
	80					

Becomes light brownish gray, fewer gravel

END OF BORING AT 51 FEET

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Boring was backfilled with soil cuttings and tamped.

* Number of blows required to drive the Crandall sampler 12 inches using a 140 pound automatic hammer falling 30 inches.

** Elevations were not measured.

Field Tech: AR
Prepared By: WL
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

amec foster wheeler

LOG OF BORING

Project: 4953-16-1011 Figure: A-1.1b

B12SOIL_CRANDALL(DECIMAL_ELE) L:\70131 GEOTECH\GINT\WLIBRARY AMEC JUNE2012.GLB
P:\4953 GEOTECH\2016-PROJ\161011 LAUSD POLYTECHNIC HS MODERNIZATION\3.2 ALL FIELD NOTES\4953-16-1011B.GPJ 11/7/16

BORING 2

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0							5-inch thick Asphalt Concrete
								FILL - SILTY SAND- moist, olive brown, fine grained, some medium, trace coase, trace fine gravel (up to ¾ inch in size), some rootlets
								FILL - POORLY GRADED SAND with SILT - moist, light grayish brown, fine grained, some medium, trace coarse, some fine gravel (up to ½ inch in size), some silt. Some cobbles (up to 4 inches in size)
							SP	POORLY GRADED SAND - moist, brownish gray, fine to medium grained, some coarse, some fine gravel (up to ½ inch in size), some light grayish brown silt
	5		3.0	107	14			
			1.3	120	27		SW	WELL-GRADED SAND - medium dense, moist, light brown and gray, fine to coarse grained, some fine to coarse gravel (up to 1 inch in size), trace silt
	10						SP	POORLY GRADED SAND - medium dense, moist, brownish gray, fine to medium grained, some coarse, some fine gravel (up to ½ inch in size)
			1.7	121	41			
		9						Becomes olive brown, grades to fine grained, some medium
	15							Thin layer of Silt
			1.7	106	22			Becomes light yellow, coarse grained, trace to some fine gravel (up to ¼ inch in size), small silt nodules
	20	33						Becomes dense, olive brown, fine to medium grained
			3.2	112	20			Thin interbed of Silty Sand from 22.75 to 23.75 feet
								Becomes yellowish brown, trace coarse, trace to some fine gravel (up to ½ inch in size), trace silt
	25	34						Fine to medium grained, trace coarse, trace fine gravel (up to ¼ inch in size)
	30		3.1	126	33			More fine grained, some fine to coarse gravel (up to 1½ inches in size), some silt
		40						
	35		5.3	111	35			Thin layers of Silty Sand
		50						
	40							

(CONTINUED ON FOLLOWING FIGURE)

Field Tech: LH
Prepared By: JO
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

amec foster wheeler

LOG OF BORING

Project: 4953-16-1011 Figure: A-1.2a

B12SOIL_CRANDALL(DECIMAL_ELE) L:\70131 GEOTECH\GINT\WLIBRARY AMEC JUNE2012.GLB
P:\4953 GEOTECH\2016-PRO\16101 LAUSD POLYTECHNIC HS MODERNIZATION\3.2 ALL FIELD NOTES\4953-16-1011B.GPJ 11/15/16

BORING 2 (Continued)

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
	45		1.9	108	38		SP-SM
		53					SP
	50		1.8	112	23		SP-SM
	55						
	60						
	65						
	70						
	75						
	80						

POORLY GRADED SAND with SILT - medium dense, moist, light grayish brown, fine grained, some medium, trace coarse, fine gravel (up to ¾ inch in size)

POORLY GRADED SAND - very dense, moist, gray, fine grained, some medium, some silt

POORLY GRADED SAND with SILT - medium dense, moist, olive to dark yellowish brown, fine to medium grained, some coarse, some fine gravel (up to ½ inch in size)

END OF BORING AT 50 FEET

NOTES:
Groundwater was not encountered. Boring was backfilled with soil cuttings, tamped, and patched with asphalt.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

Field Tech: LH
Prepared By: JO
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

amec foster wheeler

LOG OF BORING

Project: 4953-16-1011 Figure: A-1.2b

B12SOIL_CRANDALL(DECIMAL_ELE) L:\70131 GEOTECH\GINT\WLIBRARY AMEC JUNE2012.GLB
P:\4953 GEOTECH\2016-PROJ\161011 LAUSD POLYTECHNIC HS MODERNIZATION\3.2 ALL FIELD NOTES\4953-16-1011B.GPJ 11/15/16

BORING 3

DATE DRILLED: October 12, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0							FILL - WELL-GRADED SAND with GRAVEL - moist, light grayish brown, fine to coarse grained
							SW	WELL-GRADED SAND - dense, moist, light gray, fine to coarse grained, some gravel
	5		3.9	92	18			
					-			Boulder (about 12-inch in size), sample not recovered Cobble (about 8 to 10 inches in size)
	10		2.4	120	43			
	15		4.8	111	29			
	20		4.2	120	50			Becomes dense
	25		3.1	114	53			Alternating with fine grained sand
	30		3.7	118	76			Becomes very dense END OF BORING AT 31 FEET
	35							
	40							

NOTES:

Groundwater was not encountered. Boring was backfilled with soil cuttings and tamped. Bulk sample collected at 3 to 8 feet.

Field Tech: AR
Prepared By: WL
Checked By: LT

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

amec foster wheeler

LOG OF BORING

Project: 4953-16-1011 Figure: A-1.3

B12SOIL_CRANDALL(DECIMAL_ELE) L:\70131 GEOTECH\GINT\WLIBRARY AMEC JUNE2012.GLB
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BORING 4

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
	0						3-inch thick Asphalt Concrete
							FILL - SILTY SAND - moist, light brown, sand fine to medium, trace fine gravel, coblle (up to 6 inches in size)
						SP	POORLY GRADED SAND with GRAVEL - medium dense, moist, light gray, alternating layers of Poorly Graded Sand and Well-Graded Sand, fine to coarse grained, some gravel
	5		1.3	115	22		Cobbles (up to 4 to 5 inches in size)
			1.8	105	9		
	10		1.2	111	17		
		24					Slightly finer grained
	15		4.3	106	20		
		22					
	20					SW	WELL GRADED SAND with GRAVEL - medium dense, moist, light gray, fine to coarse grained
			1.9	113	25		Thin layer of Silt
	25	26					Layers of fine to medium grained with some silt.
			3.9	108	34		More gravel (up to ¼ inch in size)
	30	51					
	35		1.5	106	39		
		39					Becomes dense
	40						

(CONTINUED ON FOLLOWING FIGURE)

Field Tech: AR
Prepared By: JO
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

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LOG OF BORING

Project: 4953-16-1011 Figure: A-1.4a

B12SOIL_CRANDALL(DECIMAL_ELE) L:\70131 GEOTECH\GINT\WLIBRARY AMEC JUNE2012.GLB
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BORING 4 (Continued)

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	45		1.3	105	42	
		67				
	50		3.2	101	40	
	55					
	60					
	65					
	70					
	75					
	80					

More gravel, trace cobbles (up to 4 inches in size)

Becomes very dense

END OF BORING AT 51 FEET

NOTES:
Groundwater was not encountered. Boring was backfilled with soil cuttings, tamped, and patched with asphalt.

Field Tech: AR
Prepared By: JO
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

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LOG OF BORING

Project: 4953-16-1011 Figure: A-1.4b

B12SOIL_CRANDALL(DECIMAL_ELE) L:\70131 GEOTECH\GINT\WLIBRARY AMEC JUNE2012.GLB
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BORING 5

DATE DRILLED: September 14, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0							3-inch thick Asphalt Concrete
								FILL - SILTY SAND - moist, light brown, fine to medium grained
							SP	POORLY GRADED SAND - moist, light brown, fine to medium grained, trace gravel
							SM	SILTY SAND - moist, light gray, fine to coarse grained, some gravel, ¼-inch rootlets
	5		0.6	105	15		SP	POORLY GRADED SAND with GRAVEL - medium dense, moist, light gray, fine to medium grained, occasional coarse
					23			No recovery
	10	20						Alternatining Well-Graded Sand
			1.5	107	43			More gravel
	15	26						
	20		1.6	112	52		SW	WELL-GRADED SAND with GRAVEL - dense, moist, light gray, fine to coarse grained, some fine grained layers, trace cobbles (up to 4 inches in size).
		35						
	25		3.0	101	62			
		48						
	30		4.4	123	66			
	35	46					SP	POORLY GRADED SAND - dense, moist, light brownish gray, fine to medium grained, some silt
	40		3.5	114	65			

(CONTINUED ON FOLLOWING FIGURE)

Field Tech: AR
Prepared By: WL
Checked By: LT

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LOG OF BORING

Project: 4953-16-1011 Figure: A-1.5a

B12SOIL_CRANDALL(DECIMAL_ELE) L:\70131 GEOTECH\GINT\WLIBRARY AMEC JUNE2012.GLB
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BORING 5 (Continued)

DATE DRILLED: September 14, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	45	100/10"				
	50		3.1	110	43	
	55					
	60					
	65					
	70					
	75					
	80					

SW

WELL-GRADED SAND - dense to very dense, moist, light gray, fine to coarse grained

END OF BORING AT 50 FEET

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Boring was backfilled with soil cuttings, tamped, and patched with asphalt.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

Field Tech: AR
Prepared By: WL
Checked By: LT

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.5b

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BORING 6

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0						SP	3-inch thick Asphalt Concrete Thin Layer of Silty Sand POORLY GRADED SAND - medium dense, moist, light gray, fine to medium grained, some coarse, some gravel, cobbles (up to 5 inches in size)
	5				14	○		No recovery
			0.7	117	33	⊠		Cobbles (up to 14 inches in size)
	10		1.7	104	16	⊠		
	15		1.4	105	16	⊠		
	20		1.2	120	29	⊠		More gravel, trace cobbles (up to 5 inches in size)
	25		0.9	119	24	⊠		
	30		1.8	107	47	⊠		END OF BORING AT 31 FEET
	35							
	40							

NOTES:
Groundwater was not encountered. Boring was backfilled with soil cuttings, tamped, and patched with asphalt. Bulk sample collected at 1 to 5 feet

Field Tech: AR
Prepared By: JO
Checked By: LT

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.6

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BORING 7

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0							4.5-inch thick Asphalt Concrete over 2-inch thick Base Course FILL - POORLY GRADED SAND with SILT - moist, olive brown, fine grained, trace fine gravel (up to ½ inch in size)
	5						SP	POORLY GRADED SAND - medium dense, dry to moist, yellowish brown, fine to medium grained, some coarse, some fine gravel (up to 2 inches in size)
		18	1.0	107	10			Moist, fine to medium grained
	10							
		21	0.8	-	21			More fine grained sand and fine gravel, some silt (sample disturbed)
	15							
			1.1	111	31			More silt
	20	24						Becomes light brown, fine grained, some medium, trace fine gravel (up to ½ inch in size)
			1.4	111	42			Trace coarse, trace to some fine gravel (up to ½ inch in size), some silt
	25	52						Becomes very dense, yellow, medium grained
	30		1.3	114	25			Fine grained, some silt, some fine to coarse gravel (up to 3 inches in size), thin layer of Silty Sand interbeds at 30.3 to 31 feet
		48						Becomes dense, olive yellow
	35		1.4	120	52		SP-SM	POORLY GRADED SAND with SILT - dense, moist, fine grained, some medium to coarse, some fine gravel (up to ¾ inch in size)
		34					SP	POORLY GRADED SAND - dense, moist, olive, fine grained, some medium, some silt
	40							

(CONTINUED ON FOLLOWING FIGURE)

Field Tech: LH
Prepared By: JO
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.7a

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BORING 7 (Continued)

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	45		1.9	108	33	
		50				
	50		2.7	114	27	
	55					
	60					
	65					
	70					
	75					
	80					

More silt

More moist, more silt

Layers of Silty Sand, medium dense, moist, olive, fine grained, trace medium
END OF BORING AT 50 FEET

NOTES:
Groundwater was not encountered. Boring was backfilled with soil cuttings, tamped, and patched with asphalt.

Field Tech: LH
Prepared By: JO
Checked By: LT

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

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LOG OF BORING

Project: 4953-16-1011 Figure: A-1.7b

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BORING 8

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0							4¾-inch thick Asphalt Concrete over 4-inch thick Base Course
								FILL - POORLY GRADED SAND with SILT - moist, brownish gray, fine grained, some medium, some fine to coarse gravel up to 3/4 inch in diameter
							SP	POORLY GRADED SAND - moist, fine to medium grained, trace coarse, trace fine gravel (up to ½ inch in size)
	5		2.4	93	12			
					31			More gravel at 7 feet Becomes medium dense to dense, (sample not recovered)
	10		3.0	103	49			Some coarse sand
			1.2	121	46			More gravel Fine to medium grained, some coarse, some fine to coarse gravel (up to 2 inches in size)
	15		3.2	115	27			Thin Silty Sand lenses
	20		3.2	100	31			Fine grained, some fine gravel (up to ½ inch in size)
							SM	SILTY SAND - medium dense, moist, olive brown, fine grained, some medium, trace fine gravel (up to ¼ inch in size)
	25		13.9	117	24			
							SP	POORLY GRADED SAND - medium dense, moist, light brownish gray, fine grained, some medium, trace coarse, some fine gravel (up to ¼ inch in size)
	30		3.1	109	37			
								END OF BORING AT 31 FEET
	35							NOTES: Groundwater was not encountered. Boring was backfilled with soil cuttings, tamped, and patched with asphalt.
	40							

Field Tech: LH
Prepared By: JF
Checked By: LT

Proposed School Modernization
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Sun Valley, California

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LOG OF BORING

Project: 4953-16-1011 Figure: A-1.8

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BORING 9

DATE DRILLED: September 14, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0							3-inch thick Asphalt Concrete FILL - SILTY SAND - moist, light brown, fine to medium grained, trace fine gravel, brick fragments
	5		1.3	111	25		SW	WELL-GRADED SAND - medium dense, moist, light gray, fine to coarse grained, some gravel
			1.5	104	29			
	10		1.8	112	33			Less gravel Alternating with some fine grained layers Cobbles (up 6 inches in size)
	15		1.7	109	35			
	20		1.5	112	61		SW	WELL-GRADED SAND with GRAVEL - dense, moist, light gray, fine to coarse grained, cobbles (up to 4 inches in size)
	25		3.0	103	31			Becomes medium dense to dense
	30		2.8	110	41			END OF BORING AT 31 FEET
	35							NOTES: Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Boring was backfilled with soil cuttings, tamped, and patched with asphalt.
	40							

Field Tech: AR
Prepared By: WL
Checked By: LT

Proposed School Modernization
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Sun Valley, California

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LOG OF BORING

Project: 4953-16-1011 Figure: A-1.9

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BORING 10

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
	0						3-inch thick Asphalt Concrete
						SP	FILL - SILTY SAND - moist, light brown, fine to medium grained
							POORLY GRADED SAND - medium dense, moist, light gray, fine to medium grained, some coarse, some gravel
	5		3.0	107	15		
			2.0	107	19		Fewer gravel
	10				21		No recovery
		16					
	15		3.1	101	19		
		27					
	20		2.9	101	25		Becomes fine to coarse sand, some gravel, interbedded layers of fine grained sand
	25	25					
			2.0	110	16		Thin layer of Silty Sand, slightly more moist, fine to medium grained
	30	42					Becomes dense
	35		3.6	113	32		
		52				SW	WELL-GRADED SAND with GRAVEL - very dense, moist, light brown, fine to coarse grained
	40						

(CONTINUED ON FOLLOWING FIGURE)

Field Tech: AR
Prepared By: JO
Checked By: LT

Proposed School Modernization
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Sun Valley, California

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.10a

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BORING 10 (Continued)

DATE DRILLED: September 2, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	45	43	2.3	114	37	
	50		2.8	99	30	
	55					
	60					
	65					
	70					
	75					
	80					

Becomes medium dense to dense, moist, light gray to medium gray, alternating with some Silty Sand layers

Becomes dense

END OF BORING AT 50 FEET

NOTES:
Groundwater was not encountered. Boring was backfilled with soil cuttings, tamped, and patched with asphalt.
Bulk sample collected at 1 to 5 feet

Field Tech: AR
Prepared By: JO
Checked By: LT

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

Proposed School Modernization
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Sun Valley, California

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.10b

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BORING P-1

DATE DRILLED: September 13, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0						FILL - SILTY SAND - moist, light brown, fine grained
	5						Becomes fine to medium grained
	10					SW	WELL-GRADED SAND - moist, light gray, fine to coarse grained, some gravel
	15	2.9	116	37			Medium dense, (3% Passing No. 200 Sieve)
	20	2.4	118	54			Becomes dense END OF BORING AT 20 FEET
	25						
	30						
	35						
	40						

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Installation of 2-inch diameter PVC filter and percolation testing was performed at depth between 15 to 20 feet below ground surface at completion of drilling. After completion of percolation testing, boring was backfilled with soil cuttings and tamped.

Field Tech: AR
Prepared By: WL
Checked By: LT

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.11

B11\SOIL_CRANDALL(ELEVATION) L:\70131 GEOTECH\GINT\WLIBRARY AMEC JUNE2012.GLB
P:\4953 GEOTECH\2016-PROJ\161011 LAUSD POLYTECHNIC HS MODERNIZATION\3.2 ALL FIELD NOTES\4953-16-1011B.GPJ 11/7/16

BORING P-2

DATE DRILLED: September 12, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0						3½ inch thick Asphalt Concrete
							FILL - SILTY SAND - moist, light brown, fine to medium grained
							Brick fragment (up to 1 inch in size)
	5					SP	POORLY GRADED SAND - moist, light brownish gray, some gravel
	10						
	15	2.0	117	55			Dense
	20	2.6	109	37			Becomes medium dense, (3% Passing No. 200 Sieve)
							END OF BORING AT 20 FEET
	25						
	30						
	35						
	40						

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Installation of 2-inch diameter PVC filter and percolation testing was performed at depth between 15 to 20 feet below ground surface at completion of drilling. After completion of percolation testing, boring was backfilled with soil cuttings and tamped.

Field Tech: AR
Prepared By: JF
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

amec foster wheeler

LOG OF BORING
Project: 4953-16-1011 Figure: A-1.12

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BORING P-3

DATE DRILLED: September 12, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
	0					Lawn Surface FILL - SILTY SAND - moist, light brown, fine grained
					SP	POORLY GRADED SAND - moist, light gray, fine to medium grained, some coarse
	5					Some gravel
	10					Cobble (up to 6 inches in size)
	15	1.8	124	47		Dense, (2% Passing No. 200 Sieve)
	20			59		No recovery END OF BORING AT 20 FEET
	25					
	30					
	35					
	40					

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Installation of 2-inch diameter PVC filter and percolation testing was performed at depth between 15 to 20 feet below ground surface at completion of drilling. After completion of percolation testing, boring was backfilled with soil cuttings and tamped.

Field Tech: AR
Prepared By: JF
Checked By: LT

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.13

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BORING P-4

DATE DRILLED: October 12, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
	0					FILL - WELL-GRADED SAND - moist, light gray, fine to coarse grained, some gravel
					SP	POORLY GRADED SAND - moist, light gray, fine to medium grained, some coarse, trace gravel
	5					
	10					
	15	3.7	119	58		Dense, cobble (up to 3 inches in size)
	20	3.0	121	55		4% Passing No. 200 Sieve END OF BORING AT 20 FEET
	25					
	30					
	35					
	40					

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Installation of 2-inch diameter PVC filter and percolation testing was performed at depth between 15 to 20 feet below ground surface at completion of drilling. After completion of percolation testing, boring was backfilled with soil cuttings and tamped.

Field Tech: AR
Prepared By: WL
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.14

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BORING P-5

DATE DRILLED: October 12, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0						FILL - SILTY SAND - moist, light brown, fine to medium grained, some coarse, some brick fragments (up to 2 inches in size)
	5					SW	WELL-GRADED SAND - moist, light gray, fine to coarse grained, some gravel
	10						
	15	3.5	109	21			Medium dense, slightly finer grained, trace gravel
	20	4.6	113	31			2% Passing No. 200 Sieve END OF BORING AT 20 FEET
	25						
	30						
	35						
	40						

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Installation of 2-inch diameter PVC filter and percolation testing was performed at depth between 15 to 20 feet below ground surface at completion of drilling. After completion of percolation testing, boring was backfilled with soil cuttings and tamped.

Field Tech: AR
Prepared By: WL
Checked By: LT

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

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Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.15

BORING P-6

DATE DRILLED: September 12, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
	0					2¾-inch thick Asphalt Concrete
						FILL - SILTY SAND - moist, light brown, fine grained
					SP	POORLY GRADED SAND - moist, light gray, fine to medium grained, some coarse, some gravel
	5					
	10					
	15	4.2	115	28		Medium dense, becomes fine to coarse grained, some gravel
	20	3.8	115	31		4% Passing No. 200 Sieve
						END OF BORING AT 20 FEET
	25					
	30					
	35					
	40					

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Installation of 2-inch diameter PVC filter and percolation testing was performed at depth between 15 to 20 feet below ground surface at completion of drilling. After completion of percolation testing, boring was backfilled with soil cuttings and tamped.

Field Tech: AR
Prepared By: WL
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.16

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BORING P-7

DATE DRILLED: September 13, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0						3½-inch thick Asphalt Concrete
							FILL - SILTY SAND - moist, light brown, fine to medium grained
						SW	WELL-GRADED SAND - moist, light gray, fine to coarse grained, some gravel and cobbles (up to 5 inches in size)
	5						
	10						
	15	9.7	108	39		SM	SILTY SAND - medium dense, moist, light brown, fine grained, trace fine gravel
	20	2.5	102	26			2% Passing No. 200 Sieve END OF BORING AT 20 FEET
	25						
	30						
	35						
	40						

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Installation of 2-inch diameter PVC filter and percolation testing was performed at depth between 15 to 20 feet below ground surface at completion of drilling. After completion of percolation testing, boring was backfilled with soil cuttings and tamped.

Field Tech: AR
Prepared By: WL
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

amec foster wheeler

LOG OF BORING
Project: 4953-16-1011 Figure: A-1.17

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BORING P-8

DATE DRILLED: September 12, 2016
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION (ft.): **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.		
	0						3-inch thick Asphalt Concrete
							FILL - SILTY SAND - moist, light brown, fine to medium grained
						SW	WELL-GRADED SAND - moist, light gray, fine to coarse grained, some gravel
	5						
							Cobble (up to 6 inches in size)
	10						
							Cobble (up to 5 inches in size)
	15	3.3	118	59			Dense, more gravel
	20	5.7	113	18		SW-SM	WELL-GRADED SAND with SILT - medium dense, moist, light gray, fine to coarse grained, some gravel (12% Passing No. 200 Sieve)
							END OF BORING AT 20 FEET
	25						
	30						
	35						
	40						

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Installation of 2-inch diameter PVC filter and percolation testing was performed at depth between 15 to 20 feet below ground surface at completion of drilling. After completion of percolation testing, boring was backfilled with soil cuttings and tamped.

Field Tech: AR
Prepared By: WL
Checked By: LT

Proposed School Modernization
Francis Polytechnic High School
Sun Valley, California

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LOG OF BORING
Project: 4953-16-1011 Figure: A-1.18

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MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel - sand mixtures, little or no fines.
			GP	Poorly graded gravels or grave - sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amount of fines)	GM	Silty gravels, gravel - sand - silt mixtures.
			GC	Clayey gravels, gravel - sand - clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 Sieve Size)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand - silt mixtures
			SC	Clayey sands, sand - clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts and with slight plasticity.
			CL	Inorganic lays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils.

Undisturbed Sample		Auger Cuttings	
Standard Penetration Test		Bulk Sample	
Rock Core		Crandall Sampler	
Dilatometer		Pressure Meter	
Packer		No Recovery	
Water Table at time of drilling		Water Table after drilling	

Correlation of Penetration Resistance with Relative Density and Consistency

SAND & GRAVEL		SILT & CLAY	
No. of Blows	Relative Density	No. of Blows	Consistency
0 - 4	Very Loose	0 - 1	Very Soft
5 - 10	Loose	2 - 4	Soft
11 - 30	Medium Dense	5 - 8	Medium Stiff
31 - 50	Dense	9 - 15	Stiff
Over 50	Very Dense	16 - 30	Very Stiff
		Over 30	Hard

BOUNDARY CLASSIFICATIONS Soils possessing characteristics of two groups are designated by combinations of group symbols.

SILT OR CLAY	SAND			GRAVEL		Cobbles	Boulders
	Fine	Medium	Coarse	Fine	Coarse		

No.200 No.40 No.10 No.4 3/4" 3" 12"

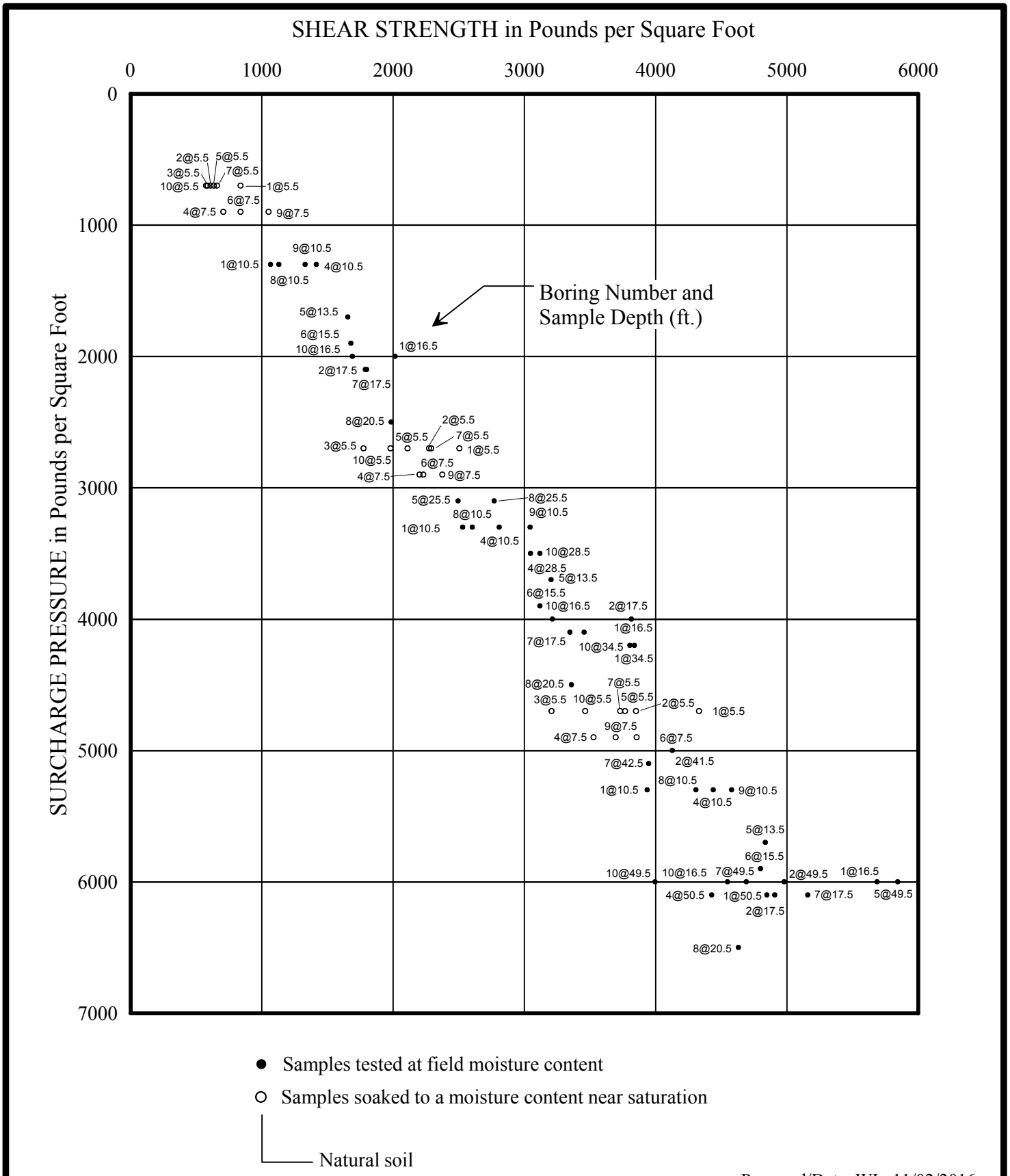
U.S. STANDARD SIEVE SIZE

Reference: The Unified Soil Classification System, Corps of Engineers, U.S. Army Technical Memorandum No. 3-357, Vol. 1, March, 1953 (Revised April, 1960)

KEY TO SYMBOLS AND DESCRIPTIONS

amec foster wheeler

Figure A-2



Prepared/Date: WL 11/02/2016
Checked/Date: LT 11/07/2016

Proposed School Modernization LAUSD Francis Polytechnic Senior High School Sun Valley, California	amec foster wheeler	DIRECT SHEAR TEST DATA Project No. 4953-16-1011 Figure A-3

AP Engineering and Testing, Inc.
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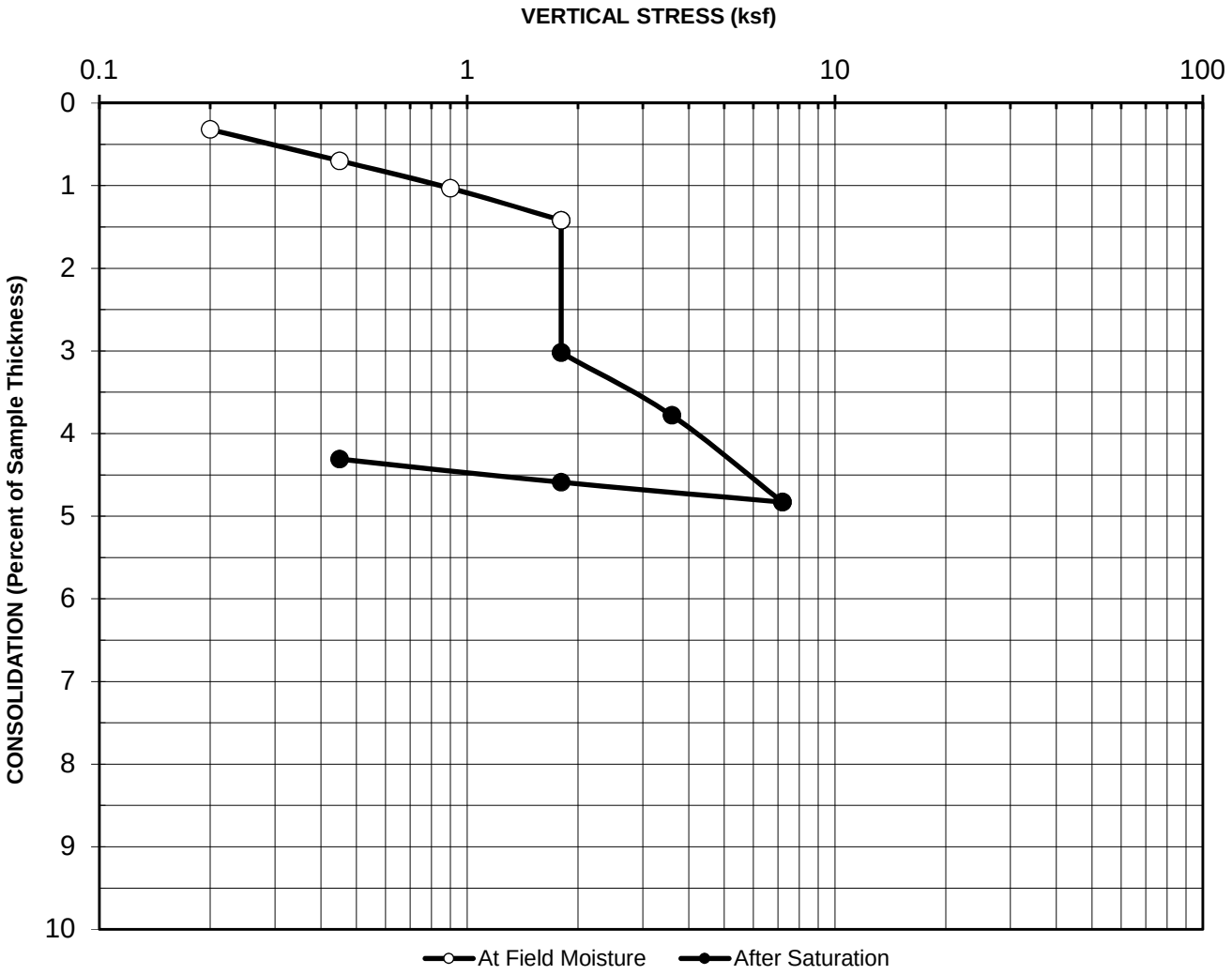

Boring No. :	1	Initial Dry Unit Weight (pcf):	111.9
Sample No.:	2	Initial Moisture Content (%):	0.8
Depth (feet):	5.5	Final Moisture Content (%):	16.4
Sample Type:	Mod Cal	Assumed Specific Gravity:	2.7
Soil Description:	Poorly-Graded Sand with gravel	Initial Void Ratio:	0.51
Remarks:	Collapse= 1.60% upon inundation		

CONSOLIDATION CURVE
ASTM D 2435

Project Name:	LAUSD - Francis Polytechnic
Project No.:	4953-16-1011
Date:	10/13/2016
AP No:	16-1010

Figure A-4.1

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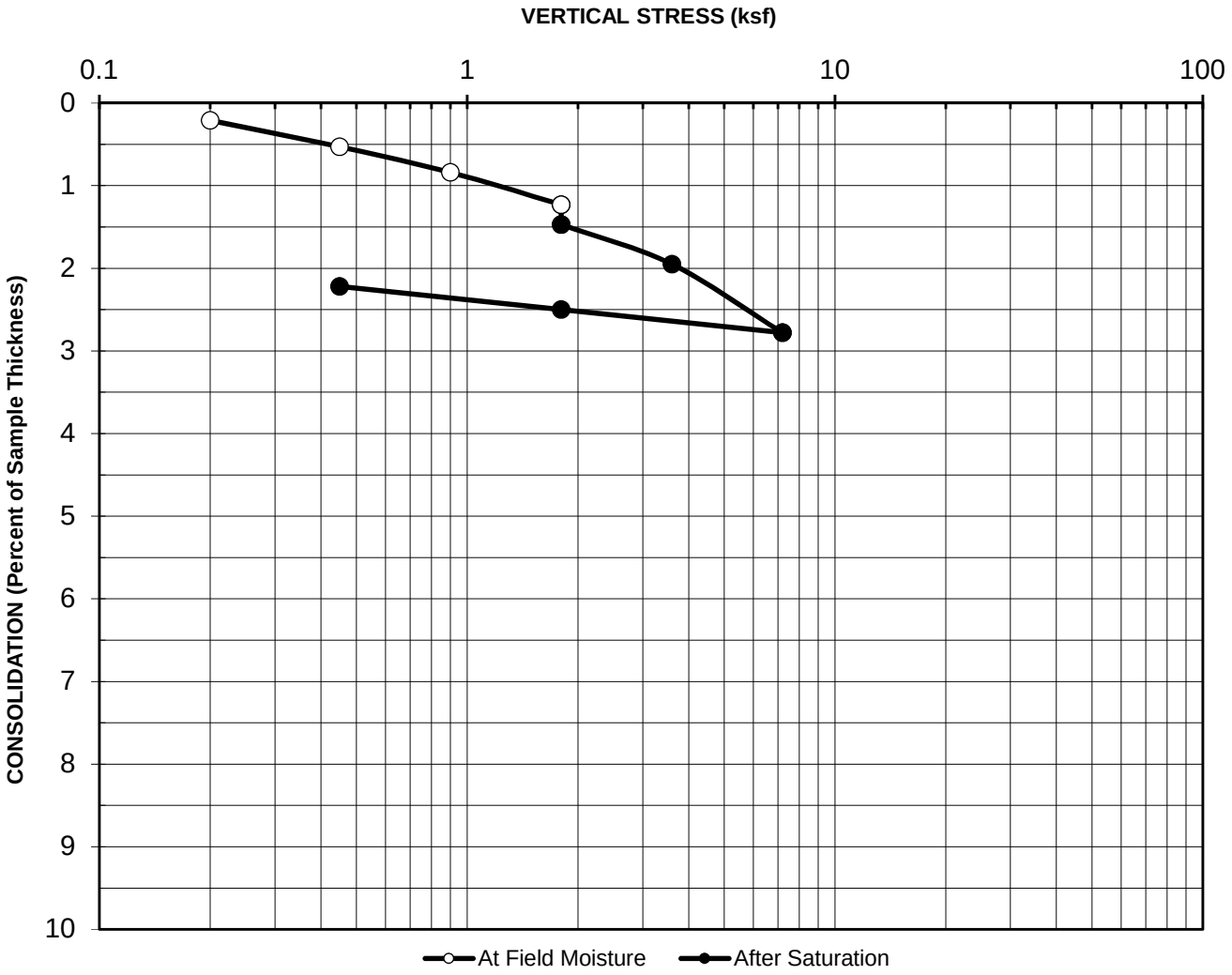

Boring No. :	4	Initial Dry Unit Weight (pcf):	107.4
Sample No.:	3	Initial Moisture Content (%):	1.8
Depth (feet):	7.5	Final Moisture Content (%):	19.6
Sample Type:	Mod Cal	Assumed Specific Gravity:	2.7
Soil Description:	Poorly-Graded Sand	Initial Void Ratio:	0.57
Remarks:	Collapse= 0.24% upon inundation		

CONSOLIDATION CURVE
ASTM D 2435

Project Name:	LAUSD - Francis Polytechnic
Project No.:	4953-16-1011
Date:	10/13/2016
AP No:	16-1010

Figure A-4.2

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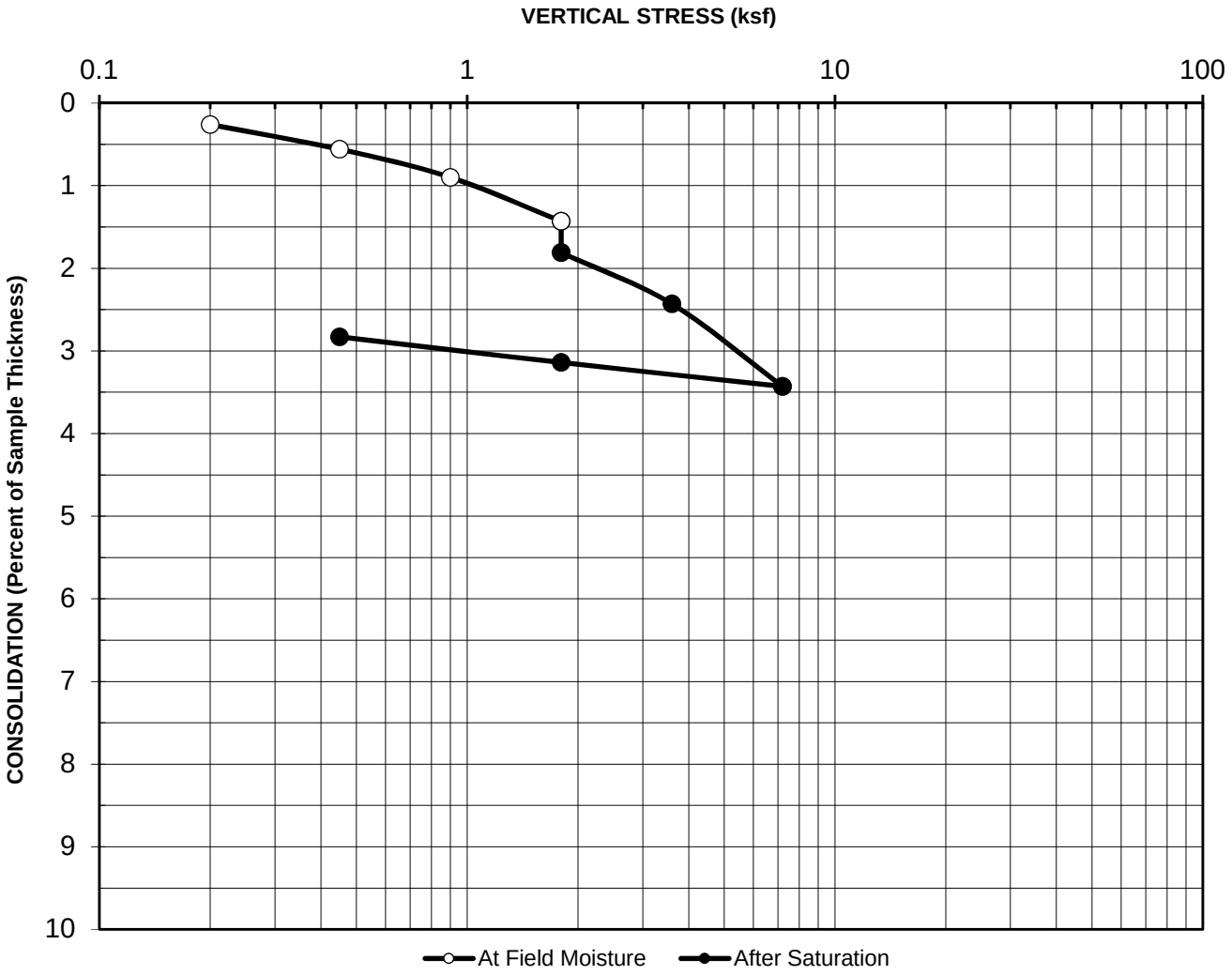

Boring No. :	6	Initial Dry Unit Weight (pcf):	104.0
Sample No.:	4	Initial Moisture Content (%):	1.7
Depth (feet):	10.5	Final Moisture Content (%):	19.6
Sample Type:	Mod Cal	Assumed Specific Gravity:	2.7
Soil Description:	Sand with silt	Initial Void Ratio:	0.62
Remarks:	Collapse= 0.38% upon inundation		

CONSOLIDATION CURVE
ASTM D 2435

Project Name:	LAUSD - Francis Polytechnic
Project No.:	4953-16-1011
Date:	10/13/2016
AP No:	16-1010

Figure A-4.3

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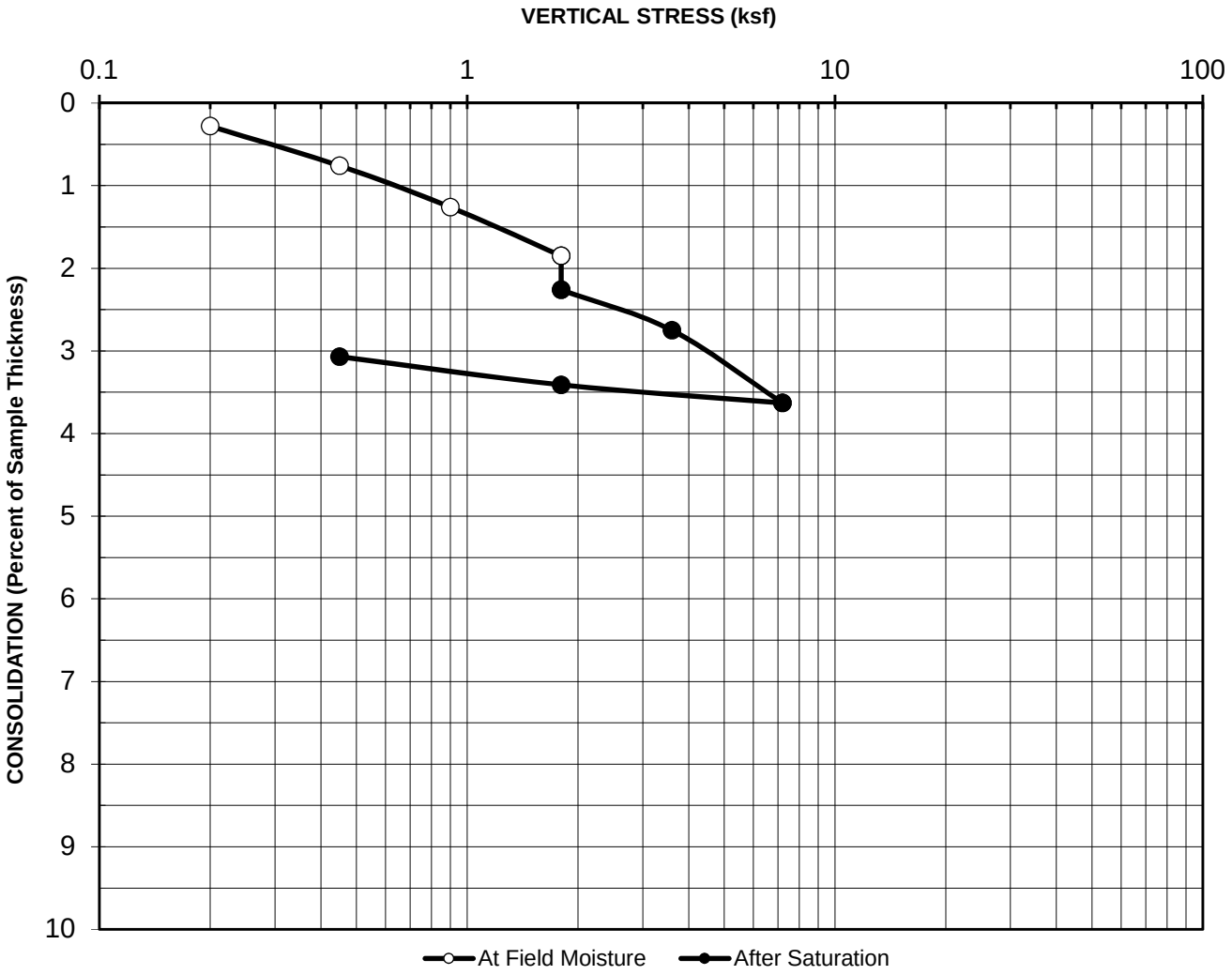

Boring No. :	7	Initial Dry Unit Weight (pcf):	104.2
Sample No.:	2	Initial Moisture Content (%):	1.0
Depth (feet):	5.5	Final Moisture Content (%):	21.2
Sample Type:	Mod Cal	Assumed Specific Gravity:	2.7
Soil Description:	Poorly-Graded Sand	Initial Void Ratio:	0.62
Remarks:	Collapse= 0.41% upon inundation		

CONSOLIDATION CURVE
ASTM D 2435

Project Name:	LAUSD - Francis Polytechnic
Project No.:	4953-16-1011
Date:	10/13/2016
AP No:	16-1010

Figure A-4.4

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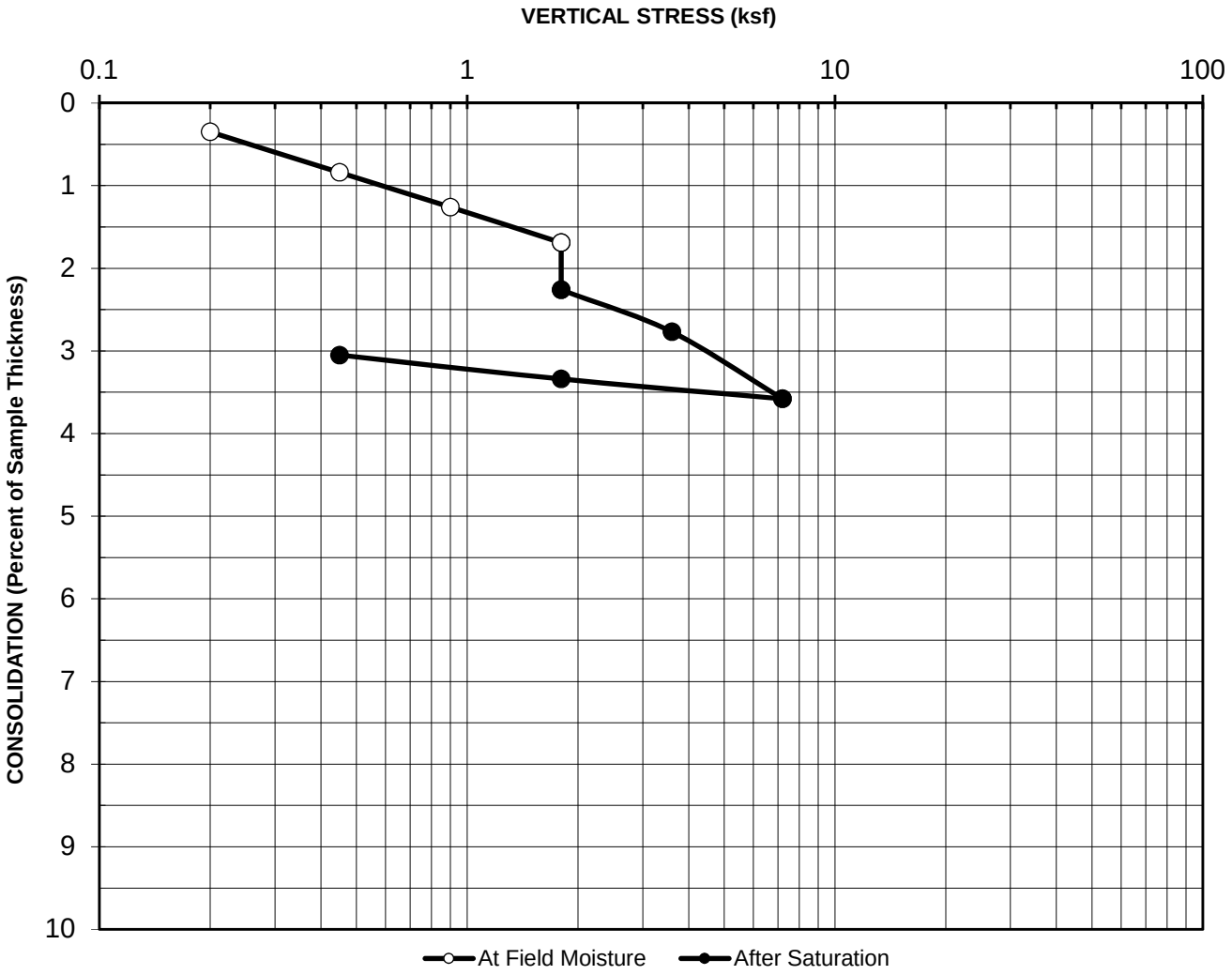

Boring No. :	9	Initial Dry Unit Weight (pcf):	109.4
Sample No.:	4	Initial Moisture Content (%):	1.8
Depth (feet):	10.5	Final Moisture Content (%):	17.2
Sample Type:	Mod Cal	Assumed Specific Gravity:	2.7
Soil Description:	Well-Graded Sand w/gravel	Initial Void Ratio:	0.54
Remarks:	Collapse= 0.57% upon inundation		

CONSOLIDATION CURVE
ASTM D 2435

Project Name:	LAUSD - Francis Polytechnic
Project No.:	4953-16-1011
Date:	10/13/2016
AP No:	16-1010

Figure A-4.5

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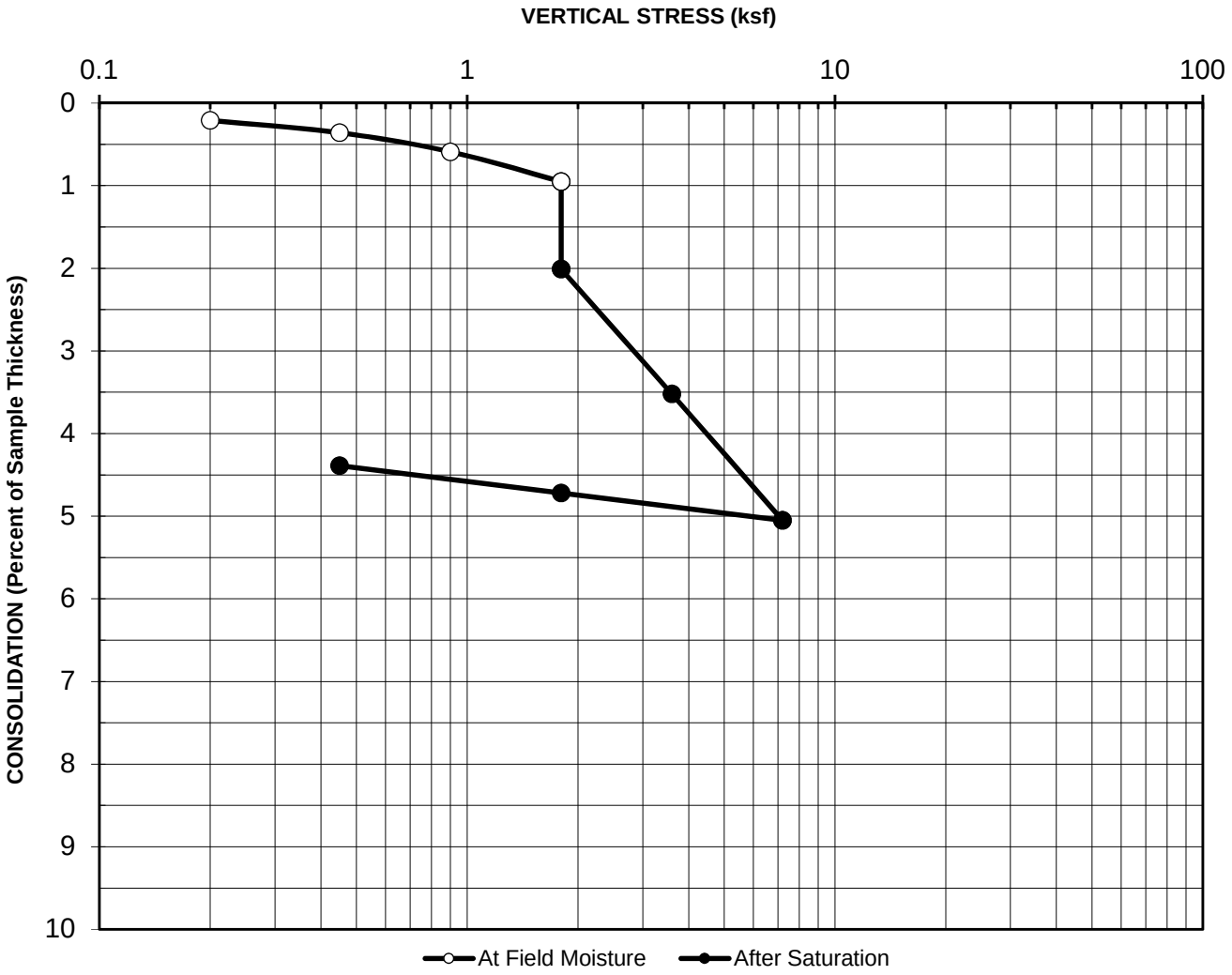

Boring No. :	10	Initial Dry Unit Weight (pcf):	103.8
Sample No.:	2	Initial Moisture Content (%):	3.0
Depth (feet):	5.5	Final Moisture Content (%):	20.7
Sample Type:	Mod Cal	Assumed Specific Gravity:	2.7
Soil Description:	Poorly-Graded Sand with silt	Initial Void Ratio:	0.62
Remarks:	Collapse= 1.06% upon inundation		

CONSOLIDATION CURVE
ASTM D 2435

Project Name:	LAUSD - Francis Polytechnic
Project No.:	4953-16-1011
Date:	10/13/2016
AP No:	16-1010

Figure A-4.6

BORING NUMBER AND SAMPLE DEPTH:	2 at 1' to 6'	9 at 0' to 5'
SOIL TYPE:	FILL - SILTY SAND AND POORLY GRADED SAND with SILT	FILL - SILTY SAND AND WELL-GRADED SAND
MAXIMUM DRY DENSITY: (lbs./cu.ft.)	124.3	128.6
OPTIMUM MOISTURE CONTENT: (%)	7.9	8.7

TEST METHOD: ASTM Designation D1557

Prepared/Date: WL 11/03/16
Checked/Date: LT 11/04/16

Proposed School Modernization
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Sun Valley, California

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COMPACTION TEST DATA
Project 4953-16-1011
Figure A-5

BORING NUMBER AND SAMPLE DEPTH:	2 at 5½'	3 at 5½'	5 at 5½'	8 at 5½'
SOIL TYPE:	POORLY GRADED SAND	WELL-GRADED SAND	POORLY GRADED SAND	POORLY GRADED SAND
SURCHARGE PRESSURE: (lbs./sq.ft.)	800	800	800	800
PERCENT HYDROCONSOLIDATION: (%)	0.51	0.62	0.53	0.54

Prepared/Date: WL 11/03/16
Checked/Date: LT 11/04/16

Proposed School Modernization
LAUSD
Francis Polytehcnic Senior High School
Sun Valley, California

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HYDROCONSOLIDATION TEST DATA
Project No.: 4953-16-1011
Figure A-6

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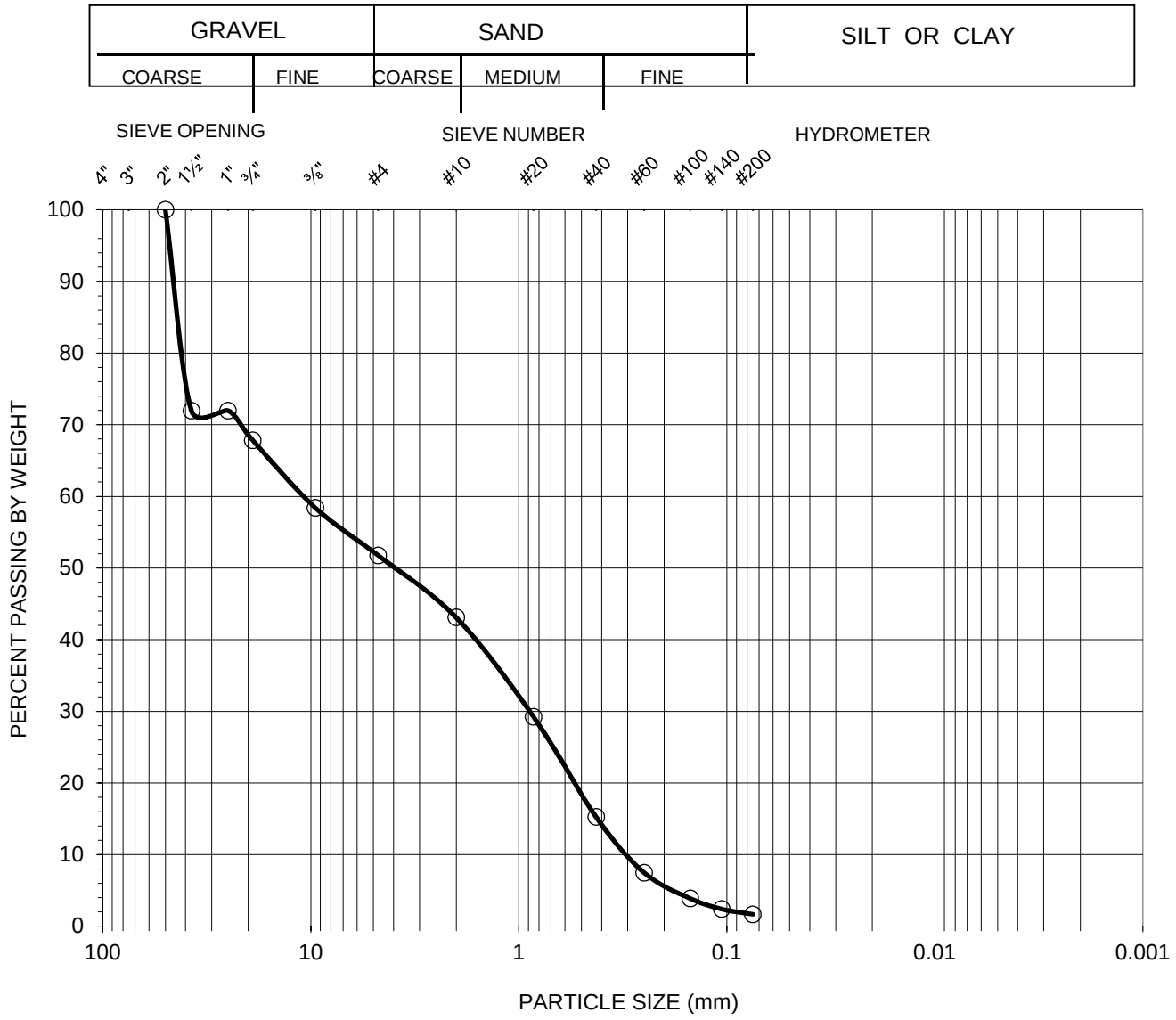
GRAIN SIZE DISTRIBUTION CURVE
ASTM D 6913

Client Name:	AMEC Foster Wheeler	Tested by:	NG	Date:	10/21/16
Project Name:	LAUSD - Francis Polytechnic	Computed by:	JP	Date:	10/24/16
Project Number:	4953-16-1011	Checked by:	AP	Date:	10/24/16



Symbol	Boring No.	Sample No.	Sample Depth (feet)	Percent			Atterberg Limits LL:PL:PI	Soil Type U.S.C.S
				Gravel	Sand	Silt & Clay		
○	6	6	20.5	48	50	2	N/A	SP

Figure A-7

LaBelle Marvin

R - VALUE DATA SHEET

PROJECT No. 41798

DATE: 10/17/2016

BORING NO. B-7 @ 1'-7'

LAUSD-Francis Polytechnic H.S., Proposed Moderization

P.N. 4953-16-1011

SAMPLE DESCRIPTION: Brown Silty Sand

R-VALUE TESTING DATA | CA TEST 301	SPECIMEN ID		
	a	b	c
Mold ID Number	7	8	9
Water added, grams	66	82	60
Initial Test Water, %	10.3	11.8	9.7
Compact Gage Pressure,psi	180	100	240
Exudation Pressure, psi	351	123	476
Height Sample, Inches	2.51	2.56	2.48
Gross Weight Mold, grams	3070	3070	2886
Tare Weight Mold, grams	1968	1964	1789
Sample Wet Weight, grams	1102	1106	1097
Expansion, Inches x 10exp-4	21	12	27
Stability 2,000 lbs (160psi)	17 / 31	19 / 41	14 / 27
Turns Displacement	5.12	6.03	4.88
R-Value Uncorrected	67	55	72
R-Value Corrected	67	56	72
Dry Density, pcf	120.6	117.1	122.1

DESIGN CALCULATION DATA

Traffic Index	Assumed:	4.0	4.0	4.0
G.E. by Stability		0.34	0.45	0.29
G. E. by Expansion		0.70	0.40	0.90

Equilibrium R-Value	**57** by EXPANSION	Examined & Checked: 10 /17/ 16
REMARKS:	Gf = 1.25 1.8% Retained on the 3/4" Sieve.	REGISTERED PROFESSIONAL ENGINEER STEVEN R. MARVIN C 30659 CIVIL STATE OF CALIFORNIA Steven R. Marvin, RCE 30659

The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.

Figure A-8.1

LaBelle Marvin

R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 41798

DATE: 10 /17/ 16

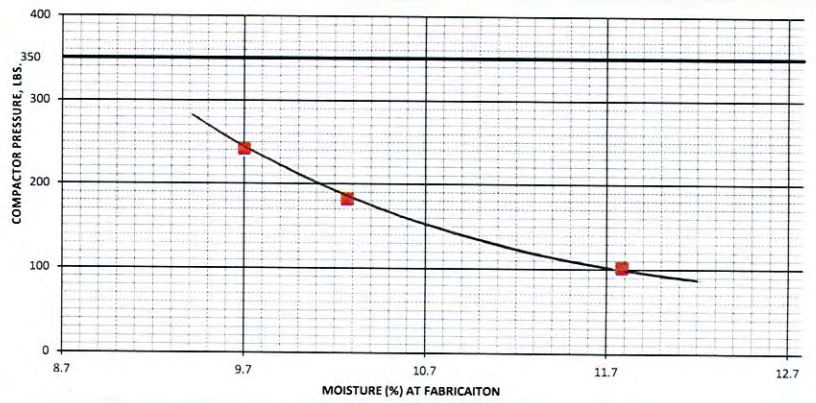
REMARKS:

BORING NO. B-7 @ 1'-7'

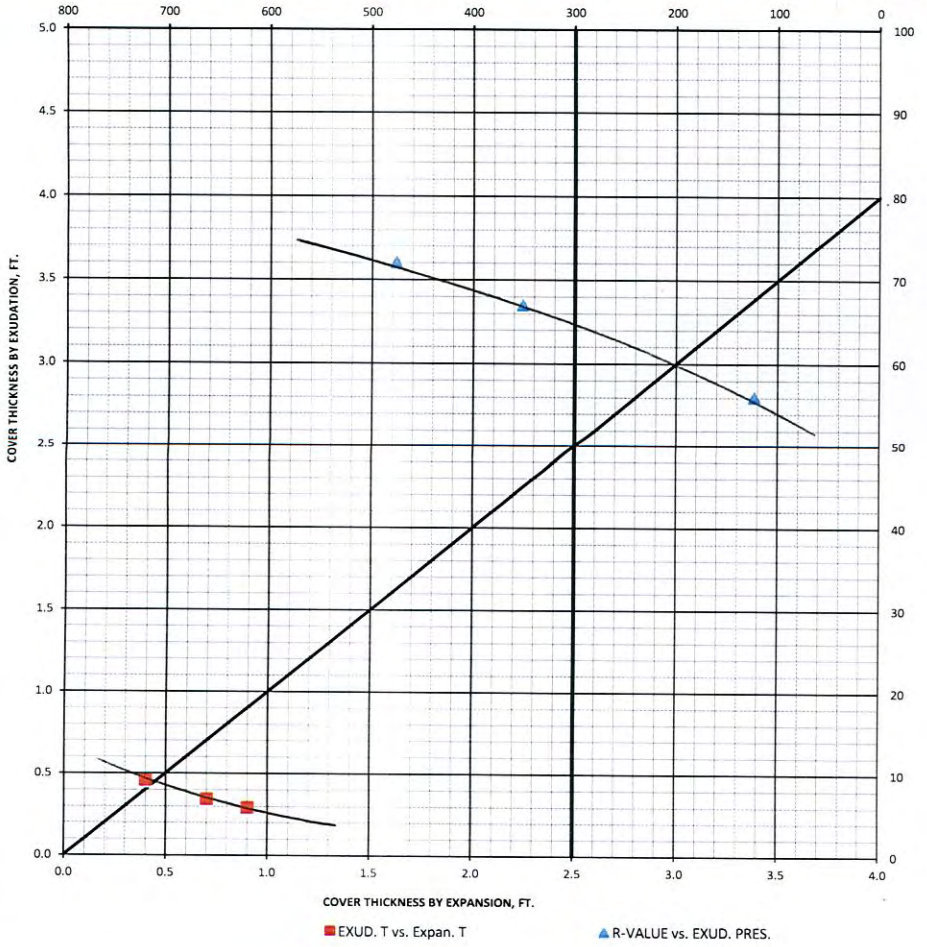
LAUSD-Francis Polytechnic H.S., Proposed Moderization

P.N. 4953-16-1011

COMPACTOR PRESSURE vs MOISTURE %



COVER THICKNESS BY EXUDATION vs COVER THICKNESS BY EXPANSION



COVER THICKNESS vs MOISTURE %

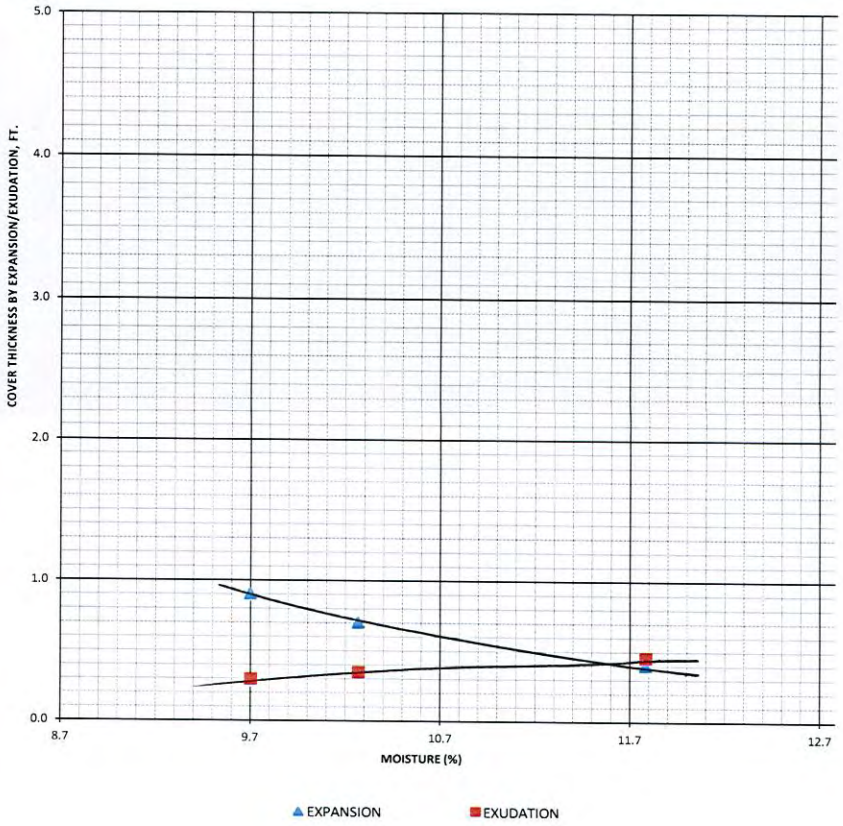


Figure A-8.2

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CORROSION TEST RESULTS

Client Name: AMEC Foster Wheeler
Project Name: LAUSD - Francis Polytechnic
Project No.: 4953-16-1011

AP Job No.: 16-1010
Date: 10/19/16

Boring No.	Sample No.	Depth (feet)	Soil Type	Minimum Resistivity (ohm-cm)	pH	Sulfate Content (ppm)	Chloride Content (ppm)
1	1	3-8	SP	6859	8.1	49	40

NOTES: Resistivity Test and pH: California Test Method 643
Sulfate Content : California Test Method 417
Chloride Content : California Test Method 422
ND = Not Detectable
NA = Not Sufficient Sample
NR = Not Requested

Figure A-9.1

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CORROSION TEST RESULTS

Client Name: AMEC Foster Wheeler
Project Name: LAUSD - Francis Polytechnic
Project No.: 4953-16-1011

AP Job No.: 16-1010
Date: 10/19/16

Boring No.	Sample No.	Depth (feet)	Soil Type	Minimum Resistivity (ohm-cm)	pH	Sulfate Content (ppm)	Chloride Content (ppm)
4	1	2-7	SP-SM	27255	7.9	35	31

NOTES: Resistivity Test and pH: California Test Method 643
Sulfate Content : California Test Method 417
Chloride Content : California Test Method 422
ND = Not Detectable
NA = Not Sufficient Sample
NR = Not Requested

Figure A-9.2

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CORROSION TEST RESULTS

Client Name: AMEC Foster Wheeler
Project Name: LAUSD - Francis Polytechnic
Project No.: 4953-16-1011

AP Job No.: 16-1010
Date: 10/19/16

Boring No.	Sample No.	Depth (feet)	Soil Type	Minimum Resistivity (ohm-cm)	pH	Sulfate Content (ppm)	Chloride Content (ppm)
9	1	0-5	SM	9758	7.6	41	32

NOTES: Resistivity Test and pH: California Test Method 643
Sulfate Content : California Test Method 417
Chloride Content : California Test Method 422
ND = Not Detectable
NA = Not Sufficient Sample
NR = Not Requested

Figure A-9.3

APPENDIX B

PRIOR FIELD EXPLORATIONS AND LABORATORY TEST RESULTS

BORING 1

DATE DRILLED: June 10, 2015
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION: **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
							3-inch thick Asphalt Concrete
						SM	FILL - SILTY SAND - moist, light brown, some brick and concrete fragments (up to 2 inches in size)
							SILTY SAND - moist, light brown
						SW	WELL GRADED SAND with GRAVEL - medium dense, moist, light brownish gray
	5		2.5	110	18		
			7.1	97	23		Cobble fragment (about 6 to 8 inches in size)
	10	21	2.9	-			
			9.0	98	22		Cobble fragment (about 6 to 7 inches in size)
	15	25	1.9	-			
			2.1	117	44		Cobble fragment (about 6 to 7 inches in size)
	20	34	3.1	-			Becomes light brown, trace cobble fragments (about 3 to 5 inches in size)
							Becomes dense
	25		9.6	96	36		
		40	2.3	-			
	30				47		No recovery
	35	40	3.2	-			
						SP	POORLY GRADED SAND - medium dense, moist, light brown, fine to medium grained
			13.6	95	45		
	40					SW	WELL GRADED SAND with GRAVEL - medium dense, moist, light

(CONTINUED ON FOLLOWING FIGURE)

Field Tech: AR
Prepared By: WL
Checked By: MM

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LOG OF BORING

Project: 4953-15-0432 Figure: B-1.1a

B12SOIL_CRANDALL (NO DECIMAL) 4953-15-0432.GPJ LAW_CRAN.GDT 7/13/15

BORING 1 (Continued)

DATE DRILLED: June 10, 2015
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION: **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	45	27	3.5	-		
			1.4	116	30	
	50	50/5"	2.1	-		
	55					
	60					
	65					
	70					
	75					
	80					

brownish gray

Thin layer of Silty Sand, moist, brown

Trace cobble fragments (about 3 to 5 inches in size)

Some Silty Sand

Becomes very dense
END OF BORING AT 50½ FEET

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Boring was backfilled with cuttings, tamped, and patched with asphalt.

*Number of blows to drive Crandall sampler 12 inches using a 140 pound automatic hammer falling 30 inches.

** Elevations not available.

Field Tech: AR
Prepared By: WL
Checked By: MM

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LOG OF BORING
Project: 4953-15-0432 Figure: B-1.1b

B12SOIL_CRANDALL (NO DECIMAL) 4953-15-0432.GPJ LAW_CRAN.GDT 7/13/15

BORING 2

DATE DRILLED: June 10, 2015
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION: **

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	5		10.3	94	22	
			2.5	115	39	
	10		3.0	106	21	
	15		2.4	106	20	
	20		1.5	126	61	
	25		2.6	114	66	
	30					
	35					
	40					

2-inch thick Asphalt Concrete over 3-inch thick Base Coarse
FILL - SANDY SILT/SILTY SAND - moist, brown
SM
SILTY SAND - moist, brown, some silt lenses

Cobble fragment (about 5 inches in size)
SW
WELL GRADED SAND with GRAVEL - medium dense, moist, light brownish gray, trace cobble fragments (about 3 to 5 inches in size)

Cobble fragment (about 6 to 8 inches in size)

Becomes dense, light gray, more gravel

END OF BORING AT 25 FEET

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Boring was backfilled with cuttings, tamped, and patched with asphalt.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

Field Tech: AR
Prepared By: WL
Checked By: MM

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LOG OF BORING
Project: 4953-15-0432 Figure: B-1.2

B12SOIL_CRANDALL (NO DECIMAL) 4953-15-0432.GPJ LAW_CRAN.GDT 7/13/15

BORING 3

DATE DRILLED: June 10, 2015
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION: **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
							5-inch thick Asphalt Concrete FILL - SILTY SAND - moist, light gray and brown, some fine gravel
	5		9.4	93	20	SW	WELL GRADED SAND with GRAVEL - medium dense, moist, light brownish gray, fine to coarse grained, trace cobble fragments (about 3 to 5 inches in size)
			2.7	113	22		
	10				64		No recovery
		18	3.1	-			
	15		10.1	91	24		
		25	3.3	-			Alternating layers of Poorly Graded Sand and Well Graded Sand
	20		12.5	92	58		Becomes dense, cobble fragment (about 4 inches in size)
	25	33	2.9	-			
			2.9	113	40		
	30	42	2.1	-			
	35		3.4	105	31		
	40	60					No recovery

(CONTINUED ON FOLLOWING FIGURE)

Field Tech: AR
Prepared By: WL
Checked By: MM

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LOG OF BORING
Project: 4953-15-0432 Figure: B-1.3a

B12SOIL_CRANDALL (NO DECIMAL) 4953-15-0432.GPJ LAW_CRAN.GDT 7/13/15

BORING 3 (Continued)

DATE DRILLED: June 10, 2015
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION: **

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	45	37	2.6	109	48	
			2.3	-		
	50					
	55					
	60					
	65					
	70					
	75					
	80					

More gravel, trace cobble fragments (about 3 to 5 inches in size)

No recovery
END OF BORING AT 50 FEET

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Boring was backfilled with cuttings, tamped, and patched with asphalt.

Field Tech: AR
Prepared By: WL
Checked By: MM

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

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LOG OF BORING
Project: 4953-15-0432 Figure: B-1.3b

B12SOIL_CRANDALL (NO DECIMAL) 4953-15-0432.GPJ LAW_CRAN.GDT 7/13/15

BORING 4

DATE DRILLED: June 10, 2015
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION: **

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
	0						Grass Area FILL - SILTY SAND - moist, brown
						SM	SILTY SAND - loose, moist, some clean sand layers
	5		16.3	80	10		
						SP	POORLY GRADED SAND - moist, light gray, fine to medium grained
			2.3	108	14	SW	WELL GRADED SAND with GRAVEL - loose, moist, light gray
	10		1.9	110	22		Becomes medium dense
	15		2.6	114	32		
	20		2.1	114	36		Becomes light grayish brown, trace cobble fragments (about 3 to 5 inches in size)
	25		2.8	106	38		Cobble fragment (about 4 inches in size) END OF BORING AT 25 FEET
	30						
	35						
	40						

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Boring was backfilled with cuttings and tamped.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

Field Tech: AR
Prepared By: WL
Checked By: MM

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LOG OF BORING
Project: 4953-15-0432 Figure: B-1.4

B12SOIL_CRANDALL (NO DECIMAL) 4953-15-0432.GPJ LAW_CRAN.GDT 7/13/15

BORING 5

DATE DRILLED: June 10, 2015
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION: **

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.
	5		2.2	103	15	
			13.6	86	19	
	10		3.4	107	31	
	15		3.0	105	23	
	20		3.9	111	32	
	25		4.2	107	30	
	30					
	35					
	40					

Grass Area

FILL - SILTY SAND - moist, light brown, with siltier layers, some brick fragments

SW

WELL GRADED SAND with GRAVEL - medium dense, moist, light brown, trace cobble fragments (up to 5 inches in size)

Cobble fragment (about 5 to 6 inches in size)

END OF BORING AT 25 FEET

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Boring was backfilled with cuttings and tamped.

Field Tech: AR
Prepared By: WL
Checked By: MM

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LOG OF BORING

Project: 4953-15-0432 Figure: B-1.5

B12SOIL_CRANDALL (NO DECIMAL) 4953-15-0432.GPJ LAW_CRAN.GDT 7/13/15

BORING 6

DATE DRILLED: June 10, 2015
EQUIPMENT USED: Hollow Stem Auger
HOLE DIAMETER (in.): 8
ELEVATION: **

ELEVATION (ft)	DEPTH (ft)	"N" VALUE STD.PEN.TEST	MOISTURE (% of dry wt.)	DRY DENSITY (pcf)	BLOW COUNT* (blows/ft)	SAMPLE LOC.	
	0						3-inch thick Asphalt Concrete FILL - SILTY SAND/SANDY SILT - moist, brown, trace gravel (up to 3 inches in size)
	5		16.3	85	12		SP POORLY GRADED SAND - loose, moist, light brown, fine to medium grained, trace gravel
			3.5	116	25		SW WELL GRADED SAND with GRAVEL - medium dense, moist, light brown, trace cobble fragments (about 3 to 5 inches in size)
	10		2.2	107	16		
	15		3.4	114	34		Cobble fragement (about 6 inches in size)
	20		3.9	103	30		SP POORLY GRADED SAND - medium dense, moist, light brown, fine to medium grained
							SW WELL GRADED SAND with GRAVEL - medium dense, moist, light brown
	25		3.1	115	40		Becomes Poorly Graded Sand with some silt END OF BORING AT 25 FEET
	30						
	35						
	40						

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. LATITUDE AND LONGITUDE OF BORING LOCATION SHOWN ON LOGS ARE APPROXIMATE; REFER TO PLOT PLAN FOR MORE ACCURATE LOCATION INFORMATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BETWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

NOTES:

Hand augered upper 5 feet to avoid damage to utilities. Groundwater was not encountered. Boring was backfilled with cuttings, tamped, and patched with asphalt.

Field Tech: AR
Prepared By: WL
Checked By: MM

Proposed Modernization
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LOG OF BORING
Project: 4953-15-0432 Figure: B-1.6

B12SOIL_CRANDALL (NO DECIMAL) 4953-15-0432.GPJ LAW_CRAN.GDT 7/13/15

MAJOR DIVISIONS			GROUP SYMBOLS		TYPICAL NAMES
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)		GW	Well graded gravels, gravel - sand mixtures, little or no fines.
				GP	Poorly graded gravels or grave - sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amount of fines)		GM	Silty gravels, gravel - sand - silt mixtures.
				GC	Clayey gravels, gravel - sand - clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 Sieve Size)	CLEAN SANDS (Little or no fines)		SW	Well graded sands, gravelly sands, little or no fines.
				SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amount of fines)		SM	Silty sands, sand - silt mixtures
				SC	Clayey sands, sand - clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size)	SILTS AND CLAYS (Liquid limit LESS than 50)			ML	Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts and with slight plasticity.
				CL	Inorganic lays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
				OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50)			MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS				PT	Peat and other highly organic soils.

Undisturbed Sample		Auger Cuttings	
Standard Penetration Test		Bulk Sample	
Rock Core		Crandall Sampler	
Dilatometer		Pressure Meter	
Packer		No Recovery	
Water Table at time of drilling		Water Table after drilling	

Correlation of Penetration Resistance with Relative Density and Consistency

SAND & GRAVEL		SILT & CLAY	
No. of Blows	Relative Density	No. of Blows	Consistency
0 - 4	Very Loose	0 - 1	Very Soft
5 - 10	Loose	2 - 4	Soft
11 - 30	Medium Dense	5 - 8	Medium Stiff
31 - 50	Dense	9 - 15	Stiff
Over 50	Very Dense	16 - 30	Very Stiff
		Over 30	Hard

BOUNDARY CLASSIFICATIONS Soils possessing characteristics of two groups are designated by combinations of group symbols.

SILT OR CLAY	SAND			GRAVEL		Cobbles	Boulders
	Fine	Medium	Coarse	Fine	Coarse		

No.200 No.40 No.10 No.4 3/4" 3" 12"

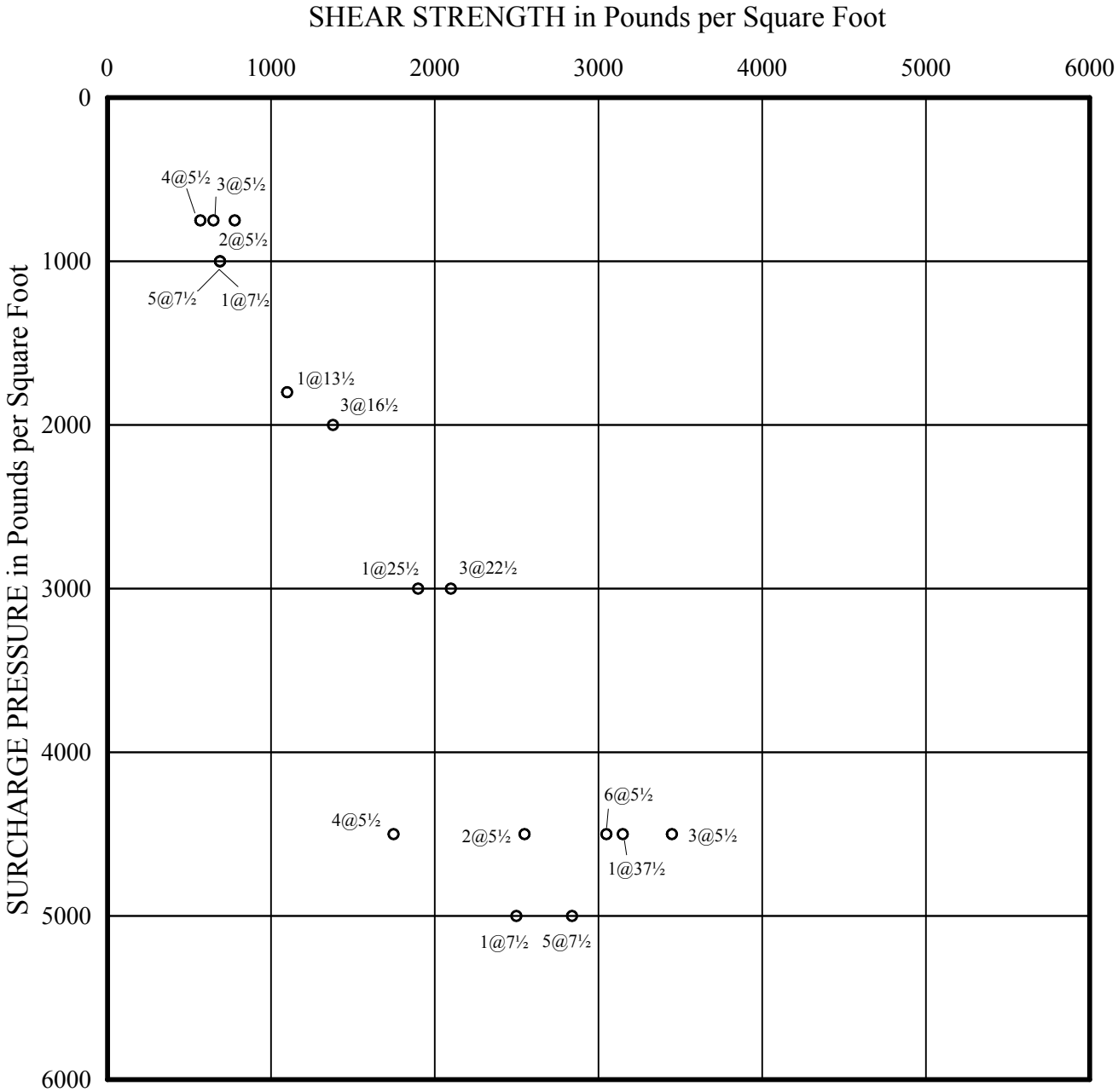
U.S. STANDARD SIEVE SIZE

Reference: The Unified Soil Classification System, Corps of Engineers, U.S. Army Technical Memorandum No. 3-357, Vol. 1, March, 1953 (Revised April, 1960)

KEY TO SYMBOLS AND DESCRIPTIONS

amec foster wheeler

Figure B-2



○ Samples soaked to a moisture content near saturation

Prepared/Date: WL 6/29/15
Checked/Date: AH 7/06/15

Proposed Modernization Francis Polytechnic Senior High School 12431 Roscoe Boulevard Sun Valley, California	amec foster wheeler	DIRECT SHEAR TEST DATA Project No. 4953-15-0432 Figure B-3

BORING NUMBER AND SAMPLE DEPTH:	4 at 5½'
SOIL TYPE:	SILTY SAND
SURCHARGE PRESSURE: (lbs./sq.ft.)	900
PERCENT HYDROCONSOLIDATION: (%)	1.0

Prepared/Date: WL 07/01/15
Checked/Date: AH 07/16/15

Proposed Modernization Francis Polytechnic Senior High School 12431 Roscoe Boulevard Sun Valley, California	amec foster wheeler 	HYDROCONSOLIDATION TEST DATA Project 4953-15-0432 Figure B-4

R - VALUE DATA SHEET

P.N. 4953-15-0432
LAUSD Polytechnic

PROJECT NUMBER 40400 BORING NUMBER: B-1 @ 1'-4'

SAMPLE DESCRIPTION: Brown Silty Sand

Item	SPECIMEN		
	a	b	c
Mold Number	1	2	3
Water added, grams	93	78	64
Initial Test Water, %	15.3	13.8	12.5
Compact Gage Pressure,psi	50	70	100
Exudation Pressure, psi	112	350	734
Height Sample, Inches	2.58	2.49	2.52
Gross Weight Mold, grams	3016	2993	3014
Tare Weight Mold, grams	1965	1969	1977
Sample Wet Weight, grams	1051	1024	1037
Expansion, Inches x 10exp-4	12	22	28
Stability 2,000 lbs (160psi)	19 / 40	17 / 35	16 / 31
Turns Displacement	5.91	5.50	5.25
R-Value Uncorrected	56	62	66
R-Value Corrected	58	62	66
Dry Density, pcf	107.1	109.5	110.9
DESIGN CALCULATION DATA			
Traffic Index Assumed:	4.0	4.0	4.0
G.E. by Stability	0.43	0.39	0.35
G. E. by Expansion	0.40	0.73	0.93

Equilibrium R-Value	59 by EXPANSION	Examined & Checked: 7 /3/ 15

REMARKS:
Gf = 1.25
0.0% Retained on the 3/4" Sieve.
Partial Free Drainage.

REGISTERED PROFESSIONAL ENGINEER STEVEN R. MARVIN C 30659 CIVIL STATE OF CALIFORNIA

Steven R. Marvin, RCE 30659

The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.

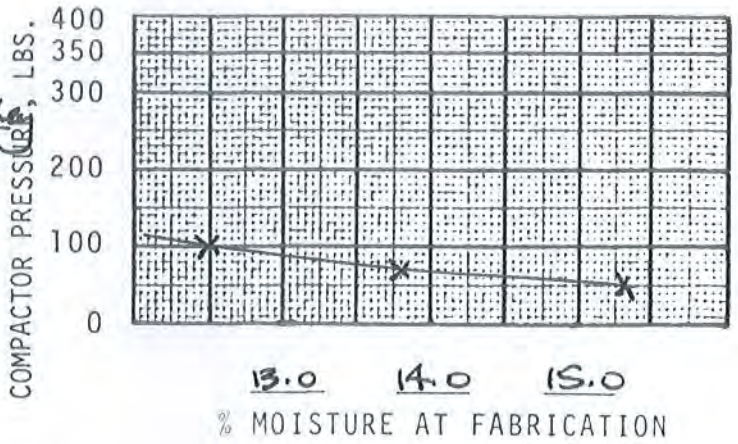
LaBelle • Marvin

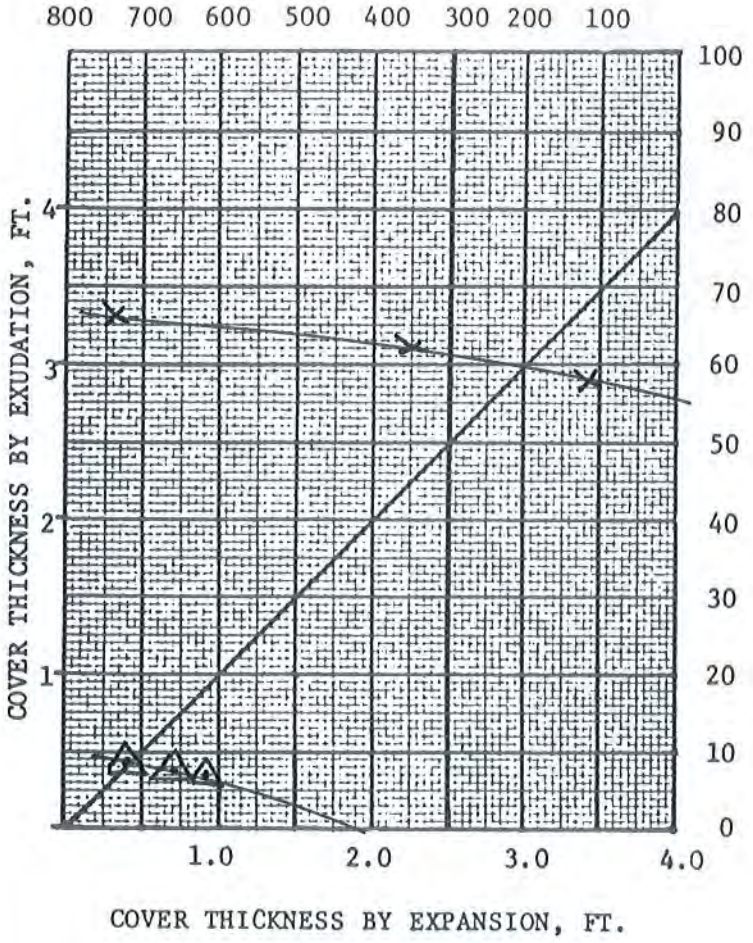
Figure B-5.1a

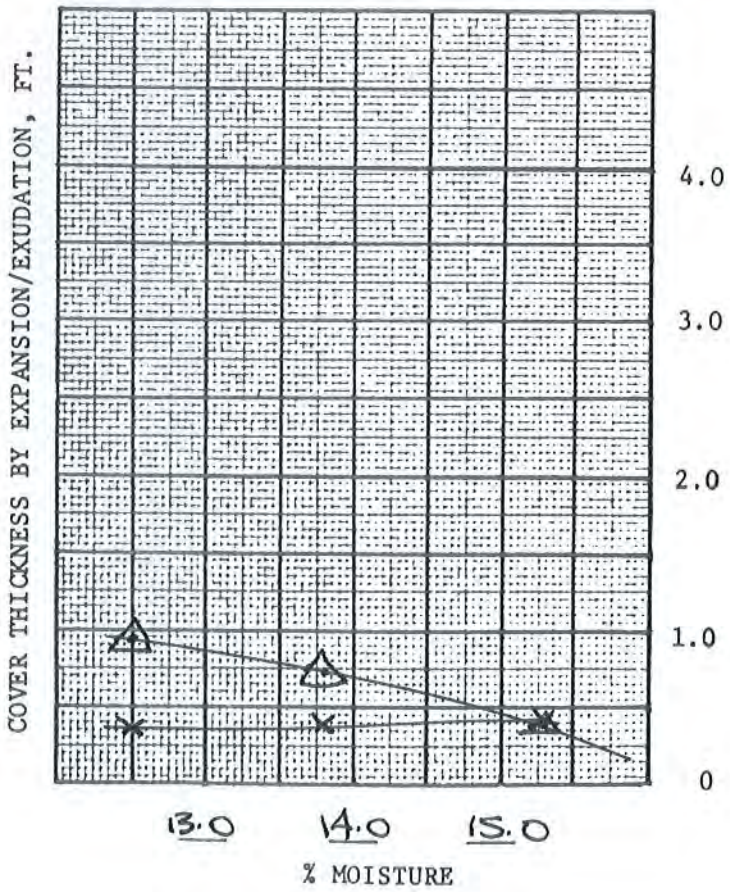
R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 40400
P.N. 4953-15-0432
BORING NO. B-1 @ 1'-4'
LAUSD Polytechnic HS - Sunkalla
DATE 7/3/15

TRAFFIC INDEX Assume 4.0
R-VALUE BY EXUDATION 61
R-VALUE BY EXPANSION 59







R-VALUE vs. EXUD. PRES.
T by EXUDATION
EXUD. T vs. EXPAN. T
T by EXPANSION

REMARKS

GF = 1.25

LaBelle • Marvin
PROFESSIONAL PAVEMENT ENGINEERING

Figure B-5.1b

R - VALUE DATA SHEET

P.N. 4953-15-0432
LAUSD Polytechnic

PROJECT NUMBER 40400 BORING NUMBER: B-6 @ 0'-3'

SAMPLE DESCRIPTION: Brown Silty Sand

Item	SPECIMEN		
	a	b	c
Mold Number	7	5	9
Water added, grams	48	31	38
Initial Test Water, %	10.0	8.3	9.0
Compact Gage Pressure,psi	50	140	100
Exudation Pressure, psi	134	646	325
Height Sample, Inches	2.52	2.50	2.51
Gross Weight Mold, grams	3092	3086	2906
Tare Weight Mold, grams	1968	1975	1789
Sample Wet Weight, grams	1124	1111	1117
Expansion, Inches x 10exp-4	1	6	5
Stability 2,000 lbs (160psi)	16 / 30	13 / 22	14 / 24
Turns Displacement	5.28	4.51	4.98
R-Value Uncorrected	67	78	74
R-Value Corrected	67	78	74
Dry Density, pcf	122.9	124.3	123.7
	DESIGN CALCULATION DATA		
Traffic Index Assumed:	4.0	4.0	4.0
G.E. by Stability	0.34	0.23	0.27
G. E. by Expansion	0.03	0.20	0.17

Equilibrium R-Value	73 by EXUDATION	Examined & Checked: 7 /2/ 15
REMARKS:	Gf = 1.25 4.1% Retained on the 3/4" Sieve. Partial Free Drainage.	REGISTERED PROFESSIONAL ENGINEER STEVEN R. MARVIN C 30659 CIVIL STATE OF CALIFORNIA Steven R. Marvin, RCE 30659

The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.

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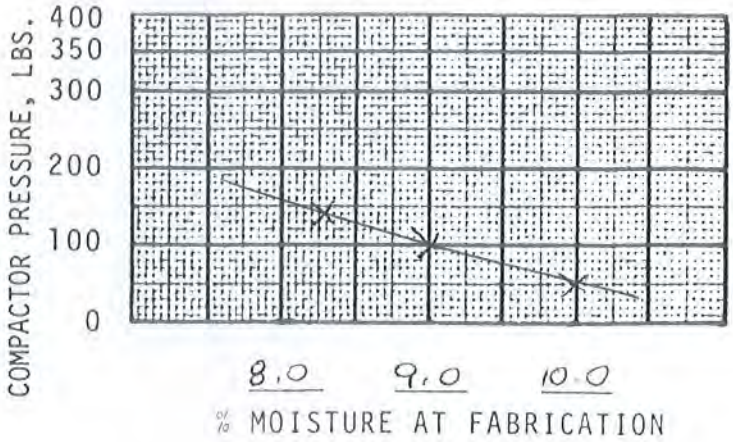
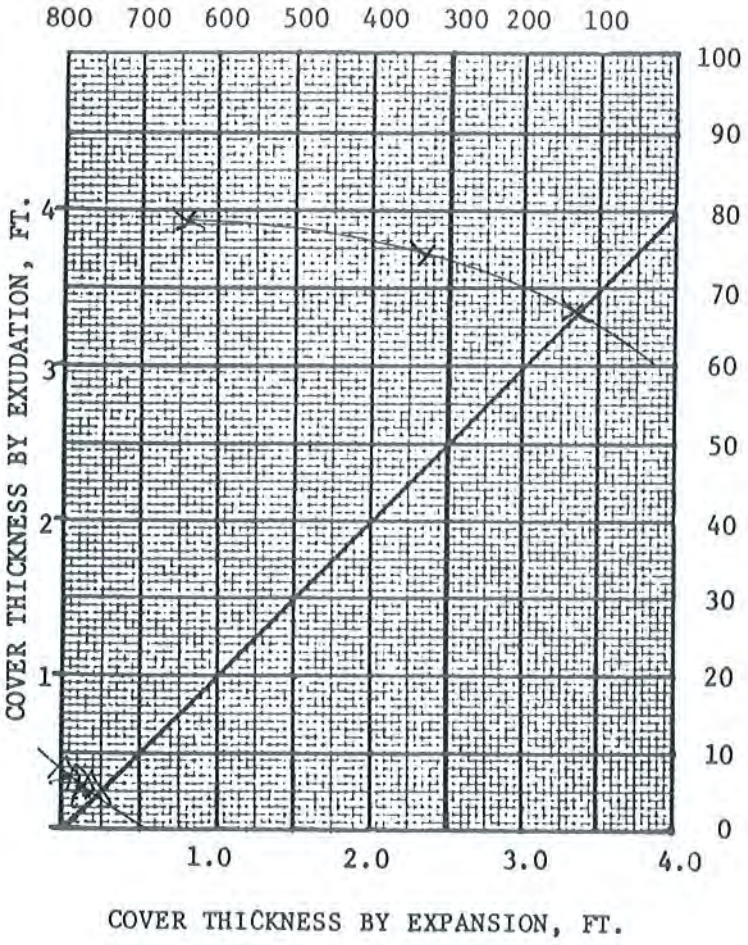
Figure B-5.2a

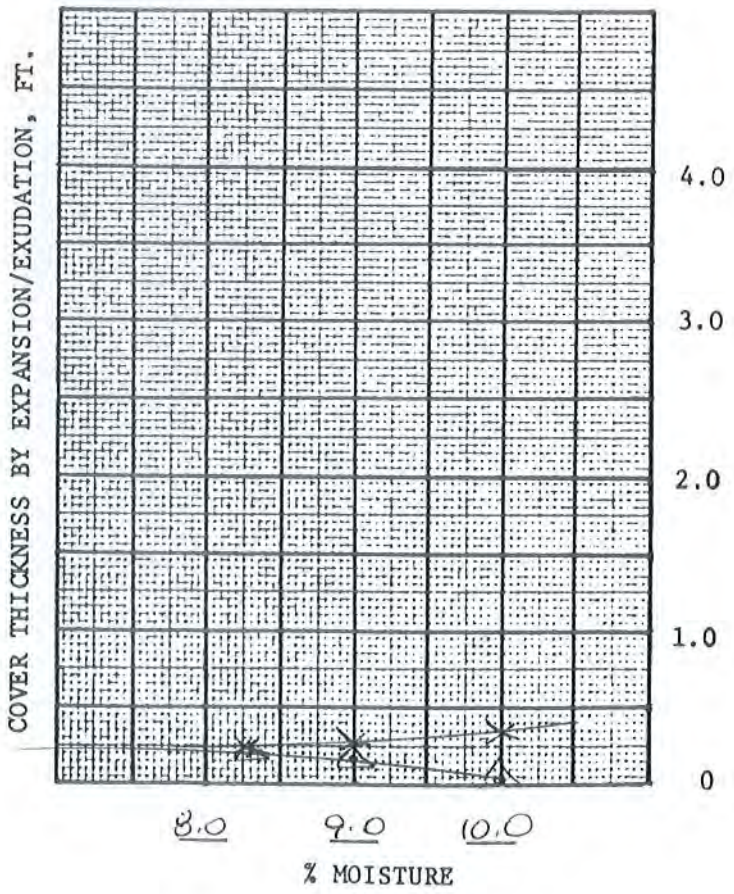
R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 40400
P.N. 4953-15-0432
BORING NO. B-6 @ 0'-3'
LAUSD Polytechnic H.S.
DATE 7/2/15

TRAFFIC INDEX Assume 4.0
R-VALUE BY EXUDATION 73
R-VALUE BY EXPANSION







R-VALUE vs. EXUD. PRES.
T by EXUDATION
EXUD. T vs. EXPAN. T
T by EXPANSION

REMARKS

GF = 1.25

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PROFESSIONAL PAVEMENT ENGINEERING

Figure B-5.2b

Table 1 - Laboratory Tests on Soil Samples

AMEC Foster Wheeler
LAUSD - Polytechnic HS
Your #4953-15-0432, HDR Lab #15-0492LAB
1-Jul-15

Sample ID			B-1 @ 1'-4'	B-2 @ 1'-4'	B-6 @ 0-3'
Resistivity		**Units**			
as-received		ohm-cm	18,000	15,600	34,000
saturated		ohm-cm	2,600	3,440	8,400
pH			7.0	7.5	7.6
Electrical Conductivity		mS/cm	0.19	0.11	0.07
Chemical Analyses					
Cations					
calcium	Ca^{2+}	mg/kg	112	56	52
magnesium	Mg^{2+}	mg/kg	20	6.8	4.0
sodium	Na^{1+}	mg/kg	26	50	28
potassium	K^{1+}	mg/kg	17	11	10
Anions					
carbonate	CO_3^{2-}	mg/kg	ND	ND	ND
bicarbonate	HCO_3^{1-}	mg/kg	58	113	149
fluoride	F^{1-}	mg/kg	2.0	5.3	2.8
chloride	Cl^{1-}	mg/kg	9.8	13	12
sulfate	SO_4^{2-}	mg/kg	324	78	23
phosphate	PO_4^{3-}	mg/kg	ND	ND	ND
Other Tests					
ammonium	NH_4^{1+}	mg/kg	ND	ND	ND
nitrate	NO_3^{1-}	mg/kg	49	59	12
sulfide	S^{2-}	qual	na	na	na
Redox		mV	na	na	na

Electrical conductivity in millisiemens/cm and chemical analysis were made on a 1:5 soil-to-water extract.
mg/kg = milligrams per kilogram (parts per million) of dry soil.
Redox = oxidation-reduction potential in millivolts
ND = not detected
na = not analyzed

431 West Baseline Road · Claremont, CA 91711
Phone: 909.962.5485 · Fax: 909.626.3316

APPENDIX C

RESULTS OF AGRICULTURAL SOIL TESTING

A & L WESTERN AGRICULTURAL LABORATORIES

1311 WOODLAND AVE #1 • MODESTO, CALIFORNIA 95351 • (209) 529-4080 • FAX (209) 529-4736

REPORT NUMBER: 16-281-110 **CLIENT:** 5933

SUBMITTED BY:

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACHER ROAD
LOS ANGELES, CA 90040

GROWER: PO# C012208795

DATE OF REPORT: 10/13/16

SOIL PHYSICAL CHARACTERISTICS

Sample ID	Lab Number	% Sand	% Silt	% Clay	Soil Texture	Moisture @ 1/3 Bar	Moisture @ 15 Bar	Available Water %
B1-0.5	56398	73	18	9	SANDY LOAM			
B1-2	56399	73	18	9	SANDY LOAM			
B2-0.5	56400	77	16	7	SANDY LOAM			
B2-2	56401	81	12	7	LOAMY SAND			
B4-0.5	56402	81	12	7	LOAMY SAND			
B4-2	56403	87	8	5	LOAMY SAND			
B5-0.5	56404	77	14	9	SANDY LOAM			

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Figure C-1.1

A & L WESTERN AGRICULTURAL LABORATORIES

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REPORT NUMBER: 16-281-110 **CLIENT:** 5933

SUBMITTED BY:

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACHER ROAD
LOS ANGELES, CA 90040

GROWER: PO# C012208795

DATE OF REPORT: 10/13/16

SOIL PHYSICAL CHARACTERISTICS

Sample ID	Lab Number	% Sand	% Silt	% Clay	Soil Texture	Moisture @ 1/3 Bar	Moisture @ 15 Bar	Available Water %
B5-2	56405	87	8	5	LOAMY SAND			
B6-0.5	56406	91	6	3	SAND			
B6-2	56407	93	4	3	SAND			
B7-0.5	56408	71	20	9	SANDY LOAM			
B7-2	56409	89	8	3	SAND			
B8-0.5	56410	83	10	7	LOAMY SAND			
B8-2	56411	73	16	11	SANDY LOAM			

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Figure C-1.2

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REPORT NUMBER: 16-281-110 **CLIENT:** 5933

SUBMITTED BY:

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACHER ROAD
LOS ANGELES, CA 90040

GROWER: PO# C012208795

DATE OF REPORT: 10/13/16

SOIL PHYSICAL CHARACTERISTICS

Sample ID	Lab Number	% Sand	% Silt	% Clay	Soil Texture	Moisture @ 1/3 Bar	Moisture @ 15 Bar	Available Water %
B9-0.5	56412	77	16	7	SANDY LOAM			
B9-2	56413	71	20	9	SANDY LOAM			
B10-0.5	56414	83	10	7	LOAMY SAND			
B10-2	56415	89	8	3	SAND			

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Figure C-1.3

A & L WESTERN AGRICULTURAL LABORATORIES

1311 WOODLAND AVE #1 • MODESTO, CALIFORNIA 95351 • (209) 529-4080 • FAX (209) 529-4736

REPORT NUMBER: 16-281-028

CLIENT NO: 5933-D

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACKER ROAD
LOS ANGELES, CA 90040

SUBMITTED BY: PJT#4953161011-01.02

GROWER: PO#CO12208795

DATE OF REPORT: 10/24/16

SOIL ANALYSIS REPORT

SAMPLE ID	LAB NUMBER	Organic Matter		Phosphorus		Potassium	Magnesium	Calcium	Sodium	pH		Hydrogen	Cation Exchange Capacity	PERCENT CATION SATURATION (COMPUTED)				
		* % Rating	** ENR lbs/A	P1 (Weak Bray) **** * ppm	$NaHCO_3$-P (OlsenMethod) **** * ppm	K ***** * ppm	Mg *** * ppm	Ca *** * ppm	Na *** * ppm	Soil pH	Buffer Index	H meq/100g	C.E.C. meq/100g	K %	Mg %	Ca %	H %	Na %
B1-0.5	56398	1.2L	53	18 *	11M	80M	284H	1281M	121H	8.0		0.0	9.5	2.2	24.7	67.6	0.0	5.6
B1-2	56399	0.5L	40	10 *	8M	49L	105L	2091VH	146H	8.1		0.0	12.1	1.0	7.1	86.5	0.0	5.3
B2-0.5	56400	0.5L	40	58VH	16H	71	84	711	39	7.3		0.0	4.6	3.9	15.0	77.3	0.0	3.7
B2-2	56401	0.5L	39	60VH	19H	79	82	617	32	7.1		0.0	4.1	5.0	16.4	75.2	0.0	3.4
B4-0.5	56402	0.5L	40	20 *	8M	45	50	749	16	8.0		0.0	4.3	2.6	9.5	86.3	0.0	1.6

* Weak Bray unreliable at M or H excess lime or pH > 7.5

SAMPLE NUMBER	Nitrogen NO_3-N ppm	Sulfur SO_4-S ppm	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Excess Lime Rating	Soluble Salts mmhos/cm	Chloride Cl ppm		PARTICLE SIZE ANALYSIS			
												SAND %	SILT %	CLAY %	SOIL TEXTURE
B1-0.5	11L	41VH	6.2VH	2L	25H	2.3H	1.2M	L	1.3M						
B1-2	6L	35H	0.9L	1VL	10L	0.7L	0.5L	M	0.7M						
B2-0.5	4VL	8L	0.5VL	1VL	28VH	1.2M	0.2VL	L	0.4L						
B2-2	4VL	6L	0.6L	1VL	20H	0.8L	0.1VL	L	0.3L						
B4-0.5	4VL	6L	1.1M	1VL	7L	0.9M	0.3VL	L	0.3L						

* CODE TO RATING: VERY LOW (VL), LOW (L), MEDIUM (M), HIGH (H), AND VERY HIGH (VH).
** ENR - ESTIMATED NITROGEN RELEASE
*** MULTIPLY THE RESULTS IN ppm BY 2 TO CONVERT TO LBS. PER ACRE OF THE ELEMENTAL FORM
**** MULTIPLY THE RESULTS IN ppm BY 4.6 TO CONVERT TO LBS. PER ACRE P_2O_5
***** MULTIPLY THE RESULTS IN ppm BY 2.4 TO CONVERT TO LBS. PER ACRE K_2O
MOST SOILS WEIGH TWO (2) MILLION POUNDS (DRY WEIGHT) FOR AN ACRE OF SOIL 6-2/3 INCHES DEEP

This report applies only to the sample(s) tested. Samples are retained a maximum of thirty days after testing.

Phoebe Gordon, PhD
A & L WESTERN LABORATORIES, INC.

Figure C-1.4

A & L WESTERN AGRICULTURAL LABORATORIES

1311 WOODLAND AVE #1 • MODESTO, CALIFORNIA 95351 • (209) 529-4080 • FAX (209) 529-4736

REPORT NUMBER: 16-281-028

CLIENT NO: 5933-D

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACKER ROAD
LOS ANGELES, CA 90040

SUBMITTED BY: PJT#4953161011-01.02

GROWER: PO#CO12208795

DATE OF REPORT: 10/24/16

SOIL ANALYSIS REPORT

SAMPLE ID	LAB NUMBER	Organic Matter		Phosphorus		Potassium	Magnesium	Calcium	Sodium	pH		Hydrogen	Cation Exchange Capacity	PERCENT CATION SATURATION (COMPUTED)				
		* % Rating	** ENR lbs/A	P1 (Weak Bray) **** * ppm	$NaHCO_3$-P (OlsenMethod) **** * ppm	K ***** * ppm	Mg *** * ppm	Ca *** * ppm	Na *** * ppm	Soil pH	Buffer Index	H meq/100g	C.E.C. meq/100g	K %	Mg %	Ca %	H %	Na %
B4-2	56403	0.1VL	33	14L	7L	34	67	521	13	7.5		0.0	3.3	2.6	16.8	78.9	0.0	1.7
B5-0.5	56404	0.4L	37	66 *	27VH	47L	140M	873M	289VH	8.1		0.0	6.9	1.8	16.8	63.2	0.0	18.3
B5-2	56405	0.3VL	37	17 *	8M	33	93	630	87	7.8		0.0	4.4	2.0	17.4	71.9	0.0	8.7
B6-0.5	56406	0.1VL	33	13L	5L	29	53	419	17	7.3		0.0	2.7	2.8	16.2	78.2	0.0	2.8
B6-2	56407	0.1VL	32	6VL	3VL	31	69	406	18	7.5		0.0	2.8	2.9	20.6	73.6	0.0	2.8

* Weak Bray unreliable at M or H excess lime or pH > 7.5

SAMPLE NUMBER	Nitrogen NO_3-N ppm	Sulfur SO_4-S ppm	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Excess Lime Rating	Soluble Salts mmhos/cm	Chloride Cl ppm		PARTICLE SIZE ANALYSIS			
												SAND %	SILT %	CLAY %	SOIL TEXTURE
B4-2	4VL	1VL	0.1VL	1VL	5VL	0.2VL	0.1VL	L	0.2VL						
B5-0.5	4VL	40VH	0.5VL	1VL	13M	0.4L	1.3M	L	0.8M						
B5-2	4VL	8L	0.1VL	1VL	7L	0.2VL	0.3VL	L	0.3L						
B6-0.5	3VL	1VL	0.2VL	1VL	6L	0.2VL	0.1VL	L	0.1VL						
B6-2	3VL	2VL	0.1VL	1VL	6L	0.1VL	0.1VL	L	0.1VL						

* CODE TO RATING: VERY LOW (VL), LOW (L), MEDIUM (M), HIGH (H), AND VERY HIGH (VH).
** ENR - ESTIMATED NITROGEN RELEASE
*** MULTIPLY THE RESULTS IN ppm BY 2 TO CONVERT TO LBS. PER ACRE OF THE ELEMENTAL FORM
**** MULTIPLY THE RESULTS IN ppm BY 4.6 TO CONVERT TO LBS. PER ACRE P_2O_5
***** MULTIPLY THE RESULTS IN ppm BY 2.4 TO CONVERT TO LBS. PER ACRE K_2O
MOST SOILS WEIGH TWO (2) MILLION POUNDS (DRY WEIGHT) FOR AN ACRE OF SOIL 6-2/3 INCHES DEEP

This report applies only to the sample(s) tested. Samples are retained a maximum of thirty days after testing.

Phoebe Gordon, PhD
A & L WESTERN LABORATORIES, INC.

Figure C-1.5

A & L WESTERN AGRICULTURAL LABORATORIES

1311 WOODLAND AVE #1 • MODESTO, CALIFORNIA 95351 • (209) 529-4080 • FAX (209) 529-4736

REPORT NUMBER: 16-281-028

CLIENT NO: 5933-D

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACKER ROAD
LOS ANGELES, CA 90040

SUBMITTED BY: PJT#4953161011-01.02

GROWER: PO#CO12208795

DATE OF REPORT: 10/24/16

SOIL ANALYSIS REPORT

SAMPLE ID	LAB NUMBER	Organic Matter		Phosphorus		Potassium	Magnesium	Calcium	Sodium	pH		Hydrogen	Cation Exchange Capacity	PERCENT CATION SATURATION (COMPUTED)				
		* % Rating	** ENR lbs/A	P1 (Weak Bray) **** * ppm	$NaHCO_3$-P (OlsenMethod) **** * ppm	K ***** * ppm	Mg *** * ppm	Ca *** * ppm	Na *** * ppm	Soil pH	Buffer Index	H meq/100g	C.E.C. meq/100g	K %	Mg %	Ca %	H %	Na %
B7-0.5	56408	0.6L	42	18 *	12M	60L	110L	1879VH	61L	8.0		0.0	10.7	1.4	8.4	87.6	0.0	2.5
B7-2	56409	0.4L	37	7 *	6L	28	82	674	29	7.7		0.0	4.2	1.7	15.9	79.5	0.0	2.9
B8-0.5	56410	0.8L	45	10 *	6L	41L	73L	1908VH	66L	8.0		0.0	10.5	1.0	5.7	90.5	0.0	2.7
B8-2	56411	0.5L	41	14 *	9M	46L	92L	1474VH	37L	8.4		0.0	8.4	1.4	9.0	87.7	0.0	1.9
B9-0.5	56412	0.4L	38	124 *	49VH	42	116	726	22	7.6		0.0	4.8	2.2	19.9	75.9	0.0	2.0

* Weak Bray unreliable at M or H excess lime or pH > 7.5

SAMPLE NUMBER	Nitrogen NO_3-N ppm	Sulfur SO_4-S ppm	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Excess Lime Rating	Soluble Salts mmhos/cm	Chloride Cl ppm		PARTICLE SIZE ANALYSIS			
												SAND %	SILT %	CLAY %	SOIL TEXTURE
B7-0.5	6L	42VH	0.4VL	1VL	7L	0.4L	0.2VL	L	0.6L						
B7-2	5L	6L	0.3VL	1VL	7L	0.8L	0.1VL	L	0.3L						
B8-0.5	3VL	45VH	0.4VL	1VL	6L	0.4L	0.2VL	L	0.8M						
B8-2	5L	21M	0.2VL	1VL	5VL	0.3VL	0.2VL	L	0.6L						
B9-0.5	5L	3VL	0.2VL	1VL	8L	0.4L	0.1VL	L	0.3L						

* CODE TO RATING: VERY LOW (VL), LOW (L), MEDIUM (M), HIGH (H), AND VERY HIGH (VH).
** ENR - ESTIMATED NITROGEN RELEASE
*** MULTIPLY THE RESULTS IN ppm BY 2 TO CONVERT TO LBS. PER ACRE OF THE ELEMENTAL FORM
**** MULTIPLY THE RESULTS IN ppm BY 4.6 TO CONVERT TO LBS. PER ACRE P_2O_5
***** MULTIPLY THE RESULTS IN ppm BY 2.4 TO CONVERT TO LBS. PER ACRE K_2O
MOST SOILS WEIGH TWO (2) MILLION POUNDS (DRY WEIGHT) FOR AN ACRE OF SOIL 6-2/3 INCHES DEEP

This report applies only to the sample(s) tested. Samples are retained a maximum of thirty days after testing.

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Figure C-1.6

A & L WESTERN AGRICULTURAL LABORATORIES

1311 WOODLAND AVE #1 • MODESTO, CALIFORNIA 95351 • (209) 529-4080 • FAX (209) 529-4736

REPORT NUMBER: 16-281-028

CLIENT NO: 5933-D

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACKER ROAD
LOS ANGELES, CA 90040

SUBMITTED BY: PJT#4953161011-01.02

GROWER: PO#CO12208795

DATE OF REPORT: 10/24/16

SOIL ANALYSIS REPORT

SAMPLE ID	LAB NUMBER	Organic Matter		Phosphorus		Potassium	Magnesium	Calcium	Sodium	pH		Hydrogen	Cation Exchange Capacity	PERCENT CATION SATURATION (COMPUTED)				
		* % Rating	** ENR lbs/A	P1 (Weak Bray) **** * ppm	$NaHCO_3$-P (OlsenMethod) **** * ppm	K ***** * ppm	Mg *** * ppm	Ca *** * ppm	Na *** * ppm	Soil pH	Buffer Index	H meq/100g	C.E.C. meq/100g	K %	Mg %	Ca %	H %	Na %
B9-2	56413	0.4L	38	4 *	5L	31L	174M	1402VH	59L	7.6		0.0	8.8	0.9	16.3	79.9	0.0	2.9
B10-0.5	56414	0.2VL	35	61VH	9M	38	124	649	21	7.4		0.0	4.4	2.2	22.9	72.9	0.0	2.1
B10-2	56415	0.2VL	34	60 *	40VH	22	53	336	17	8.0		0.0	2.2	2.5	19.6	74.7	0.0	3.3

* Weak Bray unreliable at M or H excess lime or pH > 7.5

SAMPLE NUMBER	Nitrogen NO_3-N ppm	Sulfur SO_4-S ppm	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Excess Lime Rating	Soluble Salts mmhos/cm	Chloride Cl ppm		PARTICLE SIZE ANALYSIS			
												SAND %	SILT %	CLAY %	SOIL TEXTURE
B9-2	8L	4L	0.1VL	1VL	4VL	0.4L	0.1VL	L	0.3L						
B10-0.5	6L	2VL	0.7L	1VL	10L	0.7L	0.1VL	L	0.1VL						
B10-2	3VL	1VL	0.1VL	1VL	4VL	0.1VL	0.1VL	L	0.1VL						

* CODE TO RATING: VERY LOW (VL), LOW (L), MEDIUM (M), HIGH (H), AND VERY HIGH (VH).
** ENR - ESTIMATED NITROGEN RELEASE
*** MULTIPLY THE RESULTS IN ppm BY 2 TO CONVERT TO LBS. PER ACRE OF THE ELEMENTAL FORM
**** MULTIPLY THE RESULTS IN ppm BY 4.6 TO CONVERT TO LBS. PER ACRE P_2O_5
***** MULTIPLY THE RESULTS IN ppm BY 2.4 TO CONVERT TO LBS. PER ACRE K_2O
MOST SOILS WEIGH TWO (2) MILLION POUNDS (DRY WEIGHT) FOR AN ACRE OF SOIL 6-2/3 INCHES DEEP

This report applies only to the sample(s) tested. Samples are retained a maximum of thirty days after testing.

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Figure C-1.7

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REPORT NUMBER: 16-281-028 **CLIENT:** 5933

SUBMITTED BY: PJT#4953161011-01.02

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACKER ROAD
LOS ANGELES, CA 90040

GROWER: PO#CO12208795

DATE OF REPORT: 10/24/16

SOIL SALINITY ANALYSIS REPORT

Sample ID	Lab Number	SAR	ESP	Na meq/L	Ca meq/L	Mg meq/L	pH	CO_3 meq/L	HCO_3 meq/L	E.C. dS/m	Cl meq/L	B ppm	Saturation %
B1-0.5	56398	2.4	2.2	5.6	7.0	4.1	8.0	0.0	4.0	1.3	3.4	0.5	26.5
B1-2	56399	4.1	4.6	5.1	2.2	0.8	8.1	0.0	2.2	0.7	1.0	0.4	23.9
B2-0.5	56400	1.4	0.8	1.5	1.4	0.7	7.3	0.0	1.3	0.4	0.6	0.2	21.1
B2-2	56401	1.0	0.3	1.0	1.0	1.1	7.1	0.0	1.0	0.3	0.4	0.1	22.2
B4-0.5	56402	0.6	< 0.1	0.7	1.9	0.4	8.0	0.0	1.5	0.3	0.3	0.3	17.9
B4-2	56403	0.5	< 0.1	0.4	0.8	0.5	7.5	0.0	1.0	0.2	0.2	0.1	25.1
B5-0.5	56404	9.2	11.0	9.0	1.2	0.7	8.1	0.0	1.9	0.8	0.8	1.1	26.4

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Figure C-1.8

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REPORT NUMBER: 16-281-028 **CLIENT:** 5933

SUBMITTED BY: PJT#4953161011-01.02

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACKER ROAD
LOS ANGELES, CA 90040

GROWER: PO#CO12208795

DATE OF REPORT: 10/24/16

SOIL SALINITY ANALYSIS REPORT

Sample ID	Lab Number	SAR	ESP	Na meq/L	Ca meq/L	Mg meq/L	pH	CO_3 meq/L	HCO_3 meq/L	E.C. dS/m	Cl meq/L	B ppm	Saturation %
B5-2	56405	3.5	3.7	2.3	0.5	0.3	7.8	0.0	1.5	0.3	0.3	0.2	26.1
B6-0.5	56406	1.5	0.9	0.8	0.4	0.2	7.3	0.0	1.0	0.1	0.3	0.1	23.3
B6-2	56407	0.7	< 0.1	0.3	0.3	0.2	7.5	0.0	1.0	0.1	0.3	0.1	28.8
B7-0.5	56408	1.4	0.8	2.3	4.0	1.2	8.0	0.0	1.6	0.6	0.3	0.2	26.6
B7-2	56409	1.0	0.1	1.0	1.5	0.7	7.7	0.0	1.9	0.3	0.3	0.1	24.5
B8-0.5	56410	1.8	1.4	3.4	5.6	1.6	8.0	0.0	1.8	0.8	1.2	0.2	21.2
B8-2	56411	0.9	0.1	1.5	3.9	1.5	8.4	0.0	1.6	0.6	1.0	0.1	18.5

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Figure C-1.9

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REPORT NUMBER: 16-281-028 **CLIENT:** 5933

SUBMITTED BY: PJT#4953161011-01.02

SEND TO: AMEC FOSTER WHEELER ENV. & INFRA. INC.
6001 RICKENBACKER ROAD
LOS ANGELES, CA 90040

GROWER: PO#CO12208795

DATE OF REPORT: 10/24/16

SOIL SALINITY ANALYSIS REPORT

Sample ID	Lab Number	SAR	ESP	Na meq/L	Ca meq/L	Mg meq/L	pH	CO_3 meq/L	HCO_3 meq/L	E.C. dS/m	Cl meq/L	B ppm	Saturation %
B9-0.5	56412	0.7	< 0.1	0.7	1.2	0.7	7.6	0.0	1.2	0.3	0.3	0.1	21.4
B9-2	56413	1.2	0.6	1.1	1.1	0.6	7.6	0.0	0.9	0.3	0.4	0.1	27.2
B10-0.5	56414	0.6	< 0.1	0.5	0.6	0.5	7.4	0.0	1.0	0.1	0.3	0.1	19.2
B10-2	56415	0.7	< 0.1	0.4	0.4	0.2	8.0	0.0	1.1	0.1	0.3	0.1	26.7

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Figure C-1.10

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1311 Woodland Avenue, Suite 1 • Modesto, California 95351 • (209) 529-4080

Report No: 16-281-028 **Account No:** 5933

Send to: AMEC FOSTER WHEELER
6001 RICKENBACKER RD
LOS ANGELES, CA 90040

Grower: PO#CO12208795 **Submitted by:** PJT34953161011-01.02

Date Received: 10/07/16
Date Reported: 10/24/16

SOIL ANALYSIS REPORT

Analyte:		**TKN**
Detection Limit:		**40 mg/kg**
Method Code:		**WREP 125 2nd Ed. S - 8.10**
Lab Number:	**Sample ID:**	**mg/kg (ppm)**
56398	B1-0.5	559
56399	B1-2	160
56400	B2-0.5	247
56401	B2-2	316
56402	B4-0.5	509
56403	B4-2	51
56404	B5-0.5	203
56405	B5-2	83
56406	B6-0.5	39
56407	B6-2	141

A & L Western Agricultural Laboratories, Inc.

Phoebe Gordon, PhD
Agronomist

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Figure C-1.11

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Report No: 16-281-028 **Account No:** 5933

Send to: AMEC FOSTER WHEELER
6001 RICKENBACKER RD
LOS ANGELES, CA 90040

Grower: PO#CO12208795 **Submitted by:** PJT34953161011-01.02

Date Received: 10/07/16
Date Reported: 10/24/16

SOIL ANALYSIS REPORT

Analyte:		**TKN**
Detection Limit:		**40 mg/kg**
Method Code:		**WREP 125 2nd Ed. S - 8.10**
Lab Number:	**Sample ID:**	**mg/kg (ppm)**
56408	B7-0.5	242
56409	B7-2	119
56410	B8-0.5	256
56411	B8-2	180
56412	B9-0.5	156
56413	B9-2	131
56414	B10-0.5	82
56415	B10-2	30

A & L Western Agricultural Laboratories, Inc.

Phoebe Gordon

Phoebe Gordon, PhD
Agronomist

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Figure C-1.12

Appendices

E-1.

Phase I Environmental Site Assessment

Appendices

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ENVIRONMENTAL REPORT

Phase I ESA (ASTM 1527-13) Expanded

Project Information:

LAUSD

John H Francis Polytechnic High School

12431 Roscoe Blvd

Sun Valley, CA 91352



Prepared by:

Civil-Environmental-Survey Group, Inc.

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Corona, CA 92883

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John H Francis Polytechnic HS

September 22, 2016

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LIST OF ACRONYMS

ACM Asbestos Containing Material
AMSD Approximate Minimum Search Distance
APN assessor parcel number
AST Above-ground Storage Tank
ASTM American Society for Testing and Materials
CERCLIS Comprehensive Environmental Response, Compensation and Liability Information System
CES Group Civil-Environmental-Survey Group
CFM Cubic Feet per Minute
CREC Controlled Recognized Environmental Condition
CUPA Certified Unified Program Agency
DWR Department of Water Resources
ECHO Enforcement and Compliance History Online
HREC Historical Recognized Environmental Condition
DTSC Department of Toxic Substances Control
EDR® Environmental Data Resources, Inc.
ESA Environmental Site Assessment
FINDS Facility Index System
HAZNET Hazards Network
HVAC Heating, Ventilation, and Air Conditioning
LACDPW Los Angeles County Department of Public Works
LADWP Los Angeles Department of Water and Power
LAUSD Los Angeles Unified School District
LBP Lead-Based Paint
LEL Lower Explosive Limit
LQG Large Quantity Generator
LUST Leaking Underground Storage Tank
MSL Mean Sea Level
NPL National Priorities List
OEHS Office of Environmental Health and Safety
PCB Polychlorinated biphenyl
PHICOR Public Health Information Request
RCRA Resource Conservation and Recovery Act
RCRIS Resource Conservation and Recovery Act Information System
REC recognized environmental condition
RWQCB Regional Water Quality Control Board
SCAQMD South Coast Air Quality Management District
SQG Small Quantity Generator
SVOC Semi-volatile Organic Compound
SWF Solid Waste Facility
USEPA United States Environmental Protection Agency
USGS United States Geological Survey
UST Underground Storage Tank
VOC Volatile Organic Compounds

1.0 GENERAL INFORMATION

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John H Francis Polytechnic High School
Project Number:
John H Francis Polytechnic HS

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Inspection Date:
Report Date: 9/22/16

Site Information:
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Sun Valley, CA 91352
County: Los Angeles
Latitude, Longitude: 34.221954, -118.404077
Site Access Contact:

Client Information:

,

Site Assessor

Skye Green
Principal Engineer

On Behalf Of Danny Baysa - Director of Operation

Senior Reviewer

Skye Green
Principal Engineer

Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Skye Green - Principal Engineer

2.0 EXECUTIVE SUMMARY

2.1 Subject Property Description

CES GROUP performed a Phase I Environmental Site Assessment, that included on-site observations of the accessible areas of 12431 Roscoe Blvd (the "Property") in Sun Valley, CA 91352, on July 21, 2016. The Property is located at the northeast intersection of Arleta Avenue and Roscoe Boulevard. Site maps are included in Appendix A.

The Property is approximately 47 acres and is improved with a high school including a main office building, a school library, an auditorium, two gymnasiums, a cafetorium, maintenance building, athletic fields, and classroom buildings. The property is a mixture of paved and unpaved areas, small planters, and athletic field space. The property is located within a largely residential and commercial area and is zoned Z1 for Public Facilities.

According to the City of Los Angeles Department of Building and Safety, the first construction at the Property was completed in 1956 with subsequent additions and renovations. This information is confirmed by historic aerial photographs of the Site. There is currently Byrd Middle School to the west, Sheldon Arleta Park and former landfill to the northwest, and residential areas to the northeast, east and south.

This assessment took place in July, 2016 with a site visit occurring on July 21, 2016. No data failures/data gaps were encountered during this Phase I ESA.

The following summarizes the independent conclusions representing CES GROUP's best professional judgment based on information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by the Client, owner, or their representative has been assumed to be correct and complete. Additionally, the conclusions presented are based on the conditions that existed at the time of the assessment.

2.2 Data Gaps

CES Group has been able to research the use of the Subject Property back to its first developed use. No Data Gaps have been encountered for this property.

2.3 Environmental Report Summary

The purpose of the Phase I is to identify existing or potential recognized environmental conditions (as defined by ASTM Standard E1527-13). A recognized environmental condition (REC) refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following RECs were identified during this assessment:

- The adjacent former landfill
- Arsenic. It was formerly common practice for the LAUSD to apply an arsenic-based herbicide to soil prior to paving. Due to this practice, it is possible that elevated arsenic concentrations could be present in the soils directly beneath the paved portions of the Site.

A controlled recognized environmental condition refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. No controlled recofnized environmental conditions were identified during this assessment.

A historical recognized environmental condition refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. No historical recognized environmental conditions were identified during this assessment.

An environmental issue refers to environmental concerns identified by CES Group, which do not qualify as RECs; however, warrant further discussion. The following environmental issues were identified during this assessment:

- Lead-based paint. Due to its slow deterioration with time, the paint can accumulate in soils that adjoin buildings and result in elevated lead concentrations. The buildings at this Site are adjoined by pavement but there are open planter areas between the buildings that contain trees.

2.3 Environmental Report Summary (continued)

- Fuel Bunker. Drums of gasoline, diesel, and contaminated gasoline were observed in a flammable materials storage room at the Site. Indications of releases from these fuel containers were not evident at the time of the assessment.
- Clarifiers. A clarifier was observed adjacent to the chemistry room and another clarifier was observed in the ceramics class.

Report Section		No Further Action	REC	HREC	CREC	Issue/Further Investigation	Comments
4.4	**Current Use of Property**	X					
4.6	**Adjoining Property Information**	X	X				The former Sheldon-Arleta Landfill is located north of the site and has a methane mitigation program.
6.1	**Standard Environmental Records Sources**	X					
6.4.1	**Historical Summary**	X					
6.4.7	**Other Environmental Reports**	X					
7.3.1	**Hazardous Substances**					X	Clarifiers are present at the science building and ceramics class that warrant additional investigation.
7.3.2	**Petroleum Products**					X	The presence of fuel in the fuel bunker warrants additional investigation.
7.3.3	**USTs**	X					
7.3.4	**ASTs**	X					
7.3.5	**Other Suspect Containers**	X					
7.3.6	**Equipment Likely to Contain PCBs**	X					
7.3.7	**Interior Staining/Corrosion**	X					
7.3.8	**Discharge Features**	X					
7.3.9	**Pits, Ponds, And Lagoons**	X					
7.3.10	**Solid Waste Dumping/Landfills**	X	X				The Former Sheldon-Arleta Landfill is located to the north of the Site and has a methane mitigation program.
7.3.11	**Stained Soil/Stressed Vegetation**	X					
7.3.12	**Wells**	X					
	Asbestos-Containing Materials	X					
	Lead-Based Paint	X				X	Lead-based paint and arsenic may be present on site. Soil sampling is recommended for further evaluation.
	Radon	X					
	Wetlands	X					
	Microbial Contamination (Mold)	X					

2.4 Recommendations

Based upon our understanding of the proposed project, there is a proposed modernization project at Franics Polytechnic High School that consists of the possible seismic evaluation and retrofit of up to six buildings, the demolition/removal of

2.4 Recommendations (continued)

several buildings, the construction of a new classroom building, and the potential construction of a service delivery road and yard.

Based on the conclusions of this assessment, CES Group recommends the following:

- Consideration must be given to the management of the methane gas system during demolition and construction.
- Should construction activities involve the disturbance of ACM and/or suspect ACM and lead-based paint, proper management techniques should be employed for the handling of soil and demolition materials in accordance with all applicable environmental agency rules and requirements.
- Sampling the soils in the planter areas and between buildings that are planned for demolition or earthwork.
- Sampling the soil in the areas of the clarifiers.
- Sampling in the hazardous materials storage area to confirm that there has been no release.

3.0 INTRODUCTION

3.1 Purpose

CES GROUP conducted an on-site Environmental Site Assessment of the Property that consisted of a walk-through observation of the accessible areas and interviews with facility personnel and local agency representatives. On-site activities and/or interviews were conducted by Daniel Baysa, with:

- Eric Longenecker, OEHS
- Ray Parreras, Plant Manager

An Environmental Questionnaire was partially completed through interview but was not completed due to lack of specific knowledge. Interviews were conducted during the site walk with regards to knowledge of site specifics and site history. Eric Longenecker provided CES Group with historic maps and information regarding previous environmental issues and future site plans.

Most areas of the property were available for observation during the site visit although each individual classroom was not observed and instead representative classrooms were observed. Areas accessed included classroom buildings, storage areas, chemistry classroom and storage room, ceramic classroom and storage area, former auto shop area, cafetorium, and common areas.

The weather at the time of the site visit was approximately 75 degrees Fahrenheit, with blue skies and some clouds, and a slight breeze.

CES GROUP reviewed available federal, state, and local records in an effort to identify sites of known or suspected hazardous waste activity located at or near the Property, which could have an adverse impact on the Property. In an attempt to determine whether historical uses of the Property and surrounding areas have had an environmental impact on the Property, CES GROUP interviewed individuals knowledgeable about the Property and reviewed available pertinent records and documents. This assessment is based on the evaluation of the information gathered, and accessibility at the time of the assessment.

The purpose of this report is to provide the Client an assessment concerning environmental conditions (limited to those issues identified in the report) as they existed at the Property. The assessment was conducted utilizing generally accepted Phase I industry standards using the American Society for Testing and Materials (ASTM) Standard Practice E 1527-13. The scope of work included an evaluation of:

- The Property history in an attempt to identify any possible ownership(s) and/or uses that would suggest an impact to the environmental integrity of the Property as identified through review of reasonably ascertainable standard historical sources.

- Physical characteristics of the Property as identified through review of reasonably ascertainable topographic, wetlands, flood plain, soils, geology, and groundwater data.

- Current Property conditions (as applicable), including compliance with appropriate regulations as they pertain to the presence or absence of:

    - Facility storage tanks, drums, containers (above or below ground), etc.
    - Transformers and other electrical equipment which utilize fluid which may potentially contain PCBs
    - The use of hazardous materials/chemicals and petroleum products, and/or the generation, treatment, storage, or disposal of hazardous, regulated, or medical wastes

This report provides a screening approach for the potential existence of:

- Asbestos, including the identification of all suspect materials in accessible areas (interior and exterior).

- This screening approach is not a comprehensive (i.e., AHERA-Style) asbestos survey, nor is it intended to fill the NESHAP requirements for demolition/renovation purposes, but is intended to identify the potential for an asbestos hazard in accessible areas. This screening is not intended to be used for demolition, abatement, renovation, or repair work.
  The basis for "suspect" determination is taken from the materials listed in Appendix G of the United States Environmental Protection Agency (USEPA) publication Managing Asbestos in Place (the "Green Book"). Therefore, all materials listed in the Green Book, which were installed prior to 1981 are considered suspect with the exception of resilient floor tile, asbestos-cement board (transite), and roofing felt, which are considered

3.1 Purpose (continued)

suspect regardless of installation date (these materials continue to be manufactured and installed in the United States).

- Radon gas propensity, through the review of the USEPA's Map of Radon Zones.

- Lead-based paint for properties constructed prior to 1978. The basis for this determination is taken from the Lead Paint Poisoning Act passed by the Congress of the United States that banned the use of lead paint starting January 1, 1978. Therefore, all paint applied prior to 1978 is considered suspect.

- Lead in water was investigated by inquiring of the water supplier, California Water Service Company, whether the drinking water satisfied Federal, state and local regulations.

An evaluation of information contained in programs such as the NPL, CERCLIS, SHWS, RCRIS, SWF, LUST, and other governmental information systems within specific search distances of the Property. This evaluation was performed to identify any sites that would have the potential to impact the environmental integrity of the Property.

The regulatory agency report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The report is based on a radius search, which focuses on both the Property and neighboring sites that may impact the Property. Neighboring sites listed in governmental environmental records are identified within a specific search distance. The search distance varies depending upon the particular government record being checked. The search is designed to meet the requirements of ASTM Standard E 1527-13. The information provided is assumed to be correct and complete.

Visual observation of the adjacent properties to identify high-risk neighbors and the potential for known or suspected contamination to migrate onto the Property.

3.2 Scope of Work

The Phase I ESA conducted at the Subject Property was in general accordance with ASTM Standard E 1527-13 and included the following:

- Review of previous environmental site assessments;
- Records review;
- Interviews with regulatory officials and personnel associated with the subject and adjoining properties;
- A site visit; and
- Evaluation of information and preparation of the report provided herein.

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required. For this Phase I ESA, no additions to the ASTM E 1527-13 standard were made.

3.3 Significant Assumptions

CES Group has prepared this Phase I Environmental Site Assessment using reasonable efforts in each phase of its work to identify recognized environmental conditions associated with hazardous substances or petroleum products at the property. The scope-of-work for this Phase I ESA was consistent with the ASTM Practice E 1527-13. Findings within this report are based on information collected from observations made on the day of the site investigation and from reasonably ascertainable information obtained from governing public agencies and referenced sources.

This report is not definitive and should not be assumed to be a complete or specific definition of all conditions above or below grade. Subsurface conditions may differ from the conditions implied by the surface observations and can only be reliably evaluated through intrusive techniques. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes. CES Group makes no representation or warranty that the past or current operations at the property are or have been in compliance with all applicable federal, state and local laws, regulations and codes.

Regardless of the findings stated in this report, CES Group is not responsible for consequences or conditions arising from facts that were concealed, withheld, or not fully disclosed at the time the assessment was conducted.

3.3 Significant Assumptions (continued)

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

The regulatory database report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The report focuses on the property and neighboring properties that could impact the property. Neighboring properties listed in governmental environmental records are identified within specific search distances. The search distance varies depending upon the particular government record being checked. The regulatory research is designed to meet the requirements of ASTM Practice E 1527-13. The information provided in the regulatory database report is assumed to be correct and complete unless obviously contradicted by field observation or other reviewed sources.

Reasonable efforts have been made during this assessment of aboveground and underground storage tanks and ancillary equipment. "Reasonable efforts" are limited to information gained from visual observation of largely unobstructed areas, recorded database information held in public record and available information gathered from interviews. Such methods may not identify subsurface equipment that may have been hidden from view due to snow cover, paving, construction or debris pile storage, or incorrect information from sources.

CES Group is not a professional title insurance firm and makes no guarantee, explicit or implied, that any land title records reviewed represent a comprehensive or precise delineation of past site ownership or occupancy for legal purposes.

3.4 Limitations and Exceptions

Along with all of the limitations set forth in various sections of the ASTM E 1527-13 protocol, the accuracy and completeness of this report may be limited by the following:

- Access Limitations
- Physical Obstructions to Observations
- Outstanding Information Requests
- Historical Data Source Failure

It should be noted that this assessment did not include a review or audit of operational environmental compliance issues, or of any environmental management systems (EMS) that may exist on the property. Where required, the documents listed in Appendices A and E were used as reference material for the completion of the Phase I ESA. Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, CES Group in certain instances has been required to assume that the information provided is accurate.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgment of CES Group based on the data obtained from the work. Due to the nature of investigation and the limited data available, CES Group cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be construed as legal advice.

Should additional information become available which differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.

3.5 Deviations

No deviations from the recommended scope of ASTM Standard E 1527-13 were performed as part of this Phase I ESA with the exception of any additions noted in Detailed Scope of Services.

3.6 Special Terms and Conditions

Authorization to perform this assessment was given by the client on June 27, 2016. Instructions as to the location of the property, access, and an explanation of the property and facilities to be assessed were provided by Los Angeles Unified School District (LAUSD) Office of Environmental Health and Safety (OEHS).

3.7 Reliance

Civil-Environmental-Survey Group (CES GROUP) has completed a Phase I Environmental Site Assessment of 12431 Roscoe Blvd (the "Property") in Sun Valley, CA 91352. The assessment was performed at the Client's request using the methods and procedures consistent with good commercial and customary practice designed to conform to acceptable industry standards.

Any third party agrees by accepting this report that any use or reliance on this report shall be limited by the exceptions and limitations in this report, and with the acknowledgment that actual site conditions may change with time, and that hidden conditions may exist at the Property that were not discoverable within the authorized scope of the assessment.

CES Group makes no other representation to any third party except that it has used the degree of care and skill ordinarily exercised by environmental consultants in the preparation of the report and in the assembling of data and information related thereto. No other warranties are made to any third party, either express or implied. CES Group's liability to any third party authorized to use or rely on this report with respect to any acts or omissions shall be limited to a maximum of $5000.

The results of the assessment provided herein are in no way intended to represent a guarantee that the subject property is free from past, present or future hazardous substance and waste contamination, but only that a reasonable inquiry has been conducted to ascertain the likelihood of such potential contamination, under current applicable law. Furthermore, the accuracy of the results of the regulatory agency database searches are constrained and limited by the level of care and professional skill exercised by the sub-consultants retained by CES GROUP to perform these tasks.

If you have any questions regarding this report, please contact the CES Group at (714) 398-6363.

4.0 SITE DESCRIPTION

4.1 Location and Description

The Property is located at 12431 Roscoe Blvd, Los Angeles County, in Sun Valley, CA, 91352. Sun Valley is a neighborhood in the San Fernando Valley region of the City of Los Angeles, California.

The Property lands (APN# 2634-019-900) are located on the northeast intersection of Arleta Avenue and Roscoe Boulevard. The Property is approximately 47 acres and is improved with a high school including a main office building, a school library, an auditorium, two gymnasiums, a cafetorium, maintenance building, athletic fields, and classroom buildings. The property is a mixture of paved and unpaved areas, small planters, and athletic field space. The property is located within a largely residential and commercial area and is zoned Z1 for Public Facilities.

4.2 Activity/Use Limitations

CES Group has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the property located at 12431 Roscoe Blvd, Sun Valley, CA 91352. Any exceptions to or deletions from this practice are described in Section 3.5 of this report. LAUSD provided no information regarding property activitity or use limitations.

4.3 Site and Vicinity Description

The Subject Property consists of approximately 47 acres and is developed with multiple structures that comprise the high school. The ground surface at the site slopes towards the south. Groundcover consists primarily of concrete/asphalt, open grass areas, and planters. The subject property can be accessed from Arleta Avenue's main entrance.

The site is zoned Z1 for Public Facilities. There is currently Byrd Middle School located to the west of the property, Sheldon Arleta Park and former landfill to the northwest, and residential areas to the northeast, east and south.

The Francis Polytechnic High School is an active high school. The school was opened in 1956 and has operated continuously since that date. The former Sheldon-Arleta Landfill is located to the north of the site. This landfill operated from 1962 until 1974 and was located in a former gravel pit used to mine construction materials prior to the conversion to a landfill. The former landfill had an active methane collection system in operation that was connected to a cogeneration plant which generated electrical power using the landfill methane gas. The former landfill had an extensive monitoring system in place that included vapor monitoring points along Wicks Street, which is the northwest border of the school site and an active positive pressure methane suppression system connected to wells near the gymnasiums. As of 2012, the landfill gas collection system was placed underground to allow reclamation of the landfill for use as a recreational park. There is currently an extensive monitoring and mitigation system in place at the landfill and at Francis Polytechnic High School. The landfill gas collection system is permitted by SCAQMD and overseen by the Bureau of Sanitation. City staff continues to monitor and tune the well field on a regular basis. Construction activities at the landfill are ongoing.

The Property area is serviced by the Los Angeles Department of Water and Power. According to the 2015 Annual Water Quality Report, the water supplied to the Property area complies with federal, state, and local drinking water standards. There is an acceptable amount of lead in the water.

HVAC systems observed consisted of the following:

- Multiple HVAC systems for the various classrooms and buildings

4.4 Current Use of Property

The Property is approximately 47 acres and is improved with a high school campus. The campus includes a number of buildings with outdoor corridors and open areas. The high school property includes an auditorium, administration building, gymnasium, library, cafetorium, science classroom and storage area, ceramic classroom and storage area, maintenance and storage areas, athletic fields, and various classroom buildings.

4.5 Description of Structures and Other Improvements

Buildings on the property are of masonry or concrete construction. The building exterior is red brick masonry and stucco. The interior is constructed for its various uses and includes tile, wood floor, and stucco.

A current modernization project is planned for the school. This modernization will include the demolition of the following

4.5 Description of Structures and Other Improvements (continued)

- Administration Building
- Boys' Gymnasium
- Girls' Gymansium
- Cafeteria & Lunch Shelter
- Music Building
- Auditorium Building
- Library & Study Hall Building
- Math & Science Building
- Student Store & Concessions Buildings
- Utility Building
- Sanitary Building
- Approximately 16 classrooms located in relocatable and modular buildings

Construction of the following facilites are planned:

- Approximately 41 classrooms and support spaces
- Gymnasium
- Auditorium & Performing Arts Building
- Food Services Building & Lunch Shelter
- Maintenance & Operations Building
- Administration & Library Buildings
- Sanitary Building

In addition, site upgrades will take place including utility upgrades, landscape, hardscape, exterior paint, and roof repair.

The LADWP supplies drinking water and electricity to the Subject Property from the municipal distribution system. Sanitary discharges on the subject site are discharged into the municipal sanitary sewer system. The subject site area is serviced by the City of Los Angeles and Los Angeles County.

4.6 Adjoining Property Information

During the vicinity reconnaissance, CES Group observed the following land use on properties in the immediate vicinity of the Property,

The general area is composed of residential and commercial structures. The following adjacent properties were observed:

North - The Property is bordered on the north by Sheldon Arleta Park and a former landfill to the northwest past Wicks Street and residences to the northeast past Sharp Avenue.

East - The Property is bordered on the east by residences and Peoria Street.

South - The Property is bordered on the south by Roscoe Blvd and residences. There is a Mobil Gas Station located across Roscoe Blvd.

West - The Property is bordered to the west by Arleta Avenue and Byrd Middle School. There is also a Department of Water and Power building and a CIF offices.

The Mobil Gas Station across the street has a closed LUST case. Based on the gas station's downgradient location, it is unlikely to impact the site. No further action is recommended regarding the adjacent gas station. The former Sheldon-Arleta Landfill is a recognized environmental concern and has an operating gas mitigation system.

5.0 USER PROVIDED INFORMATION

5.1 Specialized Knowledge

CES Group has no specialized knowledge of the Subject Property outside of the research which was conducted and reported as part of this report.

The property ownership and tenants as well as all individuals who were interviewed as part of this investigation, have not reported any specialized knowledge of this Subject Property outside of what is contained in this report.

5.2 Owner, Property Manager, and Occupant Information

According to the property title, the property owner is the Los Angeles Unified School District (LAUSD).

A representative of LAUSD, Mr. Eric Longenecker, indicated that it was formerly common practice for the LAUSD to apply an arsenic-based herbicide to soil prior to paving. Due to this practice, it is possible that elevated arsenic concentrations could be present in the soils directly beneath the paved portions of the Site. It is not known if this practice was used at this Site during its initial development.

5.3 Reason For Performing Phase I ESA

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E 1527-13) in connection with the Subject Property. CES Group understands that the findings of this study will be used for site assessment information during planned site renovations and construction improvements.

6.0 RECORDS REVIEW

6.1 Standard Environmental Records Sources

CES Group contracted Environmental Data Resources, Inc. (EDR) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the Federal and State environmental records database listings specified in ASTM Standard E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided below, along with an opinion about the significance of the listing to the analysis of recognized environmental conditions in connection with the subject property. Copies of the EDR research data and a description of the databases are included in Appendix D of this report.

Based on review of the regulatory database report, CES GROUP concludes that the Property is listed on the 7 databases listed below:

- RCRA-LQG: Resource Conservation and Recovery Act (RCRA) Large Quantity Generator is a site that is identified as generating over 1,000 kg of hazardous waste or over 1kg of acutely hazardous waste per month.
- RCRA-SQG: RCRA Small Quantity Generator is a site that is identified as generating between 100 kg and 1,000 kg of hazardous waste per month.
- FINDS: The property is listed on the EPA's Facility Index System, indicating that it is a facility regulated by the EPA
- ECHO: The property is listed on the EPA's Enforcement and Compliance History Online, indicating that there is compliance information relating to the Site.
- SCH: The property is listed as an existing school site being evaluated by DTSC for possible hazardous materials contamination
- ENVIROSTOR: The Site is listed in the DTSC's Envirostor program as a closed school investigation site
- HAZNET: The City of Los Angeles is identified along with the site due to hazardous materials

CES GROUP also reviewed the unmappable sites in the database report, cross-referencing addresses and site names. Unmappable sites are environmental risk sites that cannot be plotted with confidence, but can be located by zip code or city name. In general, a site cannot be geocoded because of inaccurate or missing location information in the record provided by the agency. Any identified unmappable site within the specified search radii is included below.

The following is a summary of the findings of the database review:

Map Findings Summary

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPL		1	1	0	0	0	NR	1
RCRA-LQG	X	0.25	2	0	NR	NR	NR	3
RCRA-SQG	X	0.25	0	2	NR	NR	NR	3
US ENG CONTROLS		0.5	1	0	1	NR	NR	2
US INST CONTROL		0.5	1	0	0	NR	NR	1
US BROWNFIELDS		0.5	1	0	0	NR	NR	1
CONSENT		1	1	0	0	0	NR	1
ICIS		0.001	1	NR	NR	NR	NR	1
FINDS	X	0.001	1	NR	NR	NR	NR	3
EDR Hist Auto		0.125	3	NR	NR	NR	NR	3
SEMS		0.5	1	0	1	NR	NR	2
PRP		0.001	1	NR	NR	NR	NR	1
ROD		1	1	0	1	0	NR	2
ECHO	X	0.001	1	NR	NR	NR	NR	3
LUST		0.5	3	0	6	NR	NR	9
UST		0.25	2	0	NR	NR	NR	2
HIST UST		0.25	1	2	NR	NR	NR	3
LOS ANGELES CO. HMS		0.001	NR	NR	NR	NR	NR	0
CORTESE		0.5	1	0	0	NR	NR	1
SWEEPS UST		0.25	2	1	NR	NR	NR	3
SCH	X	0.25	1	0	NR	NR	NR	2
ENVIROSTOR	X	1	2	0	2	6	NR	11
HAZNET	X	0.001	NR	NR	NR	NR	NR	6
HIST CAL-SITES		1	1	0	1	0	NR	2

6.1 Standard Environmental Records Sources (continued)

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS		0.001	NR	NR	NR	NR	NR	0
CA FID UST		0.25	2	1	NR	NR	NR	3
HIST CORTESE		0.5	2	0	6	NR	NR	8

Detail Summary

Site Name:	CITY OF LOS ANGELES - DPW - BUREAU SANIT
Databases:	HAZNET
Address:	12431 ROSCO BLVD
Distance:	0
Direction:	Southwest
Elevation:	Higher
Comments:	The Bureau of Sanitation oversees the Methane monitoring program. It is listed as a hazardous materials site.

Site Name:	LAUSD--FRANCIS POLYTECHNIC HS
Databases:	FINDS, ECHO, RCRA-SQG, RCRA-LQG, ENVIROSTOR, SCH, HAZNET
Address:	12431 ROSCOE BLVD.
Distance:	0
Direction:	Southwest
Elevation:	Higher
Comments:	Listing on these databases indicates that the Site is a regulated facility. The Site is listed as a small and large quantity generator of hazardous waste. DTSC provides oversight of the environmental assessments and Envirostor is where their documents are maintained. Haznet indicates that hazardous materials are present.

Site Name:	CITY OF LOS ANGELES-DPW
Databases:	HAZNET
Address:	12431 ROSCOE BLVD
Distance:	0
Direction:	Southwest
Elevation:	Higher
Comments:	Previously contained a LUST. The site is listed as a closed case.

Site Name:	LAUSD-NORTH HOLLYWOOD POLY CAS
Databases:	HAZNET
Address:	12431 ROSCOE BLVD
Distance:	0
Direction:	Southwest
Elevation:	Higher
Comments:	This listing shares the same address as the Site.

Site Name:	LEWIS CONTINUATION HIGH SCHOOL
Databases:	RCRA-LQG
Address:	12508 WICKS ST
Distance:	18
Direction:	NNW
Elevation:	Higher
Comments:	Large quantity generator of over 1000 kg of hazardous waste per month.

6.1 Standard Environmental Records Sources (continued)

Site Name:	EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A
Databases:	ENVIROSTOR, SCH
Address:	8451 ARLETA AVENUE
Distance:	58
Direction:	Northwest
Elevation:	Higher
Comments:	This site is listed as having DTSC oversight.

Site Name:	
Databases:	EDR Hist Auto
Address:	12440 ROSCOE BLVD
Distance:	70
Direction:	Southwest
Elevation:	Lower
Comments:	A historical automobile shop is located in a presumed downgradient location and at a lower elevation. No impacts are anticipated to the Site.

Site Name:	MOBIL STATION HNG
Databases:	HIST CORTESE, LUST, UST
Address:	12450 ROSCOE BLVD
Distance:	71
Direction:	Southwest
Elevation:	Lower
Comments:	This site is listed as a closed site. Due to its location and elevation, no site impacts are anticipated.

Site Name:	AVANTI 33 (STATE)
Databases:	HIST UST
Address:	12450 ROSCOE BLVD
Distance:	71
Direction:	Southwest
Elevation:	Lower
Comments:	This site is listed as a closed site. Due to its location and elevation, no site impacts are anticipated.

Site Name:	JED GAS STATION
Databases:	CA FID UST, SWEEPS, LUST
Address:	12450 ROSCOE BLVD
Distance:	71
Direction:	Southwest
Elevation:	Lower
Comments:	This site is listed as a closed site. Due to its location and elevation, no site impacts are anticipated.

Site Name:	
Databases:	EDR Hist Auto
Address:	12450 ROSCOE BLVD
Distance:	71
Direction:	Southwest
Elevation:	Lower
Comments:	

Site Name:	LOS ANGELES DEPARTMENT OF WATER AND POWER
Databases:	SWEEPS UST, CA FID UST, UST, LUST, CHMIRS, HIST CORTESE, NPDES
Address:	8501 N ARLETA AVE
Distance:	81
Direction:	Northwest
Elevation:	Higher
Comments:	The site is listed as a closed LUST site.

6.1 Standard Environmental Records Sources (continued)

Site Name:	BYRD MIDDLE SCHOOL
Databases:	ECHO, FINDS, RCRA-LQG
Address:	8501 ARLETA AVE
Distance:	81
Direction:	Northwest
Elevation:	Higher
Comments:	The site is a regulated site and a large quantity generator of hazardous waste greater than 1000 kg per month.

Site Name:	ROSCOE SITE
Databases:	US BROWNFIELDS, ECHO
Address:	12500-12522 W ROSCOE BLVD
Distance:	181
Direction:	WSW
Elevation:	Lower
Comments:	This site is listed as a brownfields site listing with SWRQCB and is listed with EPA on their database for enforcement and compliance history information.

Site Name:	Historical auto shop
Databases:	EDR Hist Auto
Address:	12334 BURTON ST
Distance:	509
Direction:	Southeast
Elevation:	Lower
Comments:	No negative environmental impacts are anticipated based on the proximity to the Site.

Site Name:	PAM TRUCKING
Databases:	HWT
Address:	8739 REMICK AVENUE
Distance:	749
Direction:	North
Elevation:	Higher
Comments:	No negative environmental impacts are anticipated based on the proximity to the Site.

Site Name:	LA SHELDON ARLETA LIBRARY
Databases:	ECHO, FINDS, RCRA-SQG
Address:	12455 WICKS ST
Distance:	752
Direction:	NNW
Elevation:	Lower
Comments:	No negative environmental impacts are anticipated based on the proximity to the Site.

Site Name:	SHELDON-ARLETA
Databases:	NPDES, SWF/LF (SWIS), HIST UST, HIST UST, SWF/LF (SWIS), SWEEPS UST, CA FID UST
Address:	12455 WICKS ST
Distance:	752
Direction:	NNW
Elevation:	Lower
Comments:	Former landfill site that has a methane mitigation program and is currently under oversight.

Site Name:	HIRO PHOTO LAB
Databases:	ECHO, FINDS, RCRA-SQG
Address:	8365 LAUREL AVE
Distance:	826
Direction:	ENE
Elevation:	Higher
Comments:	No negative environmental impacts are anticipated based on the proximity to the Site.

6.2 Additional Environmental Record Sources

CES Group conducted a file review for information maintained by the Los Angeles County Department of Public Health using a Public Health Information Request (PHICOR) on June 30, 2016. According to the Consolidated Contingency Plan on file (dated 2012), the site contains hazardous materials and generates hazardous waste. Information is provided to CUPA. There was no record of any USTs or ASTs. The site is reported to contain gasoline drums, diesel drums, compressed gas cylinders, and chemistry products. The site is a small quantity generator of hazardous waste due to maintenance items (5) and science class items (4). There is no auto class and no photo class documented. Waste streams consist of paint, oil, lights, and gym finish. According to a 2007 DTSC Waste Manifest Report, there was unspecified aqueous solutions, asbestos containing waste, and inorganic solid waste removed from the site.

The following items are/were reported on site in the 2012 Contingency Plan:
Fuel Bunker/ Hazardous Storage Room:

- Gasoline drums (55-gallon steel drums)
- Contaminated gasoline (55-gallon steel drum)
- Diesel drums (55-gallon)

Round House/ Plant Managers Storage Area:

- Waste paint (water based) 55 gal
- Gym finish (5 gal plastic/non-metallic drum)
- Flourescent Lamps, bulbs, metal halide lamps waste (0.5 cu yd box) - maintenance
- Lead paint debris (solid waste) 55 gal metal drum - maintenance
- Paint thinner, petroleum distillates (55 gal drum) - maintenance
- Waste aerosols (5 gal fiber drum) solid waste - maintenance

Science Storage Area:

- Waste oxidizing liquid (ammonium nitrate, lead nitrate) - 5 gal plastic/non-metallic
- Waste nitric acid - 5 gal plastic/non-metallic
- Waste corrosive liquid basic inorganic (sodium hydroxide)- 16 gal plastic/non-metallic
- Waste corrosive liquid acid (HCl, sulfuric acid) - 16 gal plastic/non-metallic
- Waste oil/used oil - 30-gal drum plastic/non-metallic

CES Group contacted LA County Fire Department Health and Hazardous Materials Division and LA City Fire Department. All records were reported to be stored with PHICOR. A copy of returned request form from the Los Angeles Fire Department indicating no records were found is included in Appendix E.

CES Group contacted the County of Los Angeles Department of Public Works Environmental Programs Division. There were no records pertaining to the Site.

CES Group sent a records request to the City of LA Department of Building and Safety. They conducted a file review and said that the only records they have are original building permits from the 1950s. There were no environmental issues on record. A copy of the request form is included in Appendix E.

CES Group conducted a search of the Department of Toxic Substances Control (DTSC) files on Envirostor and found that there was previously a school investigation for Francis Polytechnic High School (File 19820072) that led to No further Action. The school was constructed in 1956. The site is adjacent to the former Sheldon Arleta Landfill, which operated from 1962 to 1974. Despite a PEA - NFA determination issued in 12/19/00, the District elected to conduct an SSI to further evaluate soil gas impacts from the former Sheldon-Arleta Landfill which operated from 1962 to 1974 and was located adjacent to the proposed High School expansion site. DTSC issued a NFA determination on the SSI on 3/25/04. Potential contaminants of concern were lead and VOCs in soil and soil vapor.

CES Group conducted a search of Regional Water Quality Control Board (RWQCB) files on Geotracker and found that there were no sites found on the property. A Mobil gas station located across the street at Roscoe and Whitsett Avenue had a leak reported in 1999. There was previously a LUST Cleanup Site at 12450 Roscoe Blvd with the case closed on 4/11/2001. The contaminant of concern was gasoline. Another LUST is located at Wicks and Arleta at the site labeled as the "City of LADWP" (8501 Arleta Ave., Sun Valley). The Los Angeles Deparment of Public Works is located at this address. The case was closed on 4/11/2001. This site involved diesel contamination in soil that leaked in 1999.

Geotracker also reports the Sheldon Arleta Landfill land disposal site. According to Geotracker, the site is open but closed with monitoring as of 5/30/16. Several groundwater wells are located within the former landfill area for environmental sampling (see Section 6.3.3). A landfill gas collection system is operational and permitted by SCAQMD. Routine inspection and maintenance of the monitoring system occurs.

According to SCAQMD's Facility Information Detail (FIND) database, Polytechnic High School is listed as an active site with no violations and no notices to comply. A request from SCAQMD indicated that there were no active permits on file.

6.2 Additional Environmental Record Sources (continued)

Previous permits for solvent use were on file but inactive. SCAQMD indicated that they had no permits for the landfill. Backup documentation from these file searches is included in Appendix E.

6.3 General Site Setting

The elevation of the subject property is approximately 823 feet above mean sea level, as depicted on the accompanying U.S.G.S. 7.5 Minute Series Topographic Map of the Van Nuys quadrangle, photo revised 2012. A copy of the USGS map is located in Appendix C.

6.3.1 Topography

Review of the Van Nuys, California Topographic Quadrangle, published by the United States Geological Survey (USGS) and dated 2012, indicated the following:

- The Property has an average elevation of approximately 823 feet above mean sea level (amsl) in the center of the site. Elevations do not vary significantly across the Property land. Slope in the general area of the Property is to the south at a gradient of 1 to 5%.
- There are no surface water bodies or wetlands located at the Property area.

A copy of the topographic map is located in Appendix C.

6.3.2 Surface Water Bodies

The nearest surface water in the vicinity of the Property is Tujunga Wash, located approximately 2000 feet to the west of the Property. No surface water is located on the Property. Spreading basins are located to the northwest of the property.

6.3.3 Geology and Hydrology

The site is located in the eastern portion of the San Fernando Valley. The San Fernando Valley is an elliptical-shaped alluvium-filled basin, approximately 23 miles wide and 12 miles long, formed by deposition from streams and rivers that have transported sediments from the surrounding upland areas. The alluvium is mainly derived from the Santa Monica Mountains to the south, the Santa Susana Mountains to the northwest, the Simi Hills to the west, the San Gabriel Mountains to the northeast, and the Verdugo Mountains to the east.

Regionally, the site is located in the Transverse Ranges geomorphic province. This province is characterized by east-west trending geologic structures that include the eastwest trending Santa Monica Mountains and the east-west trending active San Fernando fault zone. The trend of the San Fernando Valley reflects the overall trend of the Transverse Ranges, where major structural features exhibit an east-west orientation in contrast to the northwest-southeast trend that dominates in the rest of California. The San Fernando Valley is an area of compression between the San Gabriel Mountains on the northeast and the Santa Monica Mountains on the south. The east-west trend is reflected by the nearby San Fernando fault zone located approximately 4.4 miles to the northnortheast. The closest active fault is the Verdugo fault, located approximately 1.2 mile northeast of the site.

The site is located in the San Fernando Valley Groundwater Basin of the South Coast Hydrologic Region according to the California Department of Water Resources (DWR, 2003). According to the California Geological Survey, the historic-high groundwater level in the area is approximately 140 feet bgs (California Division of Mines and Geology, 1997). Water level measurements for Los Angeles County Well No. 4897 located 0.1 mile northwest of the site, indicate the most recent measured depth to groundwater was 328.8 feet bgs on December 3, 2009 (County of Los Angeles, 2015). This depth corresponds to a water surface elevation of 488.2 feet above mean sea level (MSL). The shallowest water recorded in this well was measured on August 3, 1993 with a depth of 186.9 and corresponding water surface elevation of 630.1 feet above MSL. This well has recorded groundwater from 1958 to 2009.

Geologic materials are reported to be fill to a depth of 4 feet underlain by Holocene- and Pleistocene-age alluvial deposits. The alluvial deposits in the upper 4 to 6 feet consist of silty sand. Below a depth of 4 to 6 feet, the deposits generally consist of sand with gravel and cobbles.

According to ZIMAS, the Site is located nearest the Verdugo Fault in the Transverse Ranges and Los Angeles Basin. Shallow soil types in the area are classified as fine sandy loam, gravelly loam, sand, and silty clay. Deeper soil types are

6.3.3 Geology and Hydrology (continued)

classified as stratified, clay loam, silty clay loam, gravelly sandy loam, coarse sand, sand, weathered bedrock, and very fine sandy loam.

Based on 2016 reports from the former landfill, hydraulic conductivity is estimated to be approximately 10 ft/day (silty sands). Depth to groundwater is approximately 360-470 feet bgs. No VOCs or SVOCs were detected in groundwater. Flow gradient from occurs from Landfill Well 8 toward SA-1A and SA-3A. Based on maps that were located, there are at least 2 wells that could be considered Well 8. There is a MW-8 and also a NEW-8. Flow from either of these wells towards SA-1A and SA-3A would be in the west or southwest direction. The exact flow direction can not be determined, however a southerly flow direction would be consistent with the topography of the area.

6.4 Historical Use

6.4.1 Historical Summary

Based upon interviews and a review of local agency records, the property uses have remained consistent. The site is currently an open school site for grades 9 through 12. The Subject Property currently houses the following chemicals:

- Gasoline and diesel fuels
- Maintenace chemicals including waste paint, gym finish, flourescent lamps, bulbs, and metal halide lamps, lead paint debris, paint thinner and petroleum distillates, waste aerosols
- Science chemicals for chemistry classes
- Ceramics materials

Previous site uses included a former auto shop. There was no evidence of any USTs, lifts, or ASTs on site.

Source Reviewed	Date(s)	Source Details
USEPA Enforcement Compliance History Online	June 2007	http://www.epa.gov/echo/
USEPA Envirofacts Data Warehouse Multi-System Report	June 2007	http://www.epa.gov/enviro/html/multisystem_query_java.html
County Appraiser Website	June 2007	http://dor.myflorida.com/dor/property/appraisers.html
	N/A	

6.4.2 Title Records

Review of available deed records did not identify any previous environmentally suspect ownership, easements, right of ways, or other environmental entries/restrictions associated with the Property. A search of environmental liens indicated that there are no environmental liens or use limitations located that are associated with the Property. LAUSD is listed as the Property owner.

6.4.3 City Directories

CES Group reviewed city directories for the subject and adjoining properties provided by EDR that covered the years 1920 through 2013. The Subject Property address was first listed in 1962 as Francis Polytechnic High School. In 1956, Heirshberg Construction Co. was listed at the address.

Adjoining properties were primarily composed of residential addresses with a few notable businesses including the following:
Byrd Junior High School, East Valley High School, Valley Region Middle School, 2013 (8501 Arleta Ave)
Department of Water & Power, 2001 (8501 Arleta Ave)
Cars 4 U, 2013, Auto Pros Inc., 2008 (12440 Roscoe Blvd)
Jeds Gas Station, 2013, State Oil No 33 (12450 Roscoe Blvd)
Pacific Rim Installations, 2008 (8200 Whit Sett Ave)
No Pouldarben Chevron, 2006 (8241 Whit Sett Ave)
Steve's Texaco Service, 1980, Cliff's Texaco, 1975 (12500 Roscoe Pl)
Wrought Iron Rail & Gates, 1980 (12351 Roscoe Blvd)
Quigley Machinery Moving, 1976 (12329 Burton St)
Barnes JAS L Union Oil Dealer, 1970 (12450 Rosco Pl)
ABCO Cleaning Service, 1970 (12534 Roscoe Pl)

6.4.4 Aerial Photos

Available aerial photographs were reviewed of the property and surrounding areas from EDR. Available photographs ranged from 1928 to 2012. The following are descriptions and interpretations from the aerial photograph review.

Copies of the aerial photographs are included in Appendix C.

Summary

Date(s)	Property Comments	Surrounding Area Comments
1928	The Site is vacant land with roads on three sides, a structure in the northeast quadrant, and possible agricultural use.	The surrounding area is vacant land with a few small structures.
1938	The Site is vacant land with roads on three sides, a structure in the northeast quadrant, and possible agricultural use. Subareas are more distinct.	The surrounding area is vacant land with a few small structures.
1947	The Site is vacant land with roads on three sides, a structure in the northeast quadrant, and possible agricultural use. The subareas are even smaller.	The surrounding area is vacant land with a few small structures. There are structures on the north side of Wicks Street.
1952	The Site is vacant land with roads on three sides, a structure in the northeast quadrant, and possible agricultural use. The subareas are less defined.	The surrounding area is vacant land with residential development beginning to show. There are structures on the north side of Wicks Street. Structures in "notch" along Sharp Avenue are present.
1964	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures. Only one structure on the north side of Wicks Street remains. Highway 5 is visible to the north.
1967	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures. The Sheldon-Arleta Landfill area shows signs of excavation/ gravel pit. Grading is evident for Hollywood Freeway (170).
1970	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures. The Sheldon-Arleta Landfill area shows signs of excavation/ gravel pit. Highway 170 is complete.
1977	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures. The Sheldon-Arleta Landfill area no longer shows signs of excavation.
1979	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures.
1983	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures. A commercial shopping center along Laurel Canyon to the east is evident.
1989	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures.
1994	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures. An office building to the west is present.
2002	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures.
2005	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures.
2009	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures. The office building is no longer present and Byrd MS to the west is present.

6.4.4 Aerial Photos (continued)

Date(s)	Property Comments	Surrounding Area Comments
2010	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures.
2012	The school structure is evident with athletic fields and multiple buildings.	The surrounding area is largely residential development and small structures. A single structure is now present on Sheldon-Arleta property.

6.4.5 Sanborn/Historical Maps

A search for fire insurance maps for the property and surrounding area was conducted by EDR. No such maps for the property were available.

6.4.6 Historical Topographic Maps

Available topographic maps dated 1894 through 2012 from EDR were reviewed for this Environmental Site Assessment. Copies of selected maps are included in Appendix C of this report. A summary of topographic maps is provided below.

Summary

Date(s)	Quad	Property Comments	Surrounding Area Comments
1894	Los Angeles	Subject property shows no development.	Surrounding area shows no development. Pacoima Wash, paths, some structures, and railroad tracks are visible.
1896	Santa Monica	Subject property shows no development.	Surrounding area shows no development. Pacoima Wash, paths, some structures, and railroad tracks are visible.
1898	Santa Monica	Subject property shows no development.	Surrounding area shows no development.Pacoima Wash, paths, some structures, and railroad tracks are visible.
1900	Los Angeles	Subject property shows no development.	Surrounding area shows no development. Pacoima Wash becomes Tujunga Wash, paths, some structures, and railroad tracks are visible.
1902	Santa Monica	Subject property shows no development.	Surrounding area shows no development. Pacoima Wash, paths, some structures, and railroad tracks are visible.
1921	Santa Monica	An on-site structure is shown at the corner of Wicks and Sharp.	More streets are added and a second railroad south of the site.
1927	Pacoima	Two on-site structures on the south side of Wicks Street are shown.	No changes from the previous map are noted.
1953	Van Nuys	The two previous structures along Wicks are gone, but one along Sharp and one along Arleta are present.	The Sheldon Arleta Landfill is labeled as a "Gravel Pit." There are structures on the north side of Wicks. Five structures are shown in the notch along Sharp.
1966	Van Nuys	The Subject Site is labeled "Francis Polytechnic High School." The Subject Site shows school buildings.	Surrounding areas show development. Sheldon-Arleta is still labeled as "Gravel Pit." Tujunga Spreading Grounds are labeled. Both Highways 5 and 170 are illustrated.
1972	Van Nuys	Subject property shows school buildings.	Surrounding areas show development.
2012	Van Nuys	Subject property is not shown due to lack of detail.	Surrounding areas show development.

6.4.7 Other Environmental Reports

LAUSD provided CES Group with environmental reports pertaining to the planned site development and the methane mitigation plan. The following reports were provided and reviewed:

Various site maps
Soil Export Certification Report, Converse Consultants, 2014
Landfill Gas Fact Sheet
A map model of probe locations
A presentation from an information meeting presented to school safety personnel (August 12, 2015)
ASB Informative document regarding site renovation (March 18, 2016)

According to the Soil Export Certification Report, the soil removed from the Site did not have any elevated metals concentrations. Total petroleum hydrocarbon, chlorinated herbicides, organophosphorous pesticides, volatile organic compounds, and semi-volatile organic compounds were not reported in the soil samples. Organochlorine pesticides were detected in two soil samples below regulatory limits.

6.4.8 Building Department Records

Records from LA Department of Building and Safety were reviewed for evidence indicating the developmental history of the Subject Property, and for the presence of documentation relative to underground storage tanks. The records review indicated that original building permits were on file. No environmental issues were identified. A copy of the EDR Building Permit search results is included in Appendix H.

6.5 Environmental Liens and Activity/Use Limitations

No environmental liens or activity/use restrictions in connection with the subject property were identified by the user/client.

6.6 Vapor Encroachment Evaluation

Vapor intrusion is a way by which chemicals in soil and groundwater can migrate into indoor air. Chemical vapors moving up through soil and into a building are a potential source of indoor air contamination and may pose a risk to human health. In evaluating the potential for a vapor encroachment condition on the subject site, CES Group attempted to determine if there was information indicating that chemicals of concern were located within the critical distance, defined as the lineal distance between the nearest edge of a contaminated plume and the nearest target property boundary. Based on ASTM E 2600-10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, the critical distance is equal to 100 feet, with the exception of dissolved petroleum hydrocarbons, which have a critical distance of 30 feet. If non-aqueous phase petroleum hydrocarbons are present, the 100-foot critical distance is utilized.

CES Group has performed a Vapor Encroachment Screening in general accordance with the scope and limitations of ASTM Standard Practice E2600-10 for the subject site. CES Group utilized site and site vicinity specific criteria including groundwater gradient, distance of area properties of environmental concern from the subject site, and the types of constituents of concern which were released to evaluate potential vapor encroachment issues. The purpose of this Vapor Encroachment Screening is to identify the existing or potential vapor encroachment concern affecting the subject site.

The Vapor Encroachment Screen used the database search to identify possible properties that could have a potential for vapor intrusion. A list of the databases and distances from the property are listed in the table below. The full database results are included in Appendix F. The Vapor Encroachment Screen performed for the Subject Property indicates that several USTs, historical gas stations, and a former landfill have been located in the property area. Possible gas stations were located at the following addresses:

- Cars 4 U, 2013, Auto Pros Inc., 2008 (12440 Roscoe Blvd)
- Jeds Gas Station, 2013, State Oil No 33 (12450 Roscoe Blvd)
- No Pouldarben Chevron, 2006 (8241 Whit Sett Ave)
- Steve's Texaco Service, 1980, Cliff's Texaco, 1975 (12500 Roscoe Pl)
- Barnes JAS L Union Oil Dealer, 1970 (12450 Rosco Pl)

In addition, the Mobil Staton at 12450 Roscoe Blvd (southwest of the property) was listed as a LUST site with a leaking underground storage tank. JED Gas Station is also listed as having a LUST at the same site. This site is located at a

6.6 Vapor Encroachment Evaluation (continued)

lower elevation than the subject property. It is unlikely that soil vapors from this lower elevation will migrate upgradient to the Subject Property. According to Geotracker, this is a closed site.

The City of LADWP, located at 8501 Arleta Ave. (northwest of the site) is listed as having a LUST. The site is located at a higher elevation than the subject property. According to Geotracker, this site is closed.

Former Sheldon Arleta Landfill

The Former Sheldon-Arleta Landfill is a known contributor to methane gas in the subsurface in the area. There is currently a methane gas monitoring system to address these concerns. During the 1980s and 1990s, landfill gas infiltration was found to occur in the two gymnasium buildings. The City of Los Angeles Bureau of Sanitation has been overseeing the monitoring program since 1993.

According to the Fact Sheet provided by LAUSD, the gas monitoring equipment is located in the electrical room across from the school's main office and is connected to an autodialer and annunciator panel. The system is controlled by a programmable controller to continuously monitor 24 methane sensors located throughout the school campus. Through the autodialer device, key City and LAUSD personnel will be automatically notified whenever the methane sensors detect methane concentrations exceeding 15% of the lower explosive limit (LEL) of methane gas. A window box style annunciator panel located in the Administration office will also display which sensors are in alarm and detecting high methane concentrations. Gas production is reported to be between 200 and 400 cfm at 20% methane.

The gas extraction and monitoring configuration is as follows:
At the Landfill
- 30 Gas Extraction Wells (in refuse -- gas sent to flare)
- 34 Gas Migration Wells (in native soil at edge of landfill)
- 20 Multi-Depth Perimeter Probes (around outside perimeter)

At Francis Polytechnic HS
- 18 Multi-Depth Monitoring Probes monitored monthly, weekly, or daily (frequency based on conditions at landfill)
- 24 Monitoring Probes (monitored automatically)

The landfill represents a recognized environmental concern. There is currently an oversight program. Sampling of the existing wells or review of existing data is recommended to determine the extent of impact on site.

The following table outlines the properties that were identified as having a potential risk for vapor intrusion. Based on the distance from the site, the elevation of the sites, and location of these sites, none are believed to have a potential for vapor intrusion other than the Former Sheldon-Arleta Landfill. Four sites are listed within the 100-foot critical distance:
- Former Sheldon-Arleta Landfill
- City of LADWP - 8501 Arleta Ave. - listed as having a LUST. This property is located at a higher elevation than the property but any migration would move away from the high school property. According to Geotracker, this site is closed.
- East Valley Area New High School No. 1A (8451 Arleta Ave.). This property is located at a higher elevation than the property but any migration would move away from the high school property.
- Roscoe Site - 12500-12522 W. Roscoe Blvd - Listed as a Brownfields site and ECHO. This property is at an elevation that is lower than the Site.

Standard Environmental Records	Maximum Search Distance*	Property Total	Total within 1/10 mile from Property	Total between 1/10-1/3 mile from Property
Federal NPL	0.333	0	1	0
Federal CERCLIS	0.333	0	1	0
Federal RCRA CORRACTS facilities list	0.333	0	0	0
Federal RCRA TSD facilities list	0.333	0	0	0
Federal RCRA generators list	property	2	-	-
Federal institutional controls / engineering controls registries	0.333	0	1	0
Federal ERNS list	property	0	-	-
State and tribal - equivalent NPL	not searched	0	0	0
State and tribal - equivalent CERCLIS	0.333	1	2	0
State and tribal landfill / solid waste disposal	0.333	0	0	3

6.6 Vapor Encroachment Evaluation (continued)

Standard Environmental Records	Maximum Search Distance*	Property Total	Total within 1/10 mile from Property	Total between 1/10-1/3 mile from Property
State and tribal leaking storage tank lists	0.333	0	3	2
State and tribal registered storage tank lists	property	0	-	-
State and tribal institutional control / engineering control registries	0.5	-	-	-
State and tribal voluntary cleanup sites	0.333	0	0	0
State and tribal Brownfield sites	0.333	0	0	0
Other Standard Environmental Records	1.0	9	5	5

*Each category may include several separate databases, each having a different search distance. For each category, the table reports the maximum search distance applied.

Historical Use Records	Maximum Search Distance*	Property Total	Total within 1/10 mile from Property	Total between 1/10-1/3 mile from Property
Former manufactured Gas Plants	0.333	0	0	0
Historical Gas Stations	0.25	0	3	0
Historical Dry Cleaners	0.25	0	0	0

*Each category may include several separate databases, each having a different search distance. For each category, the table reports the maximum search distance applied.

7.0 SITE RECONNAISSANCE

7.1 Methodology and Limiting Conditions

The site reconnaissance was conducted on July 21, 2016 by Daniel Baysa of CES Group with Eric Longenecker of LAUSD OEHS and Ray Parreras, Plant Manager. Weather conditions at the time of the site reconnaissance were clear. The visual reconnaissance consisted of observing the boundaries of the property and systematically traversing the site to provide an overlapping field of view, wherever possible. The periphery of the on-site structure was observed along with interior accessible common areas, manufacturing, storage and maintenance areas. Photographs of pertinent site features identified during the site reconnaissance are included in Appendix B.

7.2 General Site Setting

The property consists of approximately 47 acres acres and is developed with a high school including a main office building, a school library, an auditorium, two gymnasiums, a cafetorium, maintenance building, athletic fields, and classroom buildings. The property is a mixture of paved and unpaved areas, small planters, and athletic field space. The property is located within a largely residential and commercial area and is zoned Z1 for Public Facilities. Groundcover consists primarily of the building, landscaped green areas, asphalt, and sparsely vegetated soil. The subject property is accessed from the main entrance on Arleta Avenue.

7.3 Site Visit Findings

7.3.1 Hazardous Substances

Visual observation for the use and/or storage of hazardous materials and petroleum products was performed. Visual observations indicated that hazardous substances are stored on the property as indicated in the Consolidated Contingency Plan located at the LA County Public Health Department.

The site Reconnaissance indicated that the site contains hazardous materials and generates hazardous waste. No evidence of USTs or ASTs was observed. Evidence of paint, oil, lights, and gym finish was observed along with science class materials and maintenance fuels and chemicals. Corrosive chemicals and acids were stored in a safe with a padlock and other chemicals were stored in a locked and labeled cabinet. Flammable liquids had a separate storage cabinet that was locked. A monthly safety check list was observed for handling of the science chemicals. An eye wash station and safety cleanup materials were also observed.

The following items are/were reported on site and confirmed during site reconnaissance:
Fuel Bunker/Hazardous Materials Storage :

- Gasoline drums (55-gallon steel drums)
- Contaminated gasoline (55-gallon steel drum)
- Diesel drums (55-gallon)

Round House/Plant Managers Storage Area:

- Waste paint (water based) 55 gal - maintenance
- Gym finish (5 gal plastic/non-metallic drum) - maintenance
- Flourescent Lamps, bulbs, metal halide lamps waste (0.5 cu yd box) - maintenance
- Lead paint debris (solid waste) 55 gal metal drum - maintenance
- Paint thinner, petroleum distillates (55 gal drum) - maintenance
- Waste aerosols (5 gal fiber drum) solid waste - maintenance

Science Storage Area:

- Waste oxidizing liquid (ammonium nitrate, lead nitrate) - 5 gal plastic/non-metallic
- Waste nitric acid - 5 gal plastic/non-metallic
- Waste corrosive liquid basic inorganic (sodium hydroxide)- 16 gal plastic/non-metallic
- Waste corrosive liquid acid (HCl, sulfuric acid) - 16 gal plastic/non-metallic
- Waste oil/used oil - 30-gal drum plastic/non-metallic

A clarifier was observed adjacent to the chemistry room and another clarifier was observed in the ceramics class.

A figure illustrating the locations of the above features on the campus is included in Appendix A "Site-Specific Details."

7.3.2 Petroleum Products

Petroleum products were identified on the subject property during the site reconnaissance. A gasoline drum (55-gallon), diesel drum (55-gallon), and contaminated gasoline drum (55-gallon) were located in the fuel bunker maintenance area. The petroleum products are used to fuel small vehicles and equipment necessary for school maintenance.

7.3.3 USTs

No evidence of underground storage tanks (USTs) or pipelines were identified at the subject property. No further action or investigation is recommended regarding storage tanks at the Property.

7.3.4 ASTs

No evidence of above-ground storage tanks (ASTs) or pipelines were identified at the subject property. No further action or investigation is recommended regarding storage tanks at the Property.

7.3.5 Other Suspect Containers

No other suspect containers were identified on the subject property during the site reconnaissance.

7.3.6 Equipment Likely to Contain PCBs

Fluorescent light fixture ballasts at the Property were observed during the site walk. Because the building was built before a 1979 ban regarding the manufacturing of PCB-containing light ballasts, it is possible that these ballasts contain PCBs. Care should be exercised during any demolition or removal of the ballasts. No further action is required regarding PCBs.

An electrical transformer is located on the property. No equipment with the potential to utilize dielectric fluid was observed during the site assessment.

7.3.7 Interior Staining/Corrosion

No interior staining or corrosion was observed in the subject building during the site reconnaissance.

7.3.8 Discharge Features

Discharge features (floor drains, catch basins, oil/water separators, etc.) were observed on the subject property during the site reconnaissance. A clarifier was observed adjacent to the science room and also in the ceramics building.

7.3.9 Pits, Ponds, And Lagoons

Observations during CES GROUP's assessment identified that the Property lands are graded to provide slope and swale to direct storm water away from the on-site buildings. The general topography of the area is directed towards the south. The Property has an average elevation of approximately 823 feet above mean sea level (amsl) in the center of the site.

Visual observation of the Property and adjacent properties did not identify any evidence of distressed vegetation, staining, or surface migration of petroleum releases or hazardous materials onto or off the Property. Visual observations did not identify any evidence of on-site surface impoundment facilities, pits, dry wells, or dumping of apparent hazardous substances at the Property.

Visual observations did not identify any surface water features including lagoons, ponds or other bodies of water at the Property.

Parking facilities consist of surface level asphalt pavement and concrete areas surrounding the school. Minor oil discharges were observed on the parking areas; however, the discharges are incidental in nature and corrective action is neither practical nor warranted.

Storm water from drive and parking surfaces is directed offsite by overland flow to the adjacent roads. Storm water from vegetated surface areas naturally infiltrates into the subsurface or is directed offsite via overland flow.

7.3.10 Solid Waste Dumping/Landfills

Visual observation for the generation, treatment, storage, and disposal of wastes was performed. There is evidence of waste drums but proper storage and removal protocol is in place. The dumpsters observed appeared to contain only solid material.

The site is located within a Methane Zone due to its proximity to the former Sheldon-Arleta Landfill. The former Sheldon-Arleta Landfill operated between 1955 and 1963. It was a Class III Landfill composed of residential waste, street sweepings, construction and demolition materials. There is a potential for methane and other volatile gases to occur beneath the site. Gas production is reported to be between 200 and 400 cfm at 20% methane. There is currently a methane mitigation system in place for existing buildings. For any new structures, a subsurface methane investigation would be required and if testing indicates that methane is present at the site, then an evaluation of a permanent methane gas control system may be necessary beneath proposed buildings at the site.

7.3.11 Stained Soil/Stressed Vegetation

No Stained Soil/Stressed Vegetation was observed on the subject property during the site reconnaissance.

7.3.12 Wells

Vapor probes were observed during the site reconnaissance. Vapor probes are reported to be monitored as part of the methane monitoring program at the Site.

8.0 INTERVIEWS

The following persons were interviewed to obtain information regarding *recognized environmental conditions* in connection with the property:

Eric Longenecker and Ray Parreras

Pertinent information from the interviews is discussed in applicable sections of this report. Qualifications of CES Group personnel are included in Appendix G.

9.0 OTHER ENVIRONMENTAL CONSIDERATIONS

The following environmental considerations were evaluated during site reconnaissance and Property research.

Asbestos-Containing Materials

Asbestos is the name for a group of naturally occurring silicate minerals that can be separated into fibers. The fibers are strong, durable, and resistant to heat and fire. They are also long, thin and flexible, so they can even be woven into cloth. Because of these qualities, asbestos has been used in thousands of consumer, industrial, maritime, automotive, scientific and building products. During the 20th century, some 30 million tons of asbestos have been used in industrial sites, homes, schools, shipyards and commercial buildings in the United States. Common ACMs include pipe-covering, insulating cement, insulating block, refactory and boiler insulation materials, transite board, fireproofing spray, joint compound, vinyl floor tile, ceiling tile, mastics, roofing products, and duct insulation for HVAC applications. Inhalation of asbestos fibers can result in deleterious health effects.

Considering the date of building construction (1956), it is possible that ACM may have been used at the Property. Environmental records indicate that ACM waste has been removed from the Site and is known to be present in the structure. During the site visit, all building materials appeared new and in good condition. Additional testing of the material may be necessary during planned renovation. Binders with records regarding ACM on site are maintained in the Administration Building.

Lead-Based Paint

Buildings constructed prior to 1978 are considered suspect for lead-based paint (LBP). Environmental records indicate that lead-based paint chips are among the items stored and removed from the site. During the site reconnaissance, visual observations of the painted areas were made. Paint at the Property appeared in good condition with no evidence of chipping or flaking. Further testing may be required in the event of demolition or construction. Binders with records regarding lead-based paint on site are maintained in the Administration Building.

Radon

Radon gas is a product of the decay series that begins with uranium. Radon is produced directly from radium, which can be commonly found in bedrock that contains black shale and/or granite. Radon gas can migrate through the ground and enter buildings through porous concrete or fractures. Radon tends to accumulate in poorly ventilated basements. Long-term exposure to radon has been associated with lung cancer.

Review of the USEPA's Radon Map for Los Angeles County, California indicated that the Property is located in Zone 2, areas with a predicted average indoor radon screening level between 2 and 4 pCi/L (picoCuries per liter of air). Radon sampling was not performed as part of this assessment.

Wetlands

The Subject Property does not appear to be designated wetland area. The area's slope would seem to preclude any designation as a wetlands area.

Microbial Contamination (Mold)

In accordance with the scope of work, the site reconnaissance is to include a visual inspection for indications of water intrusions or the presence of active mold growth on readily accessible interior and exterior surfaces. Confirmation sampling is not included in the scope of work for the Phase I ESA. Readily accessible areas of the building were observed for visual or olfactory indications of mold, and for areas of water damage. No indication of mold was observed.

CONCLUSIONS

CES Group has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of Francis Polytechnic High School located at 12431 Roscoe Blvd, Sun Valley, CA. Any exceptions to, or deletions from, this practice are described in Section 3.2 of this report.

Based upon our understanding of the proposed project, there is a proposed modernization project at Franics Polytechnic High School that consists of the demolition of 11 buildings and approximately 16 classrooms, construction of 41 classrooms and 6 buildings, and additional site upgrades.

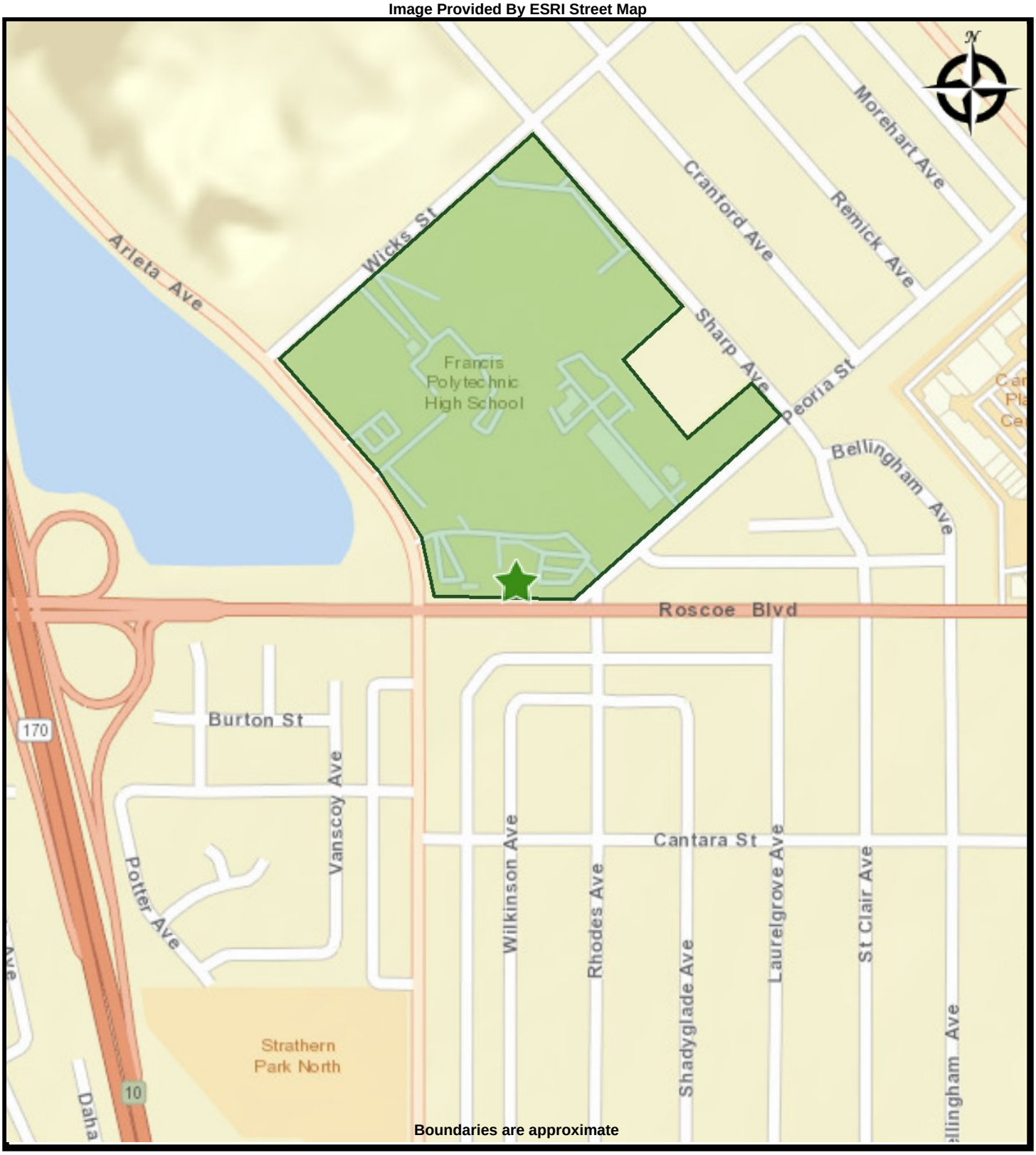
Based on the conclusions of this assessment, CES Group recommends the following:

- Consideration must be given to the management of the methane gas system during demolition and construction.
- Should construction activities involve the disturbance of ACM and/or suspect ACM and lead-based paint, proper management techniques should be employed for the handling of soil and demolition materials in accordance with all applicable environmental agency rules and requirements.
- Sampling the soils in the planter areas and between buildings that are planned for demolition or earthwork.
- Sampling the soil in the areas of the clarifiers.
  Sampling in the hazardous materials storage area to confirm that there has been no release.

Appendix A:

Figures

Image Provided By ESRI Street Map

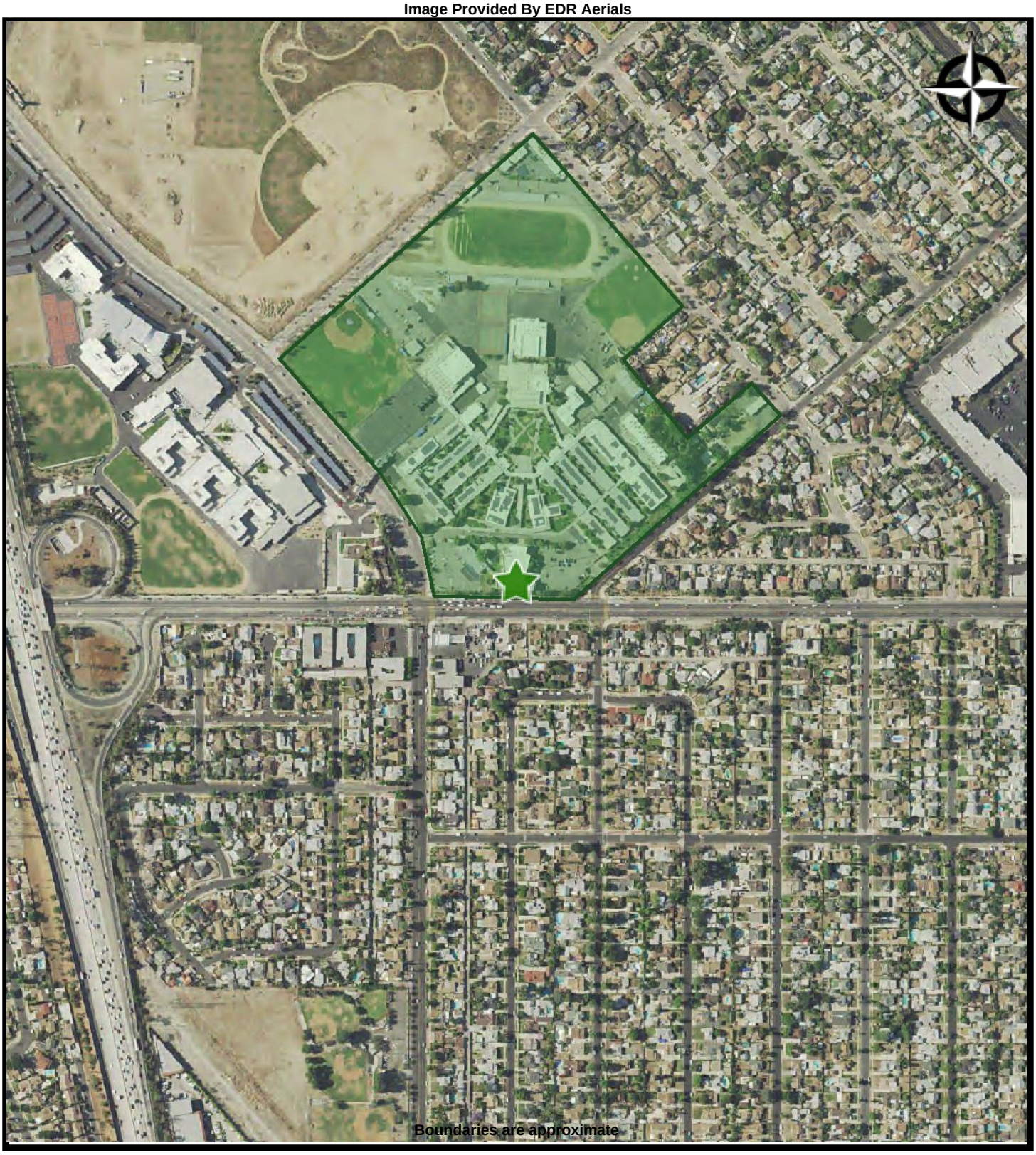


STREET MAP
John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, California 91352

PREPARED FOR:
PROJ. MGR:
Prepared By: Skye Green

DATE: 7/31/2016
PROJ. #: John H Francis Polytechnic HS

Image Provided By EDR Aerials



AERIAL - 2014
John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, California 91352

PREPARED FOR:
PROJ. MGR:
Prepared By: Skye Green

DATE: 7/31/2016
PROJ. #: John H Francis Polytechnic HS

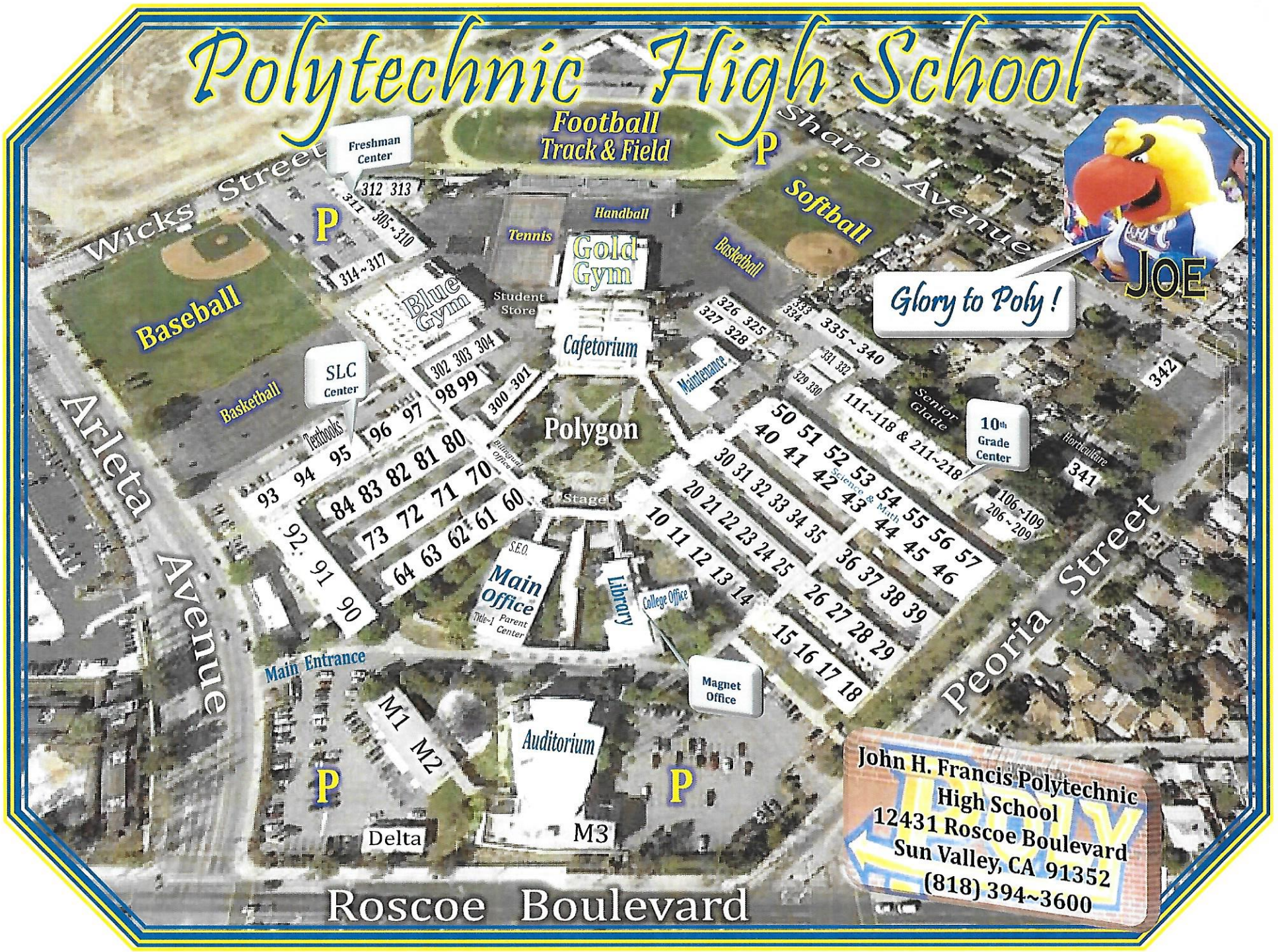
Image Provided By EDR Aerials



SITE-SPECIFIC DETAILS
John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, California 91352

PREPARED FOR:
PROJ. MGR:
Prepared By: Skye Green

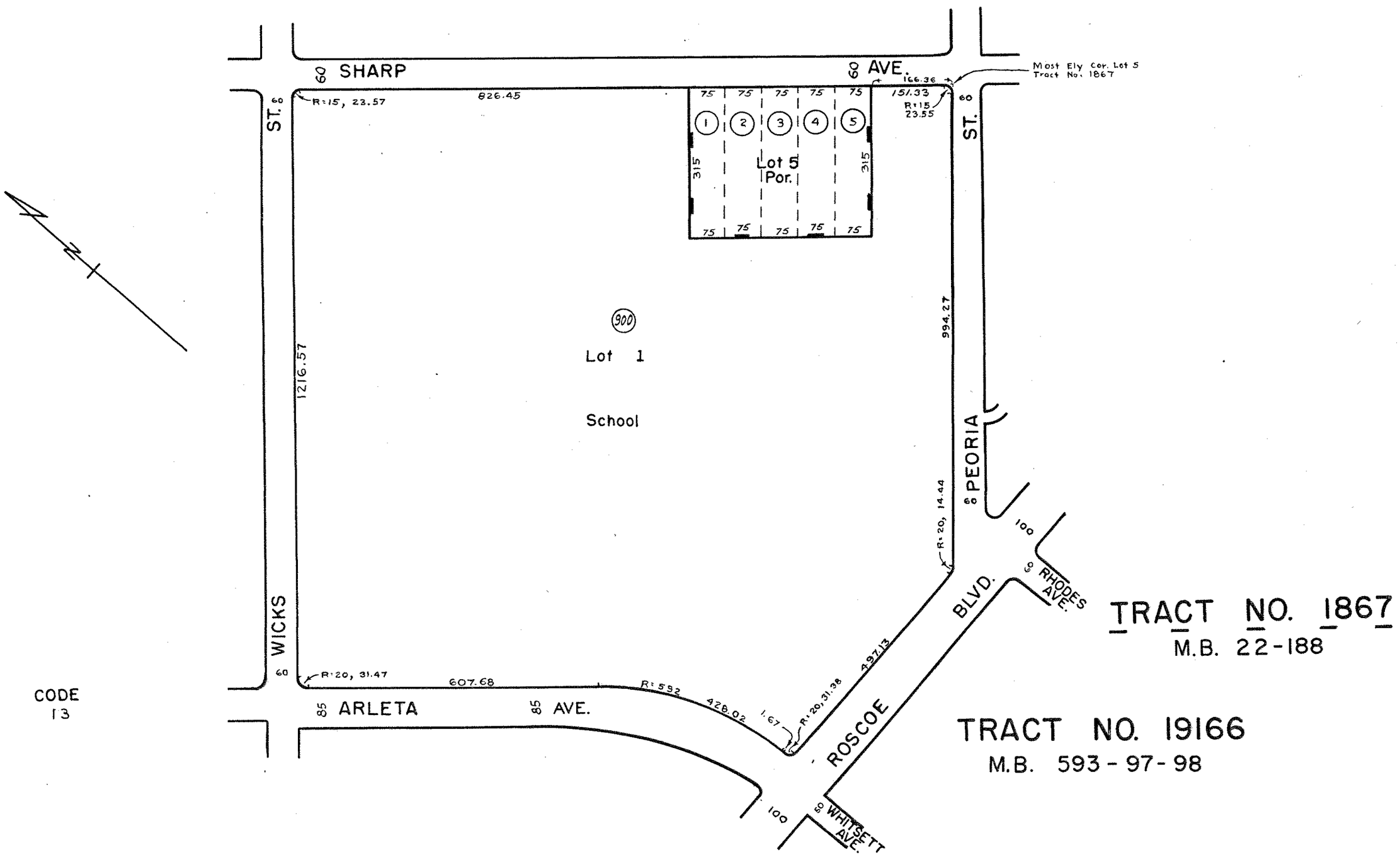
DATE: 7/31/2016
PROJ. #: John H Francis Polytechnic HS


Polytechnic High School
Football
Track & Field
Softball
Sharp Avenue
Wicks Street
Freshman Center
312 313
311
305~310
314~317
Handball
Tennis
Gold Gym
Basketball
Blue Gym
Student Store
Cafetorium
Baseball
SLC Center
Basketball
302 303 304
98 99
300 301
Maintenance
326 325
327 328
333 334
335~340
331 332
329 330
342
Glory to Poly!
JOE
Senior Glade
10th Grade Center
111~118 & 211~218
Horticulture
341
106~109
206~209
Arleta Avenue
Textbooks
96 97
93 94 95
Polygon
50 51 52 53 54 55 56 57
40 41 42 43 44 45 46
30 31 32 33 34 35
20 21 22 23 24 25
10 11 12 13 14
36 37 38 39
26 27 28 29
15 16 17 18
Science & Math
Bilingual offices
Stage
84 83 82 81 80
73 72 71 70
64 63 62 61 60
92 91 90
S.E.O.
Main Office
Title-1 Parent Center
Library
College Office
Magnet Office
Peoria Street
Main Entrance
M1 M2
Auditorium
M3
Delta
John H. Francis Polytechnic
High School
12431 Roscoe Boulevard
Sun Valley, CA 91352
(818) 394~3600
Roscoe Boulevard

2634 | 19

SCALE 1" = 200'

Revised:
6-4-56
2-22-65
4-2-66



TRACT NO. 1867
M.B. 22-188

TRACT NO. 19166
M.B. 593-97-98

CODE
13

FOR PREV. ASSM'T. SEE: 1473-19

ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.

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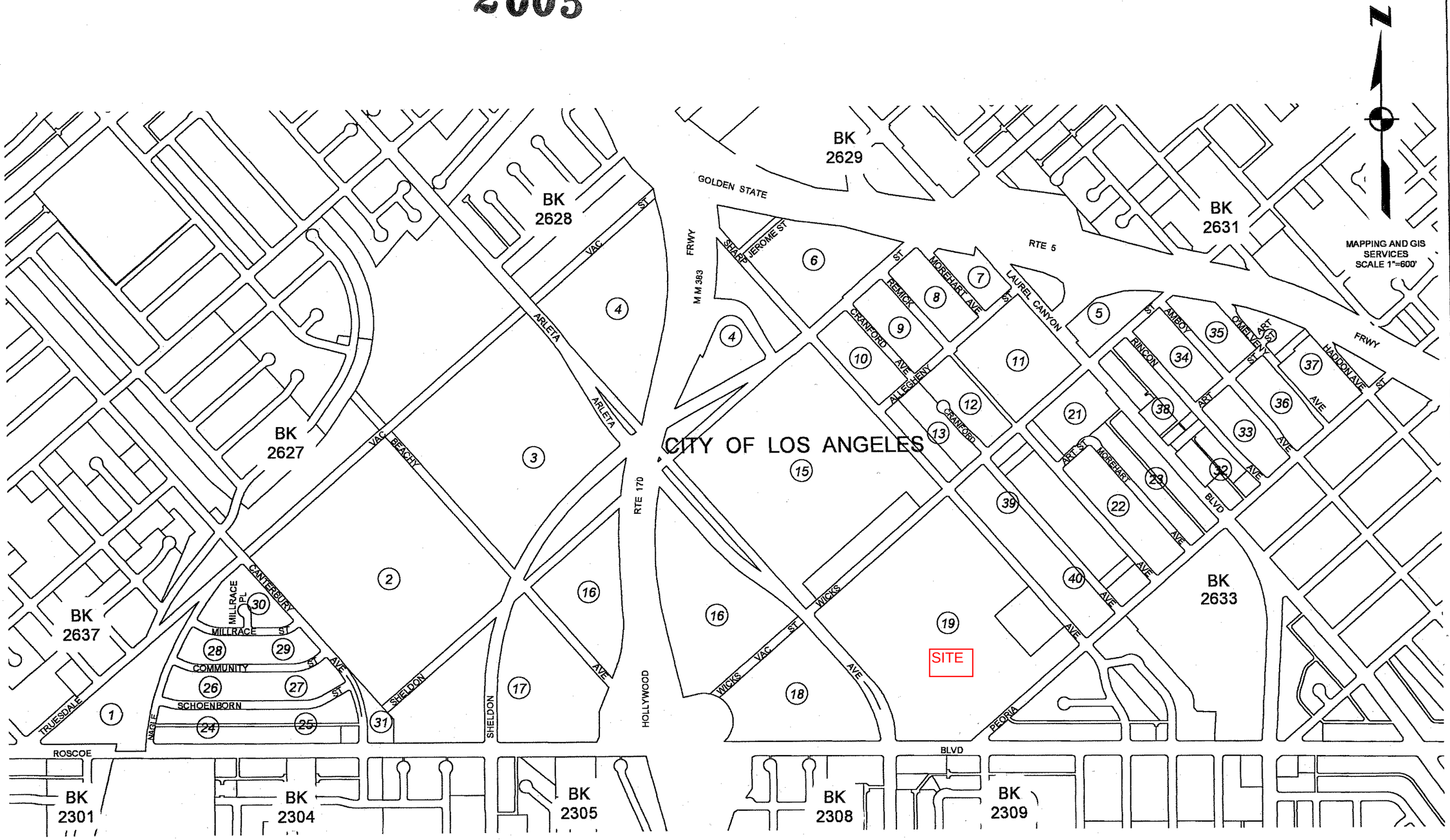
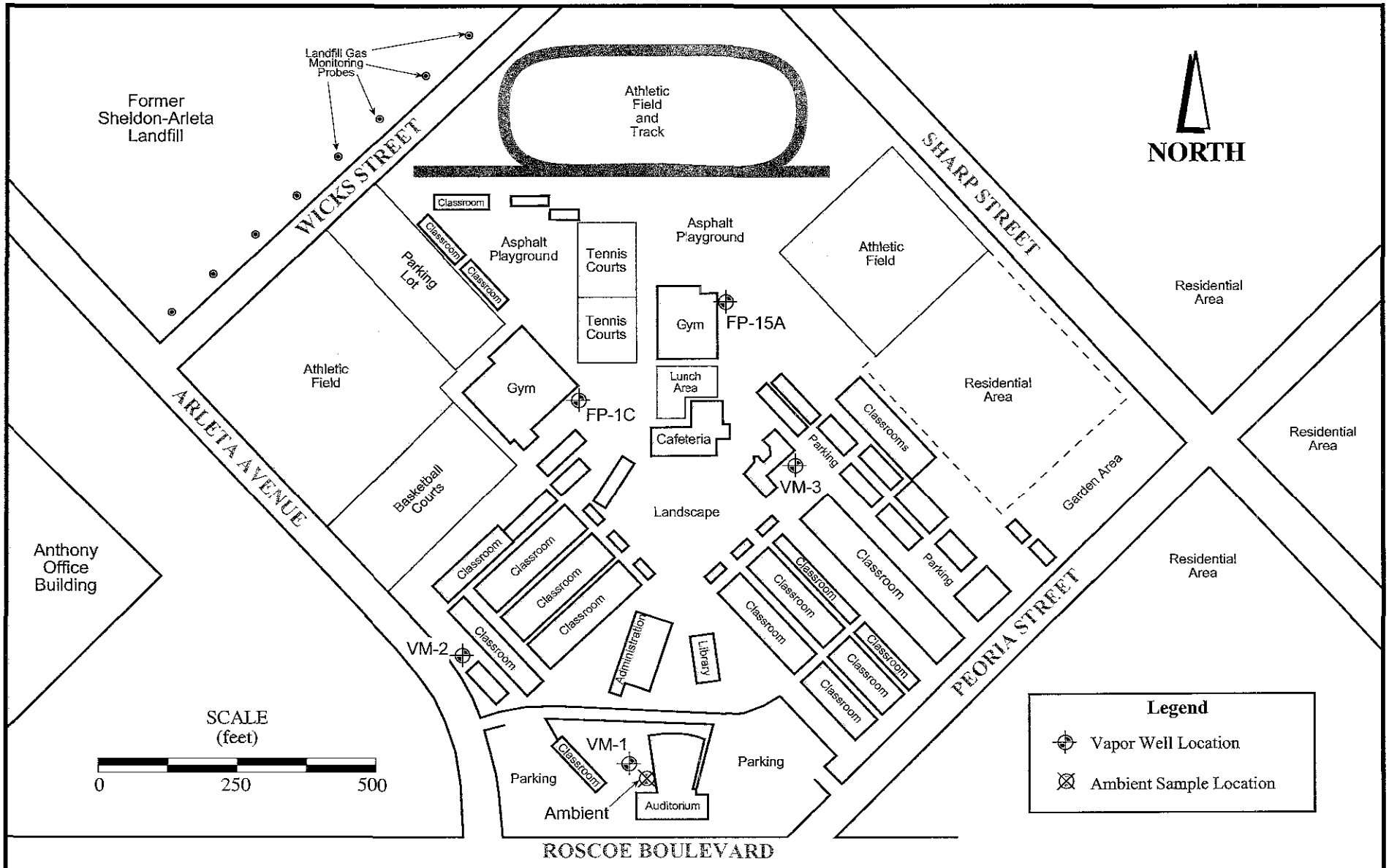
2005





PINNACLE
ENVIRONMENTAL TECHNOLOGIES
#2 Santa Maria, Foothill Ranch, CA 92610
Tel: (949) 470-3691 • Fax: (949) 595-0459

Francis Polytechnic High School
12431 Roscoe Boulevard
Sun Valley, California

Site Plan with Vapor Well Locations

Figure 2

Appendix B:

Photographs



Photo 1: Looking north at school entrance.

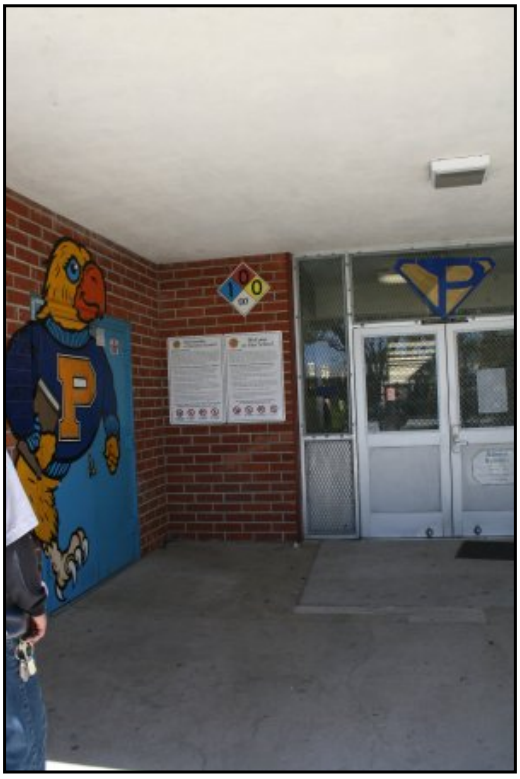


Photo 2: FPHS Main Office Entrance



Photo 3: Auditorium rooftop AC Unit



Photo 4: Hazardous storage room



Photo 5: Hazardous storage room

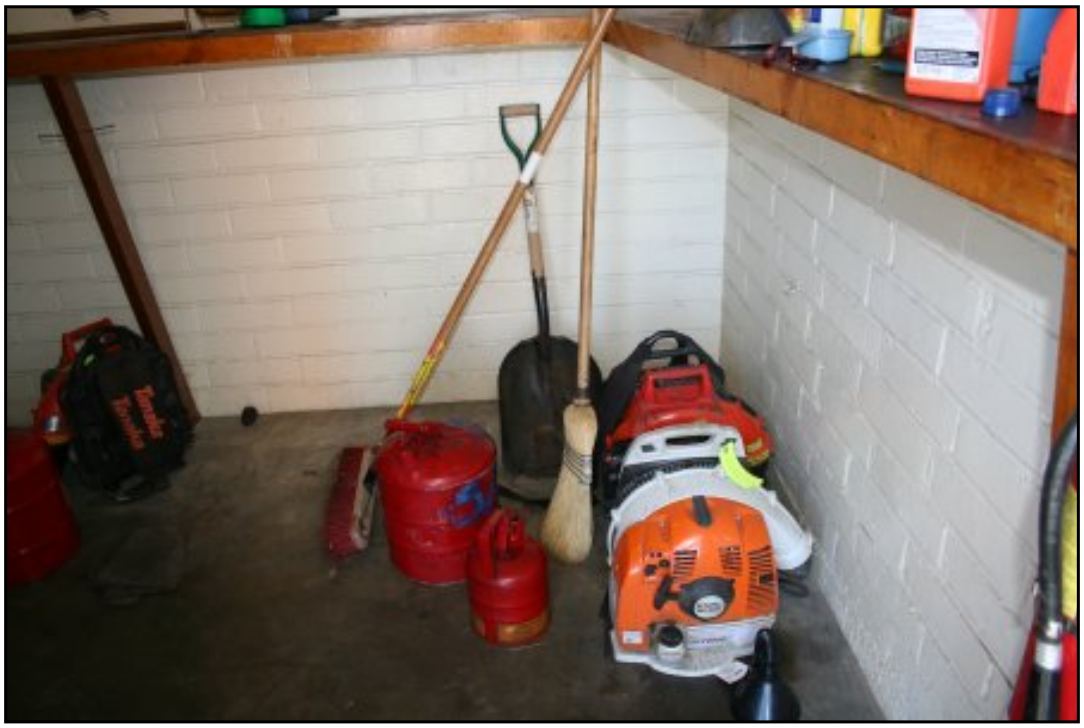


Photo 6: Hazardous storage room



Photo 7: Hazardous storage room



Photo 8: Hazardous storage room



Photo 9: Main AC unit Cafeteria



Photo 10: Main AC unit Cafeteria



Photo 11: Main AC unit Cafeteria



Photo 12: Round House Cleaning supplies storage



Photo 13: Round House Cleaning supplies storage



Photo 14: Round House Cleaning supplies storage



Photo 15: Round House Cleaning supplies storage



Photo 16: Round House Cleaning supplies storage outside



Photo 17: Round House Cleaning supplies storage facing outside



Photo 18: Round House Cleaning supplies storage area



Photo 19: Classroom AC unit



Photo 20: Rm 326 Chemistry back room



Photo 21: Rm 326 Chemistry back room



Photo 22: Rm 326 Chemistry back room



Photo 23: Rm 326 Chemistry back room

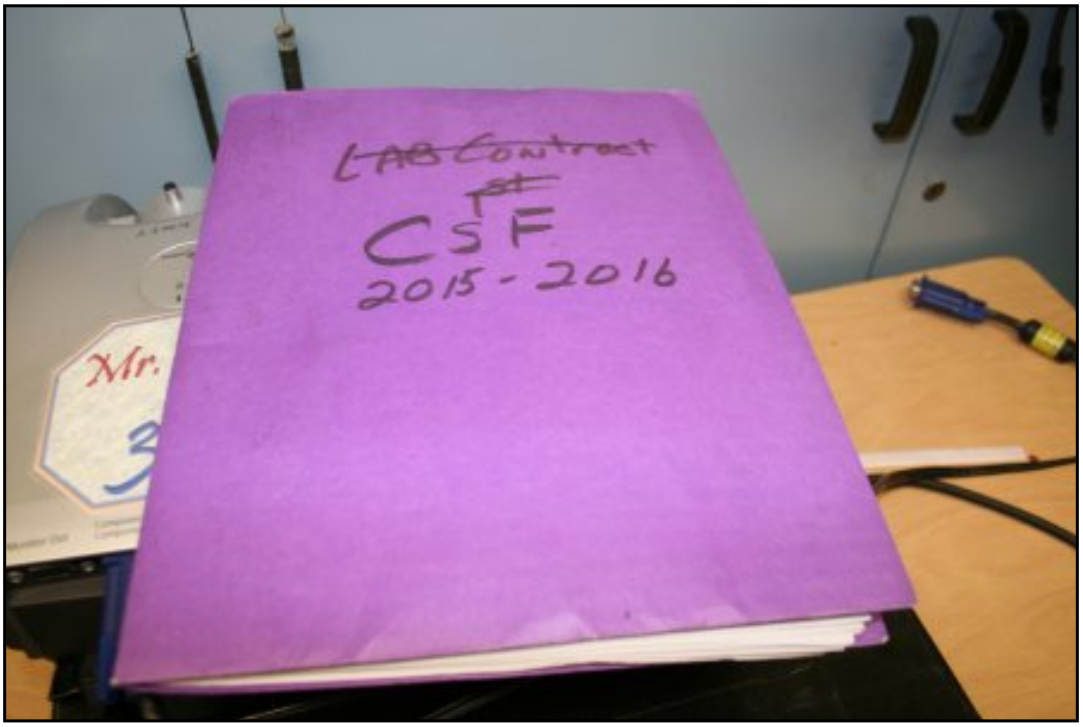


Photo 24: Rm 326 Chemistry back room log book

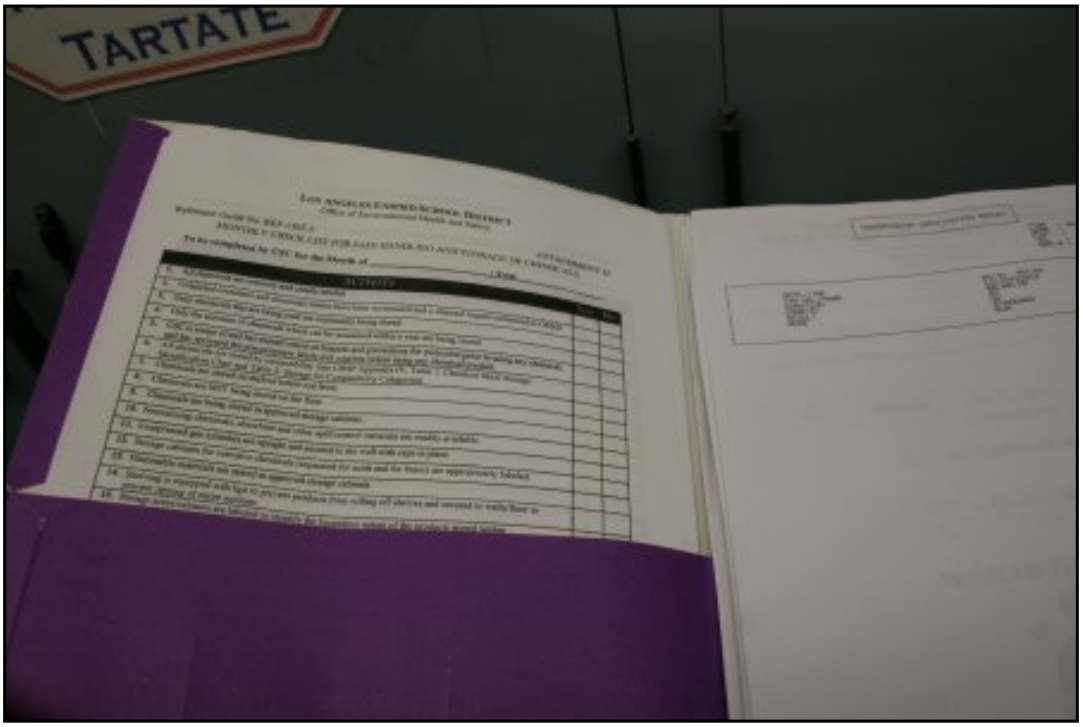


Photo 25: Rm 326 Chemistry back room log book

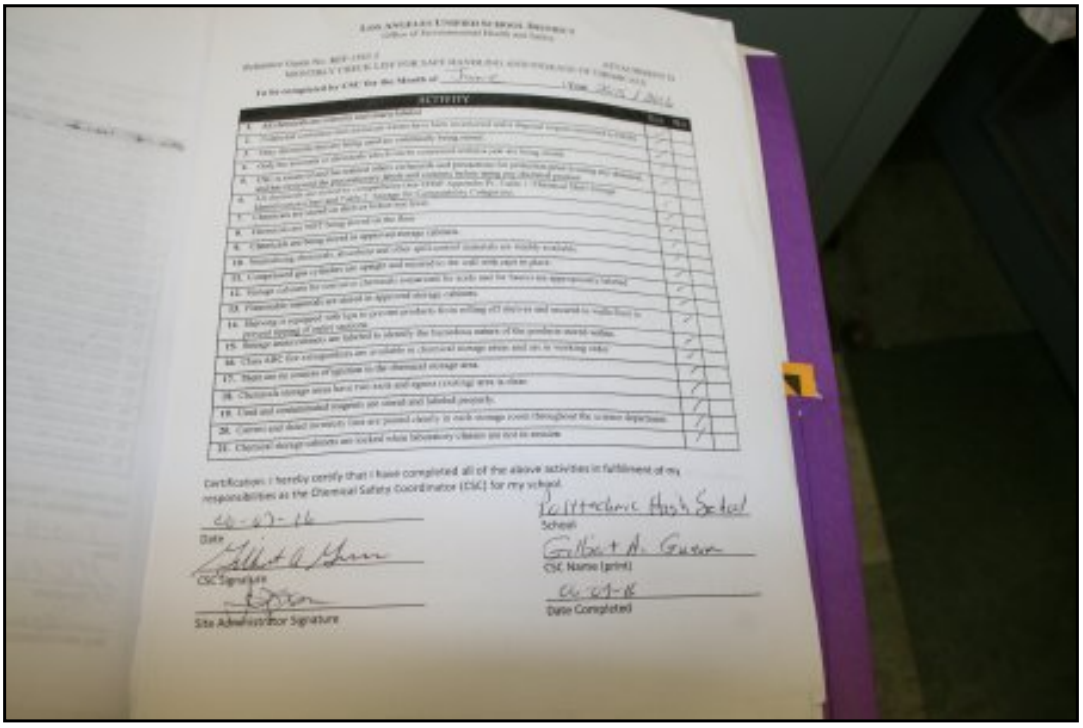


Photo 26: Rm 326 Chemistry back room log book



Photo 27: Rm 326 Chemistry back room



Photo 28: Rm 326 Chemistry room



Photo 29: Rm 326 Chemistry room clarifier



Photo 30: Rm 326 Chemistry room clarifier



Photo 31: Classroom AC Unit



Photo 32: Former garage area - structure burned down



Photo 33: Rm 40A Science classroom



Photo 34: Rm 40A Science classroom



Photo 35: Rm 40A Science classroom



Photo 36: Rm 40-40A Science classroom



Photo 37: Rm 51A Science classroom



Photo 38: Rm 51A Science classroom



Photo 39: Rm 51A Science classroom



Photo 40: Rm 51A Science classroom



Photo 41: Rm 51A Science classroom



Photo 42: Science and Math Building



Photo 43: Classroom AC Units



Photo 44: Classroom AC Units



Photo 45: Rm 62 Culinary Class Kitchen



Photo 46: Rm 62 Culinary Class Kitchen



Photo 47: Rm 62 Culinary Class Kitchen



Photo 48: Rm 62 Culinary Class Kitchen



Photo 49: Rm 72 Ceramics Class



Photo 50: Rm 72 Ceramics Class clarifier



Photo 51: Rm 72 Ceramics Class clarifier



Photo 52: Rm 72 Ceramics Class

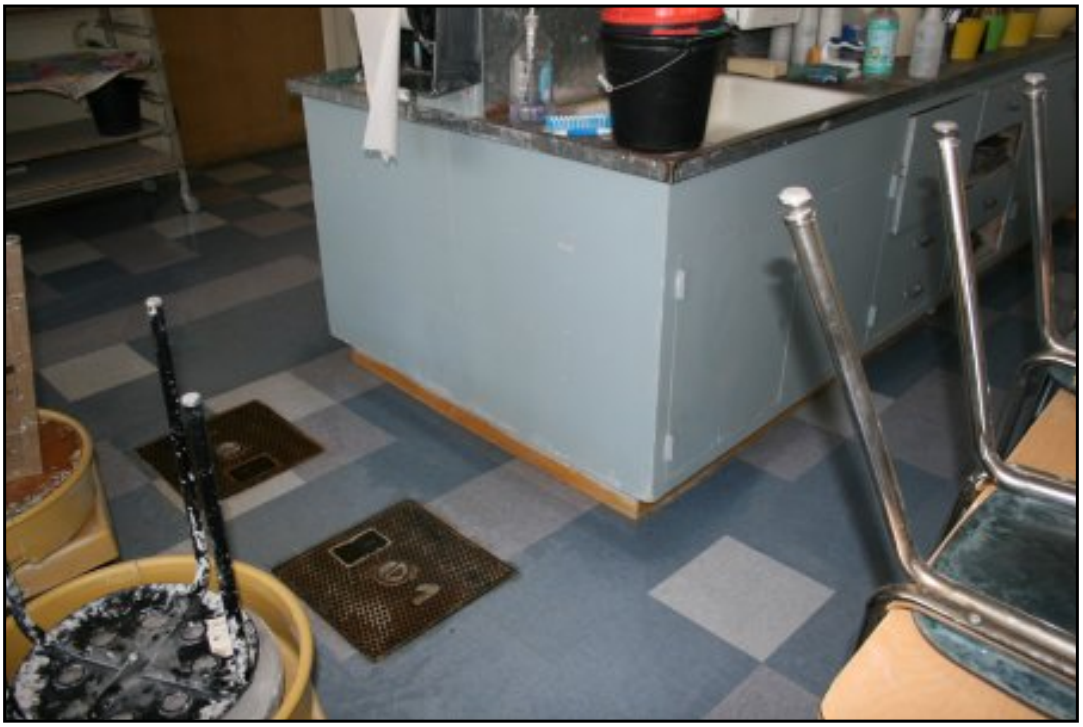


Photo 53: Rm 72 Ceramics Class clarifier



Photo 54: Room 72



Photo 55: Rooftop Building AC



Photo 56: Rm 91 former wood working shop building



Photo 57: Rm 91 former wood working shop building



Photo 58: Rm 91 former wood working shop building



Photo 59: Room 92 Copy Print Center

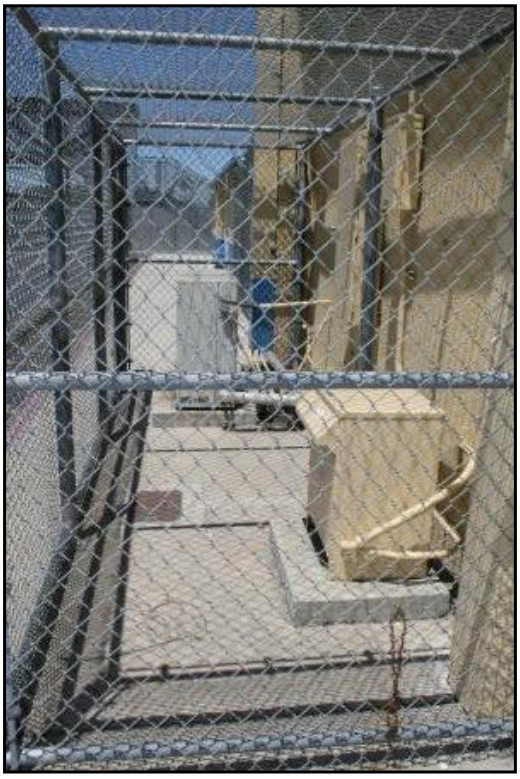


Photo 60: Ground level AC unit



Photo 61: Ground level AC unit



Photo 62: Ground level AC unit



Photo 63: Ground level AC unit



Photo 64: Ground level AC unit



Photo 65: Rm AC Unit



Photo 66: AC Units



Photo 67: Vapor probe



Photo 68: Vapor Probe



Photo 69: Vapor Probe



Photo 70: Vapor Probe



Photo 71: Rm 95 Former Auto Shop Bldg



Photo 72: Rm 95 Former Auto Shop Bldg



Photo 73: Ceiling tiles and light fixture



Photo 74: Intersection of Roscoe and Arleta looking west.



Photo 75: Arleta looking north



Photo 76: On Roscoe Blvd looking west towards Arleta Ave.



Photo 77: On Roscoe Blvd looking west towards Arleta Ave.



Photo 78: On Roscoe Blvd looking west towards Arleta Ave. with the school Site on the right.

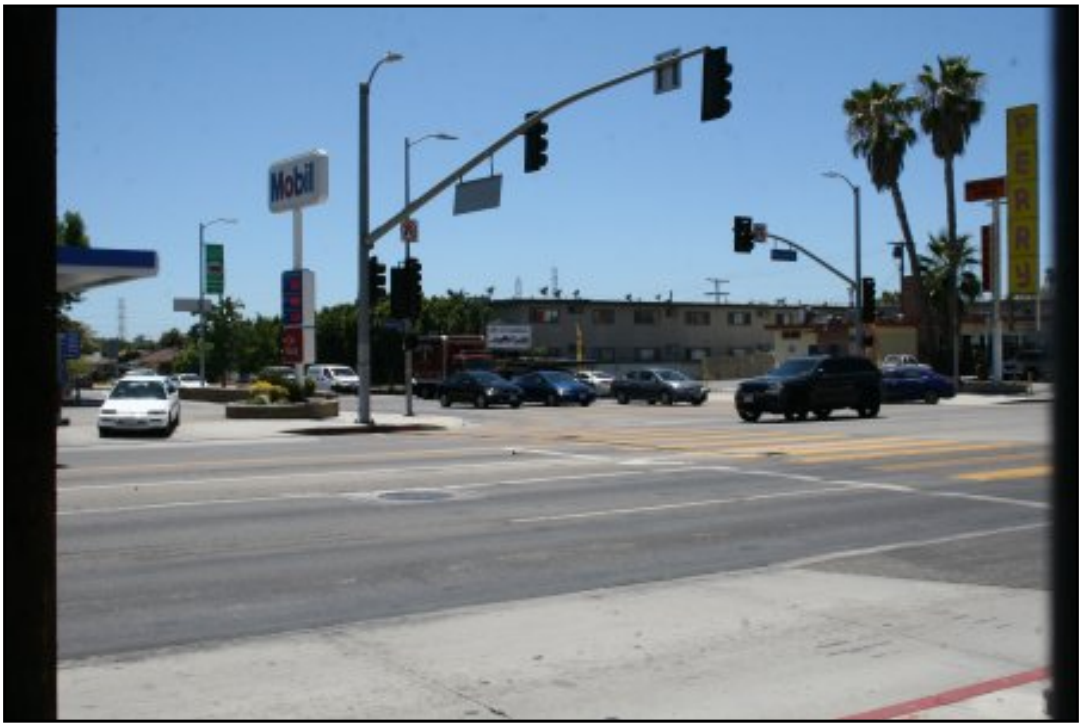


Photo 79: Roscoe and Arleta intersection.



Photo 80: Roscoe and Arleta intersection



Photo 81: Roscoe and Arleta



Photo 82: From Arleta Blvd, looking west.



Photo 83: From Arleta Blvd looking west.

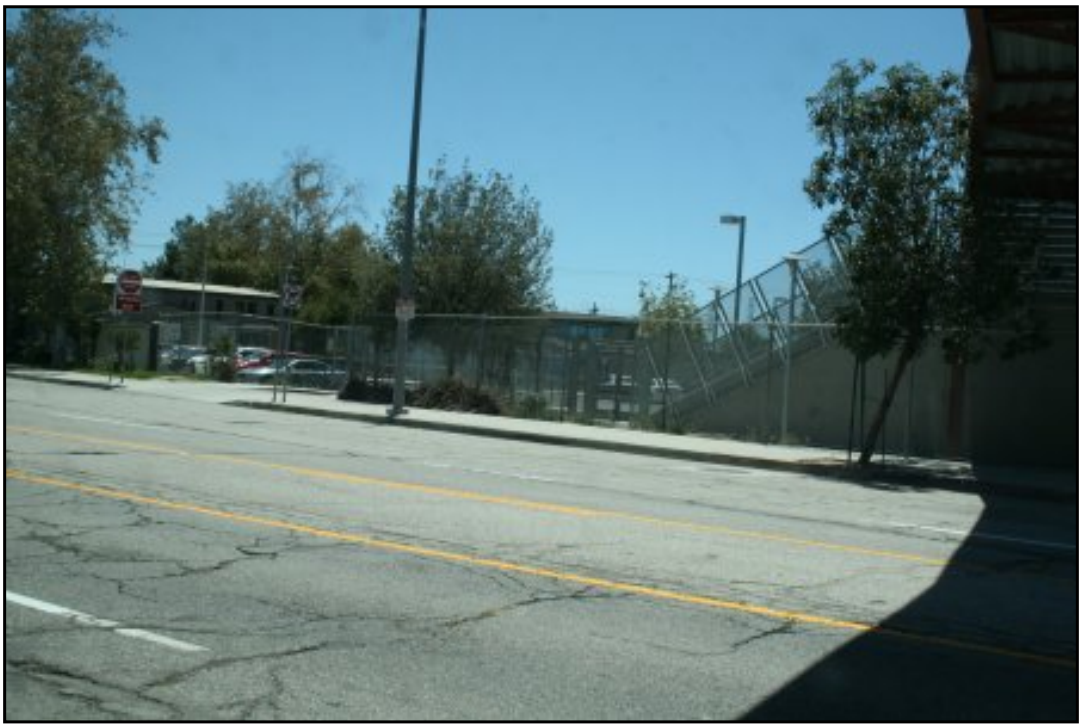


Photo 84: From Arleta Blvd looking west.



Photo 85: Intersection of Wicks and Arleta looking northwest towards Byrd Middle School.



Photo 86: Intersection of Wicks and Arleta looking northwest towards Byrd Middle School.



Photo 87: Looking north from the intersection of Wicks and Arleta.



Photo 88: Byrd Middle School to the northwest of the School.



Photo 89: Looking north towards Former Sheldon-Arleta Landfill.



Photo 90: Looking north towards Former Sheldon-Arleta Landfill.



Photo 91: Looking east on Wicks with Polytechnic School to the right.



Photo 92: Looking north towards Former Sheldon-Arleta Landfill.



Photo 93: Looking northwest towards Former Sheldon-Arleta Landfill.



Photo 94: Looking northwest towards Former Sheldon-Arleta Landfill.



Photo 95: Intersection of Wicks St. and Sharp Ave. looking northeast.



Photo 96: Looking north from the intersection of Wicks St. and Sharp Ave.



Photo 97: Looking east from the intersection of Wicks St. and Sharp Ave.



Photo 98: Looking southeast on Sharp Ave.



Photo 99: Intersection of Peoria St. and Sharp Ave. looking southeast.



Photo 100: Intersection of Peoria St. and Sharp Ave. looking northeast.



Photo 101: Eastern portion of the Site. Transformer is visible.



Photo 102: Eastern portion of the Site showing the horticulture area.



Photo 103: Eastern portion of the Site showing the horticulture area.



Photo 104: Looking west at the Site from the intersection of Peoria St. and Sharp Ave.



Photo 105: Looking southwest down Peoria St.



Photo 106: Intersection of Peoria St. and Roscoe Blvd looking south.



Photo 107: Looking north at the Site from Peoria St.



Photo 108: Looking north at the Site from Peoria St.

Appendix C:

Historical Research

John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

Inquiry Number: 4660230.6
June 28, 2016

The EDR Property Tax Map Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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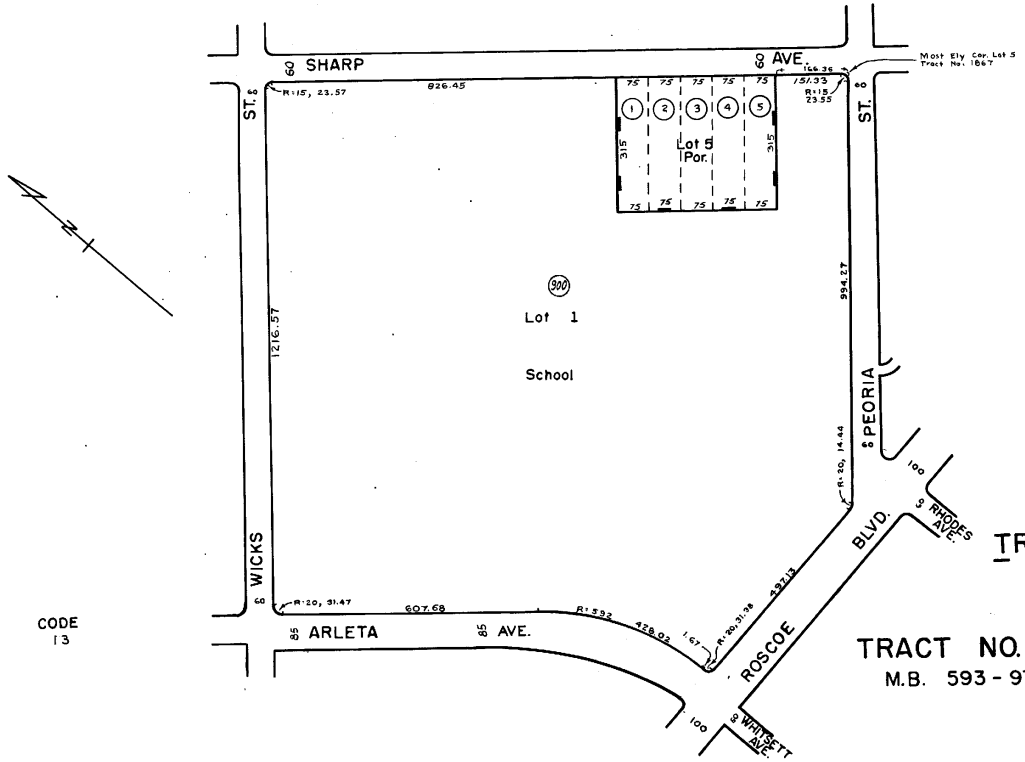
CALE 1" – 200'

Revised:
6-4-56
2-22-65
4-2-66



CODE
13

TRACT NO. 1867
M.B. 22-188

TRACT NO. 19166
M.B. 593-97-98

FOR PREV. ASSM'T. SEE: 1473-19

ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.

John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

Inquiry Number: 4660230.3
June 28, 2016

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

06/28/16

Site Name:

John H Francis Polytechnic Hig
12431 Roscoe Blvd
Sun Valley, CA 91352
EDR Inquiry # 4660230.3

Client Name:

Civil-Environmental-survey Group
2279 Eagle Glen Parkway
Corona, CA 92883-0000
Contact: Skye Green

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Certified Sanborn Results:

Certification # D087-4060-9A03

PO # LAUSD

Project John H Francis Polytechnic HS

UNMAPPED PROPERTY

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Sanborn® Library search results

Certification #: D087-4060-9A03

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

Inquiry Number: 4660230.4
June 28, 2016

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

06/28/16

Site Name:

John H Francis Polytechnic Hig
12431 Roscoe Blvd
Sun Valley, CA 91352
EDR Inquiry # 4660230.4

Client Name:

Civil-Environmental-survey Group
2279 Eagle Glen Parkway
Corona, CA 92883-0000
Contact: Skye Green

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Search Results:

P.O.# LAUSD
Project: John H Francis Polytechnic HS

Coordinates:

Latitude:	34.221954 34° 13' 19" North
Longitude:	-118.404077 -118° 24' 15" West
UTM Zone:	Zone 11 North
UTM X Meters:	370669.95
UTM Y Meters:	3787657.57
Elevation:	823.00' above sea level

Maps Provided:

2012	1898
1972	1896
1966	1894
1953	
1927	
1921	
1902	
1900	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



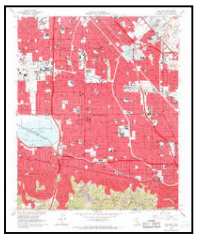
Van Nuys
2012
7.5-minute, 24000

1972 Source Sheets



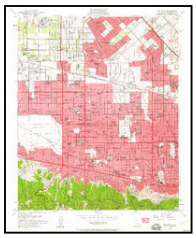
Van Nuys
1972
7.5-minute, 24000
Photo Revised 1972
Aerial Photo Revised 1972

1966 Source Sheets



Van Nuys
1966
7.5-minute, 24000
Aerial Photo Revised 1964
Edited 1953

1953 Source Sheets



Van Nuys
1953
7.5-minute, 24000
Aerial Photo Revised 1952

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1927 Source Sheets



Pacoima
1927
7.5-minute, 24000

1921 Source Sheets



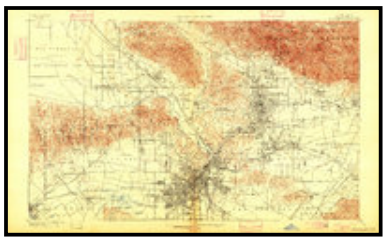
Santa Monica
1921
15-minute, 62500
Edited 1920

1902 Source Sheets



Santa Monica
1902
15-minute, 62500

1900 Source Sheets



Los Angeles
1900
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1898 Source Sheets



Santa Monica
1898
15-minute, 62500

1896 Source Sheets



Santa Monica
1896
15-minute, 62500

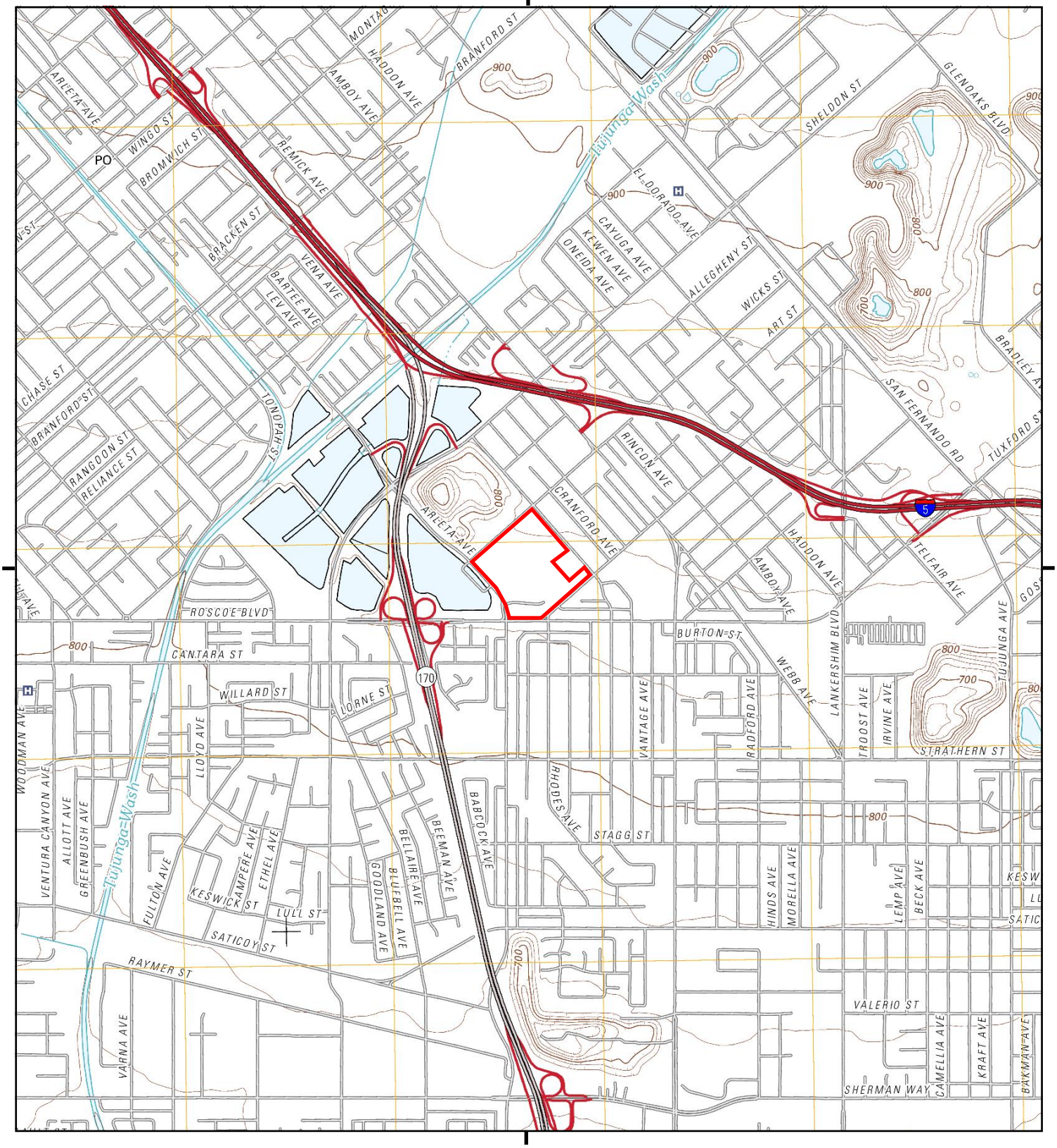
1894 Source Sheets



Los Angeles
1894
15-minute, 62500

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

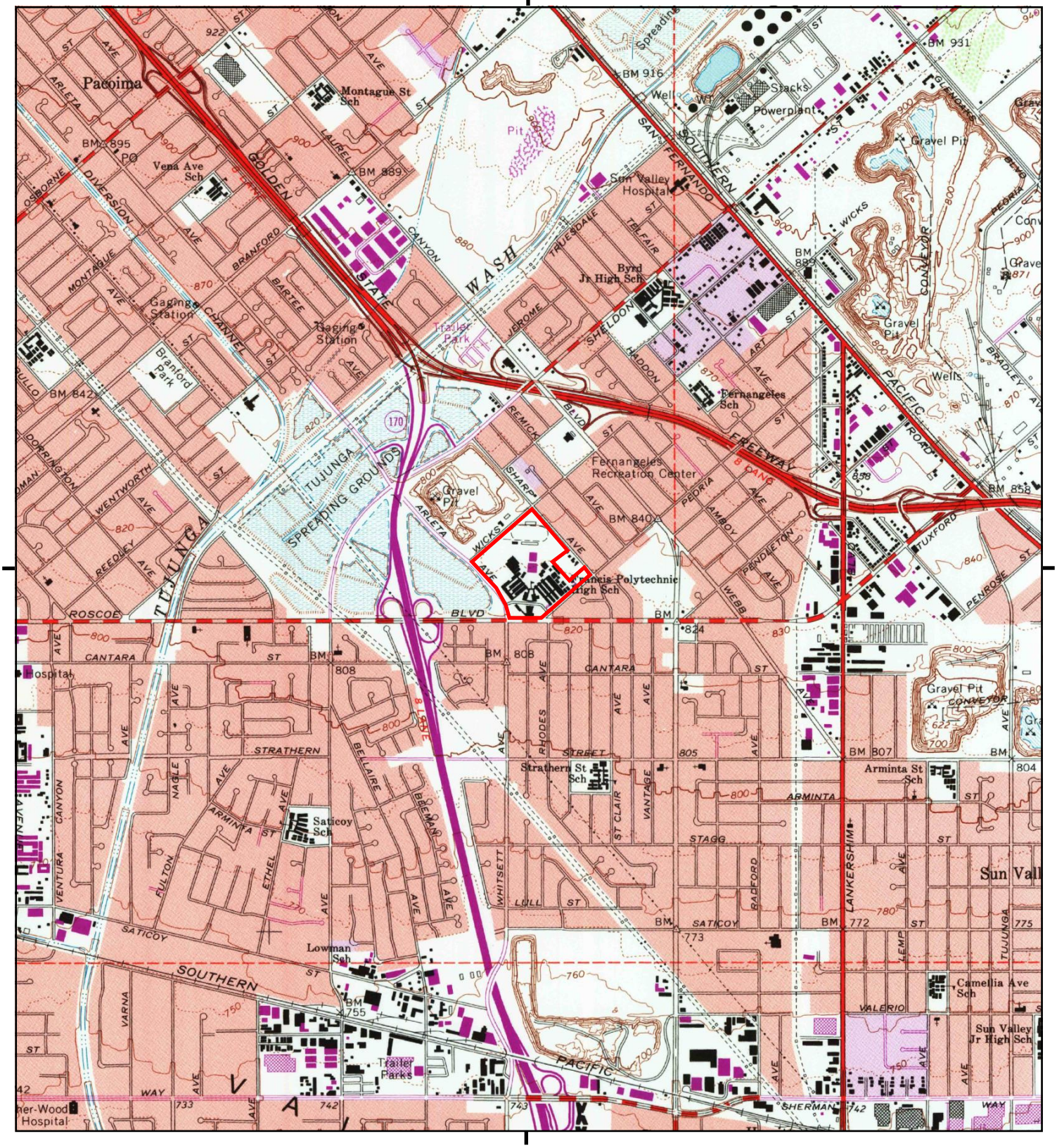
TP, Van Nuys, 2012, 7.5-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N

Historical Topo Map

1972



This report includes information from the following map sheet(s).

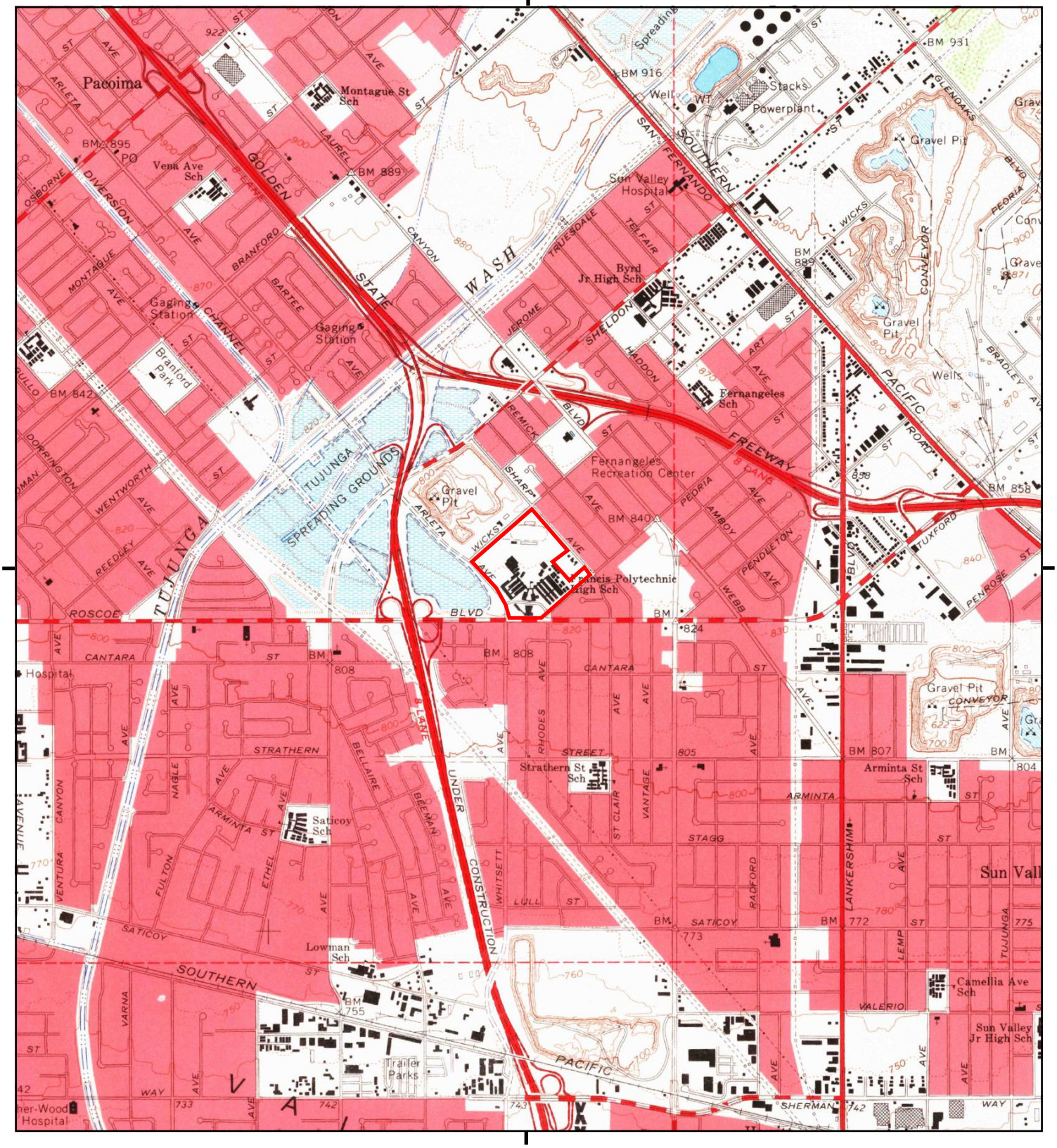
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Van Nuys, 1972, 7.5-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

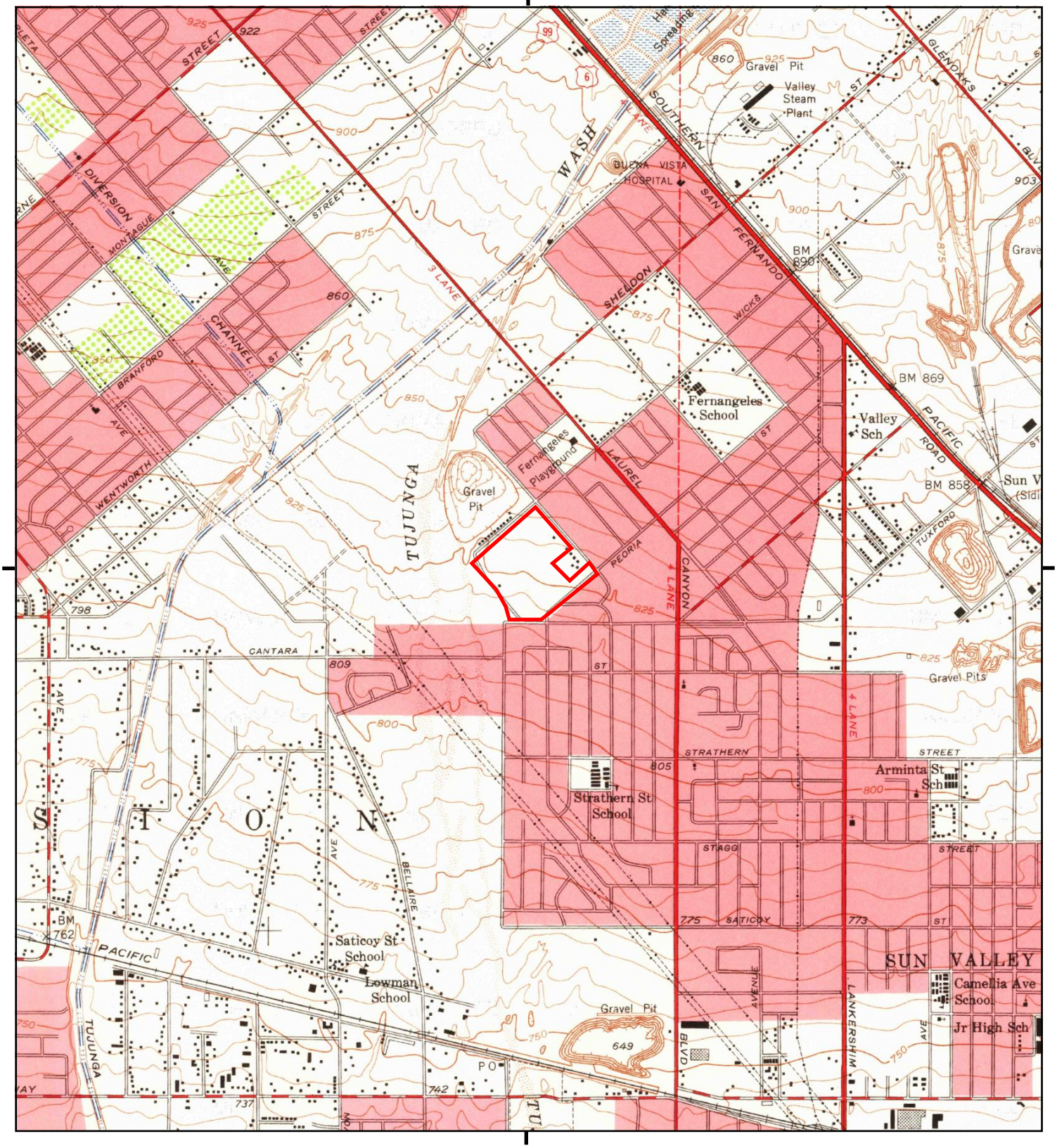
TP, Van Nuys, 1966, 7.5-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N

Historical Topo Map

1953



This report includes information from the following map sheet(s).

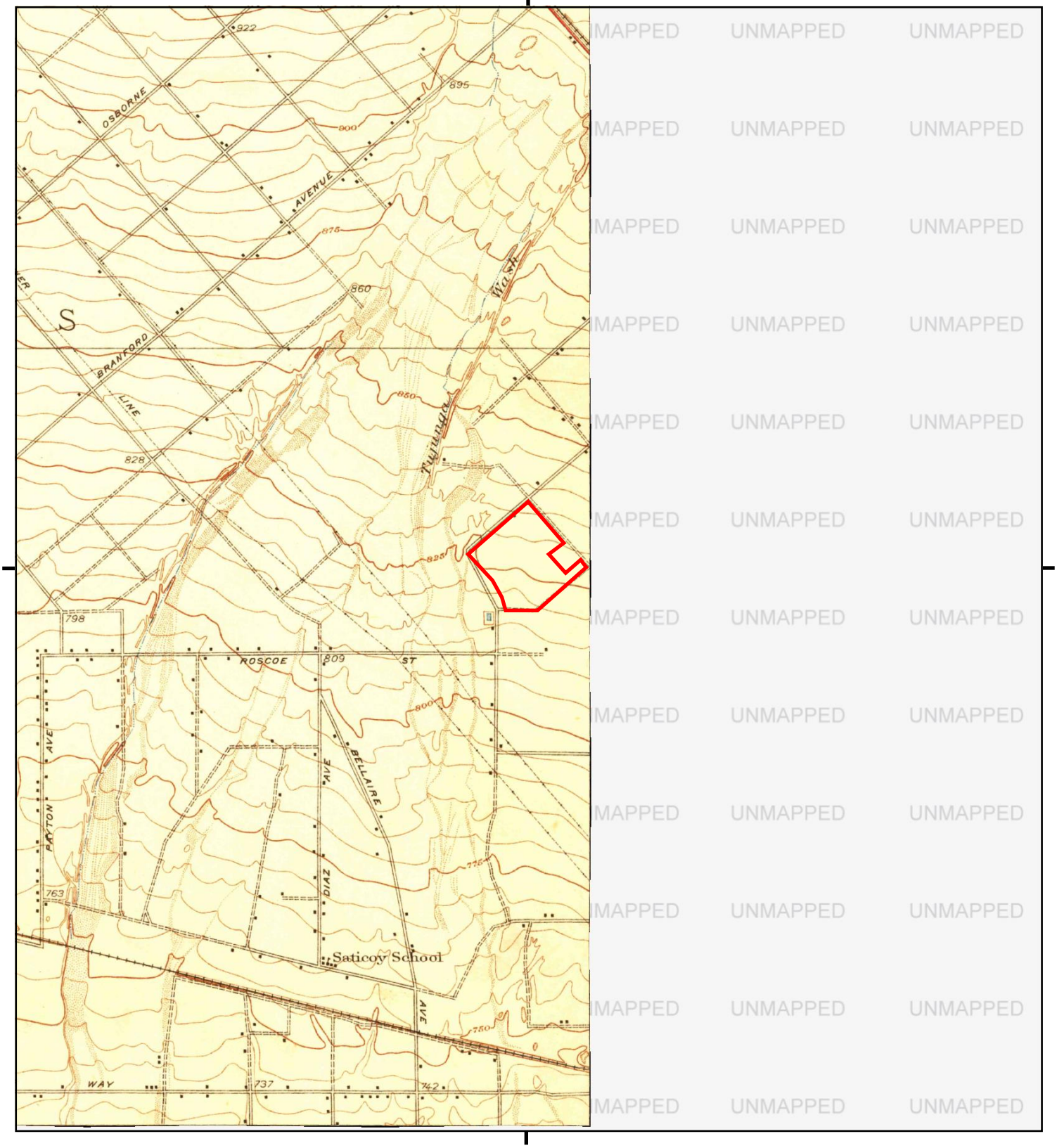
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Van Nuys, 1953, 7.5-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N



This report includes information from the following map sheet(s).

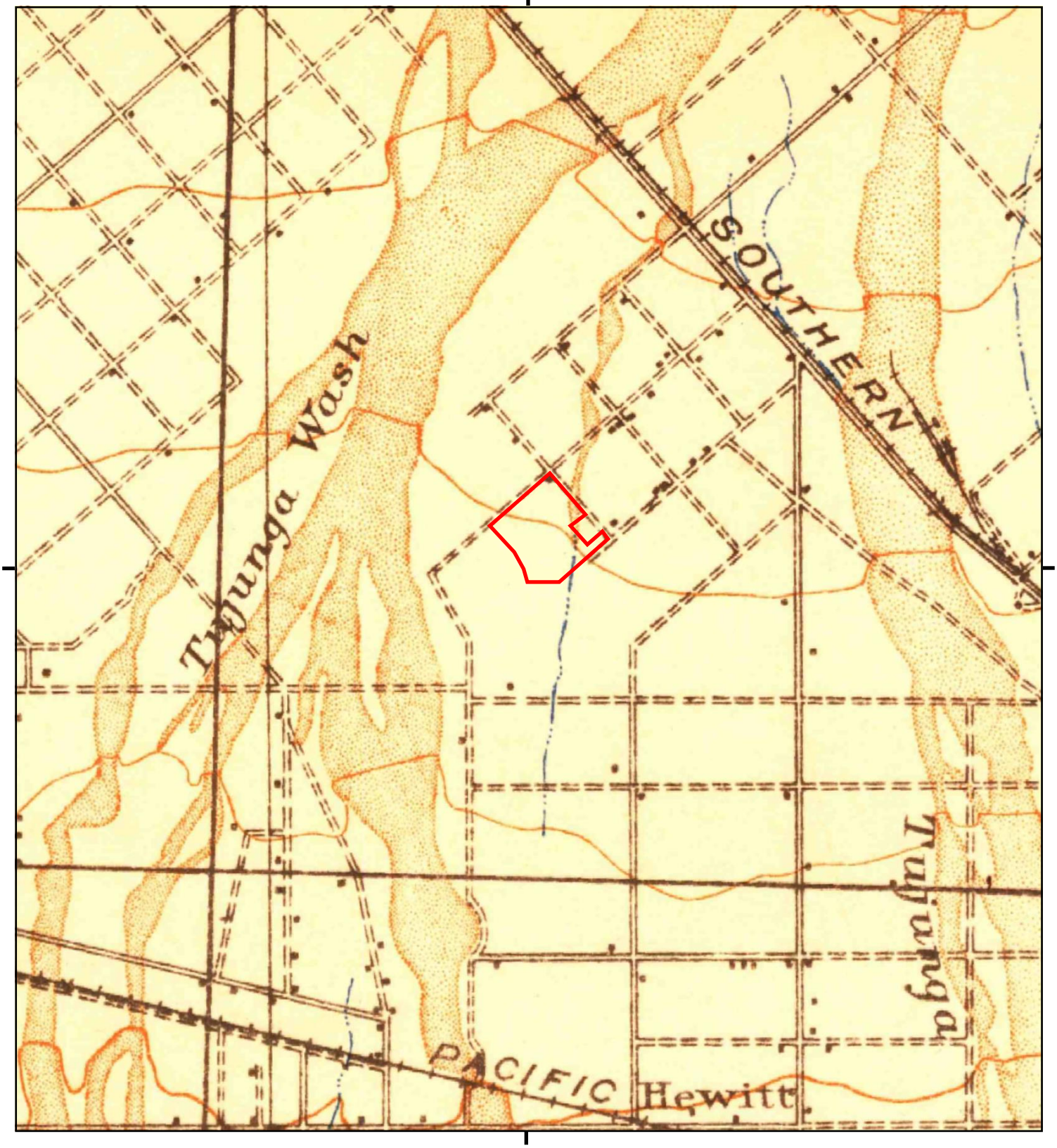
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Pacoima, 1927, 7.5-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N



This report includes information from the following map sheet(s).

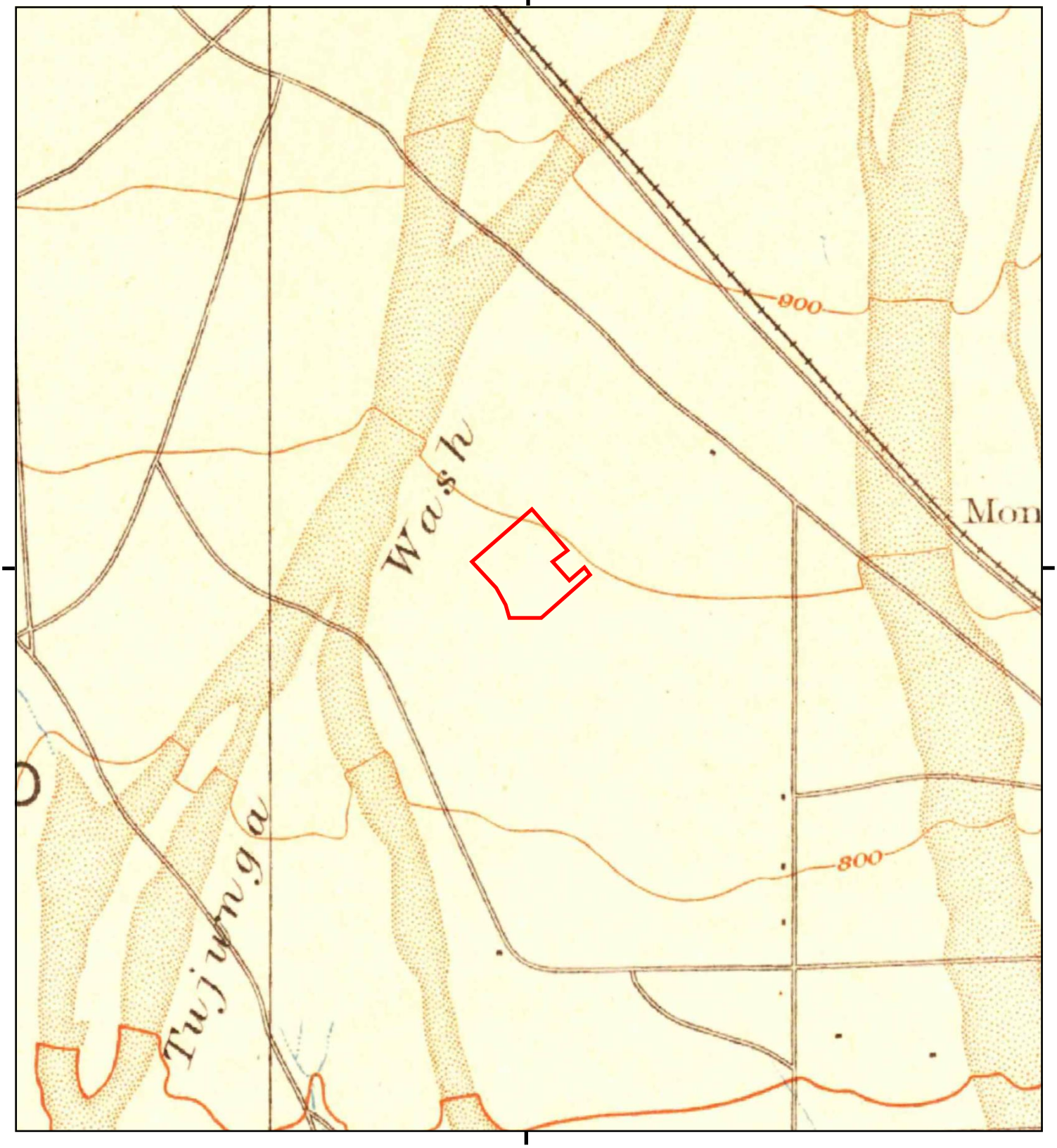
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Santa Monica, 1921, 15-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N



This report includes information from the following map sheet(s).

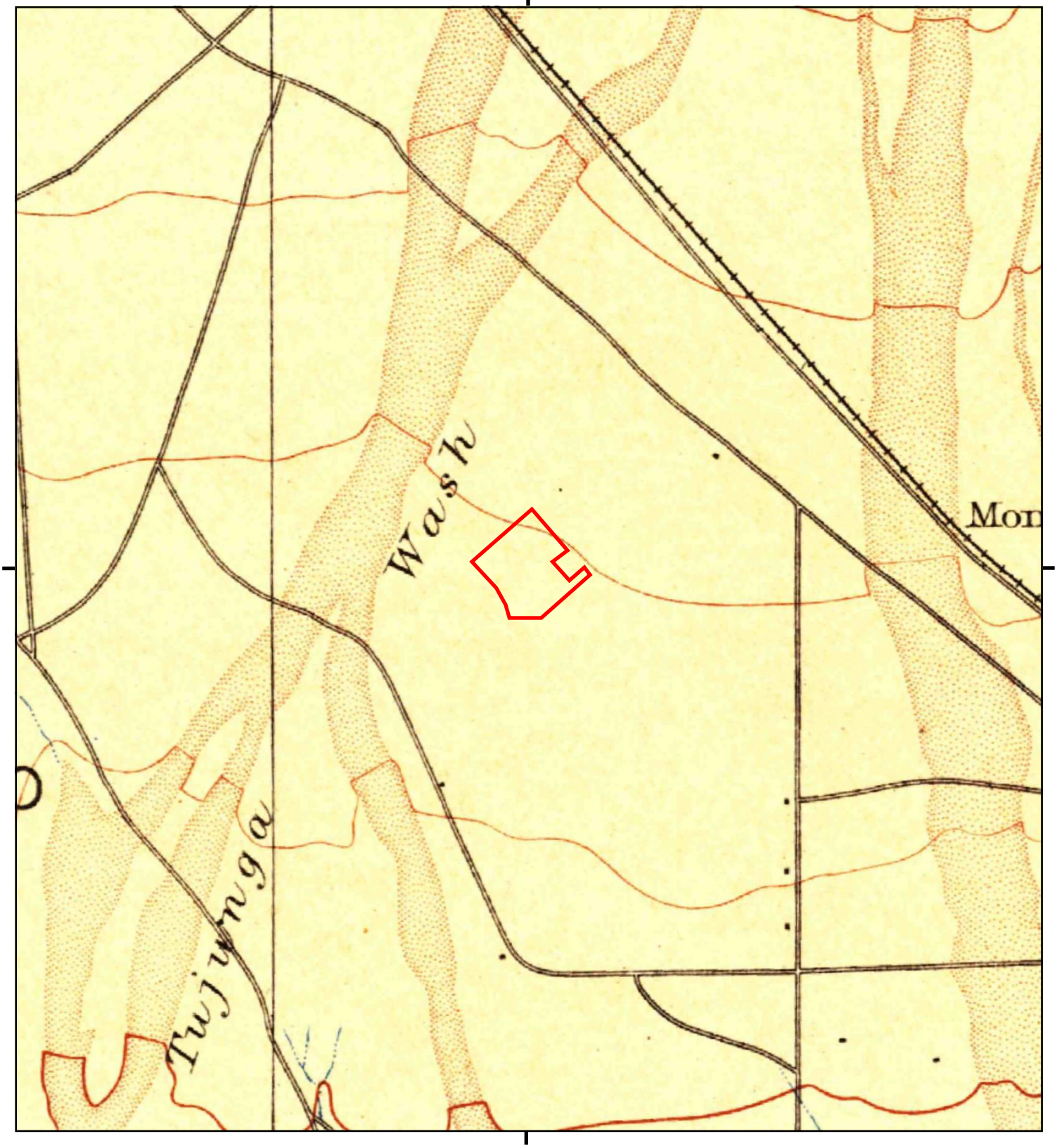
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Santa Monica, 1902, 15-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N



This report includes information from the following map sheet(s).

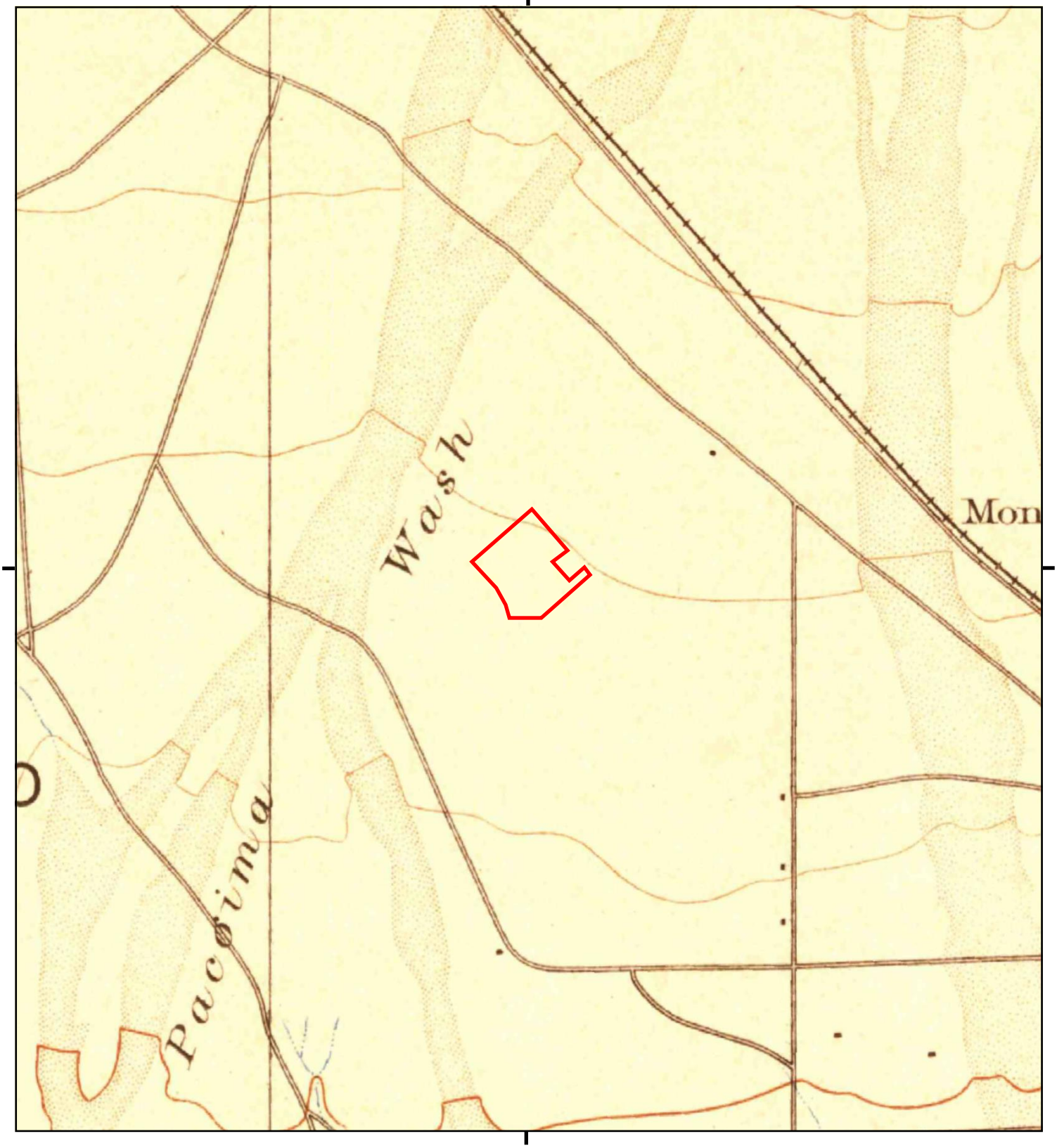
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1900, 15-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N



This report includes information from the following map sheet(s).

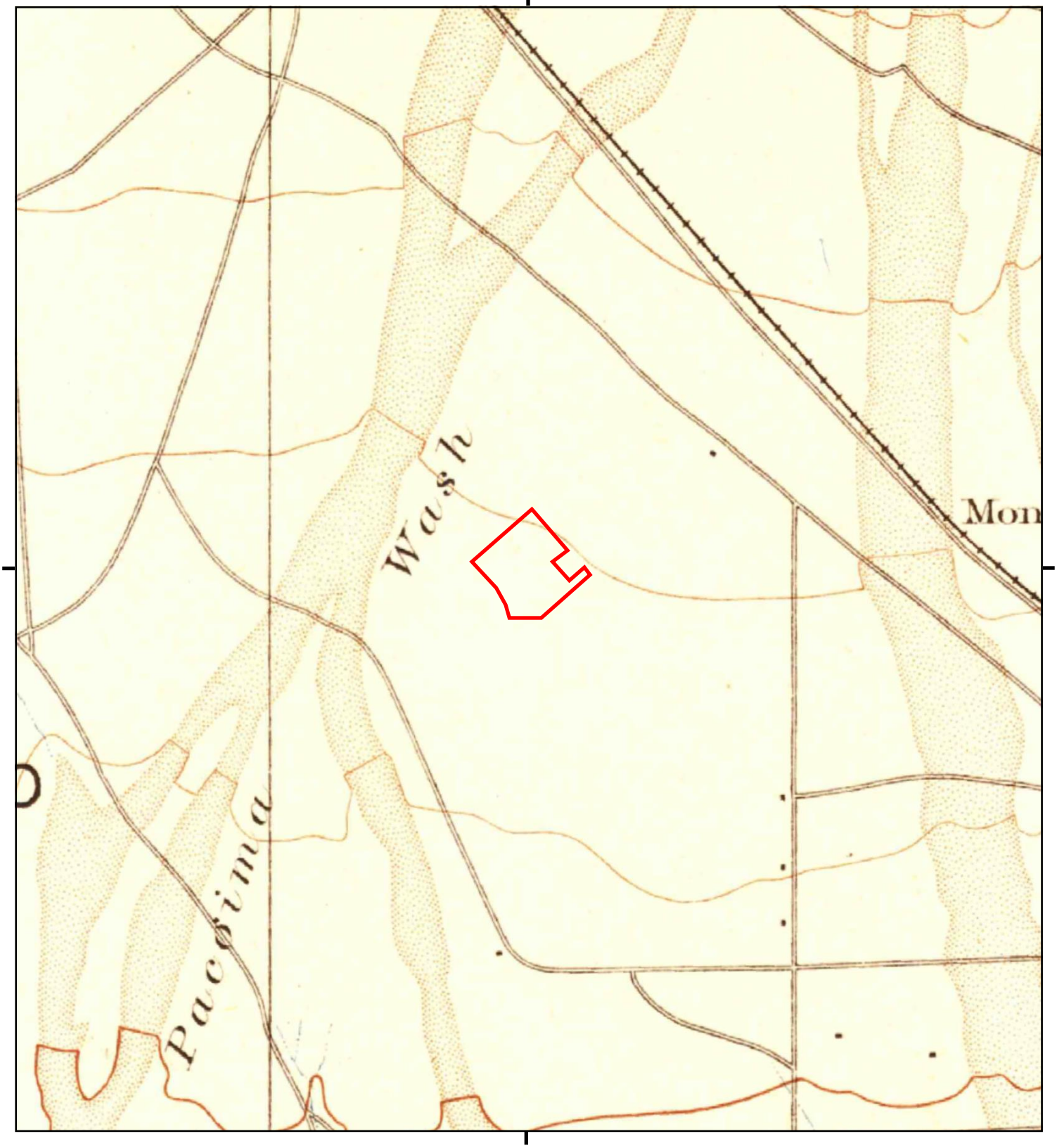
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Santa Monica, 1898, 15-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N



This report includes information from the following map sheet(s).

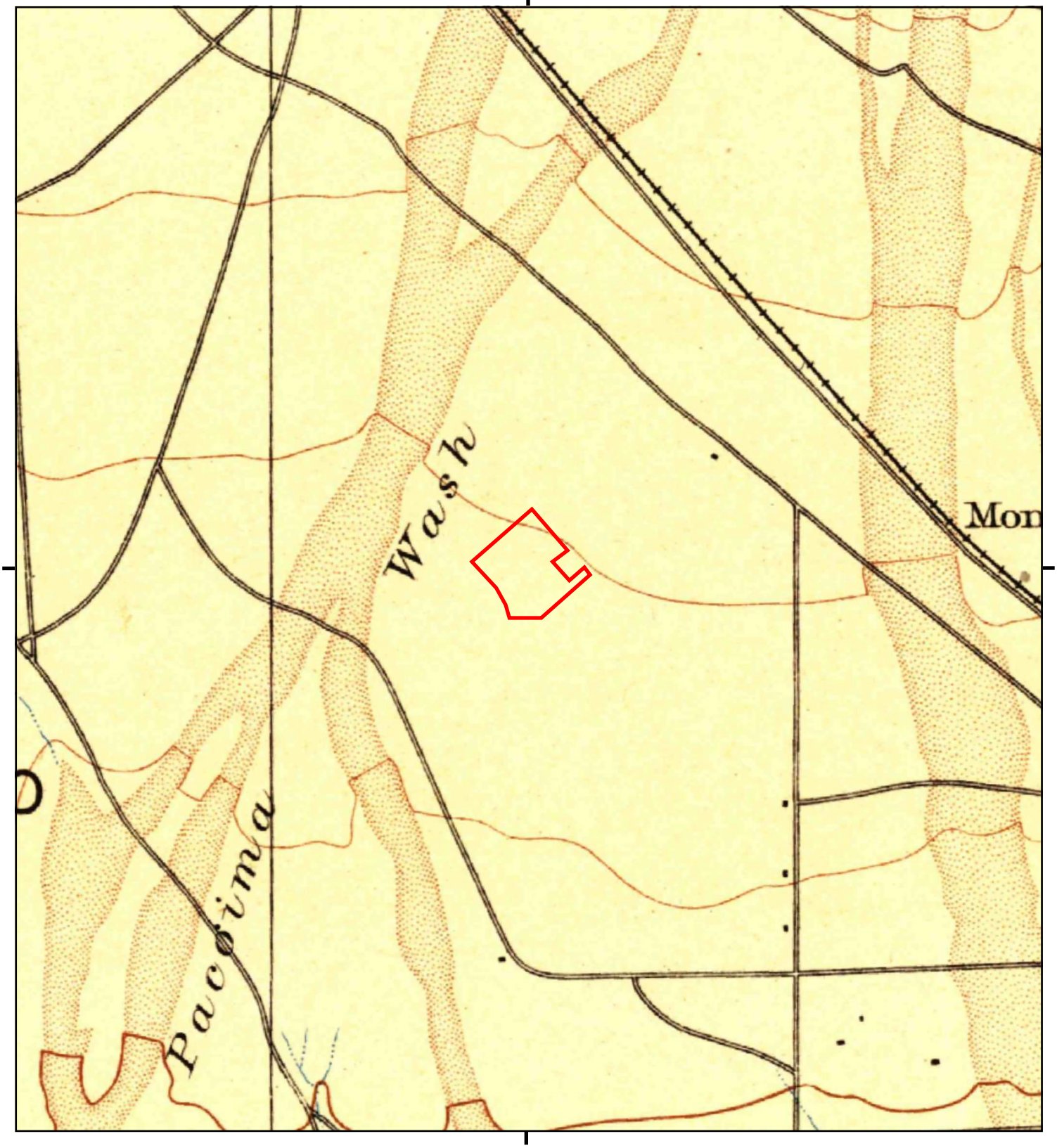
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Santa Monica, 1896, 15-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Los Angeles, 1894, 15-minute

SITE NAME: John H Francis Polytechnic High School
ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA 91352
CLIENT: Civil-Environmental-survey Group

N

John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

Inquiry Number: 4660230.5
June 28, 2016

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2013	Cole Information Services	X	X	X	-
2008	Cole Information Services	X	X	X	-
2006	Haines Company, Inc.	X	X	X	-
2004	Haines Company	-	-	-	-
2003	Haines & Company	-	-	-	-
2001	Haines & Company, Inc.	X	X	X	-
2000	Haines	-	-	-	-
1999	Haines Company	-	-	-	-
1996	GTE	-	-	-	-
1995	Pacific Bell	X	X	X	-
1992	PACIFIC BELL WHITE PAGES	-	-	-	-
1991	Pacific Bell	X	X	X	-
1990	PACIFIC BELL WHITE PAGES	-	-	-	-
1986	Pacific Bell	-	-	-	-
1985	Pacific Bell	X	X	X	-
1981	Pacific Telephone	-	X	X	-
1980	Pacific Telephone	X	X	X	-
1976	Pacific Telephone	-	X	X	-
1975	Pacific Telephone	X	X	X	-
1972	R. L. Polk & Co.	-	-	-	-
1971	R. L. Polk & Co.	-	-	-	-
1970	Pacific Telephone	X	X	X	-
1969	Pacific Telephone	-	-	-	-
1967	R. L. Polk & Co.	-	-	-	-
1966	Pacific Telephone	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1965	GTE	-	-	-	-
1964	Pacific Telephone	-	-	-	-
1963	Pacific Telephone	-	-	-	-
1962	Pacific Telephone	X	X	X	-
1961	R. L. Polk & Co.	-	-	-	-
1960	Pacific Telephone	-	X	X	-
1958	Pacific Telephone	-	-	-	-
1957	Pacific Telephone	-	X	X	-
1956	Pacific Telephone	X	X	X	-
1955	R. L. Polk & Co.	-	-	-	-
1954	R. L. Polk & Co.	-	-	-	-
1952	Los Angeles Directory Co.	-	-	-	-
1951	Los Angeles Directory Co.	-	-	-	-
1950	Pacific Telephone	-	X	X	-
1949	Los Angeles Directory Co.	-	-	-	-
1948	Associated Telephone Company, Ltd.	-	-	-	-
1947	Pacific Directory Co.	-	-	-	-
1946	Southern California Telephone Co	-	-	-	-
1945	R. L. Polk & Co.	-	-	-	-
1944	R. L. Polk & Co.	-	-	-	-
1942	Los Angeles Directory Co.	-	X	X	-
1940	Los Angeles Directory Co.	-	-	-	-
1939	Los Angeles Directory Co.	-	-	-	-
1938	Los Angeles Directory Company Publishers	-	-	-	-
1937	Los Angeles Directory Co.	-	X	X	-
1936	Los Angeles Directory Co.	-	-	-	-
1935	Los Angeles Directory Co.	-	-	-	-
1934	Los Angeles Directory Co.	-	-	-	-
1933	Los Angeles Directory Co.	-	X	X	-
1932	Los Angeles Directory Co.	-	-	-	-
1931	TRIBUNE-NEWS PUBLISHING CO.	-	-	-	-
1930	Los Angeles Directory Co.	-	-	-	-
1929	Los Angeles Directory Co.	-	X	X	-
1928	Los Angeles Directory Co.	-	X	X	-
1927	Los Angeles Directory Co.	-	-	-	-
1926	Los Angeles Directory Co.	-	-	-	-
1925	Los Angeles Directory Co.	-	-	-	-
1924	Los Angeles Directory Co.	-	X	X	-
1923	Los Angeles Directory Co.	-	-	-	-
1921	Los Angeles Directory Co.	-	-	-	-
1920	Los Angeles Directory Co.	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

12431 Roscoe Blvd
Sun Valley, CA 91352

FINDINGS DETAIL

Target Property research detail.

ROSCOE

12431 ROSCOE

Year	Uses	Source
1962	Francis Polytechnic High School	Pacific Telephone
	Polytechnic High School	Pacific Telephone

ROSCOE BLVD

12431 ROSCOE BLVD

Year	Uses	Source
2013	POLYTECHNIC HIGH SCHOOL	Cole Information Services
2008	FRANCIS POLYTECHNIC	Cole Information Services
	LOS ANGELES UNIFID SCHOOL DST	Cole Information Services
2006	FRANCIS	Haines Company, Inc.
	POLYTECHNIC HIGH	Haines Company, Inc.
	SC POLY HIGH SCHOOL	Haines Company, Inc.
2001	FRANCIS POLYTECHNIC HIGH SC	Haines & Company, Inc.
	POLY HIGH SCHOOL FRANCIS	Haines & Company, Inc.
1995	Francis Polytechnic High School	Pacific Bell
1991	Francis Polytechnic High School	Pacific Bell
	Francis R	Pacific Bell
	Francis Richard Bl Sh Oks	Pacific Bell
1985	Francis Polytechnic High School	Pacific Bell
1980	FRANCIS POLYTECHNIC HIGH SCHOOL	Pacific Telephone

ROSCOE PL

12431 ROSCOE PL

Year	Uses	Source
1975	Francis Polytechnic High School	Pacific Telephone

FINDINGS

Year	Uses	Source
1970	FRANCIS POLYTECHNIC HIGH SCHOOL	Pacific Telephone
1962	FRANCIS JOHN H POLYTECHNIC HIGH SCHOOL STUDENT BODY	Pacific Telephone
	FRANCIS POLYTECHNIC HIGH SCHOOL	Pacific Telephone
	POLYOPTIMIST	Pacific Telephone
	POLYTECHNIC HIGH SCHOOL FRANCIS JOHN H	Pacific Telephone
	POLYTECHNIC HIGH SCHOOL STUDENT BODY JOHN H FRANCIS	Pacific Telephone
1956	HEIRSHBERG CONSTRUCTION CO	Pacific Telephone

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

ARLETA AVE

8401 ARLETA AVE

Year	Uses	Source
2013	LOCAL DISTRICT 2	Cole Information Services

8501 ARLETA AVE

Year	Uses	Source
2013	BYRD JUNIOR HIGH SCHOOL STUDENT BODY	Cole Information Services
	EAST VALLEY HIGH SCHOOL 1A	Cole Information Services
	VALLEY REGION MIDDLE SCHOOL 3	Cole Information Services
2008	CITY OF LOS ANGELES	Cole Information Services
2001	DEPARTMENT OF WATER & POWER	Haines & Company, Inc.

BURTON

12329 BURTON

Year	Uses	Source
1995	Johnson Bob	Pacific Bell
	Johnson Bob	Pacific Bell

12337 BURTON

Year	Uses	Source
1995	Hultink John C	Pacific Bell

12352 BURTON

Year	Uses	Source
1995	Politzer Wayne	Pacific Bell

12417 BURTON

Year	Uses	Source
1995	Gregory Leo	Pacific Bell

12425 BURTON

Year	Uses	Source
1995	Phillips J E	Pacific Bell

FINDINGS

12489 BURTON

Year	Uses	Source
1995	Wassem Donald V	Pacific Bell

BURTON AVE

12312 BURTON AVE

Year	Uses	Source
1950	CHANEY W L R	Pacific Telephone

BURTON PL

12329 BURTON PL

Year	Uses	Source
1956	SHONAFELT PAUL A	Pacific Telephone

12333 BURTON PL

Year	Uses	Source
1962	FAILLE RAY C	Pacific Telephone
1956	FREY EDW H	Pacific Telephone

12334 BURTON PL

Year	Uses	Source
1970	FRY SYBLE	Pacific Telephone
	FRY SYBLE	Pacific Telephone
1962	FRY SYBLE	Pacific Telephone
1956	FRY SYBLE	Pacific Telephone

12337 BURTON PL

Year	Uses	Source
1970	FLEENOR GORDON E	Pacific Telephone
	FLEENOR GORDON E	Pacific Telephone
1962	FLEENOR SHIRLEY	Pacific Telephone
	FLEENOR GORDON E	Pacific Telephone
1956	SELF ELZIE E	Pacific Telephone

12343 BURTON PL

Year	Uses	Source
1970	DE STEFANO JOS	Pacific Telephone
	DE STEFANO JOS	Pacific Telephone
1962	TESSIER MELVIN	Pacific Telephone

FINDINGS

Year	Uses	Source
1956	STARK LEWIS E	Pacific Telephone

12344 BURTON PL

Year	Uses	Source
1970	LOUWERENS CHAS	Pacific Telephone
	LOUWERENS CHAS	Pacific Telephone
1962	LOUWERENS CHAS	Pacific Telephone
1956	BUSK ROBT J	Pacific Telephone

12349 BURTON PL

Year	Uses	Source
1962	DUANE WM ROBT	Pacific Telephone
1956	DUANE W R	Pacific Telephone

12352 BURTON PL

Year	Uses	Source
1970	POLITZER WAYNE	Pacific Telephone
	POLITZER WAYNE	Pacific Telephone
1962	POLITZER WAYNE	Pacific Telephone
1956	TYERMAN DAVID J	Pacific Telephone

12355 BURTON PL

Year	Uses	Source
1962	CHMURSKI DUANE A	Pacific Telephone
1956	CONN WM	Pacific Telephone

12400 BURTON PL

Year	Uses	Source
1970	STAHL SIEGFRIED H	Pacific Telephone
	STAHL SIEGFRIED H	Pacific Telephone
1962	STAHL SIEGFRIED H	Pacific Telephone
1956	STAHL SIEGFRIED H	Pacific Telephone

12401 BURTON PL

Year	Uses	Source
1962	SPENCER ODELL K	Pacific Telephone

12408 BURTON PL

Year	Uses	Source
1970	FRANK B NORBERT	Pacific Telephone
	FRANK B NORBERT	Pacific Telephone

Year	Uses	Source
1962	FRANK B NORBERT NORTH HOLLYWOOD	Pacific Telephone
1956	FRANK B NORBERT	Pacific Telephone

12409 BURTON PL

Year	Uses	Source
1962	WASSEM DONALD V	Pacific Telephone
1956	WASSEM DONALD V	Pacific Telephone

12410 BURTON PL

Year	Uses	Source
1970	BLOCK MARTIN	Pacific Telephone
	BLOCK MARTIN	Pacific Telephone

12417 BURTON PL

Year	Uses	Source
1970	GREGORY LEO	Pacific Telephone
	GREGORY LEO	Pacific Telephone
1962	GREGORY LEO	Pacific Telephone
1956	GREGORY LEO	Pacific Telephone

12425 BURTON PL

Year	Uses	Source
1970	PHILLIPS JOYCE E	Pacific Telephone
	PHILLIPS JOYCE E	Pacific Telephone
1962	PHILLIPS JOYCE E	Pacific Telephone
1956	PHILLIPS JOYCE E	Pacific Telephone

12429 BURTON PL

Year	Uses	Source
1970	JACUZZI WHIRLPOOL BATH DIST	Pacific Telephone
	JACUZZI WHIRLPOOL BATH DIST	Pacific Telephone

BURTON ST

12329 BURTON ST

Year	Uses	Source
2008	JETTA STUDIO RENTALS	Cole Information Services
2006	JOHNSON Maxwell	Haines Company, Inc.
	JOHNSON Maxwell	Haines Company, Inc.
	JOHNSON Maxwell	Haines Company, Inc.

FINDINGS

Year	Uses	Source
2001	JOHNSON Bob	Haines & Company, Inc.
	JOHNSON Bob	Haines & Company, Inc.
1980	JOHNSON BOB	Pacific Telephone
1976	Quigley Machinery Moving	Pacific Telephone

12333 BURTON ST

Year	Uses	Source
2006	a CAMPOS Jose	Haines Company, Inc.
2001	CHIR J	Haines & Company, Inc.
1980	CHIR WOO A	Pacific Telephone
1970	NATTEFORD JACK	Pacific Telephone
	NATTEFORD JACK	Pacific Telephone

12334 BURTON ST

Year	Uses	Source
2008	EDATA CREATOR	Cole Information Services
2006	a MANOYAN Grgor	Haines Company, Inc.
2001	FRY Allan	Haines & Company, Inc.
1980	FRY SYBLE	Pacific Telephone
	FRY ALLAN	Pacific Telephone

12337 BURTON ST

Year	Uses	Source
2006	HUITINKJohn C	Haines Company, Inc.
2001	HUITNK John C	Haines & Company, Inc.
1980	HUITINK JOHN C	Pacific Telephone

12343 BURTON ST

Year	Uses	Source
2006	a RODRIGUEZ Canmen	Haines Company, Inc.
2001	MAGANTE Lydia	Haines & Company, Inc.
1980	DE STEFANO JOS	Pacific Telephone

12344 BURTON ST

Year	Uses	Source
2006	PADUA Josephine	Haines Company, Inc.
	a SEEPING Manuel	Haines Company, Inc.
2001	SEEPING Manuel	Haines & Company, Inc.
1980	HINIKER THOS M	Pacific Telephone

FINDINGS

12349 BURTON ST

Year	Uses	Source
2006	a MELKONYANAram	Haines Company, Inc.
2001	WILSON Robert	Haines & Company, Inc.
1970	SEVERIN MICHAEL	Pacific Telephone
	SEVERIN MICHAEL	Pacific Telephone

12352 BURTON ST

Year	Uses	Source
2006	a POLITZER Wayne	Haines Company, Inc.
2001	POLITZER Wayne	Haines & Company, Inc.
1980	POLITZER WAYNE	Pacific Telephone

12355 BURTON ST

Year	Uses	Source
2006	a GUTIERREZReijer	Haines Company, Inc.
	Manuel	Haines Company, Inc.
2001	GUTIERREZ Manuel	Haines & Company, Inc.

12400 BURTON ST

Year	Uses	Source
2006	a MEJIA Mario	Haines Company, Inc.
2001	MEJIA Eddie	Haines & Company, Inc.
1980	STAHL SIEGFRIED H	Pacific Telephone

12401 BURTON ST

Year	Uses	Source
2006	Pogos	Haines Company, Inc.
	o ZHAMKOCHYAN	Haines Company, Inc.
2001	WATTS Lilie	Haines & Company, Inc.

12408 BURTON ST

Year	Uses	Source
2006	a MORILLO Juan Jr	Haines Company, Inc.
2001	MORILLO Juan D	Haines & Company, Inc.
1980	HOULGATE SUZANNE	Pacific Telephone
	HOULGATE RICHARD	Pacific Telephone

12409 BURTON ST

Year	Uses	Source
2006	No Current Listing	Haines Company, Inc.

FINDINGS

Year	Uses	Source
2001	XXXX	Haines & Company, Inc.
1980	WASSEM DONALD V	Pacific Telephone

12417 BURTON ST

Year	Uses	Source
2006	GREGORY Leo	Haines Company, Inc.
2001	GREGORY Leo	Haines & Company, Inc.

12425 BURTON ST

Year	Uses	Source
2006	PHILLIPSJ E	Haines Company, Inc.
2001	PHILLIPS J E	Haines & Company, Inc.
1980	PHILLIPS J E	Pacific Telephone

12429 BURTON ST

Year	Uses	Source
2006	a DAY Kathy	Haines Company, Inc.
2001	DAY Jeffrey	Haines & Company, Inc.
1980	DE FRANCO LEONARD	Pacific Telephone
	DE FRANCO DIANA	Pacific Telephone
1970	DE FRANCO LEONARD	Pacific Telephone
	DE FRANCO LEONARD	Pacific Telephone

BURTON WAY

12329 BURTON WAY

Year	Uses	Source
1991	Jdhnson Bobbie	Pacific Bell
	Johnson Bob & Ann	Pacific Bell
	Johnson Bob	Pacific Bell
	Johnson Bob	Pacific Bell
1985	Johnson Bob	Pacific Bell
	Johnson Bob	Pacific Bell
1975	Johnson Bob	Pacific Telephone
	QUIGLEY MACHINERY MOVING	Pacific Telephone

12333 BURTON WAY

Year	Uses	Source
1985	Chir Woo A	Pacific Bell

FINDINGS

12334 BURTON WAY

Year	Uses	Source
1985	Fry T	Pacific Bell
	Fry Syble	Pacific Bell
	Fry Allan	Pacific Bell
1975	Fry Syble	Pacific Telephone

12337 BURTON WAY

Year	Uses	Source
1985	Huitink John C	Pacific Bell
1975	Pollino John J	Pacific Telephone

12343 BURTON WAY

Year	Uses	Source
1975	Mathes Paul	Pacific Telephone
	De Stefano Jos	Pacific Telephone

12344 BURTON WAY

Year	Uses	Source
1991	Hiniker Thos M	Pacific Bell
1985	Hiniker Thos M	Pacific Bell
1975	Louwerens Chas	Pacific Telephone

12352 BURTON WAY

Year	Uses	Source
1991	Polilser Wayne	Pacific Bell
1985	Politzer Wayne	Pacific Bell
1975	Politzer Wayne	Pacific Telephone

12355 BURTON WAY

Year	Uses	Source
1975	Owens Charlotte J RN	Pacific Telephone

12400 BURTON WAY

Year	Uses	Source
1985	Stahl Siegfried H	Pacific Bell
1975	Stahl Siegfried H	Pacific Telephone

12401 BURTON WAY

Year	Uses	Source
1975	Schultz Anthony	Pacific Telephone

FINDINGS

12408 BURTON WAY

Year	Uses	Source
1985	Houlgate Richard	Pacific Bell
	Houlgate Suzanne	Pacific Bell
1975	Houlgate Richard	Pacific Telephone
	Houlgate Suzanne	Pacific Telephone

12409 BURTON WAY

Year	Uses	Source
1991	Wassem Jeff DOS S OOE Ohive Av A b	Pacific Bell
	Wasser A	Pacific Bell
	Wassem Donald V	Pacific Bell
1985	Wassem Donald V	Pacific Bell
	Wassem D V	Pacific Bell
1975	Wassem Donald V	Pacific Telephone

12417 BURTON WAY

Year	Uses	Source
1991	Gregory Len	Pacific Bell
1985	Gregory Leo	Pacific Bell
1975	Gregory Leo	Pacific Telephone

12425 BURTON WAY

Year	Uses	Source
1991	Phillips J E	Pacific Bell
1985	Phillips J E	Pacific Bell
1975	Phillips Joyce E	Pacific Telephone

12429 BURTON WAY

Year	Uses	Source
1985	De France Leonard	Pacific Bell
1975	De Franco Leonard	Pacific Telephone

E PEORIA ST

8345 E PEORIA ST

Year	Uses	Source
1960	HULL COLBURN H	Pacific Telephone
1957	HULL COLBURN H	Pacific Telephone

FINDINGS

8351 E PEORIA ST

Year	Uses	Source
1960	HARDIN BARTON	Pacific Telephone
1957	HARDIN BARTON	Pacific Telephone

8368 E PEORIA ST

Year	Uses	Source
1966	TANONS C M	Pacific Telephone
1960	TANONS C M	Pacific Telephone
1957	TANONS C M	Pacific Telephone

8384 E PEORIA ST

Year	Uses	Source
1960	LAMBE A	Pacific Telephone
1957	LAMBE A	Pacific Telephone

8454 E PEORIA ST

Year	Uses	Source
1966	MORGAN VEON	Pacific Telephone
	MORGAN VIRGINIA	Pacific Telephone

8460 E PEORIA ST

Year	Uses	Source
1966	COLBY NANCY	Pacific Telephone

8477 E PEORIA ST

Year	Uses	Source
1960	MERRELL LILLIAN C MRS	Pacific Telephone

PEORIA AVE

10701 PEORIA AVE

Year	Uses	Source
1933	Lew Ann V clk	Los Angeles Directory Co.

PEORIA ST

12348 PEORIA ST

Year	Uses	Source
1975	Slott Milton N	Pacific Telephone
1970	SLOTT MILTON N	Pacific Telephone
	SLOTT MILTON N	Pacific Telephone

FINDINGS

Year	Uses	Source
1970	ROSS MILDRED	Pacific Telephone
	ROSS MILDRED	Pacific Telephone
1962	ROSS MILDRED	Pacific Telephone
	SLOTT MILTON N	Pacific Telephone
1956	SLOTT MILTON N	Pacific Telephone
	ROSS MILDRED	Pacific Telephone

12354 PEORIA ST

Year	Uses	Source
2006	e SANTIZO Hilda	Haines Company, Inc.
	HUERTASIMvia	Haines Company, Inc.
2001	GARALDE Jose	Haines & Company, Inc.
	GERALD Joseph	Haines & Company, Inc.
1991	Takemoto Frank	Pacific Bell
	Takemoto J PCty	Pacific Bell
	Takemura Lian C	Pacific Bell
1985	Takemoto Frank	Pacific Bell
1980	TAKEMOTO FRANK	Pacific Telephone
1975	Bradley D R Geo	Pacific Telephone
1962	WRIGHT R C	Pacific Telephone
1956	REMINGTON ALLAN P	Pacific Telephone

12360 PEORIA ST

Year	Uses	Source
2006	LORES Victor	Haines Company, Inc.
2001	LORES Victor	Haines & Company, Inc.
1995	Zinda Don & Helen	Pacific Bell
1991	Zinda Don & Helen	Pacific Bell
	Zinder Han	Pacific Bell
1985	Zinda Don & Helen	Pacific Bell
1980	ZINDA DON & HELEN	Pacific Telephone
1975	Greene Danl C	Pacific Telephone
1970	KAUTZ HERMAN R	Pacific Telephone
	KAUTZ HERMAN R	Pacific Telephone
1962	KAUTZ HERMAN R	Pacific Telephone
1956	KAUTZ HERMAN R	Pacific Telephone

FINDINGS

RHODES

8200 RHODES

Year	Uses	Source
1975	Zauss Marvin L	Pacific Telephone

8211 RHODES

Year	Uses	Source
1975	Soltes E	Pacific Telephone

8212 RHODES

Year	Uses	Source
1975	Cywinski Florence Mrs	Pacific Telephone

8218 RHODES

Year	Uses	Source
1975	Dollinger Dianne	Pacific Telephone

8219 RHODES

Year	Uses	Source
1975	Phillips Dorothy	Pacific Telephone

RHODES AVE

8200 RHODES AVE

Year	Uses	Source
2006	ZAUSSMarvin L	Haines Company, Inc.
2001	ZAUSS Marvin L	Haines & Company, Inc.
1991	Zauss Marvin L	Pacific Bell
1985	Zauss Marvin L	Pacific Bell

8201 RHODES AVE

Year	Uses	Source
2006	PURANA Duaogpom	Haines Company, Inc.
2001	METRIYAKOOL Somkid	Haines & Company, Inc.

8206 RHODES AVE

Year	Uses	Source
2006	No Current Listing	Haines Company, Inc.
2001	XXXX	Haines & Company, Inc.
1995	Gutkewski Jeroy S	Pacific Bell
1991	Gutman B Van Nuys	Pacific Bell

FINDINGS

Year	Uses	Source
1991	Gutkowski Jerzy S	Pacific Bell
	Gutman B Van Nuys	Pacific Bell
	Gutman Jerome	Pacific Bell
	Gutman Jas K Sun	Pacific Bell
	Gutman FJ	Pacific Bell
1985	Gutkowski Jerzy S	Pacific Bell
	Gutman F J	Pacific Bell

8207 RHODES AVE

Year	Uses	Source
2006	a PETOYAN Luder	Haines Company, Inc.
2001	PETOYAN Luder	Haines & Company, Inc.

8211 RHODES AVE

Year	Uses	Source
2006	SOLTES Esther	Haines Company, Inc.
2001	SOLTES E	Haines & Company, Inc.
1995	Soltes E	Pacific Bell
1991	Soltes Judy	Pacific Bell
	Soltes E	Pacific Bell
1985	Soltes E	Pacific Bell

8212 RHODES AVE

Year	Uses	Source
2006	KHLOYIANMIsak	Haines Company, Inc.
2001	KHLOYIAN Misak	Haines & Company, Inc.

8218 RHODES AVE

Year	Uses	Source
2006	DOLLINGER Dianne	Haines Company, Inc.
2001	DOLLINGER Dianne	Haines & Company, Inc.
1985	Le Duke Geraldine	Pacific Bell

8219 RHODES AVE

Year	Uses	Source
2006	PHILLIPS Dorothy	Haines Company, Inc.
2001	PHILLIPS Dorothy	Haines & Company, Inc.
1995	Phillips Dorothy	Pacific Bell
1991	Phillips Dorothy	Pacific Bell
	Phillips Douglas E	Pacific Bell

Year	Uses	Source
1991	Phillips Douglas J	Pacific Bell
1985	Phillips Dorothy	Pacific Bell

ROSCOE BLVD

12348 ROSCOE BLVD

Year	Uses	Source
2006	MUNOZCOdian	Haines Company, Inc.
2001	LIFLAND Victor	Haines & Company, Inc.
1995	Lifland Victor	Pacific Bell
1991	Lifsay T	Pacific Bell
	Lifland Victor	Pacific Bell
1985	Liftand Victor	Pacific Bell
1980	LIFLAND VICTOR SUN VALLEY	Pacific Telephone

12351 ROSCOE BLVD

Year	Uses	Source
2006	e DACUAG Femando	Haines Company, Inc.
2001	SUNGGSAKIT Somsap	Haines & Company, Inc.
1995	l Lucksanalamai T	Pacific Bell
	Lucks P	Pacific Bell
1980	WROUGHT IRON RAIL & GATES	Pacific Telephone
	MCDONALD DARIUS	Pacific Telephone

12354 ROSCOE BLVD

Year	Uses	Source
2006	LOPEZ Consuelo	Haines Company, Inc.
	ROMAN Aracell	Haines Company, Inc.
	VILLAGOMEZJavier	Haines Company, Inc.
2001	BARAJAS Pablo	Haines & Company, Inc.
1980	GRAY SOPHIE	Pacific Telephone
1975	Gray Sophie	Pacific Telephone

12400 ROSCOE BLVD

Year	Uses	Source
2006	MUNOZSussy	Haines Company, Inc.
	BANGE Lil Ian	Haines Company, Inc.
2001	BANGE Lilian	Haines & Company, Inc.

FINDINGS

12412 ROSCOE BLVD

Year	Uses	Source
2006	Panos	Haines Company, Inc.
	HAROUTUNIAN	Haines Company, Inc.
2001	KELLY Shirley	Haines & Company, Inc.
1991	Kelly Frank L	Pacific Bell
1985	Kelly Frank L	Pacific Bell
1980	KELLY FRANK L SUN VALLEY	Pacific Telephone

12418 ROSCOE BLVD

Year	Uses	Source
2006	a PEREZTmateo	Haines Company, Inc.
2001	PEREZ Timoteo	Haines & Company, Inc.
1985	Stewart Jack D	Pacific Bell
1980	STEWART JACK D	Pacific Telephone

12426 ROSCOE BLVD

Year	Uses	Source
2006	DIAZ Isaac	Haines Company, Inc.
	AKOPYAN Edgar	Haines Company, Inc.
2001	VASQUEZ Lucy	Haines & Company, Inc.
	AKOPYAN Edgar	Haines & Company, Inc.

12440 ROSCOE BLVD

Year	Uses	Source
2013	CARS 4 U	Cole Information Services
2008	CARS 4 U	Cole Information Services
	AUTO PROS INC	Cole Information Services
	REDLINE SPEED CENTER	Cole Information Services
2006	CARS 4 U	Haines Company, Inc.
2001	CARS4U REDLINE SPEED CENTER	Haines & Company, Inc.
1991	Burger Basket	Pacific Bell
1985	Burger D G His	Pacific Bell
	Burger Basket	Pacific Bell
1980	JACK-IN-THE-BOX FAMILY RESTAURANTS ADMINISTRATIVE OFC VERNON	Pacific Telephone
1975	Sun Valley	Pacific Telephone

FINDINGS

12450 ROSCOE BLVD

Year	Uses	Source
2013	JEDS GAS STATION	Cole Information Services
2008	SANG NGEONON VICHAI	Cole Information Services
	JEDS GAS STATION	Cole Information Services
2006	JEDSGASSTATION 18 504 4 MS	Haines Company, Inc.
2001	JEDS GAS STATION	Haines & Company, Inc.
1980	STATE OIL NO 33	Pacific Telephone

12500 ROSCOE BLVD

Year	Uses	Source
2013	MEXICAN STATION	Cole Information Services
2006	PERRYS MEXICAN	Haines Company, Inc.
	RESTAURANT	Haines Company, Inc.
2001	PERRYS MEXICAN REST	Haines & Company, Inc.
1995	Perrys Mexican Restaurant	Pacific Bell
1991	Perrys Mexlcan Restaurant	Pacific Bell
	Perrys Painting & Wall Papering Contractors	Pacific Bell
	Persak K .7624720	Pacific Bell
	Persaud Chrisna	Pacific Bell
1985	Perrys Mexican Restaurant	Pacific Bell
1980	PERRY S FOOD AND GAME	Pacific Telephone
1975	Cliffs Texaco	Pacific Telephone

12522 ROSCOE BLVD

Year	Uses	Source
2008	M & M MAID SERVICES	Cole Information Services
2006	ARENALESSar	Haines Company, Inc.
	AYALANUNEZ	Haines Company, Inc.
	Constando CIFUENTES Rosa	Haines Company, Inc.
	Undo DELCARMEN	Haines Company, Inc.
	MENJIMA MA	Haines Company, Inc.
	FRANCISCO Jananm So	Haines Company, Inc.
	LOPEZSoeia Letida	Haines Company, Inc.
	LOZANO Zulema	Haines Company, Inc.
	M&MMAID	Haines Company, Inc.
	SERVICES MEDINA Rogello	Haines Company, Inc.
	MENDOZAJose C	Haines Company, Inc.
	MENDOZAMe Lssa	Haines Company, Inc.

FINDINGS

Year	Uses	Source
2006	MENDOZARosa	Haines Company, Inc.
	MENOOZARut	Haines Company, Inc.
	MENOOZAWagnw	Haines Company, Inc.
	MORAN Lorena	Haines Company, Inc.
	ORNELAS Lourdes C	Haines Company, Inc.
	PADILLADEMERCA	Haines Company, Inc.
	Rodo RAMIREZ Diana	Haines Company, Inc.
	RODRIGUEZSalnador	Haines Company, Inc.
	A VELEZJose	Haines Company, Inc.
	YANES Patric Ia	Haines Company, Inc.
	APARTMENTS AGUSTIN Erick	Haines Company, Inc.
2001	APARTMENTS	Haines & Company, Inc.
	ANTONIO Orlando	Haines & Company, Inc.
	ARENALES Sara	Haines & Company, Inc.
	AYALA Nunez Constancio	Haines & Company, Inc.
	GARCIA Jose	Haines & Company, Inc.
	LINARES Luis E	Haines & Company, Inc.
	M & M MAID SERVICES	Haines & Company, Inc.
	MARTINEZ Julio	Haines & Company, Inc.
	QUINTANILLE Zoila	Haines & Company, Inc.
	TABASH Edward	Haines & Company, Inc.
	VALLADARES Inosencia	Haines & Company, Inc.
1995	Diaz Elizabeth & Gerardo	Pacific Bell
	O Diaz Emillo	Pacific Bell
	Jones Lawrence W	Pacific Bell
	i Jones Lee Roy	Pacific Bell
	Martinez E	Pacific Bell
	Navarrete Antonio	Pacific Bell
	Rives B	Pacific Bell
1991	Galaviz Maria	Pacific Bell
	Latorre Silvia	Pacific Bell
1985	Ray J M	Pacific Bell
	Riggio Frances	Pacific Bell
	Tpran Loan	Pacific Bell
1980	RAY J M	Pacific Telephone
	WHITE D D	Pacific Telephone
	ANCHONDO RENE & GLORIE	Pacific Telephone
	FAUCI DONNA	Pacific Telephone

FINDINGS

Year	Uses	Source
1980	FLORES M C	Pacific Telephone
1975	Donaldson Jack	Pacific Telephone
	Gibb Chas Jr	Pacific Telephone
	Wall K E	Pacific Telephone

12534 ROSCOE BLVD

Year	Uses	Source
2006	APARTMENTS	Haines Company, Inc.
	ALFARORma M	Haines Company, Inc.
	AYALASara	Haines Company, Inc.
	BERNALTeresa	Haines Company, Inc.
	Dejasus	Haines Company, Inc.
	BRENES Ogaldes	Haines Company, Inc.
	Oscar BRENES Oscar	Haines Company, Inc.
	CALDERONJuan	Haines Company, Inc.
	Jose CANTUA Mada	Haines Company, Inc.
	CORONA Josefina	Haines Company, Inc.
	GARCIA Damads	Haines Company, Inc.
	GUZMAN El Iseo	Haines Company, Inc.
	HERERRARogelo	Haines Company, Inc.
	LARADamaras	Haines Company, Inc.
	LARAJuan C	Haines Company, Inc.
	MARTINEZJosetna	Haines Company, Inc.
	ORDONEZAna	Haines Company, Inc.
	PEREZ LEMUS	Haines Company, Inc.
	Mercedes VALENCIAAlejandra	Haines Company, Inc.
	VASQUEZ Rolando	Haines Company, Inc.
2001	APARTMENTS	Haines & Company, Inc.
	ALFARO Miguel A	Haines & Company, Inc.
	ALFARO Rosa M	Haines & Company, Inc.
	CONTRERAS Maria C	Haines & Company, Inc.
	GUZMAN Eliseo	Haines & Company, Inc.
	HERERRA Manuel	Haines & Company, Inc.
	KOTICK Ronald	Haines & Company, Inc.
	MELENDEZ Oscar	Haines & Company, Inc.
	SOLIZ Fidelino	Haines & Company, Inc.
1995	Cases S	Pacific Bell
	Martinez Ireneo	Pacific Bell
	Soto Alexander A	Pacific Bell

FINDINGS

Year	Uses	Source
1991	Albertson D	Pacific Bell
	Albertson Danielle Melissa	Pacific Bell
	Galulyan Kaitsak	Pacific Bell
	Galulyanlevon	Pacific Bell
	Kessinger William & Jody	Pacific Bell
	Kessinger William & Jody	Pacific Bell
	Kessington T	Pacific Bell
1985	Bobic Elizabeth	Pacific Bell
	Kim A	Pacific Bell
	Klavons Allen	Pacific Bell
	Klawer Albert A	Pacific Bell
	Lee Wong Young	Pacific Bell
	Rosh Shamoon Zineh	Pacific Bell
	Woo Sang Keun	Pacific Bell
	OConnor Jody	Pacific Bell
1980	ALCARAS ANTONIO	Pacific Telephone
	CHARVANOWSKI ROSE	Pacific Telephone
	KLAVONS DAVID REV	Pacific Telephone
	RANIGA KANTI L	Pacific Telephone
	ROSH SHAMOON ZINEH	Pacific Telephone
	VALENCIA LUPE	Pacific Telephone
	BENITEZ SONIA	Pacific Telephone
	BOBIC AUREL	Pacific Telephone
	SONSTENG REAUL P	Pacific Telephone
1975	Flores G	Pacific Telephone

ROSCOE I

12400 ROSCOE I

Year	Uses	Source
1995	Ramos Maria Griselda	Pacific Bell

ROSCOE PL

12335 ROSCOE PL

Year	Uses	Source
1975	Holten Paul Jas	Pacific Telephone
1970	HOLTEN PAUL JAS	Pacific Telephone
	HOLTEN PAUL JAS	Pacific Telephone

Year	Uses	Source
1962	HOLTEN PAUL JAS	Pacific Telephone
1956	HOLTEN PAUL J MRS	Pacific Telephone

12336 ROSCOE PL

Year	Uses	Source
1975	Montgomery Dorothy Lee Miss	Pacific Telephone
1970	MONTGOMERY DOROTHY LEE MISS	Pacific Telephone
	MONTGOMERY DOROTHY LEE MISS	Pacific Telephone
1962	MONTGOMERY DOROTHY LEE MISS	Pacific Telephone
1956	MONTGOMERY DOROTHY LEE MISS	Pacific Telephone

12341 ROSCOE PL

Year	Uses	Source
1975	Tobias Murray R	Pacific Telephone
1970	TOBIAS MURRAY R	Pacific Telephone
	TOBIAS MURRAY R	Pacific Telephone
	TOBIAS MURRAY R	Pacific Telephone
	TOBIAS MURRAY R	Pacific Telephone
1962	TOBIAS MURRAY R	Pacific Telephone
1956	TOBIAS MURRAY R	Pacific Telephone

12342 ROSCOE PL

Year	Uses	Source
1970	HALL WM L	Pacific Telephone
	HALL WM L	Pacific Telephone
1962	HALL WM L	Pacific Telephone
1956	OPPERMAN FRED G	Pacific Telephone

12348 ROSCOE PL

Year	Uses	Source
1975	Lifland Victor	Pacific Telephone
1970	LIFLAND VICTOR	Pacific Telephone
	LIFLAND VICTOR	Pacific Telephone
1962	LIFLAND VICTOR	Pacific Telephone
1956	KARPF SIDNEY	Pacific Telephone

12351 ROSCOE PL

Year	Uses	Source
1962	MCDONALD DARIUS H	Pacific Telephone
1956	MCDONALD DARIUS H	Pacific Telephone

FINDINGS

12354 ROSCOE PL

Year	Uses	Source
1970	GANZ ARNOLD	Pacific Telephone
	GANZ ARNOLD	Pacific Telephone
1956	NAMM STUART	Pacific Telephone

12400 ROSCOE PL

Year	Uses	Source
1975	Collins Kathy	Pacific Telephone
1956	COLLINS JOHN E	Pacific Telephone

12412 ROSCOE PL

Year	Uses	Source
1975	Kelly Frank L	Pacific Telephone
	Kelly E J	Pacific Telephone
	Kelly Donna	Pacific Telephone
1970	KELLY FRANK L	Pacific Telephone
	KELLY FRANK L	Pacific Telephone
1962	KELLY FRANK L	Pacific Telephone
1956	KELLY FRANK L	Pacific Telephone

12418 ROSCOE PL

Year	Uses	Source
1975	Stewart Jack D	Pacific Telephone
1962	STEWART JACK D	Pacific Telephone
1956	MYERS HOWARD V	Pacific Telephone

12426 ROSCOE PL

Year	Uses	Source
1962	HATAMIYA GEO K	Pacific Telephone
1956	HATAMIYA GEO K	Pacific Telephone

12440 ROSCOE PL

Year	Uses	Source
1995	Jeds Burger Basket	Pacific Bell
1962	DYKES LORENA	Pacific Telephone
	DYKES P M	Pacific Telephone
1956	KATO FRANK M	Pacific Telephone

FINDINGS

12450 ROSCOE PL

Year	Uses	Source
1970	BARNES JAS L UNION OIL DEALER	Pacific Telephone
	BARNES JAS L UNION OIL DEALER	Pacific Telephone
1962	GODDARD RAYMOND H	Pacific Telephone

12500 ROSCOE PL

Year	Uses	Source
1980	STEVE S TEXACO SERVICE	Pacific Telephone
1970	STEVE S TEXACO SERVICE	Pacific Telephone
	STEVE S TEXACO SERVICE	Pacific Telephone

12522 ROSCOE PL

Year	Uses	Source
1975	Krueger Kenneth P	Pacific Telephone
	Rapley Jas C	Pacific Telephone
	Chapman Stanford	Pacific Telephone
	Gutierrez Laura	Pacific Telephone
1970	STILFIELD TERRY	Pacific Telephone
	BILBEE JEANNE	Pacific Telephone
	CAGNO ANTHONY	Pacific Telephone
	CEFARATT JOHN	Pacific Telephone
	DALY HAZEL MRS	Pacific Telephone
	EICHMAN NORBERT	Pacific Telephone
	ENGELEN JEROME	Pacific Telephone
	ERDMAN JACKSON E	Pacific Telephone
	FIGUERAS WALTER	Pacific Telephone
	HAWLEY JOS E	Pacific Telephone
	HINSDALE ALAN O MRS	Pacific Telephone
	HOBACK DONALD	Pacific Telephone
	JACKSON THOS F	Pacific Telephone
	PIVA JOS A	Pacific Telephone
	STILFIELD TERRY	Pacific Telephone
	BILBEE JEANNE	Pacific Telephone
	CAGNO ANTHONY	Pacific Telephone
	CEFARATT JOHN	Pacific Telephone
	DALY HAZEL MRS	Pacific Telephone
	EICHMAN NORBERT	Pacific Telephone
	ENGELEN JEROME	Pacific Telephone
	ERDMAN JACKSON E	Pacific Telephone

FINDINGS

Year	Uses	Source
1970	FIGUERAS WALTER	Pacific Telephone
	HAWLEY JOS E	Pacific Telephone
	HINSDALE ALAN O MRS	Pacific Telephone
	HOBACK DONALD	Pacific Telephone
	JACKSON THOS F	Pacific Telephone
	PIVA JOS A	Pacific Telephone

12534 ROSCOE PL

Year	Uses	Source
1975	Field M M	Pacific Telephone
	Graybehl Isabelle L	Pacific Telephone
	Hawke J L	Pacific Telephone
	Kamenos Martin B	Pacific Telephone
	Kennedy M R	Pacific Telephone
	Klavons David Rev	Pacific Telephone
	Miguel Nereldo M	Pacific Telephone
	Didier Danl	Pacific Telephone
	Casas Nelson N	Pacific Telephone
1970	MONROE VICTOR	Pacific Telephone
	ABCO CLEANING SERVICE	Pacific Telephone
	CORNEA THOS	Pacific Telephone
	FRIEDMAN ROBT H	Pacific Telephone
	GOLDSTEIN JAS	Pacific Telephone
	HERRON REX L	Pacific Telephone
	KLAVONS DAVID REV	Pacific Telephone
	LAROSE RAYMOND	Pacific Telephone
	LEHMAN DAVID	Pacific Telephone
	MALKIN RUDY	Pacific Telephone
	NICHOLSON JOHNIE	Pacific Telephone
	TIMKO ALBERTA	Pacific Telephone
	YARBROUGH JOHN	Pacific Telephone
	ABCO CLEANING SERVICE	Pacific Telephone
	CORNEA THOS	Pacific Telephone
	FRIEDMAN ROBT H	Pacific Telephone
	GOLDSTEIN JAS	Pacific Telephone
	HERRON REX L	Pacific Telephone
	KLAVONS DAVID REV	Pacific Telephone
	LAROSE RAYMOND	Pacific Telephone
	LEHMAN DAVID	Pacific Telephone

Year	Uses	Source
1970	MALKIN RUDY	Pacific Telephone
	NICHOLSON JOHNIE	Pacific Telephone
	TIMKO ALBERTA	Pacific Telephone
	YARBROUGH JOHN	Pacific Telephone
	KUPKE JAS SUN VALLEY	Pacific Telephone
	LEE EUSTACE SUN VALLEY	Pacific Telephone
	KUPKE JAS SUN VALLEY	Pacific Telephone
	LEE EUSTACE SUN VALLEY	Pacific Telephone
	CROSS ROBT	Pacific Telephone
	CROSS ROBT	Pacific Telephone
	MONROE VICTOR	Pacific Telephone

W WHITSETT AVE

8240 W WHITSETT AVE

Year	Uses	Source
1929	Marriott Henry A Ruth chauf	Los Angeles Directory Co.

WHITSET AVE

8220 WHITSET AVE

Year	Uses	Source
1929	Postlethwaite Edgar A Rose tires	Los Angeles Directory Co.
	r	Los Angeles Directory Co.

WHITSETT

8203 WHITSETT

Year	Uses	Source
1933	HOUSE Chas J Christina cigarmkr	Los Angeles Directory Co.

8204 WHITSETT

Year	Uses	Source
1937	Fantin Lena emp Ralph E Spriggs	Los Angeles Directory Co.

8211 WHITSETT

Year	Uses	Source
1942	Browning Lucia Mrs ofc mgr Florence Emp Agency	Los Angeles Directory Co.

8224 WHITSETT

Year	Uses	Source
1933	Flikeid Sigwald Laura P slsmn	Los Angeles Directory Co.

8227 WHITSETT

Year	Uses	Source
1933	SMITH Marshall W Mabel stm eng LAG & E COrp	Los Angeles Directory Co.

8233 WHITSETT

Year	Uses	Source
1937	PARKS Geo garagemn	Los Angeles Directory Co.

8258 WHITSETT

Year	Uses	Source
1929	Creps Archie S lab LAG & E Corp	Los Angeles Directory Co.

WHITSETT AVE

8200 WHITSETT AVE

Year	Uses	Source
2008	PACIFIC RIM INSTALLATIONS	Cole Information Services
2006	o ADKINSAnthony	Haines Company, Inc.
	ADKINSAnony	Haines Company, Inc.
2001	SHIBATA Masaru	Haines & Company, Inc.
1980	PETERSON RICHARD	Pacific Telephone

8201 WHITSETT AVE

Year	Uses	Source
2006	KARAGEZYAN Anal	Haines Company, Inc.
	VERAHi ANGarabed	Haines Company, Inc.
2001	VERAHIAN Garabed	Haines & Company, Inc.
	KARAGEZYAN Anait	Haines & Company, Inc.
1995	Sarkisyan Sarkis	Pacific Bell
	i Sarkisyan Sarkis	Pacific Bell
1991	Sarkisyan Sarkis	Pacific Bell
1985	Senge Paul E	Pacific Bell
1980	SENGE PAUL E	Pacific Telephone
1956	FELTON ROLAND E	Pacific Telephone

FINDINGS

8203 WHITSETT AVE

Year	Uses	Source
1942	GARDNER Merle H sta atdt	Los Angeles Directory Co.
	Van Sant Wm H Leona aircrftwkr	Los Angeles Directory Co.
1929	HOUSE Chas J Christine cigar mfr	Los Angeles Directory Co.
1928	HOUSE CHAS J (CHRISTINA) H	Los Angeles Directory Co.

8204 WHITSETT AVE

Year	Uses	Source
1942	Fantin Aug Angelina cook	Los Angeles Directory Co.
1937	FONTAINE Gus	Los Angeles Directory Co.
1933	Larkin Francis L Agnes K lbrmn	Los Angeles Directory Co.
1929	Larkin Franklin clk	Los Angeles Directory Co.
1928	LARKIN FRANCIS L (AGNES) IMBRMN H	Los Angeles Directory Co.

8206 WHITSETT AVE

Year	Uses	Source
2006	a DUGGANRobt	Haines Company, Inc.
2001	DUGGAN Robt	Haines & Company, Inc.
1995	Duggan Robt	Pacific Bell
1991	Duggan Robt	Pacific Bell
1985	Duggan Robt	Pacific Bell

8207 WHITSETT AVE

Year	Uses	Source
1942	HARRIGAN Thos J Myrtle stmtfr	Los Angeles Directory Co.
	HARRIGAN Thos	Los Angeles Directory Co.
1937	Harrigan Mary E Mrs	Los Angeles Directory Co.
	Harrigan Thos J stmftr	Los Angeles Directory Co.
1933	Harrigan Mary E wid Thos	Los Angeles Directory Co.
	Harrigan Thos J oilwkr	Los Angeles Directory Co.
1929	Harrigan Thos J Mary steam ftr	Los Angeles Directory Co.
1928	HARRIGAN THOS (MARY E) COLLR H	Los Angeles Directory Co.
	HARRIGAN BERNARD A MTRMN R	Los Angeles Directory Co.
	HARRIGAN THOS J STMFTR R	Los Angeles Directory Co.

8209 WHITSETT AVE

Year	Uses	Source
2006	a MENJIVARIdalla	Haines Company, Inc.
2001	GONZALES Leopoldo	Haines & Company, Inc.
	MENJIVAR Mario	Haines & Company, Inc.

Year	Uses	Source
1991	Schwartz Philip	Pacific Bell
	Schwartz R	Pacific Bell
	Schwartz R	Pacific Bell
	Schwartz R	Pacific Bell
	Schwartz R	Pacific Bell
	Schwartz R	Pacific Bell
	Schwartz R	Pacific Bell
	Schwartz R	Pacific Bell
	Schwartz R	Pacific Bell
1985	Schwartz Philip	Pacific Bell
	Milgram R	Pacific Bell
	Milgram Judy	Pacific Bell
1980	SCHWARTZ PHILIP	Pacific Telephone
	MILGRAM JUDY	Pacific Telephone
1975	Schwartz Philip	Pacific Telephone
	Milgram Judy	Pacific Telephone
1970	MILGRAM CHAS	Pacific Telephone
	MILGRAM CHAS	Pacific Telephone
1962	MILGRAM CHAS	Pacific Telephone
1956	MILGRAM CHAS	Pacific Telephone

8211 WHITSETT AVE

Year	Uses	Source
1942	Browning Duncan L Lucia clk	Los Angeles Directory Co.
	Shortridge Gladys wid C M mgr Florence Employment Agency	Los Angeles Directory Co.
1937	Browning Duncan L Lucia carp	Los Angeles Directory Co.
1929	JACOBS V C Cecelia firemn	Los Angeles Directory Co.
1928	JACOBS VIRGIL (CECELIA) TILE STR H	Los Angeles Directory Co.

8212 WHITSETT AVE

Year	Uses	Source
2006	a GUZMAN Modesto	Haines Company, Inc.
2001	KURTZ V Wayne	Haines & Company, Inc.
1991	Kurtz V Wayne	Pacific Bell
1985	Kurtz V Wayne	Pacific Bell
1980	KURTZ V WAYNE	Pacific Telephone
1942	SMITH Alvin M Marie M mach	Los Angeles Directory Co.
1937	HARRIS Thos H Hazel lab	Los Angeles Directory Co.

FINDINGS

Year	Uses	Source
1933	HARRIS Thos H Hazel	Los Angeles Directory Co.
1929	Misemore Raymond Dorothy slsmn	Los Angeles Directory Co.
1928	HARRIS THOS H (HAZEL) MTRMN H	Los Angeles Directory Co.

8215 WHITSETT AVE

Year	Uses	Source
2006	CORNEJO Juo	Haines Company, Inc.
2001	MORAN Samuel	Haines & Company, Inc.
1995	Willis GA	Pacific Bell
1991	Willis G A	Pacific Bell
	Willis Gary & Pamela	Pacific Bell
1985	Willis Wayne S	Pacific Bell
1980	WILLIS WAYNE S	Pacific Telephone
1970	WILLIS WAYNE S	Pacific Telephone
	WILLIS WAYNE S	Pacific Telephone
1962	WILLIS WAYNE S	Pacific Telephone
1956	WILLIS WAYNE S	Pacific Telephone
1937	COOK Forrest Eschel mtrnmn	Los Angeles Directory Co.
1933	COOKE Forrest S Eshel E cond	Los Angeles Directory Co.
1929	COOKE Forrest S Eshell cond	Los Angeles Directory Co.
1928	COOKE FORREST (ETHEL) COND H	Los Angeles Directory Co.

8216 WHITSETT AVE

Year	Uses	Source
1942	Fontin Ross carp	Los Angeles Directory Co.
	Rodecker Frank M Matilda clk	Los Angeles Directory Co.
1937	Jantin Roes	Los Angeles Directory Co.
1933	FENTON Ross W steelwkr	Los Angeles Directory Co.
1929	FENTON Ross Angie steel wkr	Los Angeles Directory Co.
1928	FANTIN ROSS (ANGLE) IRONWKR H	Los Angeles Directory Co.

8218 WHITSETT AVE

Year	Uses	Source
2006	BAGUET Julia G	Haines Company, Inc.
2001	BAQUET Julia G	Haines & Company, Inc.
1995	Baquet Julia G	Pacific Bell
1991	Baquet Julia G	Pacific Bell
	BAR AS S OCIATION OF THE S F VALLE Y LAW YE R RE FE RRAL S E RVICE 7868408	Pacific Bell

FINDINGS

Year	Uses	Source
1985	BAR AIDS	Pacific Bell
	Baquet Julia G	Pacific Bell
1980	BAQUET JULIA G	Pacific Telephone

8220 WHITSETT AVE

Year	Uses	Source
1942	Postlethwaite Chas A clk	Los Angeles Directory Co.
	Postlethwaite Allen E Rose	Los Angeles Directory Co.
1933	Postlethwaite Allen tires	Los Angeles Directory Co.
1929	Lauer Emory T Eliz mach opr	Los Angeles Directory Co.
1928	POSTHWAITE E ALLEN (ROSE) TIRE REPR H	Los Angeles Directory Co.

8221 WHITSETT AVE

Year	Uses	Source
2006	BLUM Katherine	Haines Company, Inc.
2001	BLUM Katherine	Haines & Company, Inc.
1980	BLUM K C	Pacific Telephone
	GOLDING E	Pacific Telephone
1975	Blum Katherine C	Pacific Telephone
	Golding Eleanor	Pacific Telephone
1962	BLUM KATHERINE C	Pacific Telephone
1956	BLUM KATHERINE C	Pacific Telephone
1942	Madigan Jas A Isabell mtrmn	Los Angeles Directory Co.
1937	Madigan Jas Bella elev opr	Los Angeles Directory Co.
1933	JOHNSON Theo Eve S slsmn	Los Angeles Directory Co.
	COOKE Horace E Hattie M	Los Angeles Directory Co.
	COOKE Raymond E Goldie	Los Angeles Directory Co.
1929	COOKE Horace E Hattie supt Central Ice & Cold Storage Co	Los Angeles Directory Co.
1928	COOKE HORACE E (HATTIE) FORMN H	Los Angeles Directory Co.

8223 WHITSETT AVE

Year	Uses	Source
1924	Couts Florence Mrs slswmn h	Los Angeles Directory Co.

8224 WHITSETT AVE

Year	Uses	Source
1942	Flikeid Sigwald Laura S slsmn	Los Angeles Directory Co.
1937	Flikeid Sigwald Laura	Los Angeles Directory Co.
1929	Flikerd Laura clk	Los Angeles Directory Co.

FINDINGS

Year	Uses	Source
1929	Flikerd Sigwald Laura milkmn	Los Angeles Directory Co.
1928	FLIKEID SOL SLSMN H	Los Angeles Directory Co.

8225 WHITSETT AVE

Year	Uses	Source
2006	MOGIVERN Jared	Haines Company, Inc.
2001	MCGIVERN Mike	Haines & Company, Inc.
1995	I Mc Givern Mike	Pacific Bell
	Mc Girr R	Pacific Bell
1991	Mc Givern Mike	Pacific Bell
1985	Mc Givem Mike	Pacific Bell
1962	MCGIVERN TED	Pacific Telephone
1956	MCGIVERN TED	Pacific Telephone

8227 WHITSETT AVE

Year	Uses	Source
1942	JOHNSON Eva Mrs	Los Angeles Directory Co.
	COOKE Horace Hattle	Los Angeles Directory Co.
1937	SMITH Alvin M Marie mach	Los Angeles Directory Co.
1933	SMITH Marion Mrs	Los Angeles Directory Co.
1929	COATS Cave J Florence lather	Los Angeles Directory Co.
1928	COUTS CAVE J (FLORENCE) LATHER H	Los Angeles Directory Co.

8228 WHITSETT AVE

Year	Uses	Source
1942	Brandt Rollin R Marjorie plater	Los Angeles Directory Co.
	HOUSER Alta wid Clarence	Los Angeles Directory Co.
1937	Irving Albt Vera tmstr	Los Angeles Directory Co.
1933	HOUSTON Wm A Myra C chauf	Los Angeles Directory Co.
1929	Stockwell Chas E lab r	Los Angeles Directory Co.
	Roderick Edw S Maggie lab h	Los Angeles Directory Co.
1928	TAYLOR EARL (RUBY) MECH H	Los Angeles Directory Co.

8230 WHITSETT AVE

Year	Uses	Source
2008	RUBENS JEWELRY REPAIR	Cole Information Services
	YOUNG MILLIONAIRE ENTERPRISES	Cole Information Services
2006	CHIBUKCHIAN Ruben	Haines Company, Inc.
2001	CHIBUKCHIAN Ruben	Haines & Company, Inc.
1995	C: hiibnik Maurice	Pacific Bell

FINDINGS

Year	Uses	Source
1995	IChlbakchian Ruben	Pacific Bell
1991	Chibukchian Andranik	Pacific Bell
1956	YOUNG CHAS	Pacific Telephone

8231 WHITSETT AVE

Year	Uses	Source
1942	BOOTH Francis L Violet wtchmn	Los Angeles Directory Co.
1937	Landers Albt W Daisy driver Swift & Co	Los Angeles Directory Co.
1933	WATERS Wm J Mary J	Los Angeles Directory Co.
	WATERS Leonard A clk	Los Angeles Directory Co.
	Dahlstein Steph A Irene M carmn SP Co	Los Angeles Directory Co.
1929	MERCER Ray E Eliz auto electn	Los Angeles Directory Co.
1928	MCREYNOLDS FANNIE A (WID MILTON) H	Los Angeles Directory Co.
	MCREYNOLDS LILLIAN TILEWKR R	Los Angeles Directory Co.
	SMITH MARTHA (WID OREN) TILE WKR R	Los Angeles Directory Co.
	SLAUGHTER JOHN J LINEMN R	Los Angeles Directory Co.

8232 WHITSETT AVE

Year	Uses	Source
1942	BROWN Jas W Emma clk UPRR Co	Los Angeles Directory Co.
1937	CASEY Wm J Ellen printer	Los Angeles Directory Co.
	BROWN Jas W Emma clk UP System	Los Angeles Directory Co.
	BROWN Elmer J	Los Angeles Directory Co.
1933	BROWN Jas W Emma clk	Los Angeles Directory Co.
	BROWN Elmer W dairywkr	Los Angeles Directory Co.
1929	Ester Mabel lndywkr	Los Angeles Directory Co.
	Ester Benj lab	Los Angeles Directory Co.
1928	KEYTE DONALD B (MAY) PNTR H	Los Angeles Directory Co.

8233 WHITSETT AVE

Year	Uses	Source
2006	VOLPEGR	Haines Company, Inc.
2001	VOLPE G R	Haines & Company, Inc.
1995	Volpe Carlo	Pacific Bell
1991	Voipe Carlo	Pacific Bell
	Volpe Dominick	Pacific Bell
	Volpe Frank	Pacific Bell
1985	Volpe Carlo	Pacific Bell

Year	Uses	Source
1980	VOLPE CARLO	Pacific Telephone

8235 WHITSETT AVE

Year	Uses	Source
1942	Maness Jas C Mildred driver	Los Angeles Directory Co.
1937	Parks Burley Bessie E custodian Bd of Educ	Los Angeles Directory Co.
	PARKS Geo E slsmn	Los Angeles Directory Co.
1933	PARKS Burley Bessie E jan Bd of Educ	Los Angeles Directory Co.
1929	Stowe Harry R Elsie paperhngr h	Los Angeles Directory Co.
	Machek Svea R br mgr Van de Kamps Bakery	Los Angeles Directory Co.
1928	COON ROBT ELECTN R	Los Angeles Directory Co.
	SWAYZE HUBERT L (BETTIE) MECH H	Los Angeles Directory Co.

8236 WHITSETT AVE

Year	Uses	Source
1942	EDWARDS Lewis A Dorothy	Los Angeles Directory Co.
1933	RHEA Cossie D Julia	Los Angeles Directory Co.
1929	RHEA Cossie V Julia chauf h	Los Angeles Directory Co.
1928	RHEA DEAN (JULIAN) DRIVER H	Los Angeles Directory Co.

8239 WHITSETT AVE

Year	Uses	Source
1942	Mac DONALD Thos L Josephine	Los Angeles Directory Co.
1937	SMITH Chas L Ora lab	Los Angeles Directory Co.
	SMITH Mildred I	Los Angeles Directory Co.
1933	Schram Pauline Mrs	Los Angeles Directory Co.
1929	Lean Edw T pntr	Los Angeles Directory Co.
1928	LEAN EDWIN T (MARIE) PNTR H	Los Angeles Directory Co.

8240 WHITSETT AVE

Year	Uses	Source
2006	APARTMENTS	Haines Company, Inc.
	DEOCAMPOJhay	Haines Company, Inc.
	DIAZMauia	Haines Company, Inc.
	HERNANDEZCarios	Haines Company, Inc.
	KARNCHANASAI	Haines Company, Inc.
	Boon MEDRANOHeriberto	Haines Company, Inc.
	MEDRANOVemonica	Haines Company, Inc.
	ROJAS Cartos	Haines Company, Inc.

FINDINGS

Year	Uses	Source
2006	SILVAS Mime	Haines Company, Inc.
	SOIMANEEArdham	Haines Company, Inc.
	SOIMANEECChinto Oa	Haines Company, Inc.
	VASOUEZ Celia	Haines Company, Inc.
2001	APARTMENTS	Haines & Company, Inc.
	BRIGGS David	Haines & Company, Inc.
	CHAIJENKIT Sinart	Haines & Company, Inc.
	HERNANDEZ Carlos	Haines & Company, Inc.
	INFANTE Pedro	Haines & Company, Inc.
	MARQUEZ Sonia	Haines & Company, Inc.
	MORA Luis Ricardo	Haines & Company, Inc.
	OZUNA Gualberto	Haines & Company, Inc.
	ROSALES Antonio	Haines & Company, Inc.
	SOIMANEE Chintana	Haines & Company, Inc.
	VASQUEZ Celia	Haines & Company, Inc.
1995	Henriquez Juan Carlos	Pacific Bell
	Hernandez Carlos	Pacific Bell
	I Hernandez Carlos	Pacific Bell
	Lain William	Pacific Bell
	Mitchell Shirley	Pacific Bell
	Suphinimitvong Thanasnee	Pacific Bell
	Wassmuth Keith A	Pacific Bell
1991	Brunes Elva	Pacific Bell
	Liro Stanley	Pacific Bell
	Liroff Selma & Sid	Pacific Bell
	Lirones E	Pacific Bell
	Lirones J	Pacific Bell
	Merino Pablo	Pacific Bell
	Suphinimitvong Thanasnee	Pacific Bell
	Supin R	Pacific Bell
	Sy Willie	Pacific Bell
	Wassmuth Keith A	Pacific Bell
1985	Correa M	Pacific Bell
	King Chuang Cheng	Pacific Bell
	Method Martin & Juanita	Pacific Bell
	Pachan Jas	Pacific Bell
	Pacheco Alina	Pacific Bell
	Pichardo Antonio O	Pacific Bell

FINDINGS

Year	Uses	Source
1985	Rush Greg & Janet	Pacific Bell
	Rush J	Pacific Bell
	Suphinimitvong Thanasnee	Pacific Bell
	Supin R	Pacific Bell
	Christanio Artensa	Pacific Bell
	Correa Lucero Kathy	Pacific Bell
1942	Brady Ezra Christie	Los Angeles Directory Co.
	MARSHALL Lee H Agnes A mtrmn	Los Angeles Directory Co.
	PARNELL Lewis E	Los Angeles Directory Co.
1937	Shinnefield Cleo Fannie labty techn	Los Angeles Directory Co.
1933	Marriott Henry A Ruth R wshemn	Los Angeles Directory Co.
1929	Marriet Harry chauf	Los Angeles Directory Co.
1928	MARRIOTT H AYLSWORTH (RUTH R) DRIVER H	Los Angeles Directory Co.

8241 WHITSETT AVE

Year	Uses	Source
2006	APARTMENTS ARAGON Lelia	Haines Company, Inc.
	CARRAS Michael	Haines Company, Inc.
	GONZALEZLourdes	Haines Company, Inc.
	MORANJose A	Haines Company, Inc.
	SANCHEZAboa A	Haines Company, Inc.
	ZEPEDAAJejandcr	Haines Company, Inc.
	NO POULDARBEN CHEVRON	Haines Company, Inc.
2001	APARTMENTS	Haines & Company, Inc.
	ALFARO Jennifer	Haines & Company, Inc.
	ARAGON Leila	Haines & Company, Inc.
	GONZALEZ Francisco	Haines & Company, Inc.
	SANCHEZ Alma A	Haines & Company, Inc.
	SOLIS Uriel	Haines & Company, Inc.
1991	Morales Miguel	Pacific Bell
	Morales Miguel A	Pacific Bell
	Morales Minor	Pacific Bell
	Morales N Pac	Pacific Bell
	Morales N M	Pacific Bell
	Rodriguez M	Pacific Bell
	Rodriguez MG	Pacific Bell
	Rodriguez MH Pac	Pacific Bell
	Rodriguez M & T Sylm	Pacific Bell

FINDINGS

Year	Uses	Source
1991	Sanchez Martha	Pacific Bell
	Gutierrez Toribio	Pacific Bell
1985	Castro Antonio	Pacific Bell
	Pena Javier	Pacific Bell
	Silva Martha	Pacific Bell
1980	CASTRO ANTONIO	Pacific Telephone
	GARCIA MISAEL	Pacific Telephone
	MECOUCH GAIL	Pacific Telephone
	NUNEZ GLORIA	Pacific Telephone
1975	Balerzo Paul	Pacific Telephone
	Rich Jay	Pacific Telephone
	Sanchez A	Pacific Telephone
	Skipwith Dorothy	Pacific Telephone
1970	PARRA INES	Pacific Telephone
	PARRA INES	Pacific Telephone

8243 WHITSETT AVE

Year	Uses	Source
1942	PAYNE Ernest T Olive lab	Los Angeles Directory Co.
1937	PAYNE Ernest Olive paper eng	Los Angeles Directory Co.
1933	PAYNE Ernest T Olive F eng	Los Angeles Directory Co.
1929	PAYNE Ernest T Anna	Los Angeles Directory Co.
1928	PAYNE ERNEST T (OLIVE) PAPERMKR H	Los Angeles Directory Co.

8244 WHITSETT AVE

Year	Uses	Source
1942	Seidenthal Margt clk	Los Angeles Directory Co.
	Seidenthal Jos aircrftwkr	Los Angeles Directory Co.
	Seidenthal Emma wid Jos cigarmkr	Los Angeles Directory Co.
	Seidenthal Dorothy	Los Angeles Directory Co.
	GROSE Lula	Los Angeles Directory Co.
1937	Seidenthal Jos jr uphol	Los Angeles Directory Co.
	Seidenthal Emma wid Jos	Los Angeles Directory Co.
	Seidenthal Chas	Los Angeles Directory Co.
	Gross Lula Mrs	Los Angeles Directory Co.
1933	Marriott Ephriam M Lillian F whsemn	Los Angeles Directory Co.
1929	Marriott Ephriam Lillie	Los Angeles Directory Co.
1928	MARRIOTT ANNE L CLK R	Los Angeles Directory Co.

Year	Uses	Source
1928	MARRIOTT EPH M (LILLIE) H	Los Angeles Directory Co.

8247 WHITSETT AVE

Year	Uses	Source
1942	Stevenson Burt W Bernice mech	Los Angeles Directory Co.
	STEVENSON Robt	Los Angeles Directory Co.
1937	STEVENSON Bert W Bernice baker	Los Angeles Directory Co.
1933	Lanzer Theo chauf	Los Angeles Directory Co.
	Lanzer Nora Mrs	Los Angeles Directory Co.
	Bramlett L Lorraine clk	Los Angeles Directory Co.
	Bramlett Elton R slsmn	Los Angeles Directory Co.
1929	JOHNSON L Leo Lavona	Los Angeles Directory Co.
1928	MASTEN L EVERETT (FLORENCE) PLSTR H	Los Angeles Directory Co.

8248 WHITSETT AVE

Year	Uses	Source
1942	PAYNE Olive sten	Los Angeles Directory Co.

8258 WHITSETT AVE

Year	Uses	Source
1937	JOHNSON John R Anna cond	Los Angeles Directory Co.
1933	JOHNSON John R Anna C cond	Los Angeles Directory Co.
1929	Cripps Archie timekpr	Los Angeles Directory Co.
	Sanderson Fred H Nellie clk h	Los Angeles Directory Co.
	Sanderson Leray J chauf r	Los Angeles Directory Co.
1928	MORTON FREDK A SLSMN R	Los Angeles Directory Co.
	MORTON JOE W AUD R	Los Angeles Directory Co.
	MORTON WM H H	Los Angeles Directory Co.

8289 WHITSETT AVE

Year	Uses	Source
1991	Milgram Judy	Pacific Bell

WHITSETT AVE N

8212 WHITSETT AVE N

Year	Uses	Source
1995	Kurtz V Wayne	Pacific Bell

FINDINGS

WILKINSON AVE

8218 WILKINSON AVE

Year	Uses	Source
2006	DEBOER Pamela	Haines Company, Inc.
2001	DEBOER William	Haines & Company, Inc.

8219 WILKINSON AVE

Year	Uses	Source
2006	LARIN Jud Ith	Haines Company, Inc.
2001	LARIN Oscar	Haines & Company, Inc.
1995	Mendoza Luie	Pacific Bell
1991	Maza O 7861 4	Pacific Bell
	Maza Anthony	Pacific Bell
	Mazaheri Albert	Pacific Bell
1985	Maza Antonio R	Pacific Bell

8224 WILKINSON AVE

Year	Uses	Source
2006	LAUYan	Haines Company, Inc.
2001	LAU Yan	Haines & Company, Inc.
1981	LAU PO CHUN NH	Pacific Telephone
1976	Lau Po Chun	Pacific Telephone

8225 WILKINSON AVE

Year	Uses	Source
2006	a MEUKYANNaira	Haines Company, Inc.
2001	LANDIS John	Haines & Company, Inc.

8231 WILKINSON AVE

Year	Uses	Source
2006	SOWELLC	Haines Company, Inc.
2001	SOWELL C	Haines & Company, Inc.
1995	Sowell C	Pacific Bell
1991	Sowell M	Pacific Bell
	Sowers C	Pacific Bell
	Sowell Dianne	Pacific Bell
	Sowell C	Pacific Bell
1985	Sowell C	Pacific Bell

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
12431 Roscoe Blvd	2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
10701 PEORIA AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12312 BURTON AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12329 BURTON	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12329 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12329 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12329 BURTON ST	2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12329 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
12333 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12333 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12333 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12334 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12334 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12334 BURTON ST	2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12334 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12335 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12336 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12337 BURTON	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12337 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
12337 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12337 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12341 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12342 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12343 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12343 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12343 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12344 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12344 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12344 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12348 PEORIA ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
12348 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12348 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12349 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12349 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12351 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12351 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12352 BURTON	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12352 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12352 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12352 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12354 PEORIA ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
12354 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12354 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12355 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12355 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12355 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12360 PEORIA ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12400 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12400 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12400 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12400 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12400 ROSCOE I	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
12400 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12401 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12401 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12401 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12408 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12408 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12408 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12409 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12409 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12409 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12410 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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12412 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12412 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12417 BURTON	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12417 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12417 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12417 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12418 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12418 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12425 BURTON	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12425 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12425 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
12425 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12426 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12426 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12429 BURTON PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12429 BURTON ST	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12429 BURTON WAY	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12440 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12440 ROSCOE BLVD	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12440 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12450 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12450 ROSCOE BLVD	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
12450 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12489 BURTON	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12500 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12500 ROSCOE BLVD	2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12500 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12522 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12522 ROSCOE BLVD	2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12522 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12534 ROSCOE BLVD	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
12534 ROSCOE PL	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8200 RHODES	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
8200 RHODES AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8200 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8200 WHITSETT AVE	2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8201 RHODES AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8201 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8203 WHITSETT	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8203 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8204 WHITSETT	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8204 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8206 RHODES AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8206 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
8207 RHODES AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8207 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8209 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8211 RHODES	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8211 RHODES AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8211 WHITSETT	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8211 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8212 RHODES	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8212 RHODES AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8212 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8212 WHITSETT AVE N	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Address Researched	Address Not Identified in Research Source
8215 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8216 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8218 RHODES	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8218 RHODES AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8218 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8218 WILKINSON AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8219 RHODES	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8219 RHODES AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8219 WILKINSON AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8220 WHITSET AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8220 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
8221 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1976, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8223 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1923, 1921, 1920
8224 WHITSETT	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8224 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8224 WILKINSON AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1980, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8225 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8225 WILKINSON AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8227 WHITSETT	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8227 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8228 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8230 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
8230 WHITSETT AVE	2013, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8231 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8231 WILKINSON AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8232 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8233 WHITSETT	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8233 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8235 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8236 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8239 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8240 W WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8240 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1992, 1990, 1986, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
8241 WHITSETT AVE	2013, 2008, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1981, 1976, 1972, 1971, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8243 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8244 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8247 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8248 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8258 WHITSETT	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8258 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1936, 1935, 1934, 1932, 1931, 1930, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8289 WHITSETT AVE	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8345 E PEORIA ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8351 E PEORIA ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8368 E PEORIA ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

FINDINGS

Address Researched	Address Not Identified in Research Source
8384 E PEORIA ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8401 ARLETA AVE	2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8454 E PEORIA ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8460 E PEORIA ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8477 E PEORIA ST	2013, 2008, 2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8501 ARLETA AVE	2013, 2008, 2006, 2004, 2003, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920
8501 ARLETA AVE	2006, 2004, 2003, 2001, 2000, 1999, 1996, 1995, 1992, 1991, 1990, 1986, 1985, 1981, 1980, 1976, 1975, 1972, 1971, 1970, 1969, 1967, 1966, 1965, 1964, 1963, 1962, 1961, 1960, 1958, 1957, 1956, 1955, 1954, 1952, 1951, 1950, 1949, 1948, 1947, 1946, 1945, 1944, 1942, 1940, 1939, 1938, 1937, 1936, 1935, 1934, 1933, 1932, 1931, 1930, 1929, 1928, 1927, 1926, 1925, 1924, 1923, 1921, 1920

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Year	Scale	Details	Source
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
2002	1"=500'	Flight Date: June, 05 2002	USDA
1994	1"=500'	Acquisition Date: May, 31 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August, 22 1989	USDA
1983	1"=500'	Flight Date: November, 19 1983	EDR Proprietary Brewster Pacific
1979	1"=500'	Flight Date: February, 05 1979	EDR Proprietary Brewster Pacific
1977	1"=500'	Flight Date: April, 25 1977	EDR Proprietary Brewster Pacific
1970	1"=500'	Flight Date: February, 02 1970	EDR Proprietary Brewster Pacific
1967	1"=500'	Flight Date: August, 12 1967	USGS
1964	1"=500'	Flight Date: July, 28 1964	USGS
1952	1"=500'	Flight Date: July, 09 1952	USGS
1947	1"=500'	Flight Date: August, 15 1947	USGS
1938	1"=500'	Flight Date: May, 13 1938	USDA
1928	1"=500'	Flight Date: January, 01 1928	FAIR

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YEAR: 2012
= 500'
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INQUIRY #: 4660230.12
YEAR: 2010
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INQUIRY #: 4660230.12
YEAR: 2009
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INQUIRY #: 4660230.12
YEAR: 2005
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YEAR: 2002
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YEAR: 1994
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YEAR: 1979
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YEAR: 1977
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INQUIRY #: 4660230.12

YEAR: 1970

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INQUIRY #: 4660230.12

YEAR: 1967

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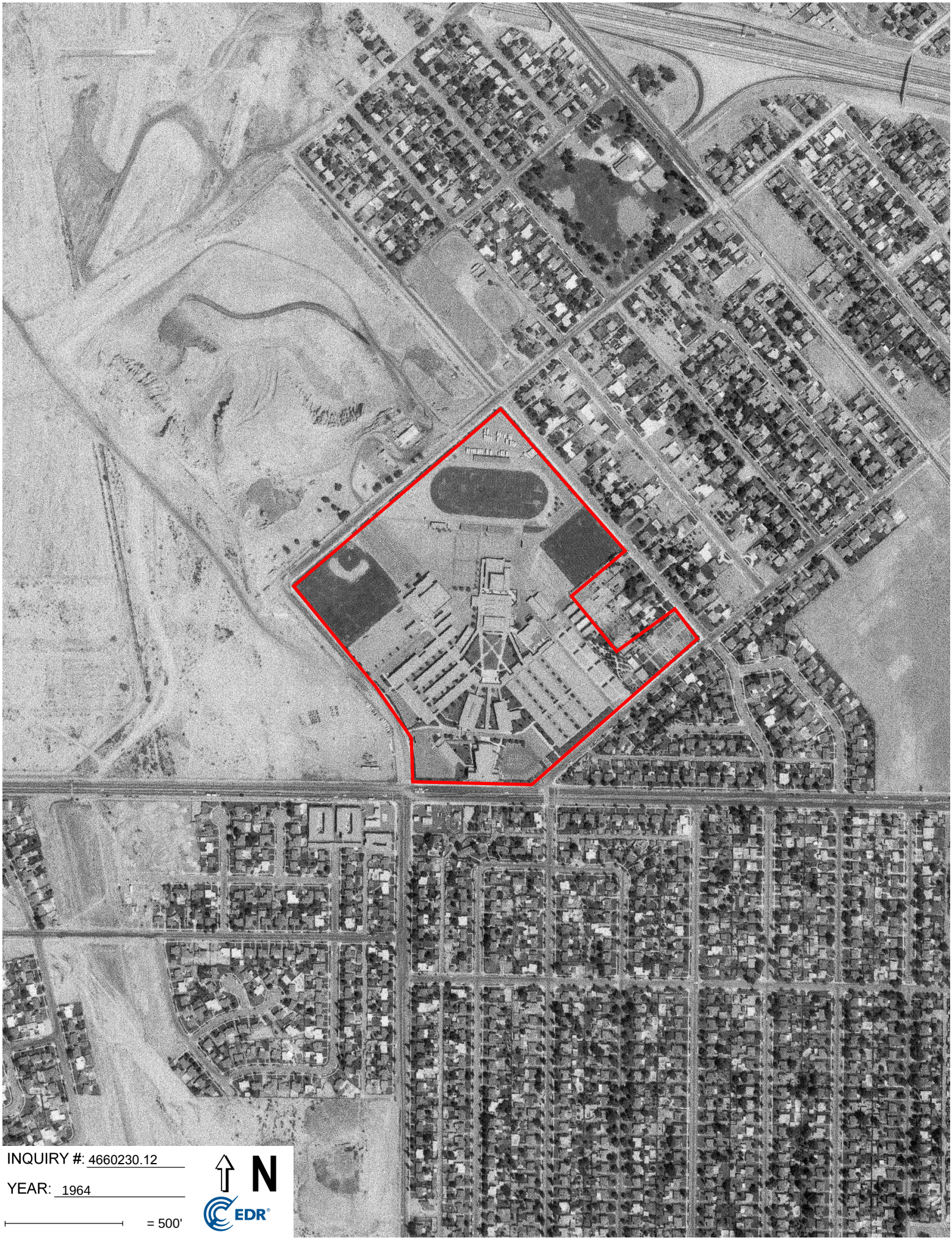
INQUIRY #: 4660230.12
YEAR: 1964
= 500'
N
EDR


INQUIRY #: 4660230.12
YEAR: 1952
= 500'
N
EDR



INQUIRY #: 4660230.12

YEAR: 1947

= 500'

N

EDR



INQUIRY #: 4660230.12

YEAR: 1938

= 500'

N

EDR



INQUIRY #: 4660230.12

YEAR: 1928

= 500'

N

EDR

John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

Inquiry Number: 4660230.7
June 30, 2016

EDR Environmental Lien and AUL Search

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

12431 Roscoe Blvd
John H Francis Polytechnic High School
Sun Valley, CA 91352

RESEARCH SOURCE

Source 1:

LA Recorder
Los Angeles, CA

PROPERTY INFORMATION

Deed 1:

Type of Deed:	deed
Title is vested in:	LAUSD of LA Co
Title received from:	LAUSD of LA CO
Deed Dated	12/17/2002
Deed Recorded:	12/19/2002
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	
Miscellaneous Comments:	
Legal Description:	See Exhibit
Legal Current Owner:	LAUSD of LA Co
Parcel # / Property Identifier:	2634-019-900
Comments:	See Exhibit

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found ☐ Not Found ☒

Deed Exhibit 1

LEAD SHEET

1

02 3115488

RECORDED/FILED IN OFFICIAL RECORDS
RECORDER'S OFFICE
LOS ANGELES COUNTY
CALIFORNIA
DEC 19 2002
AT 8 A.M.

SPACE ABOVE THIS LINE FOR RECORDERS USE

TITLE(S)
DEED

FEE

FREE C 3

D.T.T.

CODE
20

CODE
19

CODE
9___

Assessor's Identification Number (AIN)
To Be Completed By Examiner OR Title Company In Black Ink

2634 019 900

Number of Parcels Shown

001

THIS FORM IS NOT TO BE DUPLICATED

02 3115488

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

The Law Offices of Marilyn L. Garcia
801 South Figueroa Street, 14th Floor
Los Angeles, California 90017

Free recording in accordance
with California Government
Code Section 6103

A.P.N. 2634-19-900

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, **LOS ANGELES UNIFIED SCHOOL DISTRICT OF LOS ANGELES COUNTY**, a school district duly organized and existing under the laws of the Constitution and laws of the State of California, including without limitation, Sections 4000 et seq., of the Education Code of the State of California, which acquired title to the real property (the "Property") more particularly described in Exhibit A attached hereto and incorporated herein by this reference, as LOS ANGELES CITY HIGH SCHOOL DISTRICT OF LOS ANGELES COUNTY, hereby grants to **LOS ANGELES UNIFIED SCHOOL DISTRICT OF LOS ANGELES COUNTY**, the Property.

IN WITNESS WHEREOF, the undersigned has executed this Grant Deed on the date written opposite its signature below.

LOS ANGELES UNIFIED SCHOOL DISTRICT OF LOS ANGELES COUNTY

By: _____

Joseph P. Zeronian, Ed.D.,
Chief Financial Officer

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Los Angeles } ss.

On 12-17-02 (Date), before me, Eulah Y. Williams Notary Public (Name and Title of Officer (e.g., "Jane Doe, Notary Public")),
personally appeared Joseph P. Zeroman (Name(s) of Signer(s)),

☒ personally known to me
☐ proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Eulah Y. Williams
Signature of Notary Public

EULAH Y. WILLIAMS
Commission # 1295182
Notary Public - California
Los Angeles County
My Comm. Expires Mar 21, 2005

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer

Signer's Name: _____

- ☐ Individual
- ☐ Corporate Officer — Title(s): _____
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

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02 3115488

4

EXHIBIT A
THE PROPERTY

Parcel 1 (Fairfax High School)

THOSE PORTIONS OF LOTS 3 AND 4 OF TRACT NO. 215, PARTLY WITHIN AND PARTLY WITHOUT THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 14 PAGE(S) 42 AND 43 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE WEST LINE OF SAID LOT 3, BEING ALSO THE CENTER LINE OF FAIRFAX AVENUE, WITH THE CENTER LINE OF MELROSE AVENUE; THENCE ALONG THE WEST LINES OF SAID LOTS 3 AND 4 SOUTH 0° 15' 40" EAST, 403.93 FEET TO AN ANGLE POINT IN THE WEST LINE OF SAID LOT 4; THENCE ALONG THE WEST LINE OF SAID LOT 4, SOUTH 0° 7' 50" EAST, 914.12 FEET; THENCE NORTH 89° 47' 10" EAST, 929.60 FEET; THENCE NORTH 0 15' 40" WEST, 1288.58 FEET TO SAID CENTER LINE OF MELROSE AVENUE; THENCE ALONG SAID CENTER LINE, NORTH 88° 23' 40" WEST, 928.01 FEET TO THE POINT OF BEGINNING.

EXCEPT THEREFROM THAT PORTION CONVEYED TO THE CITY OF LOS ANGELES IN THE DEED RECORDED JUNE 11, 1970 AS INSTRUMENT NO. 2874, OFFICIAL RECORDS.

Parcel 2 (Francis Polytechnic High School)

LOT 1 OF TRACT NO. 19166, IN THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 593 PAGE(S) 97 AND 98 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM CERTAIN OIL, MINERALS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES LYING AND UNDER PORTIONS OF SAID LAND, AS RESERVED IN DEEDS RECORDED IN BOOK 37943, PAGE 319, 325 AND 327 OFFICIAL RECORDS AND IN DEED RECORDED IN BOOK 37947 PAGE 156, OFFICIAL RECORDS.

Appendix D:

Regulatory Records

John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

Inquiry Number: 4660230.2s
June 28, 2016

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	202
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	A-9
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

12431 ROSCOE BLVD
SUN VALLEY, CA 91352

COORDINATES

Latitude (North):	34.2219540 - 34° 13' 19.03''
Longitude (West):	118.4040770 - 118° 24' 14.67''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	370667.0
UTM Y (Meters):	3787462.5
Elevation:	823 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5630789 VAN NUYS, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140515
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	CITY OF LOS ANGELES	12431 ROSCO BLVD	HAZNET		TP
A2	LAUSD--FRANCIS POLYT	12431 ROSCOE BLVD.	FINDS, ECHO		TP
A3	CITY OF LOS ANGELES	12431 ROSCOE BLVD	HAZNET		TP
A4	POLYTECHNIC HIGH SCH	12431 ROSCOE BLVD	FINDS, ECHO		TP
A5	CITY OF LOS ANGELES-	12431 ROSCOE BLVD	HAZNET		TP
A6	LAUSD--FRANCIS POLYT	12431 ROSCOE BLVD.	RCRA-SQG		TP
A7	POLYTECHNIC HIGH SCH	12431 ROSCOE BLVD	RCRA-LQG		TP
A8	CITY OF LOS ANGELES	12431 ROSCOE BLVD	HAZNET		TP
A9	FRANCIS POLYTECHNIC	12431 ROSCOE BOULEVA	ENVIROSTOR, SCH		TP
A10	LAUSD/ FRANCIS POLYT	12431 ROSCOE BLVD	HAZNET		TP
A11	LAUSD-NORTH HOLLYWOO	12431 ROSCOE BLVD	HAZNET		TP
Reg	SAN FERNANDO VALLEY	NORTH HOLLYWOOD WELL	NPL, SEMS, US ENG CONTROLS, US INST CONTROL,...	Same	1 ft.
12	LEWIS CONTINUATION H	12508 WICKS ST	RCRA-LQG	Higher	18, 0.003, NNW
B13	EAST VALLEY AREA NEW	8451 ARLETA AVENUE	ENVIROSTOR, SCH	Higher	58, 0.011, NW
A14		12440 ROSCOE BLVD	EDR Hist Auto	Lower	70, 0.013, SW
A15	MOBIL STATION HNG	12450 ROSCOE BLVD	LUST, HIST CORTESE	Lower	71, 0.013, SW
A16	AVANTI 33 (STATE)	12450 ROSCOE BLVD	HIST UST	Lower	71, 0.013, SW
A17	JED GAS STATION	12450 ROSCOE BLVD	CA FID UST	Lower	71, 0.013, SW
A18	JED GAS STATION	12450 ROSCOE BLVD	LUST, SWEEPS UST	Lower	71, 0.013, SW
A19	MOBIL SERVICE STATIO	12450 ROSCOE BLVD	UST	Lower	71, 0.013, SW
A20		12450 ROSCOE BLVD	EDR Hist Auto	Lower	71, 0.013, SW
B21	CITY OF LA DWP	8501 ARLETA AVE	UST	Higher	81, 0.015, NW
B22	LOS ANGELES DEPARTME	8501 N ARLETA AVE	SWEEPS UST, CA FID UST	Higher	81, 0.015, NW
B23	CITY OF LADWP	8501 ARLETA AVE	LUST, CHMIRS, HIST CORTESE, NPDES	Higher	81, 0.015, NW
B24	BYRD MIDDLE SCHOOL	8501 ARLETA AVE	RCRA-LQG, FINDS, ECHO	Higher	81, 0.015, NW
25	ROSCOE SITE	12500-12522 W ROSCOE	US BROWNFIELDS, ECHO	Lower	181, 0.034, WSW
26		12334 BURTON ST	EDR Hist Auto	Lower	509, 0.096, SE
27	PAM TRUCKING	8739 REMICK AVENUE	HWT	Higher	749, 0.142, North
C28	LA SHELDON ARLETA LI	12455 WICKS ST	RCRA-SQG, FINDS, ECHO	Lower	752, 0.142, NNW
C29	SHELDON-ARLETA	12455 WICKS ST	SWF/LF, HIST UST, NPDES	Lower	752, 0.142, NNW
C30	SHELDON ARLETA GAS R	12455 WICKS ST	HIST UST	Lower	752, 0.142, NNW
C31	SHELDON-ARLETA LANDF	12455 WICKS ST.	SWF/LF	Lower	752, 0.142, NNW
C32	SHELDON-ARLETA YARD	12455 WICKS ST	SWEEPS UST, CA FID UST	Lower	752, 0.142, NNW
33	HIRO PHOTO LAB	8365 LAUREL AVE	RCRA-SQG, FINDS, ECHO	Higher	826, 0.156, ENE
D34	TEMPCO ENGINEERING,	8866 LAUREL CNYN	HIST CORTESE	Higher	1418, 0.269, NNE
D35	TEMPCO ENGINEERING,	8866 LAUREL CNYN	HIST CORTESE	Higher	1418, 0.269, NNE
D36	TEMPCO ENGINEERING,	8866 LAUREL CYN BLVD	RCRA-SQG, LUST, UST, SWEEPS UST, CA FID UST,...	Higher	1418, 0.269, NNE
37	ARCO #1959	12050 ROSCOE BLVD	LUST, SWEEPS UST, CA FID UST, HIST CORTESE	Higher	1672, 0.317, East
38	RECYCLING INC	8907 LAUREL CANYON B	SWRCY	Higher	1747, 0.331, North

MAPPED SITES SUMMARY

Target Property Address:
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
39	M & R PLATING	11679 SHELDON STREET	ENVIROSTOR	Higher	1768, 0.335, NW
E40	ROSCOE SHELL MKT.	12858 ROSCOE BLVD	LUST, CA FID UST	Lower	2256, 0.427, West
E41	ROSCOE SHELL MKT	12858 ROSCOE	LUST, HIST CORTESE	Lower	2256, 0.427, West
42	SAN FERNANDO VALLEY	GLORIETTA WELLFIELD	Delisted NPL, SEMS, US ENG CONTROLS, ENVIROSTOR,...	Higher	2327, 0.441, NW
E43	HELO'S EXXON	12904 ROSCOE BLVD	LUST	Lower	2456, 0.465, West
E44	HELO'S EXXON	12904 ROSCOE BLVD	LUST, CA FID UST, HAZNET, HIST CORTESE	Lower	2456, 0.465, West
45	BRIGHT REALITY	LAUREL CANYON & JERO	WMUDS/SWAT	Higher	2603, 0.493, North
46	RICHARD E. BYRD HIGH	9171 TELFAIR AVENUE	ENVIROSTOR, SCH	Higher	4143, 0.785, NNE
47	ACCURATE ENGINEERING	8710 TELFAIR	RCRA-LQG, ENVIROSTOR, EMI	Higher	4346, 0.823, ENE
48	SUPERIOR THREAD ROLL	12801 WENTWORTH ST	RCRA-SQG, ENVIROSTOR, FINDS, HAZNET, ECHO	Higher	4440, 0.841, NNW
49	GOLDEN STATE MAGNETI	9301 LAUREL CANYON B	RCRA-LQG, ENVIROSTOR, ICIS, ECHO	Higher	4578, 0.867, NNW
50	DIXON HARD CHROME, I	11645 PENDLETON STRE	ENVIROSTOR, ENF, NPDES, WIP	Higher	4777, 0.905, ENE
51	MILES CHEMICAL COMPA	12801 RANGOON STREET	ENVIROSTOR, SLIC, CHMIRS, ENF, HWT, WIP	Higher	5019, 0.951, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
CITY OF LOS ANGELES 12431 ROSCO BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777001410	N/A
LAUSD--FRANCIS POLYT 12431 ROSCOE BLVD. SUN VALLEY, CA 91352	FINDS Registry ID:: 110022033084 ECHO	N/A
CITY OF LOS ANGELES 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777001355	N/A
POLYTECHNIC HIGH SCH 12431 ROSCOE BLVD SUN VALLEY, CA 91352	FINDS Registry ID:: 110037378619 ECHO	N/A
CITY OF LOS ANGELES- 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777000957	N/A
LAUSD--FRANCIS POLYT 12431 ROSCOE BLVD. SUN VALLEY, CA 91352	RCRA-SQG EPA ID:: CAD982039315	CAD982039315
POLYTECHNIC HIGH SCH 12431 ROSCOE BLVD SUN VALLEY, CA 91352	RCRA-LQG EPA ID:: CAR000195750	CAR000195750
CITY OF LOS ANGELES 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777001440	N/A
FRANCIS POLYTECHNIC 12431 ROSCOE BOULEVA PANORAMA CITY, CA 91402	ENVIROSTOR Facility Id: 19820072 Status: No Further Action SCH	N/A

	Facility Id: 19820072 Status: No Further Action	
LAUSD/ FRANCIS POLYT 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAD982039315	N/A
LAUSD-NORTH HOLLYWOO 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAR000195750	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

EXECUTIVE SUMMARY

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
SLIC ---------- Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---------- Voluntary Cleanup Priority Listing
VCP ---------- Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

HAULERS ---------- Registered Waste Tire Haulers Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
AOCONCERN ---------- San Gabriel Valley Areas of Concern
CDL ---------- Clandestine Drug Labs
Toxic Pits ---------- Toxic Pits Cleanup Act Sites
US CDL ---------- National Clandestine Laboratory Register

Local Land Records

LIENS ---------- Environmental Liens Listing
LIENS 2 ---------- CERCLA Lien Information
DEED ---------- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System

CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PADS	PCB Activity Database System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
LOS ANGELES CO. HMS	HMS: Street Number List
HWP	EnviroStor Permitted Facilities Listing
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
LA Co. Site Mitigation	Site Mitigation List
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System

WIP Well Investigation Program Case List
FUELS PROGRAM EPA Fuels Program Registered Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF Recovered Government Archive Solid Waste Facilities List
RGA LUST Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***

EXECUTIVE SUMMARY

Federal Delisted NPL site list

Delisted NPL: The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may deleted from the NPL where no further response is appropriate.

A review of the Delisted NPL list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 Delisted NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***155***

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 03/07/2016 has revealed that there are 2 SEMS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***
SAN FERNANDO VALLEY	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***155***

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/09/2015 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEWIS CONTINUATION H	12508 WICKS ST	NNW 0 - 1/8 (0.003 mi.)	12	99
BYRD MIDDLE SCHOOL	***8501 ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B24***	***118***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2015 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HIRO PHOTO LAB	*8365 LAUREL AVE*	*ENE 1/8 - 1/4 (0.156 mi.)*	*33*	*133*
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
LA SHELDON ARLETA LI	*12455 WICKS ST*	*NNW 1/8 - 1/4 (0.142 mi.)*	*C28*	*125*

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 09/10/2015 has revealed that there are 2 US ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	*NORTH HOLLYWOOD WELL*	*0 - 1/8 (0.000 mi.)*	*0*	*27*
SAN FERNANDO VALLEY	*GLORIETTA WELLFIELD*	*NW 1/4 - 1/2 (0.441 mi.)*	*42*	*155*

US INST CONTROL: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROL list, as provided by EDR, and dated 09/10/2015 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	*NORTH HOLLYWOOD WELL*	*0 - 1/8 (0.000 mi.)*	*0*	*27*

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk

characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 05/02/2016 has revealed that there are 10 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY Facility Id: 19990011 Status: Active	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***
EAST VALLEY AREA NEW Facility Id: 19940001 Status: No Further Action	***8451 ARLETA AVENUE***	***NW 0 - 1/8 (0.011 mi.)***	***B13***	***100***
M & R PLATING Facility Id: 60001503 Status: Refer: EPA	11679 SHELDON STREET	NW 1/4 - 1/2 (0.335 mi.)	39	149
SAN FERNANDO VALLEY Facility Id: 19990010 Status: No Further Action	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***155***
RICHARD E. BYRD HIGH Facility Id: 60000277 Status: No Further Action	***9171 TELFAIR AVENUE***	***NNE 1/2 - 1 (0.785 mi.)***	***46***	***172***
ACCURATE ENGINEERING Facility Id: 71002709 Status: Refer: Other Agency	***8710 TELFAIR***	***ENE 1/2 - 1 (0.823 mi.)***	***47***	***176***
SUPERIOR THREAD ROLL Facility Id: 60001084 Status: No Further Action	***12801 WENTWORTH ST***	***NNW 1/2 - 1 (0.841 mi.)***	***48***	***181***
GOLDEN STATE MAGNETI Facility Id: 71003474 Status: Refer: Other Agency	***9301 LAUREL CANYON B***	***NNW 1/2 - 1 (0.867 mi.)***	***49***	***186***
DIXON HARD CHROME, I Facility Id: 71002228 Status: Refer: EPA	***11645 PENDLETON STRE***	***ENE 1/2 - 1 (0.905 mi.)***	***50***	***191***
MILES CHEMICAL COMPA Facility Id: 60001085 Status: No Further Action	***12801 RANGOON STREET***	***NNW 1/2 - 1 (0.951 mi.)***	***51***	***197***

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, and dated 05/16/2016 has revealed that there are 2 SWF/LF sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELDON-ARLETA	***12455 WICKS ST***	***NNW 1/8 - 1/4 (0.142 mi.)***	***C29***	***126***

Site ID: 2020
Status: Closed

SHELDON-ARLETA LANDF	12455 WICKS ST.	NNW 1/8 - 1/4 (0.142 mi.)	C31	131

Facility ID: 19-AR-0835
Operational Status: Closed
Regulation Status: Unpermitted
Facility Status: closure work complete and land redevelopment in progress

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 03/14/2016 has revealed that there are 9 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF LADWP	***8501 ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B23***	***112***
Status: Completed - Case Closed Facility Id: 913522461 Status: Case Closed Global Id: T0603702336 Global ID: T0603702336				
TEMPCO ENGINEERING,	***8866 LAUREL CYN BLVD***	***NNE 1/4 - 1/2 (0.269 mi.)***	***D36***	***135***
Status: Completed - Case Closed Facility Id: 913521125 Facility Id: 913521125A Status: Case Closed Global Id: T0603702314 Global Id: T0603774984 Global Id: T0603702315 Global ID: T0603702314 Global ID: T0603702315				
ARCO #1959	***12050 ROSCOE BLVD***	***E 1/4 - 1/2 (0.317 mi.)***	***37***	***144***
Status: Completed - Case Closed Facility Id: 916056852 Status: Case Closed Global Id: T0603702586 Global ID: T0603702586				

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL STATION HNG	***12450 ROSCOE BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***A15***	***104***
Status: Completed - Case Closed Global Id: T0603702338				
JED GAS STATION	***12450 ROSCOE BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***A18***	***106***
Facility Id: 913522489 Status: Case Closed Global ID: T0603702338				
ROSCOE SHELL MKT.	***12858 ROSCOE BLVD***	***W 1/4 - 1/2 (0.427 mi.)***	***E40***	***150***

Facility Id: 913522498
Status: Case Closed
Global ID: T0603702339

ROSCOE SHELL MKT Status: Completed - Case Closed Global Id: T0603798415 Global Id: T0603702339	***12858 ROSCOE***	***W 1/4 - 1/2 (0.427 mi.)***	***E41***	***152***
HELO'S EXXON Facility Id: 913522507 Status: Case Closed Global ID: T0603702340	12904 ROSCOE BLVD	W 1/4 - 1/2 (0.465 mi.)	E43	168
HELO'S EXXON Status: Completed - Case Closed Global Id: T0603702340	***12904 ROSCOE BLVD***	***W 1/4 - 1/2 (0.465 mi.)***	***E44***	***169***

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 03/14/2016 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF LA DWP Facility Id: 24609	8501 ARLETA AVE	NW 0 - 1/8 (0.015 mi.)	B21	110

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL SERVICE STATIO Facility Id: 24731	12450 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A19	109

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/22/2015 has revealed that there is 1 US BROWNFIELDS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROSCOE SITE	***12500-12522 W ROSCOE***	***WSW 0 - 1/8 (0.034 mi.)***	***25***	***122***

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

A review of the WMUDS/SWAT list, as provided by EDR, and dated 04/01/2000 has revealed that there is 1 WMUDS/SWAT site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BRIGHT REALITY	LAUREL CANYON & JERO	N 1/4 - 1/2 (0.493 mi.)	45	171

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 03/15/2016 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RECYCLING INC Cert Id: RC227919.001	8907 LAUREL CANYON B	N 1/4 - 1/2 (0.331 mi.)	38	149

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 2 HIST Cal-Sites sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***
SAN FERNANDO VALLEY	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***155***

SCH: This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category. depending on the level of threat to public health and safety or the. environment they pose.

A review of the SCH list, as provided by EDR, and dated 05/02/2016 has revealed that there is 1 SCH site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EAST VALLEY AREA NEW Facility Id: 19940001 Status: No Further Action	***8451 ARLETA AVENUE***	***NW 0 - 1/8 (0.011 mi.)***	***B13***	***100***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 3 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOS ANGELES DEPARTME	***8501 N ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B22***	***111***
Status: A Tank Status: A Comp Number: 8114				

Lower Elevation	Address	Direction / Distance	Map ID	Page
JED GAS STATION	***12450 ROSCOE BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***A18***	***106***
Status: A Tank Status: A Comp Number: 354				
SHELDON-ARLETA YARD	***12455 WICKS ST***	***NNW 1/8 - 1/4 (0.142 mi.)***	***C32***	***132***
Comp Number: 3270				

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AVANTI 33 (STATE) Facility Id: 00000003985	12450 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A16	105
SHELDON-ARLETA Facility Id: 00000060960	***12455 WICKS ST***	***NNW 1/8 - 1/4 (0.142 mi.)***	***C29***	***126***
SHELDON ARLETA GAS R Facility Id: 00000064870	12455 WICKS ST	NNW 1/8 - 1/4 (0.142 mi.)	C30	130

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOS ANGELES DEPARTME	***8501 N ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B22***	***111***
Facility Id: 19056589 Status: A				

Lower Elevation	Address	Direction / Distance	Map ID	Page
JED GAS STATION	12450 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A17	106

Facility Id: 19055299
Status: A

SHELDON-ARLETA YARD	***12455 WICKS ST***	***NNW 1/8 - 1/4 (0.142 mi.)***	***C32***	***132***

Facility Id: 19025310
Status: I

Other Ascertainable Records

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there are 2 ROD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***
SAN FERNANDO VALLEY	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***155***

PRP: A listing of verified Potentially Responsible Parties

A review of the PRP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 PRP site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***

ICIS: The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

A review of the ICIS list, as provided by EDR, and dated 01/23/2015 has revealed that there is 1 ICIS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***

CONSENT: Major Legal settlements that establish responsibility and standards for cleanup at NPL (superfund) sites. Released periodically by U.S. District Courts after settlement by parties to litigation matters.

A review of the CONSENT list, as provided by EDR, and dated 12/31/2014 has revealed that there is 1 CONSENT site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***

EXECUTIVE SUMMARY

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 07/20/2015 has revealed that there is 1 FINDS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 03/28/2016 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY Envirostor Id: 19990011 Cleanup Status: ACTIVE	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 8 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF LADWP Reg Id: 913522461	***8501 ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B23***	***112***
TEMPCO ENGINEERING, Reg Id: 913521125A	8866 LAUREL CNYN	NNE 1/4 - 1/2 (0.269 mi.)	D34	134
TEMPCO ENGINEERING, Reg Id: 913521125	8866 LAUREL CNYN	NNE 1/4 - 1/2 (0.269 mi.)	D35	134
ARCO #1959 Reg Id: 916056852	***12050 ROSCOE BLVD***	***E 1/4 - 1/2 (0.317 mi.)***	***37***	***144***
SAN FERNANDO VALLEY Reg Id: 19990010	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***155***

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL STATION HNG Reg Id: 913522489	***12450 ROSCOE BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***A15***	***104***
ROSCOE SHELL MKT	***12858 ROSCOE***	***W 1/4 - 1/2 (0.427 mi.)***	***E41***	***152***
HELO'S EXXON	***12904 ROSCOE BLVD***	***W 1/4 - 1/2 (0.465 mi.)***	***E44***	***169***

Reg Id: 913522507

HWT: A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

A review of the HWT list, as provided by EDR, and dated 04/11/2016 has revealed that there is 1 HWT site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PAM TRUCKING Reg Num: 5751	8739 REMICK AVENUE	N 1/8 - 1/4 (0.142 mi.)	27	125

ECHO: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

A review of the ECHO list, as provided by EDR, and dated 09/20/2015 has revealed that there is 1 ECHO site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***27***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 3 EDR Hist Auto sites within approximately 0.125 miles of the target property.

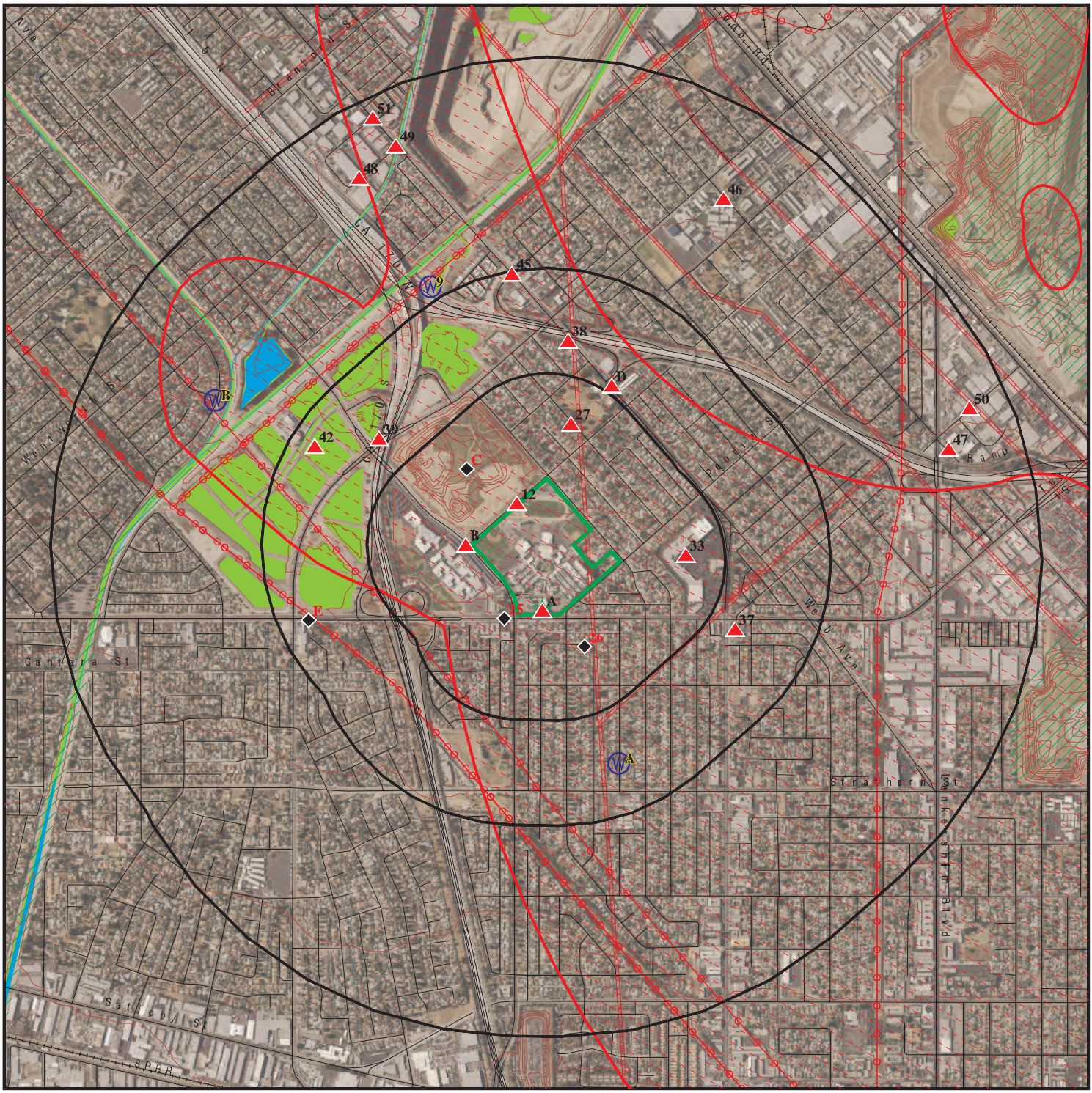
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	12440 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A14	103
Not reported	12450 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A20	109
Not reported	12334 BURTON ST	SE 0 - 1/8 (0.096 mi.)	26	124

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

Site Name	Database(s)
TUJUNGA WELLFIELD SITE DISCOVERY	SEMS
VALLEY REGION ES #7 SITE 14, 56400	ENVIROSTOR, SCH
THERMAL TECHNOLOGIES	ENVIROSTOR
TUJUNGA WELLFIELD DISCOVERY PROJEC	ENVIROSTOR

OVERVIEW MAP - 4660230.2S



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	John H Francis Polytechnic High School	CLIENT:	Civil-Environmental-survey Group
ADDRESS:	12431 Roscoe Blvd Sun Valley CA 91352	CONTACT:	Skye Green
LAT/LONG:	34.221954 / 118.404077	INQUIRY #:	4660230.2s
		DATE:	June 28, 2016 4:03 pm

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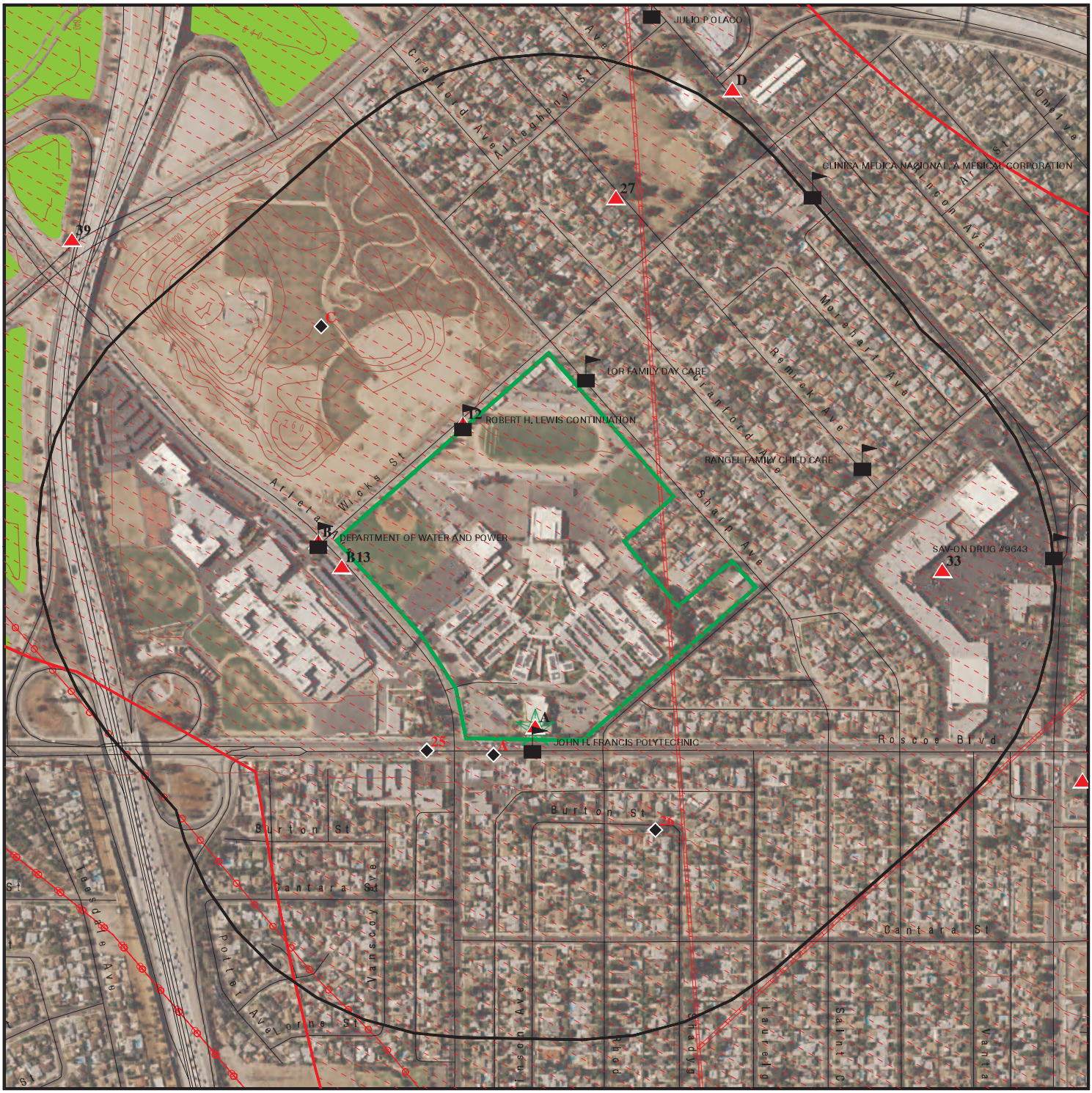
DETAIL MAP - 4660230.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
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SITE NAME:	John H Francis Polytechnic High School	CLIENT:	Civil-Environmental-survey Group
ADDRESS:	12431 Roscoe Blvd Sun Valley CA 91352	CONTACT:	Skye Green
		INQUIRY #:	4660230.2s
LAT/LONG:	34.221954 / 118.404077	DATE:	June 28, 2016 4:07 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	1	0	NR	1
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	0	1	NR	NR	2
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250	1	2	0	NR	NR	NR	3
RCRA-SQG	0.250	1	0	2	NR	NR	NR	3
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		1	0	1	NR	NR	2
US INST CONTROL	0.500		1	0	0	NR	NR	1
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000	1	2	0	2	6	NR	11
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	2	0	NR	NR	2
State and tribal leaking storage tank lists								
LUST	0.500		3	0	6	NR	NR	9

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		2	0	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		1	0	0	NR	NR	1
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	1	NR	NR	1
SWRCY	0.500		0	0	1	NR	NR	1
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
AOCONCERN	1.000		0	0	0	0	NR	0
HIST Cal-Sites	1.000		1	0	1	0	NR	2
SCH	0.250	1	1	0	NR	NR	NR	2
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		2	1	NR	NR	NR	3
HIST UST	0.250		1	2	NR	NR	NR	3
CA FID UST	0.250		2	1	NR	NR	NR	3
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		1	0	1	0	NR	2
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		1	NR	NR	NR	NR	1
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		1	NR	NR	NR	NR	1
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		1	0	0	0	NR	1
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001	2	1	NR	NR	NR	NR	3
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		1	0	0	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001	6	0	NR	NR	NR	NR	6
HIST CORTESE	0.500		2	0	6	NR	NR	8
LOS ANGELES CO. HMS	0.001		0	NR	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HWT	0.250		0	1	NR	NR	NR	1
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
LA Co. Site Mitigation	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ECHO	0.001	2	1	NR	NR	NR	NR	3
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		3	NR	NR	NR	NR	3
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		14	33	9	21	6	0	83

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **CITY OF LOS ANGELES - DPW - BUREAU SANIT** **HAZNET** **S113021421**
Target **12431 ROSCO BLVD** **N/A**
Property **SUN VALLEY, CA 91352**

Site 1 of 18 in cluster A

Actual:
823 ft.

HAZNET:

envid:	S113021421
Year:	2002
GEPAID:	CAH777001410
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not reported
Mailing Address:	433 S SPRING ST 5TH FLR MS-944
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not reported
TSD EPA ID:	CAD981696420
TSD County:	Not reported
Waste Category:	Household waste
Disposal Method:	Recycler
Tons:	7.2
Cat Decode:	Household waste
Method Decode:	Recycler
Facility County:	Los Angeles

envid:	S113021421
Year:	2002
GEPAID:	CAH777001410
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not reported
Mailing Address:	433 S SPRING ST 5TH FLR MS-944
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not reported
TSD EPA ID:	WAD991281767
TSD County:	Not reported
Waste Category:	Household waste
Disposal Method:	Treatment, Incineration
Tons:	2.84
Cat Decode:	Household waste
Method Decode:	Treatment, Incineration
Facility County:	Los Angeles

envid:	S113021421
Year:	2002
GEPAID:	CAH777001410
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not reported
Mailing Address:	433 S SPRING ST 5TH FLR MS-944
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not reported
TSD EPA ID:	WAD991281767
TSD County:	Not reported
Waste Category:	Household waste
Disposal Method:	Treatment, Tank
Tons:	1.35
Cat Decode:	Household waste
Method Decode:	Treatment, Tank

CITY OF LOS ANGELES - DPW - BUREAU SANIT (Continued) **S113021421**

Facility County: Los Angeles

envid: S113021421
Year: 2002
GEPAID: CAH777001410
Contact: VIJAY DESAI
Telephone: 2134737763
Mailing Name: Not reported
Mailing Address: 433 S SPRING ST 5TH FLR MS-944
Mailing City,St,Zip: LOS ANGELES, CA 900130000
Gen County: Not reported
TSD EPA ID: WAD991281767
TSD County: Not reported
Waste Category: Household waste
Disposal Method: Recycler
Tons: 17.41
Cat Decode: Household waste
Method Decode: Recycler
Facility County: Los Angeles

A2 **LAUSD--FRANCIS POLYTECHNIC HS** **FINDS** **1008310322**
Target **12431 ROSCOE BLVD.** **ECHO** **N/A**
Property **SUN VALLEY, CA 91352**

Site 2 of 18 in cluster A

Actual: 823 ft.

FINDS:

Registry ID: 110022033084

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

ECHO:
Envid: 1008310322
Registry ID: 110022033084
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110022033084

A3 **CITY OF LOS ANGELES - DPW - BUREAU SANIT** **HAZNET** **S113021396**
Target **12431 ROSCOE BLVD** **N/A**
Property **SUN VALLEY, CA 91352**

Site 3 of 18 in cluster A

Actual:
823 ft.

HAZNET:

envid:	S113021396
Year:	2001
GEPAID:	CAH777001355
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not reported
Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not reported
TSD EPA ID:	CAD981696420
TSD County:	Not reported
Waste Category:	Household waste
Disposal Method:	Not reported
Tons:	8.32
Cat Decode:	Household waste
Method Decode:	Not reported
Facility County:	Los Angeles

envid:	S113021396
Year:	2001
GEPAID:	CAH777001355
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not reported
Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not reported
TSD EPA ID:	WAD991281767
TSD County:	Not reported
Waste Category:	Household waste
Disposal Method:	Disposal, Land Fill
Tons:	0
Cat Decode:	Household waste
Method Decode:	Disposal, Land Fill
Facility County:	Los Angeles

envid:	S113021396
Year:	2001
GEPAID:	CAH777001355
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not reported
Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not reported
TSD EPA ID:	WAD991281767
TSD County:	Not reported
Waste Category:	Household waste
Disposal Method:	Treatment, Incineration
Tons:	3.48
Cat Decode:	Household waste
Method Decode:	Treatment, Incineration

CITY OF LOS ANGELES - DPW - BUREAU SANIT (Continued) **S113021396**

Facility County: Los Angeles

envid: S113021396
Year: 2001
GEPAID: CAH777001355
Contact: VIJAY DESAI
Telephone: 2134737763
Mailing Name: Not reported
Mailing Address: 433 S SPRING ST STE 500
Mailing City,St,Zip: LOS ANGELES, CA 900130000
Gen County: Not reported
TSD EPA ID: WAD991281767
TSD County: Not reported
Waste Category: Household waste
Disposal Method: Treatment, Tank
Tons: 0.33
Cat Decode: Household waste
Method Decode: Treatment, Tank
Facility County: Los Angeles

envid: S113021396
Year: 2001
GEPAID: CAH777001355
Contact: VIJAY DESAI
Telephone: 2134737763
Mailing Name: Not reported
Mailing Address: 433 S SPRING ST STE 500
Mailing City,St,Zip: LOS ANGELES, CA 900130000
Gen County: Not reported
TSD EPA ID: WAD991281767
TSD County: Not reported
Waste Category: Household waste
Disposal Method: Recycler
Tons: 10.81
Cat Decode: Household waste
Method Decode: Recycler
Facility County: Los Angeles

Click this hyperlink while viewing on your computer to access additional CA_HAZNET: detail in the EDR Site Report.

A4 **POLYTECHNIC HIGH SCHOOL** **FINDS** **1011917615**
Target **12431 ROSCOE BLVD** **ECHO** **N/A**
Property **SUN VALLEY, CA 91352**

Site 4 of 18 in cluster A

Actual: 823 ft.

FINDS:

Registry ID: 110037378619

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

POLYTECHNIC HIGH SCHOOL (Continued) **1011917615**

ECHO:
Envid: 1011917615
Registry ID: 110037378619
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110037378619

A5 **CITY OF LOS ANGELES-DPW** **HAZNET** **S113021169**
Target **12431 ROSCOE BLVD** **N/A**
Property **SUN VALLEY, CA 91352**

Site 5 of 18 in cluster A

Actual:
823 ft.

HAZNET:
envid: S113021169
Year: 1997
GEPAID: CAH777000957
Contact: CITY OF LOS ANGELES
Telephone: 2137435086
Mailing Name: Not reported
Mailing Address: 419 S SPRING ST STE 800
Mailing City,St,Zip: LOS ANGELES, CA 900130000
Gen County: Not reported
TSD EPA ID: CAD088504881
TSD County: Not reported
Waste Category: Household waste
Disposal Method: Transfer Station
Tons: .0005
Cat Decode: Household waste
Method Decode: Transfer Station
Facility County: Los Angeles

envid: S113021169
Year: 1997
GEPAID: CAH777000957
Contact: CITY OF LOS ANGELES
Telephone: 2137435086
Mailing Name: Not reported
Mailing Address: 419 S SPRING ST STE 800
Mailing City,St,Zip: LOS ANGELES, CA 900130000
Gen County: Not reported
TSD EPA ID: UTD981552177
TSD County: Not reported
Waste Category: Household waste
Disposal Method: Transfer Station
Tons: 6.0646
Cat Decode: Household waste
Method Decode: Transfer Station
Facility County: Los Angeles

envid: S113021169
Year: 1997
GEPAID: CAH777000957
Contact: CITY OF LOS ANGELES
Telephone: 2137435086
Mailing Name: Not reported
Mailing Address: 419 S SPRING ST STE 800
Mailing City,St,Zip: LOS ANGELES, CA 900130000
Gen County: Not reported

CITY OF LOS ANGELES-DPW (Continued) **S113021169**

TSD EPA ID: CAD080806850
TSD County: Not reported
Waste Category: Household waste
Disposal Method: Transfer Station
Tons: 6.6159
Cat Decode: Household waste
Method Decode: Transfer Station
Facility County: Los Angeles

envid: S113021169
Year: 1997
GEPAID: CAH777000957
Contact: CITY OF LOS ANGELES
Telephone: 2137435086
Mailing Name: Not reported
Mailing Address: 419 S SPRING ST STE 800
Mailing City,St,Zip: LOS ANGELES, CA 900130000
Gen County: Not reported
TSD EPA ID: CAD080806850
TSD County: Not reported
Waste Category: Household waste
Disposal Method: Not reported
Tons: 25.1575
Cat Decode: Household waste
Method Decode: Not reported
Facility County: Los Angeles

envid: S113021169
Year: 1997
GEPAID: CAH777000957
Contact: CITY OF LOS ANGELES
Telephone: 2137435086
Mailing Name: Not reported
Mailing Address: 419 S SPRING ST STE 800
Mailing City,St,Zip: LOS ANGELES, CA 900130000
Gen County: Not reported
TSD EPA ID: CAD050806850
TSD County: Not reported
Waste Category: Household waste
Disposal Method: Not reported
Tons: 18.5416
Cat Decode: Household waste
Method Decode: Not reported
Facility County: Los Angeles

Click this hyperlink while viewing on your computer to access additional CA_HAZNET: detail in the EDR Site Report.

A6
Target Property
LAUSD--FRANCIS POLYTECHNIC HS
12431 ROSCOE BLVD.
SUN VALLEY, CA 91352

RCRA-SQG **1008194416**
CAD982039315

Site 6 of 18 in cluster A

Actual: 823 ft.

RCRA-SQG:

Date form received by agency:	03/31/2004
Facility name:	LAUSD--FRANCIS POLYTECHNIC HS
Facility address:	12431 ROSCOE BLVD. SUN VALLEY, CA 91352
EPA ID:	CAD982039315
Mailing address:	333 S. BEAUDRY AVE. 20TH FL LOS ANGELES, CA 90017
Contact:	SOE AUNG
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	(213) 241-3199
Contact email:	SOE.AUNG@LAUSD.NET
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	LAUSD
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	State
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/2003
Owner/Op end date:	Not reported

Owner/operator name:	LAUSD
Owner/operator address:	333 S. BEAUDRY AVE. 20TH FL LOS ANGELES, CA 90017
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/2003
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

LAUSD--FRANCIS POLYTECHNIC HS (Continued) **1008194416**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/31/2004
Site name: LAUSD--FRANCIS POLYTECHNIC HS
Classification: Large Quantity Generator

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

A7 **POLYTECHNIC HIGH SCHOOL** **RCRA-LQG** **1011861622**
Target **12431 ROSCOE BLVD** **CAR000195750**
Property **SUN VALLEY, CA 91352**

Site 7 of 18 in cluster A

Actual: 823 ft.

RCRA-LQG:
Date form received by agency: 08/06/2013
Facility name: POLYTECHNIC HIGH SCHOOL
Facility address: 12431 ROSCOE BLVD
SUN VALLEY, CA 91352
EPA ID: CAR000195750
Mailing address: 333 S BEAUDRY AVE
20TH FL
LOS ANGELES, CA 90017
Contact: SOE AUNG
Contact address: 333 S BEAUDRY AVE 20TH FL
LOS ANGELES, CA 90017
Contact country: US
Contact telephone: 213-241-3904
Contact email: SOE.AUNG@LAUSD.NET
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: LOS ANGELES UNIFIED SCHOOL DIST
Owner/operator address: 333 S BEAUDRY AVE 28TH FL
LOS ANGELES, CA 90017

POLYTECHNIC HIGH SCHOOL (Continued) **1011861622**

Owner/operator country: US
Owner/operator telephone: 213-241-3199
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: 11/10/2008
Owner/Op end date: Not reported

Owner/operator name: POLYTECHNIC HIGH SCHOOL
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: District
Owner/Operator Type: Operator
Owner/Op start date: 11/10/2008
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 181
. Waste name: 181

. Waste code: D008
. Waste name: LEAD

Historical Generators:
Date form received by agency: 10/10/2008
Site name: NORTH HOLLYWOOD POLY CAS
Classification: Large Quantity Generator

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

A8 **CITY OF LOS ANGELES - DPW - BUREAU SANIT** **HAZNET** **S113021439**
Target **12431 ROSCOE BLVD** **N/A**
Property **SUN VALLEY, CA 91352**

Site 8 of 18 in cluster A

Actual:
823 ft.

HAZNET:

envid:	S113021439
Year:	2003
GEPAID:	CAH777001440
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not reported
Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 90013
Gen County:	Not reported
TSD EPA ID:	CAD981696420
TSD County:	Not reported
Waste Category:	Household waste
Disposal Method:	Recycler
Tons:	5.62
Cat Decode:	Household waste
Method Decode:	Recycler
Facility County:	Los Angeles

A9 **FRANCIS POLYTECHNIC HIGH SCHOOL** **ENVIROSTOR** **S105628600**
Target **12431 ROSCOE BOULEVARD** **SCH** **N/A**
Property **PANORAMA CITY, CA 91402**

Site 9 of 18 in cluster A

Actual:
823 ft.

ENVIROSTOR:

Facility ID:	19820072
Status:	No Further Action
Status Date:	05/04/2004
Site Code:	300772
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	47
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	39
Senate:	18
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	34.22393
Longitude:	-118.4039
APN:	2634019900
Past Use:	* EDUCATIONAL SERVICES
Potential COC:	Benzene Lead Methyl tertbutyl ether (MTBE Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Vinyl chloride Bromobenzene Bromodichloromethane Bromoform (tribromomethane Bromomethane (Methyl bromide n-Butylbenzene sec-Butylbenzene tert-Butylbenzene Carbon tetrachloride Chlorobenzene Chloroethane

FRANCIS POLYTECHNIC HIGH SCHOOL (Continued) **S105628600**

Chloroform Chloromethane (methyl chloride o-Chlorotoluene 1,4-Dibromobenzene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP 1,2-Dibromoethane (EDB 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane 1,1-Dichloroethane 1,2-Dichloroethane (EDC 1,1-Dichloroethylene 1,2-Dichloroethylene (cis 1,2-Dichloroethylene (trans 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropene Ethylbenzene Hexachlorobutadiene Methylene bromide Methylene chloride Methyl ethyl ketone (2-Butanone Methyl isobutyl ketone n-Propylbenzene Styrene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Toluene 1,2,4-Trichlorobenzene 1,1,2-Trichloroethane Trichlorofluoromethane 1,1,2-Trichloropropane 1,2,3-Trichloropropane 1,2,3-Trichloropropene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes

Confirmed COC: 30003-NO 30013-NO 30016-NO 30564-NO 30565-NO 30571-NO 30572-NO 30578-NO 30022-NO 30026-NO 30093-NO 30499-NO 30312-NO 30094-NO 30096-NO 30104-NO 30105-NO 30137-NO 30179-NO 30180-NO 30182-NO 30185-NO 30192-NO 30193-NO 30195-NO 30196-NO 30200-NO 30202-NO 30272-NO 30536-NO 30383-NO 30593-NO 30386-NO 30384-NO 30387-NO 30550-NO 30116-NO 30135-NO 30027-NO 30095-NO 30103-NO 30136-NO 30181-NO 30186-NO 30191-NO 30194-NO 30201-NO 30028-NO 30127-NO 30525-NO 30563-NO 30570-NO 30577-NO 30535-NO 30146-NO 30187-NO

Potential Description: SOIL, SV

Alias Name: FRANCIS POLYTECHNIC HIGH SCHOOL
Alias Type: Alternate Name
Alias Name: FRANCIS POLYTECHNIC HIGH SCHOOL
Alias Type: Alternate Name
Alias Name: LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: 2634019900
Alias Type: APN
Alias Name: 300772
Alias Type: Project Code (Site Code)
Alias Name: 19820072
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/19/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/12/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 03/25/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/23/2001

FRANCIS POLYTECHNIC HIGH SCHOOL (Continued) **S105628600**

Comments: Final Supplemental Work Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/13/2000
Comments: Final Soil-Gas Monitoring Work Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 07/15/2002
Comments: Soil Gas Sampling Report Event #1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 07/30/2002
Comments: Soil Gas Sampling Report Monitoring Event #2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/12/2003
Comments: Soil Gas Sampling Report Monitoring Event #3

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/27/2003
Comments: Soil Gas Sampling Report Monitoring Event #4

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 3

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 05/04/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE

FRANCIS POLYTECHNIC HIGH SCHOOL (Continued) **S105628600**

Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	02/10/2000
Comments:	DTSC entered into a Master Oversight Agreement (Agreement), (Docket Number HSA-A 99/00-051) with the Los Angeles Unified School District (LAUSD) on February 10, 2000. DTSC made a "No Further Action" determination on the site. LAUSD is conducting vapor monitoring pursuant to a PEA recommendation. DTSC concurs with the monitoring, activities, however it is not required. Received soil gas monitoring reports round 3 on 03/26/03.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Facility ID:	19820072
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	47
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	300772
Assembly:	39
Senate:	18
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	05/04/2004
Restricted Use:	NO
Funding:	School District
Latitude:	34.22393
Longitude:	-118.4039
APN:	2634019900
Past Use:	* EDUCATIONAL SERVICES
Potential COC:	Benzene, Lead, Methyl tertbutyl ether (MTBE, Tetrachloroethylene (PCE, 1,1,1-Trichloroethane (TCA, Trichloroethylene (TCE, Vinyl chloride, Bromobenzene, Bromodichloromethane, Bromoform (tribromomethane, Bromomethane (Methyl bromide, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane (methyl chloride, o-Chlorotoluene, 1,4-Dibromobenzene, Dibromochloromethane, 1,2-Dibromo-3-chloropropane (DBCP, 1,2-Dibromoethane (EDB, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane (EDC,

FRANCIS POLYTECHNIC HIGH SCHOOL (Continued) **S105628600**

1,1-Dichloroethylene, 1,2-Dichloroethylene (cis, 1,2-Dichloroethylene (trans, 1,2-Dichloropropane, 1,3-Dichloropropane, 1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Methylene bromide, Methylene chloride, Methyl ethyl ketone (2-Butanone, Methyl isobutyl ketone, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Toluene, 1,2,4-Trichlorobenzene, 1,1,2-Trichloroethane, Trichlorofluoromethane, 1,1,2-Trichloropropane, 1,2,3-Trichloropropane, 1,2,3-Trichloropropene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Xylenes

Confirmed COC: 30003-NO, 30013-NO, 30016-NO, 30564-NO, 30565-NO, 30571-NO, 30572-NO, 30578-NO, 30022-NO, 30026-NO, 30093-NO, 30499-NO, 30312-NO, 30094-NO, 30096-NO, 30104-NO, 30105-NO, 30137-NO, 30179-NO, 30180-NO, 30182-NO, 30185-NO, 30192-NO, 30193-NO, 30195-NO, 30196-NO, 30200-NO, 30202-NO, 30272-NO, 30536-NO, 30383-NO, 30593-NO, 30386-NO, 30384-NO, 30387-NO, 30550-NO, 30116-NO, 30135-NO, 30027-NO, 30095-NO, 30103-NO, 30136-NO, 30181-NO, 30186-NO, 30191-NO, 30194-NO, 30201-NO, 30028-NO, 30127-NO, 30525-NO, 30563-NO, 30570-NO, 30577-NO, 30535-NO, 30146-NO, 30187-NO

Potential Description: SOIL, SV
Alias Name: FRANCIS POLYTECHNIC HIGH SCHOOL
Alias Type: Alternate Name
Alias Name: FRANCIS POLYTECHNIC HIGH SCHOOL
Alias Type: Alternate Name
Alias Name: LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: 2634019900
Alias Type: APN
Alias Name: 300772
Alias Type: Project Code (Site Code)
Alias Name: 19820072
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/19/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/12/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 03/25/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/23/2001
Comments: Final Supplemental Work Plan

FRANCIS POLYTECHNIC HIGH SCHOOL (Continued) **S105628600**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 10/13/2000
Comments: Final Soil-Gas Monitoring Work Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 07/15/2002
Comments: Soil Gas Sampling Report Event #1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 07/30/2002
Comments: Soil Gas Sampling Report Monitoring Event #2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 03/12/2003
Comments: Soil Gas Sampling Report Monitoring Event #3

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/27/2003
Comments: Soil Gas Sampling Report Monitoring Event #4

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 3

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 05/04/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement

FRANCIS POLYTECHNIC HIGH SCHOOL (Continued) **S105628600**

Completed Date:	02/10/2000
Comments:	DTSC entered into a Master Oversight Agreement (Agreement), (Docket Number HSA-A 99/00-051) with the Los Angeles Unified School District (LAUSD) on February 10, 2000. DTSC made a "No Further Action" determination on the site. LAUSD is conducting vapor monitoring pursuant to a PEA recommendation. DTSC concurs with the monitoring, activities, however it is not required. Received soil gas monitoring reports round 3 on 03/26/03.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

A10 **LAUSD/ FRANCIS POLYTECHNIC HS** **HAZNET** **S113013220**
Target **12431 ROSCOE BLVD** **N/A**
Property **SUN VALLEY, CA 91352**

Site 10 of 18 in cluster A

Actual:
823 ft.

HAZNET:

envid:	S113013220
Year:	2013
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE FL 27
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1
Cat Decode:	Not reported
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Not reported

envid:	S113013220
Year:	2009
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil

LAUSD/ FRANCIS POLYTECHNIC HS (Continued) **S113013220**

Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	1.71
Cat Decode:	Waste oil and mixed oil
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles

envid:	S113013220
Year:	2009
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	1.71
Cat Decode:	Waste oil and mixed oil
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles

envid:	S113013220
Year:	2009
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Laboratory waste chemicals
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.15
Cat Decode:	Laboratory waste chemicals
Method Decode:	Fuel Blending Prior To Energy Recovery At Another Site
Facility County:	Los Angeles

envid:	S113013220
Year:	2009
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not reported
TSD EPA ID:	CAD009007626
TSD County:	Not reported

LAUSD/ FRANCIS POLYTECHNIC HS (Continued) **S113013220**

Waste Category:	Asbestos containing waste
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.4
Cat Decode:	Asbestos containing waste
Method Decode:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County:	Los Angeles

Click this hyperlink while viewing on your computer to access
58 additional CA_HAZNET: record(s) in the EDR Site Report.

A11 **LAUSD-NORTH HOLLYWOOD POLY CAS** **HAZNET** **S113178708**
Target **12431 ROSCOE BLVD** **N/A**
Property **SUN VALLEY, CA 91352**

Site 11 of 18 in cluster A

Actual: 823 ft.

HAZNET:

envid:	S113178708
Year:	2014
GEPAID:	CAR000195750
Contact:	PAT SCHAENEN
Telephone:	2132413921
Mailing Name:	Not reported
Mailing Address:	940 S BEAUDRY AVE FL 28
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	NVT330010000
TSD County:	99
Waste Category:	Not reported
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.22935
Cat Decode:	Not reported
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles

envid:	S113178708
Year:	2014
GEPAID:	CAR000195750
Contact:	PAT SCHAENEN
Telephone:	2132413921
Mailing Name:	Not reported
Mailing Address:	940 S BEAUDRY AVE FL 28
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	NVT330010000
TSD County:	99
Waste Category:	Unspecified aqueous solution
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	1.386
Cat Decode:	Unspecified aqueous solution
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles

LAUSD-NORTH HOLLYWOOD POLY CAS (Continued) **S113178708**

envid: S113178708
Year: 2013
GEPAID: CAR000195750
Contact: SOE AUNG
Telephone: 2132413904
Mailing Name: Not reported
Mailing Address: 333 S BEAUNDRY AVE FL 28
Mailing City,St,Zip: LOS ANGELES, CA 900170000
Gen County: Los Angeles
TSD EPA ID: NVT330010000
TSD County: 99
Waste Category: Not reported
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 1.08
Cat Decode: Not reported
Method Decode: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County: Not reported

envid: S113178708
Year: 2013
GEPAID: CAR000195750
Contact: SOE AUNG
Telephone: 2132413904
Mailing Name: Not reported
Mailing Address: 333 S BEAUNDRY AVE FL 28
Mailing City,St,Zip: LOS ANGELES, CA 900170000
Gen County: Los Angeles
TSD EPA ID: NMD002208627
TSD County: 99
Waste Category: Not reported
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0445
Cat Decode: Not reported
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Not reported

envid: S113178708
Year: 2013
GEPAID: CAR000195750
Contact: SOE AUNG
Telephone: 2132413904
Mailing Name: Not reported
Mailing Address: 333 S BEAUNDRY AVE FL 28
Mailing City,St,Zip: LOS ANGELES, CA 900170000
Gen County: Los Angeles
TSD EPA ID: CAD009007626
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 0.8
Cat Decode: Not reported
Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To

LAUSD-NORTH HOLLYWOOD POLY CAS (Continued) **S113178708**

Include On-Site Treatment And/Or Stabilization)
Facility County: Not reported

Click this hyperlink while viewing on your computer to access
3 additional CA_HAZNET: record(s) in the EDR Site Report.

NPL Region
< 1/8
1 ft.

SAN FERNANDO VALLEY (AREA 1)
NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601

NPL **1000709322**
SEMS **CAD980894893**
US ENG CONTROLS
US INST CONTROL
ENVIROSTOR
HIST Cal-Sites
ROD
PRP
ICIS
CONSENT
FINDS
Cortese
ECHO

NPL:
EPA ID: CAD980894893
Cerclis ID: 902251
EPA Region: 9
Federal: N
Final Date: 1986-06-10 00:00:00
Site Score: 42.240000000000002
Latitude: 34.189999999999998
Longitude: -118.3514

Category Details:
NPL Status: Currently on the Final NPL
Category Description: Depth To Aquifer-<= 10 Feet
Category Value: 1

NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 10

Site Details:
Site Name: SAN FERNANDO VALLEY (AREA 1)
Site Status: Final
Site Zip: 91601
Site City: NORTH HOLLYWOOD
Site State: CA
Federal Site: No
Site County: LOS ANGELES
EPA Region: 09
Date Proposed: 10/15/84
Date Deleted: Not reported
Date Finalized: 06/10/86

Substance Details:
NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: U044
Substance: CHLOROFORM
CAS #: 67-66-3
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U211
Substance: CARBON TETRACHLORIDE
CAS #: 56-23-5
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

Summary Details:

Conditions at proposal October 15, 1984): San Fernando Valley Area l) is an area of contaminated ground water in the vicinity of the North Hollywood section of the City of Los Angeles, Los Angeles County, California. This area is part of the San Fernando Valley Basin, a natural underground reservoir that represents an important source of drinking water for at least 3 million people in the Los Angeles metropolitan area. The contaminated ground water, which underlies an area of approximately 5,l56 acres, contains trichloroethylene TCE) and perchloroethylene PCE), and to a lesser extent, carbon tetrachloride and chloroform, according to analyses conducted by the California Department of Health Services, as well as numerous local government agencies. The State s recommended drinking water guideline for TCE and PCE 5 and 4 parts per billion respectively) are exceeded in a number of public wells in this area. To alleviate this contamination, wells are eithertaken out of service or blended with water from clean sources to ensure that the public receives water with TCE/PCE concentrations below the State s guidelines. Status June 10, 1986): EPA and the Los Angeles Department of Water and Power are entering into a cooperative agreement for a remedial investigation of the San Fernando Valley Basin and a feasibility study targeted at Area 1, the most contaminated area. The RI is scheduled to begin in early 1986.

Site Status Details:
NPL Status: Final
Proposed Date: 10/15/1984

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Final Date: 06/10/1986
Deleted Date: Not reported

Narratives Details:
NPL Name: SAN FERNANDO VALLEY (AREA 1)
City: NORTH HOLLYWOOD
State: CA

SEMS:
Site ID: 902251
EPA ID: CAD980894893
Federal Facility: N
NPL: Currently on the Final NPL
Non NPL Status: Not reported

Following information was gathered from the prior CERCLIS update completed in 10/2013:
Site ID: 0902251
EPA ID: CAD980894893
Facility County: LOS ANGELES
Short Name: SAN FERNANDO VALLEY (AREA
Congressional District: 28
IFMS ID: 0959
SMSA Number: 4480
USGC Hydro Unit: 18070105
Federal Facility: Not a Federal Facility
DMNSN Number: 9336.00000
Site Orphan Flag: N
RCRA ID: Not reported
USGS Quadrangle: Not reported
Site Init By Prog: Not reported
NFRAP Flag: Not reported
Parent ID: Not reported
RST Code: I
EPA Region: 09
Classification: Wells
Site Settings Code: UR
NPL Status: Currently on the Final NPL
DMNSN Unit Code: ACRE
RBRAC Code: Not reported
RResp Fed Agency Code: Not reported
Non NPL Status: Not reported
Non NPL Status Date: / /
Site Fips Code: 06037
CC Concurrence Date: / /
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):
Contact ID: 13002702.00000
Contact Name: Zizi Searles
Contact Tel: (415) 972-3178
Contact Title: Remedial Project Manager (RPM)
Contact Email: Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Contact ID: 13003854.00000
Contact Name: Leslie Ramirez
Contact Tel: (415) 972-3978
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Contact Email: Not reported

Contact ID: 13003858.00000
Contact Name: Sharon Murray
Contact Tel: (415) 972-4250
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13004003.00000
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Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13002904.00000
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Contact Title: Remedial Project Manager (RPM)
Contact Email: Not reported

Contact ID: 13002785.00000
Contact Name: Kelly Manheimer
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Contact Title: Remedial Project Manager (RPM)
Contact Email: Not reported

Contact ID: 13004928.00000
Contact Name: Jamey Watt
Contact Tel: (415) 972-3175
Contact Title: Remedial Project Manager (RPM)
Contact Email: Not reported

CERCLIS Site Alias Name(s):
Alias ID: 101
Alias Name: SAN FERNANDO VALLEY- N HOLLYWOOD WELLFLD
Alias Address: Not reported
NORTH HOLLYWOOD & BURBANK, CA 91600
Alias ID: 201
Alias Name: NORTH HOLLYWOOD OPERABLE UNIT
Alias Address: Not reported
CA
Alias ID: 301
Alias Name: BURBANK OPERABLE UNIT
Alias Address: Not reported
CA
Alias ID: 302
Alias Name: SAN FERNANDO VALLEY (AREA 1)
Alias Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Alias ID: 303
Alias Name: SAN FERNANDO VALLEY (AREA 1)
Alias Address: NORTH HOLLYWOOD WELLFIELD AREA
LOS ANGELES, CA 91601

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Alias ID: 201
Alias ID: 301
Alias Comments: OPERABLE UNIT 1* BURBANK WELL FIELD IN VICINITY OF BURBANK AIRPORT & FACILITY. *
OPERABLE UNIT 2. *
BURBANK/LOCKHEED OPERABLE UNIT.

Site Description: The North Hollywood-Burbank Well Field is located within the North Hollywood National Priorities List (NPL) Site, which is one of four NPL sites in the San Fernando Valley. It is also located in the San Fernando Valley Groundwater Basin. The sites were proposed for inclusion on the NPL because of the discovery of trichloroethylene and other volatile organic contaminants (VOCs) in the groundwater. The San Fernando Valley Groundwater Basin comprises 112,000 acres of valley fill situated among the Coastal Ranges within the Los Angeles metropolitan area. The area is used for residential, commercial, and industrial purposes. Groundwater from the basin is distributed by various municipalities and water districts to the residents of the metropolitan area. The Los Angeles Department of Water and Power (DWP) operates the North Hollywood-Burbank Well Field to provide drinking water to the residents of the City of Los Angeles, located to the south of the San Fernando Valley. The San Fernando Groundwater Basin can provide drinking water for approximately 500,000 people residing in the San Fernando Valley and Los Angeles. In times of water shortages, the groundwater shortage can be drawn upon to supply about one million people. It is also an important source of water for the Cities of Burbank, Glendale, and San Fernando. The North Hollywood Operable Unit (NHOU) is one of two geographically-defined operable units within the San Fernando Valley (SFV) (Area 1) Superfund Site. The NHOU comprises approximately 4 square miles of contaminated groundwater underlying an area of mixed industrial, commercial, and residential land use in the community of North Hollywood (a district of the City of Los Angeles). The NHOU is approximately 15 miles north of downtown Los Angeles and immediately west of the City of Burbank, and has approximate Site boundaries of Sun Valley and Interstate 5 to the north, State Highway 170 and Lankershim Boulevard to the west, the Burbank Airport to the east, and Burbank Boulevard to the south. The EPA is the lead agency for the current and planned future groundwater remedial activities at the NHOU. The EPA's response activities at the NHOU are and have been conducted under the authority established in the federal Superfund law, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. Section 9601 et seq. The lead state agency is the California Department of Toxic Substances Control (DTSC). The Los Angeles Regional Water Quality Control Board (RWQCB) has provided and continues to provide substantial support, particularly with the investigation and cleanup of sources of contamination in the SFV. The expected source of cleanup monies for the NHOU is an enforcement settlement with the Potentially Responsible Parties (PRPs). Prior to World War II, most land in the SFV was occupied by farms, orchards, and ranchland. By 1949, after the war, nearly all the land in Burbank and North Hollywood was occupied by housing developments, industrial facilities, retail establishments, and the Burbank Airport. Accompanying these land use changes in the 1940s was a substantial increase in population and groundwater withdrawals from the SFV. In the 1950s, the North Hollywood, Erwin, Whitnall, and Verdugo Well Fields were constructed by the Los Angeles Department of Water and Power (LADWP) in the North Hollywood area to meet the increasing demand for water. In 1968, groundwater withdrawals from the SFV were reduced to achieve "safe yield" from the basin, and more surface water was imported to the basin from external sources. In 1979, industrial contamination was found in groundwater in the San Gabriel Valley (to the east of the SFV), prompting the California Department of Public Health (CDPH; formerly the California Department of Health Services) to request that all

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

major water providers in the region, including those in the SFV, sample and analyze groundwater for potential industrial contaminants. Trichloroethylene (TCE) and tetrachloroethylene (PCE) were consistently detected in a large number of production wells in the SFV at concentrations greater than Federal and State Maximum Contaminant Levels (MCLs) for drinking water. TCE and PCE were widely used in the San Fernando Valley starting in the 1940s for dry cleaning and for degreasing machinery. Disposal was not well regulated at that time, and releases volatile organic compound (VOC)-contaminated groundwater that extends from the NHOU to the southeast. To replace wells within the NHOU area contaminated by TCE and PCE, and to provide more operational flexibility for groundwater recharge and pumping in the SFV, LADWP constructed the Rinaldi-Toluca Well Field in 1988 and 1989, and the Tujunga Well Field in 1993. Based on the significant levels of groundwater contamination present in the SFV and the impact of that contamination on numerous municipal water supply wells, EPA added four SFV Sites to the National Priorities List (NPL) in 1986 and defined them as areas of regional groundwater contamination. Three of the four Sites (Areas 1, 2 and 4) are contiguous areas within whose boundaries are well fields that serve the water supply systems for the cities of Los Angeles, Burbank and Glendale. There is a large, continuous plume of groundwater contamination that runs through these three Sites. The fourth Site, Area 3, lies in the Verdugo basin, a geographically separate area of the eastern San Fernando Valley. In the SFV Area 1 Site, located at the upgradient end of the contaminated groundwater plume, the selection and implementation of the initial interim remedy - the Existing NHOU Extraction and Treatment System - for the LADWP's North Hollywood well field was given fast-track status because of the potential for contamination to spread to other well fields and areas of uncontaminated groundwater. In 1986, LADWP completed the Operable Unit Feasibility Study for the North Hollywood Well Field Area of the North Hollywood-Burbank NPL Site, which was the basis for selection and implementation of the Existing NHOU Extraction and Treatment System. The 1987 Record of Decision (ROD) for the Site selected the Existing NHOU Extraction and Treatment System as an interim groundwater containment remedy. In 1989, LADWP constructed the Existing NHOU Extraction and Treatment System with financial support from EPA. The Existing NHOU Extraction and Treatment System consists of eight groundwater extraction wells (NHE-1 through NHE-8), an air-stripping treatment system to remove VOCs from the extracted groundwater, activated carbon filters to remove VOCs from the air stream, and ancillary equipment. The treated groundwater is discharged into an LADWP blending facility where it is combined with water from other sources before entering the LADWP water supply system. The Existing NHOU Extraction and Treatment System commenced operation in December 1989 and remains in operation today. In 1989, EPA issued a ROD for the Burbank OU (BOU) of the SFV Area 1 Site. That ROD also selected an interim remedy (containment) for the VOC-contaminated groundwater within the Burbank area, where ten of the city's water supply wells had been shut down due to contamination. The BOU remedy, which provides treated water for the City of Burbank's water supply system, began operation in 1996 and remains in operation to this day. OU01 1991 ESD: In June 1986, the United States Environmental Protection Agency (EPA) evaluated the threat posed by a number of well fields within the San Fernando and Verdugo Groundwater Basins, and designated them as National Priorities List (NPL) hazardous substance sites. Industrial chemicals had been detected in groundwater from these areas. Although four sites in the basin were listed on the NPL, EPA and DWP are managing the investigation of the four sites and the adjacent area as a single project consistent with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Section 104(d)(4). The San Fernando Valley Groundwater Basin (SFVGB) has historically been, and continues to be, an important source of drinking water for the Los Angeles metropolitan area,

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

including the unincorporated area of La Cresenta, and the cities of Burbank, Glendale, and San Fernando. The groundwater basin provides these communities with enough water to serve approximately 600,000 residents. Groundwater from the SFVGB is used for residential, commercial, and industrial purposes, and is especially important during years of drought. The groundwater that has become contaminated is difficult to replace. The current water supply from surface water may not always be available in the future because of periodic drought conditions and state and federal water rights issues. The Burbank Operable Unit (OU) was developed to address the areal extent of groundwater contamination that is presently generally located in the area of the Burbank Well Field and including any areas to which the groundwater contamination migrates. The Site is part of the SFV Area 1 (North Hollywood) NPL site and includes an area beyond that originally designated as SFV Area 1. The City of Burbank's production wells have been shut down because the water they produce contained trichloroethylene (TCE) and perchloroethylene (PCE) in concentrations exceeding state and federal maximum contaminant levels (MCLs). Consequently, the City of Burbank now purchases 100 percent of its water, which is imported supply, from the Metropolitan Water District of Southern California (MWD). On June 30, 1989, the U.S. Environmental Protection Agency (EPA) signed a Record of Decision (ROD) for the San Fernando Valley (SFV) Area 1 - Burbank Operable Unit (Burbank OU). The Burbank OU is the second OU, but is named OU03 at the SFV Area 1 NPL site. The purpose of this Explanation of Significant Differences (ESD) is to explain the significant differences between the interim remedial action originally selected in the 1989 ROD and the interim remedy which will be implemented at the Site. EPA is issuing this ESD in order to take into account technical data received after the ROD was signed in June of 1989 and to clarify any ambiguities regarding the selected remedy. An Explanation of Significant Differences addressing OU01 the San Fernando Site was completed in November, 1990. Operable Unit 3: The following gives a brief background of the Burbank Operable unit (OU) and a short summary of the remedy selected in the Record of Decision (ROD) and modified by Explanation of Significant Differences (ESD) 1. Further background information can be found in the ROD (dated June 30, 1989), and in ESD1 (dated November 20, 1990), as well as in other documents in the Burbank OU Administrative Record. In June 1986, the U.S. Environmental Protection Agency (EPA) evaluated the threat posed by groundwater contamination at a number of water supply wellfields within the San Fernando Valley and Verdugo groundwater basins. The chief contaminants of concern are trichloroethylene (TCE) and perchloroethylene (PCE). As a result of its investigation, EPA designated four wellfield areas as National Priorities List (NPL) sites. EPA is managing the four sites as a single project consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104(d)(4). The San Fernando Valley Groundwater Basin has historically been an important source of drinking water for the Los Angeles metropolitan area, including the City of Burbank. The groundwater basin provides enough water to serve approximately 600,000 residents. Groundwater extracted from the basin is especially important during years of drought. Due to contamination by volatile organic chemicals (VOC), including TCE and PCE, beneficial use of the groundwater resource has been partially lost. Surface water supplies have replaced the lost resource, but are costly, and may not be available in the future due to periodic drought conditions and the potential for changing water rights policy. The Burbank OU is located within the San Fernando Valley groundwater basin and encompasses wellfields which were operated by the City of Burbank prior to being shut down as a result of contamination. The Burbank OU was specifically developed to address this areal extent of groundwater contamination. The City of Burbank's production wells have been shut down since the early 1980s because of the presence of TCE and PCE in concentrations

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

exceeding federal and state Maximum Contaminant Levels (MCL). Consequently, the city purchases close to one hundred percent of its water from the Metropolitan Water District of Southern California, which supplies surface water imported from outside the San Fernando basin. (The city does operate a granular activated carbon groundwater extraction and treatment plant during parts of the year, but the contribution of this plant toward meeting the overall water demand is small). On June 30, 1989, EPA signed a Record of Decision (ROD) for the San Fernando Valley Area 1 Superfund Site, Burbank Operable Unit OU. On November 21, 1990, EPA signed an Explanation of Significant Differences (ESD1) modifying the interim remedial action selected in the ROD. A second ESD addressing the Burbank Operable Unit (Operable Unit 3) at the San Fernando Valley (Area 1) site was completed in February 1997. In December 1992, a remedial investigation (RI) for the SFV groundwater basin, including installation and subsequent regular monitoring of 84 groundwater wells, was completed under a cooperative agreement between EPA and the LADWP. The RI was conducted to evaluate the groundwater quality throughout the SFV basin and assist in identifying the best treatment method(s) and optimal locations to install groundwater treatment systems to address the SFV groundwater contamination EPA listed the SFV Sites as groundwater only, with the intent to focus on addressing the regional groundwater contamination, with an agreement with the state agencies to address the sources. From the late 1980s to late 1990s, EPA provided funds to RWQCB to conduct assessments of facilities in the SFV to determine the extent of solvent usage and to assess past and current chemical handling, storage, and disposal practices. These investigations were conducted pursuant to RWQCB's Well Investigation Program and resulted in source remediation activities under RWQCB oversight at several facilities within the SFV, including two within the NHOU. Source investigations and remediation activities are currently in progress under the lead of RWQCB and DTSC. In 1993, 1998, 2003, and 2008, EPA conducted five-year reviews (as required by CERCLA) to evaluate the protectiveness of the NHOU interim remedy. The Third NHOU Five-Year Review reported that the TCE and PCE groundwater plume that the remedy was designed to capture was migrating vertically and laterally beyond the remedy's zone of hydraulic control. This conclusion was based largely on EPA's evaluation of the current NHOU groundwater conditions and LADWP findings in the Draft Evaluation of the North Hollywood Operable Unit and Options to Enhance Its Effectiveness. The Final Evaluation of the North Hollywood Operable Unit and Options to Enhance Its Effectiveness also raised concerns regarding detections of total chromium and hexavalent chromium in extraction well NHE-2 of the NHOU interim remedy. Well NHE-2 is located just a short distance from the former Bendix facility, one of the major VOC sources in the NHOU. In July 2006, after a year of unusually high rainfall and rising groundwater levels in the SFV, the total chromium concentration detected at NHOU extraction well NHE-2 began to increase. Chromium was used in the metal plating and aerospace industry (metal fabrication), as well as for corrosion inhibition in industrial cooling towers, from the 1940s through the 1980s. It was also used extensively at the former Bendix facility. In 2007, the elevated concentrations of chromium at well NHE-2 caused total chromium concentrations in the combined NHOU treatment system effluent to exceed 30 micrograms per liter (ug/L) (60 percent of the state MCL). As a result, CDPH advised LADWP to shut down well NHE-2 or divert the water produced by the well to a nonpotable use. Chromium concentrations at this well have subsequently ranged from approximately 280 to 440 ug/L. In addition, 1, 4-dioxane was detected at well NHE-2 during 2007 and 2008 at concentrations ranging from 4 to 7 ug/L. There is no MCL for 1, 4-dioxane, but the CDPH notification level for 1, 4-dioxane is 3 ug/L. Extraction well NHE-2 remained shut down until September 2008, when the installation of a wellhead VOC treatment unit and modification of the discharge piping were completed, which

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

allowed this well to return to service. The NHE-2 effluent, which still contains elevated levels of chromium, is currently discharged to the Los Angeles Bureau of Sanitation sewer system. This work was conducted by Honeywell International (a corporate successor to Bendix) as an interim measure, pursuant to a Cleanup and Abatement Order (CAO) from RWQCB that requires Honeywell to clean up the chromium contamination and to restore lost water caused by the shut down of well NHE-2. A long-term wellhead treatment system for well NHE-2, including treatment for chromium and, if necessary, 1,4-dioxane, to meet drinking water standards is expected to be implemented pursuant to the RWQCB CAO prior to the implementation of the NHOU Second Interim Remedy. Following construction and start up of the Existing NHOU Extraction and Treatment System, EPA issued general and special notice letters to PRPs. In 1996 and 1997, EPA reached two separate settlements with PRPs in which the settling parties agreed to pay EPA's past costs and fund operation of the Existing NHOU Extraction and Treatment System for the remainder of its fifteen-year term. In 2008, when the funds collected pursuant to the 1996 and 1997 settlements were close to being exhausted, EPA entered into an administrative order on consent with a number of parties from 1996 and 1997 settlements and issued a unilateral administrative order to the remaining viable parties in order to secure funding to continue operating the Existing NHOU Extraction and Treatment System until the Second Interim Remedy is constructed and operational. In preparation for the selection and implementation of the Second Interim Remedy, EPA has conducted additional PRP search activity. The RWQCB has issued CAOs to two parties in the NHOU. In December 1987, Lockheed was issued a CAO directing it to remediate contaminated soil and groundwater at Plant B-1 (in the BOU) and to complete a comprehensive Site assessment at all of Lockheed's other Burbank Airport facilities, including Plants B5 and C1 (in the NHOU), to determine the sources and extent of soil and groundwater contamination. The RWQCB issued a CAO in February 2003 to Honeywell International, Inc., for VOC and chromium contamination in groundwater at the former Bendix facility in North Hollywood. This CAO was amended in April 2007 to include investigation and mitigation of emerging contaminants at the former Bendix facility and to address elevated chromium concentrations at NHOU extraction well NHE-2. The land use in the SFV Area 1 Site, including the NHOU, consists of mixed residential, industrial, and commercial use. The SFV is fully developed and land uses in the NHOU are not expected to change significantly in the next 20 years or longer. The SFV groundwater basin is an important source of drinking water for the Los Angeles metropolitan area, including the cities of Los Angeles, Glendale, Burbank, and San Fernando. The SFV is located in the Upper Los Angeles River Area (ULARA), which is under adjudicated water rights regulated by the ULARA Watermaster. Through court action in 1975, the City of Los Angeles was granted rights to all groundwater in the San Fernando Basin that is derived from precipitation within ULARA. There are a number of production well fields in the eastern SFV, including six LADWP well fields located in or near the NHOU. The output from the existing NHOU remedy accounts for approximately 1 to 2 percent of LADWP's total extraction from the SFV groundwater basin. The need for drinking water development in the eastern SFV, including the NHOU, is expected to increase over the next 20 years as restrictions on importing water to Southern California increase and imported water becomes more expensive. An Interim ROD addressing Operable Unit 4 was completed in September 2009.

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	/ /
Date Completed:	12/01/83

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: / /
Date Completed: 04/01/84
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: SITE INSPECTION
Date Started: / /
Date Completed: 04/01/84
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 04/01/84
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 10/15/84
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started: 09/30/84
Date Completed: 08/15/85
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 06/10/86
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 08/16/85
Date Completed: 09/24/87
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: State, Fund Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMEDIAL DESIGN
Date Started: 04/01/87
Date Completed: 09/24/87
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: State, Fund Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Action Code:	003
Action:	RECORD OF DECISION
Date Started:	/ /
Date Completed:	09/24/87
Priority Level:	Not reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	08/24/88
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	04/13/89
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	01/15/88
Date Completed:	06/30/89
Priority Level:	Not reported
Operable Unit:	BURBANK
Primary Responsibility:	State, Fund Financed
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	Special Notice Issued
Date Started:	/ /
Date Completed:	06/30/89

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 06/30/89
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: Special Notice Issued
Date Started: / /
Date Completed: 05/04/90
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL ASSESSMENT
Date Started: 08/29/90
Date Completed: 08/29/90
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: UNILATERAL ADMIN ORDER
Date Started: / /
Date Completed: 08/30/90
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: Notice Letters Issued
Date Started: / /
Date Completed: 08/30/90
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: Explanation Of Significant Differences
Date Started: / /
Date Completed: 11/12/90
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: Not reported
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: Special Notice Issued
Date Started: / /
Date Completed: 11/20/90
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started: 05/04/89
Date Completed: 03/28/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL
Date Started: 08/27/90
Date Completed: 05/23/91
Priority Level: Cleaned up
Operable Unit: BURBANK
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Time Critical
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL COMMUNITY RELATIONS
Date Started: 09/11/90
Date Completed: 05/23/91
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: REMOVAL ASSESSMENT
Date Started: 06/17/91
Date Completed: 06/17/91
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMEDIAL ACTION
Date Started: 08/06/87
Date Completed: 09/04/91
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: State, Fund Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Date Started:	08/16/90
Date Completed:	09/30/91
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	CONSENT DECREE
Date Started:	03/28/91
Date Completed:	03/25/92
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	UNILATERAL ADMIN ORDER
Date Started:	/ /
Date Completed:	03/26/92
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	RISK/HEALTH ASSESSMENT
Date Started:	/ /
Date Completed:	12/15/92
Priority Level:	Not reported
Operable Unit:	BASINWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	ECOLOGICAL RISK ASSESSMENT
Date Started:	/ /
Date Completed:	12/15/92
Priority Level:	Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Operable Unit: BASINWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PREPARATION OF COST DOCUMENT PACKAGE
Date Started: / /
Date Completed: 06/17/93
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started: 09/25/89
Date Completed: 06/30/93
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FIVE-YEAR REVIEW
Date Started: 07/08/93
Date Completed: 07/08/93
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 03/25/92
Date Completed: 11/22/93
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Phased Completion

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 07/27/92
Date Completed: 11/22/93
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: UNILATERAL ADMIN ORDER
Date Started: / /
Date Completed: 02/18/94
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: PREPARATION OF COST DOCUMENT PACKAGE
Date Started: 03/24/94
Date Completed: 06/24/94
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION
Date Started: 02/18/94
Date Completed: 09/09/94
Priority Level: Not reported
Operable Unit: BASINWIDE
Primary Responsibility: Responsible Party
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

STUDY
Date Started: 02/18/94
Date Completed: 09/09/94
Priority Level: Not reported
Operable Unit: BASINWIDE
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: PREPARATION OF COST DOCUMENT PACKAGE
Date Started: 09/04/94
Date Completed: 02/13/95
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: PREPARATION OF COST DOCUMENT PACKAGE
Date Started: 10/17/95
Date Completed: 01/26/96
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: Lodged By DOJ
Date Started: / /
Date Completed: 02/21/96
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: Lodged By DOJ
Date Started: / /
Date Completed: 03/14/96
Priority Level: Not reported
Operable Unit: SITEWIDE

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: CONSENT DECREE
Date Started: 01/02/96
Date Completed: 07/01/96
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: CONSENT DECREE
Date Started: 02/12/96
Date Completed: 08/01/96
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: SECTION 107 LITIGATION
Date Started: 03/19/93
Date Completed: 01/14/97
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: COST RECOVERY NEGOTIATIONS
Date Started: 07/16/93
Date Completed: 01/14/97
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: Explanation Of Significant Differences
Date Started: / /
Date Completed: 02/12/97
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: Not reported
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: Lodged By DOJ
Date Started: / /
Date Completed: 02/18/97
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: Lodged By DOJ
Date Started: / /
Date Completed: 02/18/97
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 006
Action: CONSENT DECREE
Date Started: 01/14/97
Date Completed: 05/14/97
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Action Code: 007
Action: CONSENT DECREE
Date Started: / /
Date Completed: 05/14/97
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started: 05/04/94
Date Completed: 08/07/97
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 03/25/92
Date Completed: 09/30/97
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Phased Start

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: Lodged By DOJ
Date Started: / /
Date Completed: 03/17/98
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: CONSENT DECREE
Date Started: 08/07/97
Date Completed: 06/22/98
Priority Level: Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 06/30/98
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: FIVE-YEAR REVIEW
Date Started: / /
Date Completed: 08/17/98
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 12/30/98
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: LONG TERM RESPONSE ACTION
Date Started: 12/01/89
Date Completed: 12/01/99
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: State, Fund Financed
Planning Status: Primary

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: FIVE-YEAR REVIEW
Date Started: 06/20/03
Date Completed: 09/30/03
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: FIVE-YEAR REVIEW
Date Started: 04/15/04
Date Completed: 09/30/04
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: UNILATERAL ADMIN ORDER
Date Started: / /
Date Completed: 03/29/07
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: Notice of Intent by All Parties
Date Started: / /
Date Completed: 03/29/07
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Not reported
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 09/16/08
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: NEGOTIATION (GENERIC)
Date Started: / /
Date Completed: 09/16/08
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: UNILATERAL ADMIN ORDER
Date Started: / /
Date Completed: 09/18/08
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: FIVE-YEAR REVIEW
Date Started: 04/24/08
Date Completed: 09/30/08
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FEASIBILITY STUDY
Date Started: 01/23/06
Date Completed: 09/30/09
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/30/09
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 12/29/09
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: CLAIM IN BANKRUPTCY PROCEEDING
Date Started: 07/02/09
Date Completed: 04/23/10
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: Special Notice Issued
Date Started: / /
Date Completed: 07/01/10
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started: 07/01/10
Date Completed: 02/14/11
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 02/14/11
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 006
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 11/16/11
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: NEGOTIATION (GENERIC)
Date Started: / /
Date Completed: 11/16/11
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 007

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 12/06/11
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: NEGOTIATION (GENERIC)
Date Started: / /
Date Completed: 12/06/11
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started: 09/08/04
Date Completed: 04/26/12
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Other Completion Anomaly

For detailed financial records, contact EDR for a Site Report.:

Action Code: 008
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 03/01/13
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 009
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 08/06/13
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 08/16/85
Date Completed: / /
Priority Level: Not reported
Operable Unit: BASINWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: TECHNICAL ASSISTANCE
Date Started: 09/30/85
Date Completed: / /
Priority Level: Not reported
Operable Unit: BASINWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 11/22/93
Date Completed: / /
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Phased Completion

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 11/22/93
Date Completed: / /
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Phased Completion

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started: 09/30/97
Date Completed: / /
Priority Level: Not reported
Operable Unit: BURBANK
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Long Term Action
Action Anomaly: Phased Start

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: OPERATIONS AND MAINTENANCE
Date Started: 12/01/99
Date Completed: / /
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD
Primary Responsibility: Responsible Party
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 006
Action: POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started: 02/14/11
Date Completed: / /
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: Responsible Party
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: REMEDIAL DESIGN
Date Started: 03/01/13
Date Completed: / /
Priority Level: Not reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Federal Register Details:
Fed Register Date: 06/10/86
Fed Register Volume: 51
Page Number: 21054

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Fed Register Date: 10/15/84
Fed Register Volume: 49
Page Number: 40320

Click this hyperlink while viewing on your computer to access
3257 additional US CERCLIS Financial: record(s) in the EDR Site Report.

US ENG CONTROLS:
EPA ID: CAD980894893
Site ID: 0902251
Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Actual Date: 09/30/2009
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 001
Action Name: Explanation Of Significant Differences
Action Completion date: 11/12/1990
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Reinjection
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 001
Action Name: Explanation Of Significant Differences
Action Completion date: 11/12/1990
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Treatment, (N.O.S.)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 002
Action Name: Explanation Of Significant Differences
Action Completion date: 02/12/1997
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Non-fundamental change (ESD)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 002

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Action Name: RECORD OF DECISION
Action Completion date: 06/30/1989
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Air Stripping
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 06/30/1989
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Extraction
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 06/30/1989
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Reuse as Drinking Water
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 06/30/1989
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Treatment, (N.O.S.)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 09/24/1987
Operable Unit: 02
Contaminated Media : Groundwater
Engineering Control: Aeration
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 09/24/1987

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Operable Unit: 02
Contaminated Media : Groundwater
Engineering Control: Carbon Adsorption
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 09/24/1987
Operable Unit: 02
Contaminated Media : Groundwater
Engineering Control: Containment, (N.O.S.)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 09/24/1987
Operable Unit: 02
Contaminated Media : Groundwater
Engineering Control: Discharge
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 09/24/1987
Operable Unit: 02
Contaminated Media : Groundwater
Engineering Control: Extraction
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 04
Contaminated Media : Groundwater
Engineering Control: Air Stripping
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 04
Contaminated Media : Groundwater

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Engineering Control: Extraction
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 04
Contaminated Media : Groundwater
Engineering Control: Filtration
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 04
Contaminated Media : Groundwater
Engineering Control: Ion Exchange
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 04
Contaminated Media : Groundwater
Engineering Control: Liquid Phase Carbon Adsorption
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 04
Contaminated Media : Groundwater
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 09/30/2009
Operable Unit: 04
Contaminated Media : Groundwater
Engineering Control: Well Head Treatment
Contact Name: Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

US INST CONTROL:
EPA ID: CAD980894893
Site ID: 0902251
Name: SAN FERNANDO VALLEY (AREA 1)
Action Name: RECORD OF DECISION
Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
EPA Region: 09
County: LOS ANGELES
Event Code: Not reported
Inst. Control: Groundwater use/well drilling regulation
Actual Date: 09/30/2009
Complet. Date: 09/30/2009
Operable Unit: 04
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Latitude : Not reported
Longitude : Not reported

ENVIROSTOR:
Facility ID: 19990011
Status: Active
Status Date: 05/15/1996
Site Code: 300287
Site Type: Federal Superfund
Site Type Detailed: State Response or NPL
Acres: 5254
NPL: YES
Regulatory Agencies: SMBRP, RWQCB 4 - Los Angeles, US EPA
Lead Agency: US EPA
Program Manager: Tedd Yargeau
Supervisor: Javier Hinojosa
Division Branch: Cleanup Chatsworth
Assembly: 39
Senate: 18
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 34.1875
Longitude: -118.3838
APN: NONE SPECIFIED
Past Use: AEROSPACE MANUFACTURING/MAINTENANCE, MACHINE SHOP, MANUFACTURING - METAL, METAL FINISHING, METAL PLATING - CHROME, METAL PLATING - OTHER, RESEARCH - AEROSPACE
Potential COC: Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA
Trichloroethylene (TCE Chromium III Chromium VI
Confirmed COC: Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA
Trichloroethylene (TCE Chromium III Chromium VI
Potential Description: AQUI, SOIL

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Alias Name: BURBANK OU
Alias Type: Alternate Name
Alias Name: NORTH HOLLYWOOD OUFS
Alias Type: Alternate Name
Alias Name: SAN FERNANDO VALLEY GW BASIN AREA 1
Alias Type: Alternate Name
Alias Name: CAD980894893
Alias Type: CERCLIS ID
Alias Name: 110009267961
Alias Type: EPA (FRS #)
Alias Name: P31031
Alias Type: PCode
Alias Name: 300126
Alias Type: Project Code (Site Code)
Alias Name: 300173
Alias Type: Project Code (Site Code)
Alias Name: 300287
Alias Type: Project Code (Site Code)
Alias Name: 19990011
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 06/24/1997
Comments: A second partial Consent Decree, dated June 24, 1997, requires reimbursement to the State by Lockheed-Martin of certain past costs and annual billing for future site specific response costs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 05/14/1997
Comments: The second partial consent decree to recover DTSC's past cost is signed on May 14, 1997. This also concludes the litigation for the interim remedy at the North Hollywood OU.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 08/01/1996
Comments: The first partial consent decree is entered by the Federal District court on August 1, 1996.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 08/17/1998
Comments: A second 5-year review of remedial activities is conducted at the North Hollywood OU (NHOU) and covers operations from 1993 thru 1997. The purpose was to evaluate whether the NH Interim Remedy achieved the objectives specified in the ROD. The findings of the 5-year review are that the objectives of the ROD have been met.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Completed Date: 11/17/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 03/31/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 04/30/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/30/1989
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Plan
Completed Date: 06/30/1989
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 03/31/1989
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 09/30/1987
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 07/08/2008
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Feasibility Study Report
Completed Date: 01/08/2009
Comments: DTSCs letter with comments on Focussed Feasibility Study document for North Hollywood Operable Unit, San Fernando Valley Area 1 was sent out.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Record of Decision - Interim
Completed Date: 09/28/2009

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Calsite:
Region: GLENDALE
Facility ID: 19990011
Facility Type: NPJF
Type: NPL SITE, JOINT STATE/FEDERAL-FUNDED
Branch: SA
Branch Name: SO CAL - GLENDALE
File Name: Not reported
State Senate District: 05151996
Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name: ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency: ENVIRONMENTAL PROTECTION AGENCY
NPL: Listed
SIC Code: 99
SIC Name: NONCLASSIFIABLE ESTABLISHMENTS
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Confirmed
Staff Member Responsible for Site: TYARGEAU
Supervisor Responsible for Site: Not reported
Region Water Control Board: LA
Region Water Control Board Name: LOS ANGELES
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported
Lat/Long Description: Not reported
State Assembly District Code: 43
State Senate District Code: 20
Facility ID: 19990011
Activity: RAP
Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code: NH
Proposed Budget: 0
AWP Completion Date: Not reported
Revised Due Date: Not reported
Comments Date: 09301987
Est Person-Yrs to complete: 0
Estimated Size: Not reported
Request to Delete Activity: Not reported
Activity Status: AWP
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals): 0
Liquids Treated (Gals): 0

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	NH
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09301987
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	NH
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03311989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Facility ID:	19990011
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	B
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	B
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301989
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04301990
Est Person-Yrs to complete:	0

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	DES
Activity Name:	DESIGN
AWP Code:	B-PH1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03311997
Est Person-Yrs to complete:	0.30000
Estimated Size:	X
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	NH1/1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09041996
Est Person-Yrs to complete:	0
Estimated Size:	X
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	NH OU
Proposed Budget:	0
AWP Completion Date:	06302009
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	M
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	NH2/1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06201997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	DES
Activity Name:	DESIGN

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

AWP Code:	B-PH2
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11171997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CSNH1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08011996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CSNH2
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05141997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CD-B2
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06241997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	5YEAR
Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	NH OU
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	08171998
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Alternate Address: NORTH HOLLYWOOD AREA
Alternate City,St,Zip: NORTH HOLLYWOOD, CA 91606
Alternate Address: NORTH HOLLYWOOD WELLFIELD AREA
Alternate City,St,Zip: LOS ANGELES, CA 91601
Alternate Address: BURBANK
Alternate City,St,Zip: BURBANK, CA 91502
Background Info: The San Fernando Valley Ground Water Basin (SFVGWB) is located within the Upper Los Angeles River Area, and consists of the eastern portion of the San Fernando Valley and the entire Verdugo Basin. The SFVGWB encompasses approximately 112,000 acres of alluvial valley fill deposits and provides enough water to serve approximately 600,000 residents. The Basin is bounded on the north and the northwest by the Santa Susana Mountains, on the northeast by the San Gabriel Mountains, on the west by the Simi Hills and on the south by the Santa Monica Mountains.
The San Fernando Valley Study area includes four National Priorities List (NPL) sites. They are:
Area #1 - North Hollywood NPL Site covers 9336 acres in the eastern part of the San Fernando Valley. The site has been divided into the North Hollywood Operable Unit(OU) and the Burbank OU.
Area #2 - Crystal Springs NPL Site covers 3975 acres located southeast of the North Hollywood NPL site and is in the cities of Glendale and Los Angeles.
Area #3 - Verdugo NPL Site covers 2673 acres in the eastern part of the SF Valley and is located in and adjacent to La Crescenta in the Verdugo Mountains.
Area #4 - the Pollock NPL Site covers 1635 acres in the south-eastern part of the San Fernando Valley and is located in and adjacent to the cities of Los Angeles and Glendale.
Groundwater contamination in the SFVGWB is linked to prewar, postwar, and current industrialization in the San Fernando Valley.
The primary contaminants of concern are the volatile organic compounds (VOCs) trichloroethylene (TCE) and tetrachloroethylene (PCE). These compounds have been and/or are being used in many San Fernando Valley industries, such as aeronautical, automotive dry cleaning, and metal plating. These solvents have found their way to the groundwater basin as a result of both past and improper use, storage and disposal practices. The SFVGWB Superfund sites, added to the NPL in 1986, are areas where groundwater from wells have been found to contain VOCs above the state and federal drinking water standards. Groundwater contamination in numerous wells have been so severe with TCE and PCE that these wells have essentially been put out of commission.
Exposure of receptors to contaminants can possibly occur through ingestion of contaminated drinking water, inhalation of VOC vapors released from the contaminated water as in taking showers, and dermal exposure as in washing or bathing. However, with the strict regulatory control over water quality by the State's Department of Health, Office of Drinking Water (ODW), the RWQCB, and other agencies, residents are assured that the water they consume is safe and that no one is drinking water which contains concentrations of contaminants above regulatory

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

standards. Federal, state, and local agencies have been conducting investigations and cleanup of contaminated groundwater in the San Fernando Valley since contamination was discovered in 1979. These activities involve measuring the extent of contamination, developing and implementing cleanup remedies, and identifying responsible parties.
EPA provided oversight of the basinwide Remedial Investigation (RI) of groundwater contamination conducted by the Los Angeles Department of Water and Power (LADWP). The RI objectives were to collect lithological and water quality data and information regarding basin operations for the eastern SF and Verdugo basins; develop a regional characterization of geology, hydrology, hydrogeology and the nature and extent of groundwater contamination within the eastern and Verdugo basins; study fate and transport of compounds in the environment; identify Applicable or Relevant and Appropriate Requirements; (ARAR's) and evaluate the potential risk to human health and the environment.
The Remedial Investigation of the SFVGWB was divided into two phases.
Phase I activities have included vertical profile borings and installation of monitoring wells to obtain preliminary contamination information. Monitoring wells have been installed as follows: 34 in North Hollywood (Area #1); 29 in Crystal Springs (Area #2); 7 in Verdugo (Area #3); and 17 in Pollock (Area #4).
Information obtained from Phase I investigation activities identified the need for several operable units. Operable Unit is a federal term which is similar to the State's definition of a removal action.
Phase II activities consist of a basinwide remedial investigation conducted by the LADWP.
Remedial Actions (RAs):
North Hollywood (Area #1) -- Two RAs were identified for Area #1, the North Hollywood OU and the Burbank OU.
A Record of Decision (ROD) for the North Hollywood RA was signed in September 1987, selecting groundwater extraction and treatment (air stripping) of 2,000 gallons per minute (gpm) of contaminated water as an interim remedy. This RA was constructed with funding from EPA and the State and has been treating contaminated groundwater since March 1989. This facility is located at 11845 Vose Street in the N. Hollywood section of Los Angeles.
A ROD for the Burbank OU was signed in June 1989, again selecting groundwater extraction and treatment of about 12,000 gpm of contaminated water. Phase I of the Burbank OU began operations in January 1996 treating groundwater at a rate of 6,000 gpm. Phase II began operations in May 1998 adding an additional 3,000 gpm to the Burbank OU's treatment capacity.
Crystal Springs (Area #2) -- LADWP has completed a focused RI/FS for this proposed RA. The Glendale OU has been separated into a North OU and a South OU based on the amount of contamination and the facilities contributing to the GW contamination. A ROD for each OU was signed on June 18, 1993 designating groundwater extraction and treatment as the interim remeday. The PRPs have formed a group and combined the RA efforts for each OU into one document. The selected

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

alternative is GW extraction and treatment. The Glendale OU began operations in September 2000.
Verdugo and Pollock (Areas #3 and #4) --
Currently no RAs have been identified for Area #3 or for Area #4. In October 2003 US EPA proposed No Remedial Action for Verdugo Basin (Area #3).
Another contaminant of concern, hexavalent chromium, has been identified in the San Fernando Valley Groundwater Basin.
EPA and the RWQCB are currently dentifying potential sources of contamination and pursuing PRPs that may be responsible for contaminating groundwater. As these PRPs are identified, individual site investigations and mitigation activities will be pursued. Enforceable agreements and orders will be implemented at numerous specific potential source sites within the Basin by RWQCB and DTSC

Comments Date: 01011984
Comments: Groundwater contaminated with TCE and PCE is discovered.
Comments Date: 01011984
Comments: Site covers approximately 5254 acres.
Comments Date: 04141996
Comments: Consent Decree between EPA, DTSC and settling PRPs lodged
Comments Date: 04141996
Comments: with the court. Negotiations with non-settling PRPs
Comments Date: 04141996
Comments: continue.
Comments Date: 04241994
Comments: The U.S. EPA is in the process of recovering costs from
Comments Date: 04241994
Comments: the PRPs. DOJ is pursuing the cost recovery for DTSC.
Comments Date: 04241994
Comments: The cooperative PRPs are willing to settle if they are
Comments Date: 04241994
Comments: guaranteed contribution protection from the non-settling
Comments Date: 04241994
Comments: PRPs (so that they cannot be named as a party to the
Comments Date: 04241994
Comments: suit by the non-settling PRPs). DTSC is providing
Comments Date: 04241994
Comments: documentation to DOJ (i.e. timesheets) to determine
Comments Date: 04241994
Comments: staff time charged to the project. EPA is pursuing
Comments Date: 04241994
Comments: legal action against the non-settling PRPs to recover
Comments Date: 04241994
Comments: costs of past and future oversight.
Comments Date: 05022002
Comments: EPA issues fine against Lockheed Martin for 1.37 million for
Comments Date: 05022002
Comments: Force Majeure claim on Burbank Operable Unit.
Comments Date: 05131998
Comments: 11/17/97-The phase 2 design adds an additional well (wp-180)
Comments Date: 05131998
Comments: and pipeline for extraction and treatment at the Burbank
Comments Date: 05131998
Comments: operable unit. This adds an additional 3,000 gpm to the treatmen
Comments Date: 05131998

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Comments:	system. Additional amendments to the design include changing the
Comments Date:	05131998
Comments:	Liquid Phase Granular Activated Carbon (LPGAC) bed system from an
Comments Date:	05131998
Comments:	upflow to a downflow configuration, and the addition of a LPGAC
Comments Date:	05131998
Comments:	backflush filtration system for continuous backflush to the
Comments Date:	05131998
Comments:	plant's storm drain discharge.
Comments Date:	05141997
Comments:	The second partial consent decree to recover DTSC's past cost is
Comments Date:	05141997
Comments:	signed on May 14, 1997. This also concludes the litigation for
Comments Date:	05141997
Comments:	the interim remedy at the North Hollywood OU.
Comments Date:	06201997
Comments:	DTSC recovers costs in accordance with the Second Partial
Comments Date:	06201997
Comments:	Consent Decree for the interim remedy at the NHOU. Two
Comments Date:	06201997
Comments:	additional payments are due by 5/14/98 and and 5/14/99.
Comments Date:	06241997
Comments:	A second partial Consent Decree, dated June 24, 1997, requires
Comments Date:	06241997
Comments:	reimbursement to the State by Lockheed-Martin of certain past
Comments Date:	06241997
Comments:	costs and annual billing for future site specific response costs.
Comments Date:	08011996
Comments:	The first partial consent decree is entered by the Federal
Comments Date:	08011996
Comments:	District court on August 1, 1996.
Comments Date:	08171998
Comments:	A second 5-year review of remedial activities is conducted at
Comments Date:	08171998
Comments:	the North Hollywood OU (NHOU) and covers operations from 1993
Comments Date:	08171998
Comments:	thru 1997. The purpose was to evaluate whether the NH Interim
Comments Date:	08171998
Comments:	Remedy achieved the objectives specified in the ROD. The
Comments Date:	08171998
Comments:	findings of the 5-year review are that the objectives of the
Comments Date:	08171998
Comments:	ROD have been met.
Comments Date:	09041996
Comments:	Costs are recovered by DTSC in accordance with the First
Comments Date:	09041996
Comments:	Partial Consent Decree for interim remedial action at the North
Comments Date:	09041996
Comments:	Hollywood OU (NHOU). An additional payment is due by 08/01/97.
Comments Date:	09202001
Comments:	The facility has been operating continuously with six water
Comments Date:	09202001
Comments:	supply wells on line. This past quarter approximately 175
Comments Date:	09202001
Comments:	million gallons of water was treated down to non-detect levels
Comments Date:	09202001
Comments:	of contamination.

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Comments Date: 12191999
Comments: Negotiating new state superfund contract between U.S. EPA, DTSC,
Comments Date: 12191999
Comments: and the Los Angeles Department of Water and Power to provide for
Comments Date: 12191999
Comments: continued funding of operation and maintenance of the NHOU.
ID Name: CALSTARS CODE
ID Value: 300127
ID Name: CALSTARS CODE
ID Value: 300126
ID Name: BEP DATABASE PCODE
ID Value: P31031
Alternate Name: SAN FERNANDO VALLEY GW BASIN AREA 1NORTH HOLLYWOOD OUFSSAN FERNANDO VALLEY (AREA 1)BURBANK OU
Special Programs Code: MSCA
Special Programs Name: MULTI-SITE COOPERATIVE AGREEMENT

ROD:
Full-text of USEPA Record of Decision(s) is available from EDR.

PRP:
PRP name:
2L SCREEN PRINTING CO.
A-H PLATING, INC.
ACCESSORY PLATING
ADLER SCREW PRODUCTS INC.
AEROQUIP CORP.
AEROQUIP CORP.
AIRPORT GROUP INTERNATIONAL, INC.
AIRPORT GROUP INTERNATIONAL, INC.
ALLIED SIGNAL
ALLIED SIGNAL
ANTONINI FAMILY TRUST
B.J. GRINDING
BARRON ANODIZING
BASINGER B TRUST
BASINGER C TRUST
BENDIX CORP.
BENDIX CORP.
CALIFORNIA CAR HIKERS SERVICES, INC.
CALMAT CO.
CALMAT CO.
CALMAT CO.
CALMAT CO.
CEBALLOS, MR. CHUCK
CHASE, STUART
COOKE FAMILY TRUST (AMENDED)
COOKE FAMILY TRUST (AMENDED)
COOKE FAMILY TRUST (AMENDED)
CRANE COMPANY/HYDRO-AIRE DIVISION
CRANE COMPANY/HYDRO-AIRE DIVISION
DE KING SCREW PRODUCTS
DELTRON ENGINEERING
DYNAMIC PLATING, INC.
ELLISON, LEON
ERIK AND ELSE BRUUN-ANDERSEN TRUST
ERIK AND ELSE BRUUN-ANDERSEN TRUST

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

FLEETWOOD MACHINE PRODUCTS, INC.
FLEETWOOD MACHINE PRODUCTS, INC.
FLEETWOOD MACHINE PRODUCTS, INC.
FRANK GUERRORO
HASKEL, INC.
HAWKER PACIFIC CORPORATION
HAWKER PACIFIC CORPORATION
HAWKER PACIFIC CORPORATION
HAYWARD ASSOC, LLC
HONEYWELL INTERNATIONAL, INC.
HONEYWELL INTERNATIONAL, INC.
HONEYWELL INTERNATIONAL, INC.
HONEYWELL INTERNATIONAL, INC.
JANCO CORPORATION
JANCO CORPORATION
JOHNSON, CHAD
KAHR BEARING
KAHR BEARING
LA AGCO SALES
LAWRENCE ENGINEERING AND SUPPLY CO.
LOCKHEED AERONAUTICAL SYSTEMS
LOCKHEED AERONAUTICAL SYSTEMS
LOCKHEED AERONAUTICAL SYSTEMS
LOCKHEED AERONAUTICAL SYSTEMS
LOCKHEED AERONAUTICAL SYSTEMS

Click this hyperlink while viewing on your computer to access
45 additional PRP: record(s) in the EDR Site Report.

ICIS:

Enforcement Action ID:	09-2013-2511
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9

Enforcement Action ID:	09-2013-2511
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Enforcement Action ID: 09-2013-2511
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122h Agrmt For Cost Recovery
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2511
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 107L Filing Of Lien
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2511
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: NHOU AOC FOR RECOVERY OF RESPONSE COSTS
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State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
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Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2511
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State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 107L Filing Of Lien
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2508

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122h Agrmt For Cost Recovery
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2508
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 104E5A AO For Access And/Or Info
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2508
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 104E5A AO For Access And/Or Info
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2508
FRS ID: 110009267961
Program ID: FRS 110009267961
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Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 104E5A AO For Access And/Or Info
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2508
FRS ID: 110009267961

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Program ID: CERCLIS CAD980894893
Action Name: NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2508
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: NHOU AOC FOR HONEYWELL NHE-2 RD
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Enforcement Action Type: CERCLA 122h Agrmt For Cost Recovery
Facility County: LOS ANGELES
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Enforcement Action Type: CERCLA 107L Filing Of Lien
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2508
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Action Name: NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
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Enforcement Action Type: CERCLA 107L Filing Of Lien
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2508
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
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State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2013-2508
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2012-2501
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: NHOU AOC WITH WASTE MGMT FOR COST RECOVERY AND CIVIL PENALTY

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2501
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC WITH WASTE MGMT FOR COST RECOVERY AND CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2501
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC WITH WASTE MGMT FOR COST RECOVERY AND CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

	PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2011-2509
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: NORTH HOLLYWOOD OPERABLE UNIT AOC FOR RD
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122A/104A Agrmt For RI/FS
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2011-2509
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: NORTH HOLLYWOOD OPERABLE UNIT AOC FOR RD
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122A/104A Agrmt For RI/FS
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2011-2509
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: NORTH HOLLYWOOD OPERABLE UNIT AOC FOR RD
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122A/104A Agrmt For RI/FS
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2011-2500

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: ACCESS ORDER TO LOS ANGELES BYPRODUCTS CO.
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 104E5A AO For Access And/Or Info
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2011-2500
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: ACCESS ORDER TO LOS ANGELES BYPRODUCTS CO.
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 104E5A AO For Access And/Or Info
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2011-2500
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: ACCESS ORDER TO LOS ANGELES BYPRODUCTS CO.
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 104E5A AO For Access And/Or Info
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2010-2519
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: LYONDELL BANKRUPTCY (NC)
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Bankruptcy
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2010-2519
FRS ID: 110009267961

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Program ID: DTSC-ENVIROSTOR 19990011
Action Name: LYONDELL BANKRUPTCY (NC)
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Bankruptcy
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2010-2519
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: LYONDELL BANKRUPTCY (NC)
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Bankruptcy
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2010-2505
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: NORTH HOLLYWOOD AO FOR RI WITH HONEYWELL INTL INC
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122A/104A Agrmt For RI/FS
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2010-2505
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: NORTH HOLLYWOOD AO FOR RI WITH HONEYWELL INTL INC
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122A/104A Agrmt For RI/FS
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2010-2505
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Action Name: NORTH HOLLYWOOD AO FOR RI WITH HONEYWELL INTL INC
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122A/104A Agrmt For RI/FS
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2008-2527
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: NORTH HOLLYWOOD 106A ORDER FOR GROUNDWATER
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2008-2527
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: NORTH HOLLYWOOD 106A ORDER FOR GROUNDWATER
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2008-2527
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: NORTH HOLLYWOOD 106A ORDER FOR GROUNDWATER
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2008-2521
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: SAN FERNANDO AREA 1 122H AOC W/ HONEYWELL, LOCKHEED

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122h Agrmt For Cost Recovery
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2008-2521
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: SAN FERNANDO AREA 1 122H AOC W/ HONEYWELL, LOCKHEED
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122h Agrmt For Cost Recovery
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2008-2521
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: SAN FERNANDO AREA 1 122H AOC W/ HONEYWELL, LOCKHEED
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 122h Agrmt For Cost Recovery
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1997-0172
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: LOCKHEED MARTIN
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1997-0172
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: LOCKHEED MARTIN
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1997-0172
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: LOCKHEED MARTIN
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1997-0015
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: SAN FERNANDO GLENDALE (NORTH AND SOUTH)
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1997-0015
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: SAN FERNANDO GLENDALE (NORTH AND SOUTH)
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1997-0015
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: SAN FERNANDO GLENDALE (NORTH AND SOUTH)
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1997-0014
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: SAN FERNANDO, GLENDALE
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1997-0014
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: SAN FERNANDO, GLENDALE
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1997-0014
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: SAN FERNANDO, GLENDALE
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1993-0010
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: ALLIED-SIGNAL INCORPORATED
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1993-0010
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: ALLIED-SIGNAL INCORPORATED
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1993-0010
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: ALLIED-SIGNAL INCORPORATED
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1991-0016
FRS ID: 110009267961
Program ID: CERCLIS CAD980894893
Action Name: CITY OF BURBANK
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1991-0016
FRS ID: 110009267961
Program ID: DTSC-ENVIROSTOR 19990011
Action Name: CITY OF BURBANK
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-1991-0016
FRS ID: 110009267961
Program ID: FRS 110009267961
Action Name: CITY OF BURBANK
Full Address: NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State: California
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Facility Address: NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601
Enforcement Action Type: Civil Judicial Action
Facility County: LOS ANGELES
EPA Region #: 9

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS CAD980894893
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: DTSC-ENVIROSTOR 19990011
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110009267961
Facility Name: SAN FERNANDO VALLEY (AREA 1)
Address: NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

CONSENT:
EPA ID: CAD980894893
Site ID: Not reported
Case Title: U.S. V. ALLIED-SIGNAL, ET AL.
Court Num: 93-6490
District: California, Cent
Entered Date: 19970514
Full-text of the consent decree for this site issued by the United States District Court is available from EDR. Contact your EDR Account Executive.

FINDS:

Registry ID: 110009267961

Environmental Interest/Information System
California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

CORTESE:

Region:	CORTESE
Envirostor Id:	19990011
Site/Facility Type:	FEDERAL SUPERFUND - LISTED
Cleanup Status:	ACTIVE
Status Date:	05/15/1996
Site Code:	300126, 300173, 300287
Latitude:	34.1875
Longitude:	-118.38388
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	envirostor
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported

ECHO:

Envid:	1000709322
Registry ID:	110009267961
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110009267961

12
NNW
< 1/8
0.003 mi.
18 ft.

LEWIS CONTINUATION HIGH SCHOOL
12508 WICKS ST
SUN VALLEY, CA 91352

RCRA-LQG **1011861590**
CAR000195206

Relative:
Higher

Actual:
836 ft.

RCRA-LQG:

Date form received by agency:	09/11/2008
Facility name:	LEWIS CONTINUATION HIGH SCHOOL
Facility address:	12508 WICKS ST SUN VALLEY, CA 91352
EPA ID:	CAR000195206
Mailing address:	333 S BEAUDRY AVE 20TH FL LAUSD OEHS LOS ANGELES, CA 90017
Contact:	SOE AUNG
Contact address:	333 S BEAUDRY AVE 20TH FL LAUSD OEHS LOS ANGELES, CA 90017
Contact country:	US
Contact telephone:	213-241-3904
Contact email:	SOE.AUNG@LAUSD.NET
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	LEWIS CONTINUATION HIGH SCHOOL
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	District
Owner/Operator Type:	Operator
Owner/Op start date:	11/14/1989
Owner/Op end date:	Not reported
Owner/operator name:	LOS ANGELES UNIFIED SCHOOL DIST
Owner/operator address:	333 S BEAUDRY AVE LOS ANGELES, CA 90017
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	11/14/1989
Owner/Op end date:	Not reported

Handler Activities Summary:

LEWIS CONTINUATION HIGH SCHOOL (Continued) **1011861590**

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

B13 **EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A** **ENVIROSTOR** **S105628653**
NW **8451 ARLETA AVENUE** **SCH** **N/A**
< 1/8 **SUN VALLEY, CA 91352**
0.011 mi.
58 ft. **Site 1 of 5 in cluster B**

Relative:
Higher

Actual:
826 ft.

ENVIROSTOR:
Facility ID: 19940001
Status: No Further Action
Status Date: 01/28/2002
Site Code: 304251
Site Type: School Investigation
Site Type Detailed: School
Acres: 34
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Assembly: 39
Senate: 18
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 34.23032
Longitude: -118.4136
APN: NONE SPECIFIED
Past Use: * ADMINISTRATION OF HUMAN RESOURCES
Potential COC: Beryllium and compounds Antimony and compounds Chromium VI Molybdenum Vanadium and compounds Cobalt Mercury (elemental Selenium Zinc Thallium and compounds Nickel (soluble salts Copper and compounds Cadmium and compounds Silver Lead
Confirmed COC: NONE SPECIFIED
Potential Description: NMA
Alias Name: EAST VALLEY AREA NEW HIGH SCHOOL #1A
Alias Type: Alternate Name

EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A (Continued) **S105628653**

Alias Name: LAUSD-E. VALLEY AREA HS #1A AKA-ANTHONY
Alias Type: Alternate Name
Alias Name: LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: 304251
Alias Type: Project Code (Site Code)
Alias Name: 19940001
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 01/28/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 01/15/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 01/15/2002
Comments: DTSC approved the PEA

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 05/30/2006
Comments: Issued a Underground Storage Tank Closure Report approval letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 03/01/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 02/10/2000
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A (Continued) **S105628653**

Facility ID:	19940001
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	34
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	304251
Assembly:	39
Senate:	18
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	01/28/2002
Restricted Use:	NO
Funding:	School District
Latitude:	34.23032
Longitude:	-118.4136
APN:	NONE SPECIFIED
Past Use:	* ADMINISTRATION OF HUMAN RESOURCES
Potential COC:	Beryllium and compounds, Beryllium and compounds, Antimony and compounds, Chromium VI, Molybdenum, Vanadium and compounds, Cobalt, Mercury (elemental, Selenium, Zinc, Thallium and compounds, Nickel (soluble salts, Copper and compounds, Cadmium and compounds, Silver, Lead
Confirmed COC:	NONE SPECIFIED
Potential Description:	NMA
Alias Name:	EAST VALLEY AREA NEW HIGH SCHOOL #1A
Alias Type:	Alternate Name
Alias Name:	LAUSD-E. VALLEY AREA HS #1A AKA-ANTHONY
Alias Type:	Alternate Name
Alias Name:	LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	304251
Alias Type:	Project Code (Site Code)
Alias Name:	19940001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	01/28/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	01/15/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan

EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A (Continued) **S105628653**

Completed Date:	01/15/2002
Comments:	DTSC approved the PEA
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	05/30/2006
Comments:	Issued a Underground Storage Tank Closure Report approval letter.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	03/01/2001
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	02/10/2000
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

A14 **EDR Hist Auto** **1015191745**
SW **12440 ROSCOE BLVD** **N/A**
< 1/8 **SUN VALLEY, CA 91352**
0.013 mi.
70 ft. **Site 12 of 18 in cluster A**

Relative:
Lower

Actual:
822 ft.

EDR Historical Auto Stations:

Name:	AUTO PROS INC
Year:	2006
Address:	12440 ROSCOE BLVD
Name:	AUTO PROS INC
Year:	2007
Address:	12440 ROSCOE BLVD
Name:	AUTO PROS INC
Year:	2008
Address:	12440 ROSCOE BLVD

A15 **MOBIL STATION HNG** **LUST** **S103626589**
SW **12450 ROSCOE BLVD** **HIST CORTESE** **N/A**
< 1/8 **SUN VALLEY, CA 91352**
0.013 mi.
71 ft. **Site 13 of 18 in cluster A**

Relative:
Lower

Actual:
822 ft.

LUST:

Region:	STATE
Global Id:	T0603702338
Latitude:	34.221344
Longitude:	-118.404902
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/11/2001
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	UST
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	913522489
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603702338
Contact Type:	Regional Board Caseworker
Contact Name:	UST
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	BCP 04 UNKNOWN
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0603702338
Contact Type:	Local Agency Caseworker
Contact Name:	TBD
Organization Name:	LOS ANGELES, CITY OF
Address:	200 N. MAIN ST. RM. 970
City:	LOS ANGELES
Email:	Not reported
Phone Number:	2134826528

Status History:

Global Id:	T0603702338
Status:	Completed - Case Closed
Status Date:	04/11/2001

Global Id:	T0603702338
Status:	Open - Case Begin Date
Status Date:	12/10/1999

Regulatory Activities:

Global Id:	T0603702338
Action Type:	Other
Date:	12/10/1999
Action:	Leak Reported

MOBIL STATION HNG (Continued) **S103626589**

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 913522489

A16 **AVANTI 33 (STATE)** **HIST UST** **U001567766**
SW **12450 ROSCOE BLVD** **N/A**
< 1/8 **SUN VALLEY, CA 91352**
0.013 mi.
71 ft. **Site 14 of 18 in cluster A**

Relative:
Lower

Actual:
822 ft.

HIST UST:
File Number: 000265EC
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000265EC.pdf
Region: STATE
Facility ID: 00000003985
Facility Type: Gas Station
Other Type: Not reported
Contact Name: AVANTI MGT INC
Telephone: 2136571034
Owner Name: AUANTI MGT INC
Owner Address: 920 SO ROBERTSON BLVD SUITE 4
Owner City,St,Zip: LOS ANGELES, CA 90035
Total Tanks: 0005

Tank Num: 001
Container Num: A
Year Installed: 1975
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: B1
Year Installed: Not reported
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: B2
Year Installed: 1976
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: C
Year Installed: Not reported
Tank Capacity: 00006000

AVANTI 33 (STATE) (Continued) **U001567766**

Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	005
Container Num:	D
Year Installed:	1976
Tank Capacity:	00006000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

A17 **JED GAS STATION** **CA FID UST** **S101587324**
SW **12450 ROSCOE BLVD** **N/A**
< 1/8 **SUN VALLEY, CA 91352**
0.013 mi.
71 ft. **Site 15 of 18 in cluster A**

Relative:
Lower

Actual:
822 ft.

CA FID UST:

Facility ID:	19055299
Regulated By:	UTNKA
Regulated ID:	00003985
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	8185049488
Mail To:	Not reported
Mailing Address:	12450 ROSCOE BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	SUN VALLEY 913520000
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

A18 **JED GAS STATION** **LUST** **S104406377**
SW **12450 ROSCOE BLVD** **SWEEPS UST** **N/A**
< 1/8 **SUN VALLEY, CA 91352**
0.013 mi.
71 ft. **Site 16 of 18 in cluster A**

Relative:
Lower

Actual:
822 ft.

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	913522489
Status:	Case Closed
Substance:	Gasoline
Substance Quantity:	Not reported
Local Case No:	Not reported

JED GAS STATION (Continued) **S104406377**

Case Type:	Soil
Abatement Method Used at the Site:	Not reported
Global ID:	T0603702338
W Global ID:	Not reported
Staff:	TAS
Local Agency:	19050
Cross Street:	Not reported
Enforcement Type:	Not reported
Date Leak Discovered:	Not reported
Date Leak First Reported:	12/10/1999
Date Leak Record Entered:	Not reported
Date Confirmation Began:	Not reported
Date Leak Stopped:	Not reported
Date Case Last Changed on Database:	1/20/2000
Date the Case was Closed:	4/11/2001
How Leak Discovered:	Not reported
How Leak Stopped:	Not reported
Cause of Leak:	Not reported
Leak Source:	Not reported
Operator:	Not reported
Water System:	Not reported
Well Name:	Not reported
Approx. Dist To Production Well (ft):	1960.2828647552030301278066801
Source of Cleanup Funding:	Not reported
Preliminary Site Assessment Workplan Submitted:	Not reported
Preliminary Site Assessment Began:	Not reported
Pollution Characterization Began:	Not reported
Remediation Plan Submitted:	Not reported
Remedial Action Underway:	Not reported
Post Remedial Action Monitoring Began:	Not reported
Enforcement Action Date:	Not reported
Historical Max MTBE Date:	Not reported
Hist Max MTBE Conc in Groundwater:	Not reported
Hist Max MTBE Conc in Soil:	96
Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	MOBIL STATION HNG
RP Address:	12450 ROSCOE BLVD., SUN VALLEY, CA 91352
Program:	LUST
Lat/Long:	34.221513 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	1/20/00 MTBE POLLUTION INVESTIGATION, CASE CLOSED 7/99 LACFD, 5-30' BORINGS ALL ND, SITE EVALUATED FOR MTBE POLLUTION, TUJUNGA WELLFIELD (FILE NO. 99-064)

SWEEPS UST:

Status:	Active
Comp Number:	354
Number:	9

JED GAS STATION (Continued) **S104406377**

Board Of Equalization: 44-011127
Referral Date: 01-15-93
Action Date: 03-15-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-000354-000001
Tank Status: A
Capacity: 8000
Active Date: 04-20-88
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 5

Status: Active
Comp Number: 354
Number: 9
Board Of Equalization: 44-011127
Referral Date: 01-15-93
Action Date: 03-15-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-000354-000002
Tank Status: A
Capacity: 6000
Active Date: 04-20-88
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 354
Number: 9
Board Of Equalization: 44-011127
Referral Date: 01-15-93
Action Date: 03-15-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-000354-000003
Tank Status: A
Capacity: 6000
Active Date: 04-20-88
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 354
Number: 9
Board Of Equalization: 44-011127
Referral Date: 01-15-93
Action Date: 03-15-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-000354-000004

JED GAS STATION (Continued) **S104406377**

Tank Status: A
Capacity: 6000
Active Date: 04-20-88
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 354
Number: 9
Board Of Equalization: 44-011127
Referral Date: 01-15-93
Action Date: 03-15-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-000354-000005
Tank Status: A
Capacity: 6000
Active Date: 04-20-88
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

A19 **MOBIL SERVICE STATION HNG** **UST** **U003781098**
SW **12450 ROSCOE BLVD** **N/A**
< 1/8 **SUN VALLEY, CA 91352**
0.013 mi.
71 ft. **Site 17 of 18 in cluster A**

Relative:
Lower

Actual:
822 ft.

UST:
Facility ID: 24731
Permitting Agency: LOS ANGELES, CITY OF
Latitude: 34.2227106
Longitude: -118.4036161

A20 **EDR Hist Auto** **1015191917**
SW **12450 ROSCOE BLVD** **N/A**
< 1/8 **SUN VALLEY, CA 91352**
0.013 mi.
71 ft. **Site 18 of 18 in cluster A**

Relative:
Lower

Actual:
822 ft.

EDR Historical Auto Stations:
Name: JEDS GAS STATION
Year: 1999
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2001
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2002
Address: 12450 ROSCOE BLVD

(Continued) **1015191917**

Name: JEDS GAS STATION
Year: 2003
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2004
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2006
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2007
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2008
Address: 12450 ROSCOE BLVD

Name: MOBIL GAS STATION
Year: 2009
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2010
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2011
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2012
Address: 12450 ROSCOE BLVD

B21 **CITY OF LA DWP** **UST** **U003781003**
NW **8501 ARLETA AVE** **N/A**
< 1/8 **SUN VALLEY, CA 91352**
0.015 mi.
81 ft. **Site 2 of 5 in cluster B**

Relative:
Higher

Actual:
825 ft.

UST:
Facility ID: 24609
Permitting Agency: LOS ANGELES, CITY OF
Latitude: 34.2246655
Longitude: -118.4056359

B22
NW
< 1/8
0.015 mi.
81 ft.

LOS ANGELES DEPARTMENT OF WATER AND POWER
8501 N ARLETA AVE
SUN VALLEY, CA 91352

Site 3 of 5 in cluster B

SWEEPS UST **S101588343**
CA FID UST **N/A**

Relative:
Higher

Actual:
825 ft.

SWEEPS UST:

Status:	Active
Comp Number:	8114
Number:	4
Board Of Equalization:	Not reported
Referral Date:	12-16-92
Action Date:	12-16-92
Created Date:	12-16-92
Owner Tank Id:	8114-1
SWRCB Tank Id:	19-050-008114-000001
Tank Status:	A
Capacity:	12000
Active Date:	10-06-93
Tank Use:	M. V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	3

Status:	Active
Comp Number:	8114
Number:	4
Board Of Equalization:	Not reported
Referral Date:	12-16-92
Action Date:	12-16-92
Created Date:	12-16-92
Owner Tank Id:	8114-2
SWRCB Tank Id:	19-050-008114-000002
Tank Status:	A
Capacity:	12000
Active Date:	10-06-93
Tank Use:	M. V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	8114
Number:	4
Board Of Equalization:	Not reported
Referral Date:	12-16-92
Action Date:	12-16-92
Created Date:	12-16-92
Owner Tank Id:	8114-3
SWRCB Tank Id:	19-050-008114-000003
Tank Status:	A
Capacity:	12000
Active Date:	10-06-93
Tank Use:	M. V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

LOS ANGELES DEPARTMENT OF WATER AND POWER (Continued) **S101588343**

CA FID UST:
Facility ID: 19056589
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 8187712267
Mail To: Not reported
Mailing Address: 8501 N ARLETA AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: SUN VALLEY 91352
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

B23 **CITY OF LADWP** **LUST S104406375**
NW **8501 ARLETA AVE** **CHMIRS N/A**
< 1/8 **SUN VALLEY, CA 91352** **HIST CORTESE**
0.015 mi. **NPDES**
81 ft. **Site 4 of 5 in cluster B**

Relative:
Higher

Actual:
825 ft.

LUST:
Region: STATE
Global Id: T0603702336
Latitude: 34.2241269
Longitude: -118.4072957
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 04/11/2001
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: UST
Local Agency: LOS ANGELES, CITY OF
RB Case Number: 913522461
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603702336
Contact Type: Regional Board Caseworker
Contact Name: UST
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: BCP 04 UNKNOWN
Email: Not reported
Phone Number: Not reported

Global Id: T0603702336
Contact Type: Local Agency Caseworker
Contact Name: ELOY LUNA

CITY OF LADWP (Continued) **S104406375**

Organization Name: LOS ANGELES, CITY OF
Address: 200 North Main Street, Suite 1780
City: LOS ANGELES
Email: eloy.luna@lacity.org
Phone Number: Not reported

Status History:
Global Id: T0603702336
Status: Completed - Case Closed
Status Date: 04/11/2001

Global Id: T0603702336
Status: Open - Case Begin Date
Status Date: 12/10/1999

Regulatory Activities:
Global Id: T0603702336
Action Type: Other
Date: 12/10/1999
Action: Leak Reported

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 913522461
Status: Case Closed
Substance: Diesel
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Soil
Abatement Method Used at the Site: Not reported
Global ID: T0603702336
W Global ID: Not reported
Staff: TAS
Local Agency: 19050
Cross Street: Not reported
Enforcement Type: Not reported
Date Leak Discovered: Not reported
Date Leak First Reported: 12/10/1999
Date Leak Record Entered: Not reported
Date Confirmation Began: Not reported
Date Leak Stopped: Not reported
Date Case Last Changed on Database: 12/10/1999
Date the Case was Closed: 4/11/2001
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 2486.2382327051799544707602184
Source of Cleanup Funding: Not reported
Preliminary Site Assessment Workplan Submitted: Not reported

CITY OF LADWP (Continued) **S104406375**

Preliminary Site Assessment Began:	Not reported
Pollution Characterization Began:	Not reported
Remediation Plan Submitted:	Not reported
Remedial Action Underway:	Not reported
Post Remedial Action Monitoring Began:	Not reported
Enforcement Action Date:	Not reported
Historical Max MTBE Date:	Not reported
Hist Max MTBE Conc in Groundwater:	Not reported
Hist Max MTBE Conc in Soil:	Not reported
Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	CITY OF LADWP (ANTHONY OFFICE
RP Address:	111 N. HOPE ST., LOS ANGELES, CA 90051
Program:	LUST
Lat/Long:	34.2241269 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	SITE EVALUATED FOR MTBE POLLUTION , TUJUNGA WELLFIELD (FILE NO. 99-064)

CHMIRS:

OES Incident Number:	7-4307
OES notification:	10/29/1997
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported

CITY OF LADWP (Continued) **S104406375**

Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	NO
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	1997
Agency:	DEPT OF WATER AND POWER
Incident Date:	10/29/199712:00:00 AM
Admin Agency:	L. A. County Fire Prevention
Amount:	Not reported
Contained:	No
Site Type:	Other
E Date:	Not reported
Substance:	CHLORODIFLUOROMETHANE R-22
Gallons:	0.000000
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	UNSPECIFIED AMOUNT RELEASED FROM AIR CONDITIONING SYSTEM INTO OFFICE BUILDING. BUILDING EVACUATED. BUILDING REOCCUPIED A SHORT TIME LATER.
OES Incident Number:	3-2289
OES notification:	05/02/2003
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported

CITY OF LADWP (Continued) **S104406375**

Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Yes
Waterway:	Storm Drain
Spill Site:	Not reported
Cleanup By:	hazardous materials unit
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2003
Agency:	Dept of Water and Power City of Los Angeles
Incident Date:	5/2/200312:00:00 AM
Admin Agency:	L. A. County Fire Prevention
Amount:	Not reported
Contained:	No
Site Type:	Merchant/Business
E Date:	Not reported
Substance:	sewage
Gallons:	100
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Mainline stoppage caused a leakage that is flowing 1-5 gallons per minute. Drain flows to LA River, vacuum truck is enroute and should be able to recover all.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA

CITY OF LADWP (Continued) **S104406375**

Reg Id: 913522461

NPDES:

Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4
Regulatory Measure Id:	332879
Order No:	Not reported
Regulatory Measure Type:	Construction
Place Id:	Not reported
WDID:	4 19C349200
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	5/9/2008
PROCESSED DATE:	10/4/2007
STATUS CODE NAME:	Active
STATUS DATE:	10/4/2007
PLACE SIZE:	9.95
PLACE SIZE UNIT:	52
FACILITY CONTACT NAME:	Matt Gerard
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	619-571-4355
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	matt.gerard@clarkconstruction.com
OPERATOR NAME:	Los Angeles Unified School District
OPERATOR ADDRESS:	333 S Beaudry Ave
OPERATOR CITY:	Los Angeles
OPERATOR STATE:	California
OPERATOR ZIP:	90017
OPERATOR CONTACT NAME:	Dan Holmquist
OPERATOR CONTACT TITLE:	Owners Authorized Representative
OPERATOR CONTACT PHONE:	661-510-7225
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	dan.holmquist@lundgren.net
OPERATOR TYPE:	State Agency
DEVELOPER NAME:	CLARK Construction Group
DEVELOPER ADDRESS:	8509 Arleta
DEVELOPER CITY:	Sun Valley
DEVELOPER STATE:	California
DEVELOPER ZIP:	91351
DEVELOPER CONTACT NAME:	Matt Gerard
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported

CITY OF LADWP (Continued) **S104406375**

CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	K 12 Educa
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Pacific Ocean
CERTIFIER NAME:	Jan Ducker
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	10-JUN-10
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

B24 **BYRD MIDDLE SCHOOL** **RCRA-LQG** **1001967355**
NW **8501 ARLETA AVE** **FINDS** **CAR000068031**
< 1/8 **SUN VALLEY, CA 91352** **ECHO**
0.015 mi.
81 ft. **Site 5 of 5 in cluster B**

Relative:
Higher

Actual:
825 ft.

RCRA-LQG:

Date form received by agency:	01/16/2009
Facility name:	BYRD MIDDLE SCHOOL
Facility address:	8501 ARLETA AVE SUN VALLEY, CA 91352
EPA ID:	CAR000068031
Mailing address:	333 S BEAUDRY AVE 20TH FL LAUSD OEHS LOS ANGELES, CA 90017
Contact:	SOE AUNG
Contact address:	333 S BEAUDRY AVE 20TH FL LAUSD OEHS LOS ANGELES, CA 90017
Contact country:	US
Contact telephone:	213-241-3904
Contact email:	SOE.AUNG@LAUSD.NET
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

BYRD MIDDLE SCHOOL (Continued) **1001967355**

Owner/Operator Summary:
Owner/operator name: BYRD MIDDLE SCHOOL
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: District
Owner/Operator Type: Operator
Owner/Op start date: 06/17/2009
Owner/Op end date: Not reported

Owner/operator name: LAUSD
Owner/operator address: 333 S BEAUDRY AVE
LOS ANGELES, CA 90017
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: 06/17/1988
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D008
. Waste name: LEAD

Historical Generators:
Date form received by agency: 02/27/2006
Site name: LADWP ANTHONY OFFICE BUILDING
Classification: Small Quantity Generator

Date form received by agency: 02/27/2006
Site name: LADWP ANTHONY OFFICE BUILDING
Classification: Large Quantity Generator

. Waste code: 331
. Waste name: 331

. Waste code: 551
. Waste name: 551

BYRD MIDDLE SCHOOL (Continued) **1001967355**

. Waste code: 791
. Waste name: 791

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Date form received by agency: 08/29/2005
Site name: EAST VALLEY AREA NEW HIGH SCHOOL NO 1A
Classification: Large Quantity Generator

. Waste code: D008
. Waste name: LEAD

Date form received by agency: 02/28/2004
Site name: ANTHONY OFFICE BUILDING
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

Date form received by agency: 03/16/2000
Site name: ANTHONY OFFICE BLDG
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: P004
. Waste name: 1,4,5,8-DIMETHANONAPHTHALENE, 1,2,3,4,10,10-HEXA-CHLORO-1,4,4A,5,8,8A,-HEXAHYDRO-, (1ALPHA, 4ALPHA, 4ABETA, 5ALPHA, 8ALPHA, 8ABETA)- (OR) ALDRIN

. Waste code: P037
. Waste name: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA, 2BETA, 2AALPHA, 3BETA, 6BETA, 6AALPHA, 7BETA, 7AALPHA)- (OR) DIELDRIN

BYRD MIDDLE SCHOOL (Continued) **1001967355**

. Waste code: P047
. Waste name: 4,6-DINITRO-O-CRESOL, & SALTS (OR) PHENOL, 2-METHYL-4,6-DINITRO-, & SALTS

. Waste code: P050
. Waste name: 6,9-METHANO-2,4,3-BENZODIOXATHIEPIN,6,7,8,9,10,10-HEXACHLORO-1,5,5A,6, ,9A-HEXAHYDRO-,3-OXIDE (OR) ENDOSULFAN

. Waste code: P051
. Waste name: 2,7:3,6-DIMETHANONAPHTH[2,3-B]OXIRENE, 3,4,5,6,9,9-HEXACHLORO-1A,2,2A,3,6,6A,7,7A-OCTAHYDRO-, (1AALPHA, 2BETA, 2ABETA, 3ALPHA, 6ALPHA, 6ABETA, 7BETA, 7AALPHA)- & METABOLITES (OR) ENDRIN (OR) ENDRIN, & METABOLITES

. Waste code: P059
. Waste name: 4,7-METHANO-1H-INDENE, 1,4,5,6,7,8,8-HEPTACHLORO-3A,4,7,7A-TETRAHYDRO- (OR) HEPTACHLOR

. Waste code: P066
. Waste name: ETHANIMIDOTHIOIC ACID, N-[[(METHYLAMINO)CARBONYL]OXY]-, METHYL ESTER (OR) METHOMYL

. Waste code: P070
. Waste name: ALDICARB (OR) PROPANAL, 2-METHYL-2-(METHYLTHIO)-, O-[(METHYLAMINO)CARBONYL]OXIME

. Waste code: P123
. Waste name: TOXAPHENE

. Waste code: P127
. Waste name: 7-BENZOFURANOL, 2,3-DIHYDRO-2,2-DIMETHYL-, METHYLCARBAMATE (OR) CARBOFURAN

. Waste code: P194
. Waste name: ETHANIMIDOTHIOC ACID, 2-(DIMETHYLAMINO)-N-[[(METHYLAMINO) CARBONYL]OXY]-2-OXO-, METHYL ESTER (OR) OXAMYL

. Waste code: P203
. Waste name: ALDICARB SULFONE (OR) PROPANAL, 2-METHYL-2-(METHYL-SULFONYL)-, O-[(METHYLAMINO)CARBONYL] OXIME

Violation Status: No violations found

FINDS:

Registry ID: 110002933773

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

BYRD MIDDLE SCHOOL (Continued) **1001967355**

ECHO:
Envid: 1001967355
Registry ID: 110002933773
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002933773

25
WSW
< 1/8
0.034 mi.
181 ft.

ROSCOE SITE **US BROWNFIELDS** **1018119711**
12500-12522 W ROSCOE BLVD **ECHO** **N/A**
PACOIMA, CA 91331

Relative:
Lower

Actual:
822 ft.

US BROWNFIELDS:
Recipient name: Los Angeles - Dept of Public Works, City of
Grant type: Assessment
Property name: ROSCOE SITE
Property #: 2308005017
Parcel size: .43
Property Description: The site was a gas station many years ago. It currently has a restaurant on the property which used to be the pay station/mini store for the gas station. The restaurant is not very nice looking. Most of the customers are students from the local High School and Middle School across the street. During the holidays they use part of the parking space as a Christmas Tree Lot. The site has an old "Perry's" sign. This is the name of the restaurant that was closed down a few years ago. The new Mexican restaurant owner has not been very cooperative in providing access to the property owner. This site is an eye sore for the community and can use some serious upgrade. With it being a cleaned property the possibilities would be greater.
Latitude: 34.2213035
Longitude: -118.40600560000001
HCM label: Address Matching-House Number
Map scale: Not reported
Point of reference: Entrance Point of a Facility or Station
Datum: North American Datum of 1983
ACRES property ID: 176504
Start date: Not reported
Completed date: Not reported
Acres cleaned up: Not reported
Cleanup funding: Not reported
Cleanup funding source: Not reported
Assessment funding: 5000
Assessment funding source: US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding: Not reported
Redev. funding source: Not reported
Redev. funding entity name: Not reported
Redevelopment start date: Not reported
Assessment funding entity: EPA
Cleanup funding entity: Not reported
Grant type: P
Accomplishment type: Phase I Environmental Assessment
Accomplishment count: 1
Cooperative agreement #: 00T51701
Ownership entity: Private
Current owner: Calliopi Ash Trust
Did owner change: N
Cleanup required: No
Video available: No

ROSCOE SITE (Continued) **1018119711**

Photo available:	Yes
Institutional controls required:	N
IC Category proprietary controls:	Not reported
IC cat. info. devices:	Not reported
IC cat. gov. controls:	Not reported
IC cat. enforcement permit tools:	Not reported
IC in place date:	Not reported
IC in place:	No
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Not reported
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Not reported
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Past use commercial acreage:	.43
Past use industrial acreage:	Not reported
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	Not reported
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported

ROSCOE SITE (Continued) **1018119711**

Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
nickel cleaned up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported

ECHO:

Envid:	1018119711
Registry ID:	110064566410
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110064566410

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26 **EDR Hist Auto** **1015189585**
SE **12334 BURTON ST** **N/A**
< 1/8 **NORTH HOLLYWOOD, CA 91605**
0.096 mi.
509 ft.

Relative:
Lower

Actual:
820 ft.

EDR Historical Auto Stations:

Name:	AUTO COLLISION REPAIR CENTER INC
Year:	2005
Address:	12334 BURTON ST
Name:	AUTO COLLISION REPAIR CENTER INC
Year:	2006
Address:	12334 BURTON ST

27
North
1/8-1/4
0.142 mi.
749 ft.

PAM TRUCKING
8739 REMICK AVENUE
SUN VALLEY, CA 91352

HWT **S117312153**
N/A

Relative:
Higher

Actual:
852 ft.

HWT:
Reg Num: 5751
Expiration Date: 08/31/2016

C28
NNW
1/8-1/4
0.142 mi.
752 ft.

LA SHELDON ARLETA LIBRARY
12455 WICKS ST
LOS ANGELES, CA 90012

RCRA-SQG **1000381491**
FINDS **CAD981990534**
ECHO

Site 1 of 5 in cluster C

Relative:
Lower

Actual:
762 ft.

RCRA-SQG:

Date form received by agency:	03/25/1987
Facility name:	LA SHELDON ARLETA LIBRARY
Facility address:	12455 WICKS ST LOS ANGELES, CA 90012
EPA ID:	CAD981990534
Mailing address:	200 N MAIN RM EIGHTH HUNDREDCH LOS ANGELES, CA 90012
Contact:	ENVIRONMENTAL MANAGER
Contact address:	12455 WICKS ST LOS ANGELES, CA 90012
Contact country:	US
Contact telephone:	(213) 485-7527
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CITY OF LOS ANGELES
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

LA SHELDON ARLETA LIBRARY (Continued) **1000381491**

Handler Activities Summary:
- U.S. importer of hazardous waste: No
- Mixed waste (haz. and radioactive): No
- Recycler of hazardous waste: No
- Transporter of hazardous waste: No
- Treater, storer or disposer of HW: No
- Underground injection activity: No
- On-site burner exemption: No
- Furnace exemption: No
- Used oil fuel burner: No
- Used oil processor: No
- User oil refiner: No
- Used oil fuel marketer to burner: No
- Used oil Specification marketer: No
- Used oil transfer facility: No
- Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002768452

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:
- Envid: 1000381491
- Registry ID: 110002768452
- DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002768452

C29 **SHELDON-ARLETA** **SWF/LF** **U001567820**
NNW **12455 WICKS ST** **HIST UST** **N/A**
1/8-1/4 **SUN VALLEY, CA 91352** **NPDES**
0.142 mi.
752 ft. **Site 2 of 5 in cluster C**

Relative:
Lower

Actual:
762 ft.

LOS ANGELES CO. LF:
- Site ID: 2020
- Alt. Address: 8700 Arleta Avenue, Sun Valley, CA
- Site Contact: Not reported
- Site Contact Phone: Not reported
- Site Email: Not reported
- Site Website: Not reported
- Site Type: Unknown
- Site SWIS Number: 19-AR-0835
- Beginning Operation Date: Not reported
- Ending Operation Date: Not reported
- Local Enforcement Agency: City of Los Angeles, Building and Safety
- Maximun Depth Fill(Ft): Not reported
- Permitted Capacity: Not reported

SHELDON-ARLETA (Continued) **U001567820**

Present Use: Sheldon Arieta Park
Remaining Capacity(Million): Not reported
Status: Closed
Waste Accepted: Not reported
Hours of Operation: Not reported
Disposal Area (Acre): Not reported

Detail As Of 01/2014:
Operator Name: Unknown
Operator Address: Not reported
Operator City/State/Zip: Not reported
Operator Contact: Not reported
Operator Telephone: Not reported
Operator Email: Not reported
Owner Name: City of Los Angeles Bureau of Sanitation
Owner Address: 11950 Lopez Canyon Road
Owner City/State/Zip: Lake View Terrace, CA 91342
Owner Contact: Not reported
Owner Telephone: (213) 485-3002
Owner Email: Not reported

HIST UST:
File Number: 000271A2
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000271A2.pdf
Region: STATE
Facility ID: 00000060960
Facility Type: Other
Other Type: CITY LANDFILL
Contact Name: B.G. EVANS
Telephone: 8188995054
Owner Name: CITY OF LOS ANGELES
Owner Address: 200 N. SPRING ST
Owner City,St,Zip: LOS ANGELES, CA 90012
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00007000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

NPDES:
Npdes Number: Not reported
Facility Status: Not reported
Agency Id: Not reported
Region: 4
Regulatory Measure Id: 188360
Order No: Not reported
Regulatory Measure Type: Construction
Place Id: Not reported
WDID: 4 19C329691
Program Type: Not reported

SHELDON-ARLETA (Continued) **U001567820**

Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	5/9/2008
PROCESSED DATE:	9/2/2004
STATUS CODE NAME:	Active
STATUS DATE:	9/2/2004
PLACE SIZE:	45
PLACE SIZE UNIT:	52
FACILITY CONTACT NAME:	James Kurz
FACILITY CONTACT TITLE:	Solid Waste Disposal Supt. II
FACILITY CONTACT PHONE:	818-834-5128
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	James.Kurz@lacity.org
OPERATOR NAME:	Los Angeles City Bureau of Sanitation SRPCD
OPERATOR ADDRESS:	1149 S Broadway Ste 800
OPERATOR CITY:	Los Angeles
OPERATOR STATE:	California
OPERATOR ZIP:	90015
OPERATOR CONTACT NAME:	Khalil Gharios
OPERATOR CONTACT TITLE:	Solid Resources Manager II
OPERATOR CONTACT PHONE:	213-485-3002
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	khalil.gharios@lacity.org
OPERATOR TYPE:	Other
DEVELOPER NAME:	Los Angeles City Bureau of Sanitation SRPCD
DEVELOPER ADDRESS:	1149 S Broadway Ste 800
DEVELOPER CITY:	Los Angeles
DEVELOPER STATE:	California
DEVELOPER ZIP:	90015
DEVELOPER CONTACT NAME:	Khalil Gharios
DEVELOPER CONTACT TITLE:	Solid Resources Manager II
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	213-216-7458
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Park
CONSTYPE OTHER IND:	Y
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported

SHELDON-ARLETA (Continued) **U001567820**

DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Los Angeles River
CERTIFIER NAME:	Kosta Kaporis
CERTIFIER TITLE:	Sanitary Engineer
CERTIFICATION DATE:	30-JUN-10
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported
Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	188360
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19C329691
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/02/2004
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Los Angeles City Bureau of Sanitation SRPCD
Discharge Address:	1149 S Broadway Ste 800
Discharge City:	Los Angeles
Discharge State:	California
Discharge Zip:	90015
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported

SHELDON-ARLETA (Continued) **U001567820**

CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

C30 **SHELDON ARLETA GAS RECOVERY FA** **HIST UST** **U001567819**
NNW **12455 WICKS ST** **N/A**
1/8-1/4 **SUN VALLEY, CA 91352**
0.142 mi.
752 ft. **Site 3 of 5 in cluster C**

Relative:
Lower

Actual:
762 ft.

HIST UST:

File Number:	0002761F
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002761F.pdf
Region:	STATE
Facility ID:	00000064870
Facility Type:	Other
Other Type:	WATER/ELECTRIC UTILI
Contact Name:	RICHARD LEARMAN
Telephone:	2137620468
Owner Name:	DEPARTMENT OF WATER AND POWER
Owner Address:	111 N. HOPE STREET
Owner City,St,Zip:	LOS ANGELES, CA 90012
Total Tanks:	0001
Tank Num:	001
Container Num:	0357/WASTE
Year Installed:	1983
Tank Capacity:	00000068
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Visual

SHELDON ARLETA GAS RECOVERY FA (Continued) **U001567819**

Click here for Geo Tracker PDF:

C31 **SHELDON-ARLETA LANDFILL** **SWF/LF** **S105036243**
NNW **12455 WICKS ST.** **N/A**
1/8-1/4 **LOS ANGELES, CA 91352**
0.142 mi.
752 ft. **Site 4 of 5 in cluster C**

Relative:
Lower

Actual:
762 ft.

SWF/LF (SWIS):

Region:	STATE
Facility ID:	19-AR-0835
Lat/Long:	34.226900 / -118.40728
Owner Name:	City Of Los Angeles Bureau Of Sanitation
Owner Telephone:	8007732489
Owner Address:	Not reported
Owner Address2:	11950 Lopez Canyon Road
Owner City,St,Zip:	Lake View Terrace, CA 91342
Operational Status:	Closed
Operator:	Not reported
Operator Phone:	Not reported
Operator Address:	Not reported
Operator Address2:	Not reported
Operator City,St,Zip:	Not reported
Permit Date:	Not reported
Permit Status:	Not reported
Permitted Acreage:	$0.00
Activity:	Solid Waste Disposal Site
Regulation Status:	Unpermitted
Landuse Name:	Urban,Recreational
GIS Source:	Map
Category:	Disposal
Unit Number:	01
Inspection Frequency:	Quarterly
Accepted Waste:	Not reported
Closure Date:	Not reported
Closure Type:	Not reported
Disposal Acreage:	$0.00
SWIS Num:	19-AR-0835
Waste Discharge Requirement Num:	Not reported
Program Type:	Not reported
Permitted Throughput with Units:	0
Actual Throughput with Units:	Not reported
Permitted Capacity with Units:	0
Remaining Capacity:	0
Remaining Capacity with Units:	Not reported
Lat/Long:	34.226900 / -118.40728

CA LA LF:

Region:	LA CITY
Facility Status:	closure work complete and land redevelopment in progress
How to get there:	Directions
Year Opened:	1962
Year Closed:	1975
Property Size 1:	50 acres
Property Size 2:	Not reported
Fill Area:	41 acres
Type of Refuse:	Class III

SHELDON-ARLETA LANDFILL (Continued) **S105036243**

Total Capacity:	5,500,000 tons
Average Depth of Fill:	130 feet
Additional Expansion Area:	none
Description:	Sheldon-Arleta Landfill closure construction is completed. The landfill gas management system consists of vertical extraction wells feeding a flare station at a capacity of 1,200 ft3/minute. Present landfill gas generation is 400,000 ft3 per day.
Present and Future Use:	Home of the future Cesar Chavez Recreational Complex Conceptual Illustration for Cesar Chavez Recreational Complex

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C32 **SHELDON-ARLETA YARD** **SWEEPS UST** **S101618532**
NNW **12455 WICKS ST** **CA FID UST** **N/A**
1/8-1/4 **SUN VALLEY, CA 91352**
0.142 mi.
752 ft. **Site 5 of 5 in cluster C**

Relative:
Lower

Actual:
762 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	3270
Number:	Not reported
Board Of Equalization:	44-012042
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	19-050-003270-000001
Tank Status:	Not reported
Capacity:	7000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	DIESEL
Number Of Tanks:	1

CA FID UST:

Facility ID:	19025310
Regulated By:	UTNKI
Regulated ID:	00060960
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2134855846
Mail To:	Not reported
Mailing Address:	12455 WICKS ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	SUN VALLEY 913520000
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Inactive

33
ENE
1/8-1/4
0.156 mi.
826 ft.

HIRO PHOTO LAB
8365 LAUREL AVE
SUN VALLEY, CA 91352

RCRA-SQG
FINDS
ECHO

1000326473
CAD981457732

Relative:
Higher

Actual:
837 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	HIRO PHOTO LAB
Facility address:	8365 LAUREL AVE SUN VALLEY, CA 91352
EPA ID:	CAD981457732
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	KANEMITSU HIROAKI
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

HIRO PHOTO LAB (Continued) **1000326473**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 04/02/1986
Site name: HIRO PHOTO LAB
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002714126

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:
Envid: 1000326473
Registry ID: 110002714126
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002714126

D34 **TEMPCO ENGINEERING, INC.** **HIST CORTESE** **S105026812**
NNE **8866 LAUREL CNYN** **N/A**
1/4-1/2 **SUN VALLEY, CA 91352**
0.269 mi.
1418 ft. **Site 1 of 3 in cluster D**

Relative:
Higher

Actual:
848 ft.

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 913521125A

D35 **TEMPCO ENGINEERING, INC** **HIST CORTESE** **S105026811**
NNE **8866 LAUREL CNYN** **N/A**
1/4-1/2 **SUN VALLEY, CA 91352**
0.269 mi.
1418 ft. **Site 2 of 3 in cluster D**

Relative:
Higher

Actual:
848 ft.

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 913521125

D36 **TEMPCO ENGINEERING, INC** **RCRA-SQG** **1000345745**
NNE **8866 LAUREL CYN BLVD** **LUST** **CAD982401705**
1/4-1/2 **SUN VALLEY, CA 91352** **UST**
0.269 mi. **SWEEPS UST**
1418 ft. **Site 3 of 3 in cluster D** **CA FID UST**
FINDS
Relative: **NPDES**
Higher **ECHO**

Actual: **848 ft.**

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	TEMPCO ENGINEERING, INC
Facility address:	8866 LAUREL CYN BLVD SUN VALLEY, CA 91352
EPA ID:	CAD982401705
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	TEMPCO ENGINEERING, INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No

TEMPCO ENGINEERING, INC (Continued) **1000345745**

On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/04/1989
Site name: TEMPCO ENGINEERING, INC
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 05/12/2008
Date achieved compliance: 05/12/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/12/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/12/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/12/2008
Evaluation lead agency: State

Evaluation date: 08/10/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: Local

LUST:
Region: STATE
Global Id: T0603702314
Latitude: 34.230552
Longitude: -118.401755
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 07/18/1996
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: YR
Local Agency: LOS ANGELES, CITY OF
RB Case Number: 913521125
LOC Case Number: Not reported

TEMPCO ENGINEERING, INC (Continued) **1000345745**

File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Aviation
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603702314
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0603702314
Contact Type: Local Agency Caseworker
Contact Name: PATRICK KILLIAN
Organization Name: LOS ANGELES, CITY OF
Address: 221 N FIGUEROA ST STE 1500
City: LOS ANGELES
Email: Not reported
Phone Number: 2134826527

Status History:
Global Id: T0603702314
Status: Completed - Case Closed
Status Date: 07/18/1996

Global Id: T0603702314
Status: Open - Case Begin Date
Status Date: 01/31/1984

Regulatory Activities:
Global Id: T0603702314
Action Type: Other
Date: 01/31/1984
Action: Leak Reported

Region: STATE
Global Id: T0603774984
Latitude: 34.230462
Longitude: -118.401755
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 12/20/2007
Lead Agency: LOS ANGELES, CITY OF
Case Worker: PK
Local Agency: LOS ANGELES, CITY OF
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Acetone

TEMPCO ENGINEERING, INC (Continued) **1000345745**

Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603774984
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0603774984
Contact Type:	Local Agency Caseworker
Contact Name:	PATRICK KILLIAN
Organization Name:	LOS ANGELES, CITY OF
Address:	221 N FIGUEROA ST STE 1500
City:	LOS ANGELES
Email:	Not reported
Phone Number:	2134826527

Status History:

Global Id:	T0603774984
Status:	Completed - Case Closed
Status Date:	12/20/2007

Global Id:	T0603774984
Status:	Open - Case Begin Date
Status Date:	04/27/2007

Global Id:	T0603774984
Status:	Open - Site Assessment
Status Date:	05/02/2007

Global Id:	T0603774984
Status:	Open - Site Assessment
Status Date:	10/20/2007

Regulatory Activities:

Global Id:	T0603774984
Action Type:	Other
Date:	04/27/2007
Action:	Leak Discovery

Global Id:	T0603774984
Action Type:	Other
Date:	04/27/2007
Action:	Leak Reported

Global Id:	T0603774984
Action Type:	REMEDIATION
Date:	11/20/2007
Action:	Excavation

TEMPCO ENGINEERING, INC (Continued) **1000345745**

Region:	STATE
Global Id:	T0603702315
Latitude:	34.230552
Longitude:	-118.401755
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/11/2001
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	UST
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	913521125A
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603702315
Contact Type:	Regional Board Caseworker
Contact Name:	UST
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	BCP 04 UNKNOWN
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0603702315
Contact Type:	Local Agency Caseworker
Contact Name:	PATRICK KILLIAN
Organization Name:	LOS ANGELES, CITY OF
Address:	221 N FIGUEROA ST STE 1500
City:	LOS ANGELES
Email:	Not reported
Phone Number:	2134826527

Status History:

Global Id:	T0603702315
Status:	Completed - Case Closed
Status Date:	04/11/2001

Global Id:	T0603702315
Status:	Open - Case Begin Date
Status Date:	12/10/1999

Regulatory Activities:

Global Id:	T0603702315
Action Type:	Other
Date:	12/10/1999
Action:	Leak Reported

LUST REG 4:

Region:	4

TEMPCO ENGINEERING, INC (Continued) **1000345745**

Regional Board:	04	
County:	Los Angeles	
Facility Id:	913521125	
Status:	Case Closed	
Substance:	1	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603702314	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19050	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	Not reported	
Date Leak First Reported:		1/31/1984
Date Leak Record Entered:	12/31/1986	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		4/18/1988
Date the Case was Closed:		7/18/1996
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		2786.07360184348616642374218 67
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	TEMPCO ENGINEERING INCORP.	
RP Address:	8866 LAUREL CANYON BLVD, SUN VALLEY CA 91352	
Program:	LUST	
Lat/Long:	34.2302607 / -1	
Local Agency Staff:	PEJ	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	*TANKS TESTED TIGHT ACCORDING TO LEAK DETECTION REPORT.	

TEMPCO ENGINEERING, INC (Continued) **1000345745**

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	913521125A	
Status:	Case Closed	
Substance:	Waste Oil	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603702315	
W Global ID:	Not reported	
Staff:	TAS	
Local Agency:	19050	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	Not reported	
Date Leak First Reported:		12/10/1999
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		1/18/2000
Date the Case was Closed:		4/11/2001
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		2781.72407834486922825986949 65
Source of Cleanup Funding:		Not reported
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	TEMPCO ENGINEERING, INC.	
RP Address:	8866 LAUREL CANYON BLVD, SUN VALLEY, CA 91352	
Program:	LUST	
Lat/Long:	34.2302737 / -1	
Local Agency Staff:	PEJ	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	

TEMPCO ENGINEERING, INC (Continued) **1000345745**

Summary: NO GASOLINE STORAGE AT SITE, UST'S USED FOR WASTE OIL ONLY, SITE EVALUATED FOR MTBE POLLUTION, TUJUNGA WELLFIELD (FILE NO. 99-064)

UST:
Facility ID: 24621
Permitting Agency: LOS ANGELES, CITY OF
Latitude: 34.2317094
Longitude: -118.4001231

SWEEPS UST:
Status: Active
Comp Number: 5270
Number: 1
Board Of Equalization: Not reported
Referral Date: 02-25-93
Action Date: 02-25-93
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 19001089
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 2130000000
Mail To: Not reported
Mailing Address: 8866 LAUREL CANYON BLVD
Mailing Address 2: Not reported
Mailing City,St,Zip: SUN VALLEY 913520000
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

FINDS:

Registry ID: 110002804476

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

TEMPCO ENGINEERING, INC (Continued) **1000345745**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	457288
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19I025840
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/17/2015
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Tempco Engineering
Discharge Address:	8866 Laurel Canyon Boulevard
Discharge City:	Sun Valley
Discharge State:	California
Discharge Zip:	91352
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported

TEMPCO ENGINEERING, INC (Continued) **1000345745**

CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

ECHO:

Envid:	1000345745
Registry ID:	110002804476
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110002804476

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37 **ARCO #1959** **LUST** **S101583348**
East **12050 ROSCOE BLVD** **SWEEPS UST** **N/A**
1/4-1/2 **NORTH HOLLYWOOD, CA 91605** **CA FID UST**
0.317 mi. **HIST CORTESE**
1672 ft.

Relative:
Higher

Actual:
830 ft.

LUST:

Region:	STATE
Global Id:	T0603702586
Latitude:	34.2213009
Longitude:	-118.396107
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	11/14/1996
Lead Agency:	LOS ANGELES, CITY OF
Case Worker:	AO
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	916056852
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Aviation
Site History:	Not reported

ARCO #1959 (Continued) **S101583348**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603702586
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0603702586
Contact Type:	Local Agency Caseworker
Contact Name:	ANNA OLEKSZYK
Organization Name:	LOS ANGELES, CITY OF
Address:	200 N. MAIN ST. RM. 970
City:	LOS ANGELES
Email:	Not reported
Phone Number:	2139783686

Status History:

Global Id:	T0603702586
Status:	Completed - Case Closed
Status Date:	11/14/1996

Global Id:	T0603702586
Status:	Open - Case Begin Date
Status Date:	12/13/1991

Global Id:	T0603702586
Status:	Open - Site Assessment
Status Date:	12/19/1991

Regulatory Activities:

Global Id:	T0603702586
Action Type:	Other
Date:	12/13/1991
Action:	Leak Discovery

Global Id:	T0603702586
Action Type:	Other
Date:	12/19/1991
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	916056852
Status:	Case Closed
Substance:	1
Substance Quantity:	Not reported
Local Case No:	Not reported

ARCO #1959 (Continued) **S101583348**

Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603702586	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	19050	
Cross Street:	LAUREL CANYON	
Enforcement Type:	Not reported	
Date Leak Discovered:	12/13/1991	
Date Leak First Reported:		12/19/1991
Date Leak Record Entered:	4/7/1992	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		11/14/1996
Date the Case was Closed:		11/14/1996
How Leak Discovered:	OM	
How Leak Stopped:	Not reported	
Cause of Leak:	UNK	
Leak Source:	UNK	
Operator:	NANKIL, HERCULES	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		3937.08537458059754919097775
Source of Cleanup Funding:		UNK
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		12/19/1991
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		.003
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	ND	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	ARCO PRODUCTS CO.	
RP Address:	17315 STUDEBAKER RD., CERRITOS, 90701	
Program:	LUST	
Lat/Long:	34.221509 / -1	
Local Agency Staff:	PEJ	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	DURING A SITE DRILL ASSESSMENT FOR TANK REPLACEMENT BORING HOLE SHOWED NO SIGN OF CONTAMINATED SOIL; HOWEVER, WHEN PULLING OUT THE OLD TANKS CONTAMINATED SOIL WAS FOUND AT DEPTH OF 2' BELOW THE TANKS.	

SWEEPS UST:

Status:	Active
Comp Number:	1602

ARCO #1959 (Continued) **S101583348**

Number: 1
Board Of Equalization: Not reported
Referral Date: 07-21-93
Action Date: 03-17-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-001602-000001
Tank Status: A
Capacity: 6000
Active Date: 04-20-88
Tank Use: CHEMICAL
STG: P
Content: UNKNOWN
Number Of Tanks: 5

Status: Active
Comp Number: 1602
Number: 1
Board Of Equalization: Not reported
Referral Date: 07-21-93
Action Date: 03-17-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-001602-000002
Tank Status: A
Capacity: 6000
Active Date: 04-20-88
Tank Use: CHEMICAL
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Status: Active
Comp Number: 1602
Number: 1
Board Of Equalization: Not reported
Referral Date: 07-21-93
Action Date: 03-17-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-001602-000003
Tank Status: A
Capacity: 4000
Active Date: 04-20-88
Tank Use: CHEMICAL
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Status: Active
Comp Number: 1602
Number: 1
Board Of Equalization: Not reported
Referral Date: 07-21-93
Action Date: 03-17-94
Created Date: 02-29-88
Owner Tank Id: Not reported

ARCO #1959 (Continued) **S101583348**

SWRCB Tank Id: 19-050-001602-000004
Tank Status: A
Capacity: 4000
Active Date: 04-20-88
Tank Use: CHEMICAL
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Status: Active
Comp Number: 1602
Number: 1
Board Of Equalization: Not reported
Referral Date: 07-21-93
Action Date: 03-17-94
Created Date: 02-29-88
Owner Tank Id: Not reported
SWRCB Tank Id: 19-050-001602-000005
Tank Status: A
Capacity: 12000
Active Date: 04-20-88
Tank Use: CHEMICAL
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 19003485
Regulated By: UTNKA
Regulated ID: 00026681
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 8187684738
Mail To: Not reported
Mailing Address: 515 S FLOWER ST
Mailing Address 2: Not reported
Mailing City,St,Zip: NORTH HOLLYWOOD 916050000
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 916056852

38
North
1/4-1/2
0.331 mi.
1747 ft.

RECYCLING INC
8907 LAUREL CANYON BLVD
SUN VALLEY, CA 91352

SWRCY **S108991910**
N/A

Relative:
Higher

Actual:
843 ft.

SWRCY:

Reg Id:	227919
Cert Id:	RC227919.001
Mailing Address:	39928 Gorham Ln
Mailing City:	Palmdale
Mailing State:	CA
Mailing Zip Code:	93551
Website:	Not reported
Email:	Not reported
Phone Number:	(323) 240-2341
Grand Father:	N
Rural:	N
Operation Begin Date:	07/02/2015
Aluminium:	Y
Glass:	Y
Plastic:	Y
Bimetal:	Y
Agency:	N/A
Monday Hours Of Operation:	9:00 am - 5:00 pm
Tuesday Hours Of Operation:	9:00 am - 5:00 pm
Wednesday Hours Of Operation:	9:00 am - 5:00 pm
Thursday Hours Of Operation:	9:00 am - 5:00 pm
Friday Hours Of Operation:	9:00 am - 5:00 pm
Saturday Hours Of Operation:	9:00 am - 4:00 pm
Sunday Hours Of Operation:	CLOSED
Organization ID:	224828
Organization Name:	Recycling Inc

39
NW
1/4-1/2
0.335 mi.
1768 ft.

M & R PLATING
11679 SHELDON STREET
PACOIMA, CA 91331

ENVIROSTOR **S111120539**
N/A

Relative:
Higher

Actual:
843 ft.

ENVIROSTOR:

Facility ID:	60001503
Status:	Refer: EPA
Status Date:	06/27/2013
Site Code:	301449
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	1
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Manjul Bose
Supervisor:	Javier Hinojosa
Division Branch:	Cleanup Chatsworth
Assembly:	Not reported
Senate:	Not reported
Special Program:	EPA - PASI
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	EPA Grant

M & R PLATING (Continued) **S111120539**

Latitude: 0
Longitude: 0
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 301449
Alias Type: Project Code (Site Code)
Alias Name: 60001503
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

E40 **ROSCOE SHELL MKT.** **LUST** **S101584364**
West **12858 ROSCOE BLVD** **CA FID UST** **N/A**
1/4-1/2 **SUN VALLEY, CA 91352**
0.427 mi.
2256 ft. **Site 1 of 4 in cluster E**

Relative:
Lower

Actual:
816 ft.

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: 913522498
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Soil
Abatement Method Used at the Site: Not reported
Global ID: T0603702339
W Global ID: Not reported
Staff: TAS
Local Agency: 19050
Cross Street: Not reported
Enforcement Type: Not reported
Date Leak Discovered: Not reported
Date Leak First Reported: 12/10/1999
Date Leak Record Entered: Not reported
Date Confirmation Began: Not reported
Date Leak Stopped: Not reported
Date Case Last Changed on Database: 12/10/1999

ROSCOE SHELL MKT. (Continued) **S101584364**

Date the Case was Closed:		4/11/2001
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		2115.996723730894308813842 6836
Source of Cleanup Funding:		Not reported
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		.409
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	EQUIVA SERVICES	
RP Address:	P.O. BOX 7869, BURBANK, CA 91510	
Program:	LUST	
Lat/Long:	34.221451 / -1	
Local Agency Staff:	PEJ	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	SOIL ONLY, NO H20 SAMPLES, SITE EVALUATED FOR MTBE POLLUTION, TUJUNGA WELLFIELD (FILE NO. 99-064)	

CA FID UST:

Facility ID:	19010803
Regulated By:	UTNKA
Regulated ID:	00017501
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	8189882321
Mail To:	Not reported
Mailing Address:	511 N BROOKHURST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	SUN VALLEY 913520000
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

E41 **ROSCOE SHELL MKT** **LUST** **S105126377**
West **12858 ROSCOE** **HIST CORTESE** **N/A**
1/4-1/2 **SUN VALLEY, CA 91352**
0.427 mi.
2256 ft. **Site 2 of 4 in cluster E**

Relative:
Lower

Actual:
816 ft.

LUST:

Region:	STATE
Global Id:	T0603798415
Latitude:	34.221315
Longitude:	-118.414044
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	02/05/2013
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	MB
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	913522498A
LOC Case Number:	Not reported
File Location:	Regional Board
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603798415
Contact Type:	Regional Board Caseworker
Contact Name:	MAGDY BAIADY
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	LOS ANGELES
Email:	mbaiady@waterboards.ca.gov
Phone Number:	2135766699

Global Id:	T0603798415
Contact Type:	Local Agency Caseworker
Contact Name:	ELOY LUNA
Organization Name:	LOS ANGELES, CITY OF
Address:	200 North Main Street, Suite 1780
City:	LOS ANGELES
Email:	eloy.luna@lacity.org
Phone Number:	Not reported

Status History:

Global Id:	T0603798415
Status:	Completed - Case Closed
Status Date:	02/05/2013

Global Id:	T0603798415
Status:	Open - Case Begin Date
Status Date:	09/12/2003

Global Id:	T0603798415
Status:	Open - Site Assessment
Status Date:	09/11/2006

Global Id:	T0603798415

ROSCOE SHELL MKT (Continued) **S105126377**

Status: Open - Site Assessment
Status Date: 05/22/2007

Global Id: T0603798415
Status: Open - Site Assessment
Status Date: 04/26/2012

Global Id: T0603798415
Status: Open - Verification Monitoring
Status Date: 01/08/2008

Regulatory Activities:

Global Id: T0603798415
Action Type: RESPONSE
Date: 01/15/2013
Action: Other Report / Document

Global Id: T0603798415
Action Type: RESPONSE
Date: 04/15/2011
Action: Other Report / Document

Global Id: T0603798415
Action Type: Other
Date: 09/12/2003
Action: Leak Discovery

Global Id: T0603798415
Action Type: RESPONSE
Date: 03/23/2013
Action: Well Destruction Report

Global Id: T0603798415
Action Type: Other
Date: 09/17/2003
Action: Leak Reported

Global Id: T0603798415
Action Type: ENFORCEMENT
Date: 02/05/2013
Action: Closure/No Further Action Letter

Global Id: T0603798415
Action Type: ENFORCEMENT
Date: 04/26/2012
Action: Staff Letter

Global Id: T0603798415
Action Type: RESPONSE
Date: 11/14/2011
Action: Soil and Water Investigation Workplan

Global Id: T0603798415
Action Type: ENFORCEMENT
Date: 12/07/2010
Action: Referral to Regional Board

ROSCOE SHELL MKT (Continued) **S105126377**

Global Id: T0603798415
Action Type: RESPONSE
Date: 01/15/2012
Action: Other Report / Document

Global Id: T0603798415
Action Type: RESPONSE
Date: 10/15/2011
Action: Other Report / Document

Global Id: T0603798415
Action Type: RESPONSE
Date: 04/15/2012
Action: Other Report / Document

Global Id: T0603798415
Action Type: ENFORCEMENT
Date: 07/07/2009
Action: Staff Letter

Global Id: T0603798415
Action Type: RESPONSE
Date: 07/13/2012
Action: Site Assessment Report

Global Id: T0603798415
Action Type: RESPONSE
Date: 10/01/2012
Action: Request for Closure

Global Id: T0603798415
Action Type: RESPONSE
Date: 02/11/2011
Action: Other Report / Document

Global Id: T0603798415
Action Type: ENFORCEMENT
Date: 01/11/2011
Action: Staff Letter

Region: STATE
Global Id: T0603702339
Latitude: 34.221316
Longitude: -118.414044
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 04/11/2001
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: UST
Local Agency: LOS ANGELES, CITY OF
RB Case Number: 913522498
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

ROSCOE SHELL MKT (Continued) **S105126377**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603702339
Contact Type:	Regional Board Caseworker
Contact Name:	UST
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	BCP 04 UNKNOWN
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0603702339
Contact Type:	Local Agency Caseworker
Contact Name:	TBD
Organization Name:	LOS ANGELES, CITY OF
Address:	200 N. MAIN ST. RM. 970
City:	LOS ANGELES
Email:	Not reported
Phone Number:	2134826528

Status History:

Global Id:	T0603702339
Status:	Completed - Case Closed
Status Date:	04/11/2001

Global Id:	T0603702339
Status:	Open - Case Begin Date
Status Date:	12/10/1999

Regulatory Activities:

Global Id:	T0603702339
Action Type:	Other
Date:	12/10/1999
Action:	Leak Reported

HIST CORTESE:

Region:	CORTESE
Facility County Code:	Not reported
Reg By:	Not reported
Reg Id:	Not reported

42
NW
1/4-1/2
0.441 mi.
2327 ft.

Relative:
Higher

Actual:
833 ft.

SAN FERNANDO VALLEY (AREA 3)
GLORIETTA WELLFIELD AREA
GLENDALE, CA 91209

Delisted NPL **1000710136**
SEMS **CAD980894984**
US ENG CONTROLS
ENVIROSTOR
HIST Cal-Sites
ROD
HIST CORTESE

Delisted NPL:

EPA ID:	CAD980894984
Site ID:	902254
EPA Region:	9
Federal:	No

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

Deleted Date: 2004-10-12 00:00:00
Latitude: 34.205128999999999
Longitude: -118.23089299999999

Category Details:
NPL Status: Deleted from the Final NPL
Category Description: Depth To Aquifer-<= 10 Feet
Category Value: 1

NPL Status: Deleted from the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 10

Site Details:
Site Name: SAN FERNANDO VALLEY (AREA 3)
Site Status: Deleted
Site Zip: 91209
Site City: GLENDALE
Site State: CA
Federal Site: No
Site County: LOS ANGELES
EPA Region: 09
Date Proposed: 10/15/84
Date Deleted: 10/12/2004
Date Finalized: 06/10/86

Substance Details:
NPL Status: Deleted from the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Deleted from the Final NPL
Substance ID: U044
Substance: CHLOROFORM
CAS #: 67-66-3
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Deleted from the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: GROUND WATER PATHWAY
Scoring: 2

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

Summary Details:

Conditions at proposal October 15, 1984): San Fernando Valley Area 3) is an area of contaminated ground water in the vicinity of the Glorietta Well Field in the City of Glendale, Los Angeles County, California. This area is part of the San Fernando Valley Basin, a natural underground reservoir that represents an important source of drinking water for at least 3 million people in the Los Angeles metropolitan area. The contaminated ground water, which underlies an area of approximately 5,200 acres, contains trichloroethylene TCE) and perchloroethylene PCE), according to tests conducted by the California Department of Health Services, as well as numerous local government agencies. The State s recommended drinking water guidelines for TCE and PCE 5 and 4 parts per billion respectively) are exceeded in a number of public wells in this area. To alleviate this contamination, wells are either taken out of service or blended with water from clean sources to ensure that the public receives water with TCE/PCE concentrations below the State s guidelines. Status June 10, 1986): EPA and the Los Angeles Department of Water and Power are entering into a cooperative agreement for a remedial investigation of the San Fernando Valley Basin and a feasibility study targeted at Area 1, the most contaminated area. The RI is scheduled to begin in early 1986.

Site Status Details:

NPL Status:	Final
Proposed Date:	10/15/1984
Final Date:	06/10/1986
Deleted Date:	Not reported

Narratives Details:

NPL Name:	SAN FERNANDO VALLEY (AREA 3)
City:	GLENDALE
State:	CA

SEMS:

Site ID:	902254
EPA ID:	CAD980894984
Federal Facility:	N
NPL:	Deleted from the Final NPL
Non NPL Status:	Not reported

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID:	0902254
EPA ID:	CAD980894984
Facility County:	LOS ANGELES
Short Name:	SAN FERNANDO VALLEY (AREA
Congressional District:	28
IFMS ID:	096S
SMSA Number:	4480
USGC Hydro Unit:	18070105
Federal Facility:	Not a Federal Facility
DMNSN Number:	5200.00000
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

Parent ID: Not reported
RST Code: Not reported
EPA Region: 09
Classification: Wells
Site Settings Code: UR
NPL Status: Deleted from the Final NPL
DMNSN Unit Code: ACRE
RBRAC Code: Not reported
RResp Fed Agency Code: Not reported
Non NPL Status: Not reported
Non NPL Status Date: / /
Site Fips Code: 06037
CC Concurrence Date: 05/20/04
CC Concurrence FY: 2004
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):
Contact ID: 13003854.00000
Contact Name: Leslie Ramirez
Contact Tel: (415) 972-3978
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13003858.00000
Contact Name: Sharon Murray
Contact Tel: (415) 972-4250
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

Contact ID: 13004003.00000
Contact Name: Carl Brickner
Contact Tel: Not reported
Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

CERCLIS Site Alias Name(s):
Alias ID: 101
Alias Name: SAN FERNANDO VLY BASIN - GLORIETTA AREA
Alias Address: Not reported
CA
Alias ID: 201
Alias Name: LA CRESCENTA OPERABLE UNIT
Alias Address: Not reported
CA
Alias ID: 202
Alias Name: SAN FERNANDO VALLEY (AREA 3)
Alias Address: GLORIETTA WELLFIELD AREA
GLENDALE, CA 91209
Alias ID: 201
Alias Comments: PREVIOUS EPA ID# AZD 981 416 977
Site Description: The Verdugo Study Area covers an area of approximately 2,000 acres of the 4,400 acre Verdugo Basin, which is situated in the eastern portion of the San Fernando Valley Basin (SFVB). The Verdugo Basin is bounded on the northeast by the San Gabriel Mountains, on the west by the Verdugo Mountains, and on the southeast by the San Rafael Hills. The Verdugo Study Area is generally

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

considered a small tributary of the larger SFVB ground water basin. Land use in the Verdugo Study Area is primarily residential along the floor of the valley, and undeveloped open space in surrounding mountains. A northwest-oriented strip of commercial development is present along Foothill Boulevard, and a commercial sector is present in the southern portion of the basin. The Verdugo Study Area is not an industrial area and does not contain a point source that is a primary source of groundwater contamination. Rather, it is an area of historical and current residential, commercial, and limited agricultural use with contamination likely due to non-point sources. In 1981, the Los Angeles Department of Water and Power (LADWP) began a 2-year study designed to assess groundwater contamination in the SFVB, including wells located in the Glorietta, Glenwood, and Mills Well Fields in the Verdugo Basin. More than 600 water supply wells were sampled as part of this program. Additional work included a review of existing hydrogeologic data and industrial site surveys. Results of this work are presented in the Groundwater Quality Management Plan for the San Fernando Valley Basin, and indicated that 45 percent of LADWP supply wells in the eastern SFVB contained trichloroethene (TCE) in excess of maximum contaminant levels (MCLs) and/or perchloroethene (PCE) in excess of 1983 state action levels. Pursuant to California Assembly Bill 1803 (AB 1803), wells within the SFVB were sampled in 1983 for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and pesticides/herbicides. The current EPA and California Department of Health Services (DHS) MCL for both TCE and PCE is 5.0 parts per billion (ppb). Results of the 1983 sampling revealed concentrations of VOCs above MCLs in several SFVB well fields. TCE and PCE were the two most common VOCs detected. PCE was the main contaminant detected in the Verdugo Study Area, and was detected in excess of its MCL (52 ppb during 1982) in several water supply production wells in this basin. In 1986, at the request of the State of California, EPA placed four areas within the SFVB on the National Priorities List (NPL) as individual Superfund sites, due to the presence of VOCs (TCE and PCE) in groundwater that had been detected in concentrations that exceeded state and federal drinking water standards. The four areas are: North Hollywood (Area 1) containing the North Hollywood Operable Unit (OU) and the Burbank OU; Crystal Springs (Area 2) containing the Glendale North and South OUs; Verdugo (Area 3); and Pollock (Area 4). The Verdugo Basin is generally considered a small tributary of the larger SFV groundwater basin. EPA subsequently entered into a cooperative agreement with the LADWP to conduct a Remedial Investigation (RI) of the SFVB. The RI included a baseline risk assessment for the eastern portion of the SFVB.

In 1989, LADWP completed a soil gas sampling and analysis program within the SFVB designed to better define limits of shallow groundwater contamination. In the Verdugo Study Area, 73 soil gas samples were obtained and analyzed. Based upon results of soil gas sampling and available data from existing wells, seven vertical profile borings (VPBs) in the Verdugo Study Area were converted into shallow monitoring wells in 1990. A baseline risk assessment was conducted in conjunction with the San Fernando Valley RI in 1991. This baseline risk assessment was completed on a regional scale, addressing compounds that exceeded MCLs in the groundwater of the entire eastern portion of the SFVB, which includes the Verdugo Study Area. The primary contributors to risks were evaluated based on a reasonable maximum exposure (RME) calculated from observed VOC concentrations. These RMEs were calculated based on regional data rather from specific areas within the SFVB. In the Verdugo Study Area, the levels of contaminants observed were significantly lower than the concentration levels used to calculate risk for the entire SFVB; no VOCs were observed at concentrations exceeding their respective MCLs. EPA completed a hydrogeologic site assessment of the Verdugo Study Area in 1993. This document assisted in evaluating the nature and extent of groundwater contamination in the basin and provided recommendations for ongoing monitoring of groundwater

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

contamination. A further evaluation of the geological setting, groundwater recharge, discharge and flow conditions, and a summary of water quality was conducted. Since the completion of the RI in 1992 through 2002, EPA has continued to monitor groundwater quality by sampling groundwater in wells in the Verdugo Study Area four times a year as part of the SFVB basinwide monitoring program. The right to use groundwater in the Verdugo Study Area is strictly controlled by a 1979 adjudicated judicial agreement (Judgment) concerning water rights in the SFVB. Under the Judgment, only the City of Glendale and the Crescenta Valley Water District (CVWD), formerly the Crescenta Valley County Water District (CVCWD), can use surface and groundwater in the Verdugo Study Area. Groundwater within the Verdugo Study Area is used as a source of potable water supply by the City of Glendale and the CVWD. Land use in the Verdugo Study Area is primarily residential along the floor of the valley, and undeveloped open space in surrounding mountains. A northwest-oriented strip of commercial development is present along Foothill Boulevard, and a commercial sector is present in the southern portion of the basin. The basin contains four scattered agricultural areas, and no industrial development. The CVWD produces approximately 65% of its customers' annual water demand from the operation of groundwater wells, all located in the lower, southerly portion of the Crescenta Valley. The remainder of the District's water supply is treated surface water purchased from the Foothill Municipal Water District (FMWD). The District and the City of Glendale are the only two water-rights holders in the Verdugo Basin by the order of a court adjudication of the entire San Fernando Basin decreed in 1979. Overall groundwater supply management of both basins is performed by a court-appointed Watermaster and his staff working in the office of the Los Angeles Department of Water & Power. A Record of Decision addressing OU2 at the Verdugo Study Area (SFVB Area 3) was completed in February 2004.

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	/ /
Date Completed:	12/01/83
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	04/01/84
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

Action Code: 001
Action: SITE INSPECTION
Date Started: / /
Date Completed: 04/01/84
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: / /
Date Completed: 04/01/84
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 10/15/84
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started: 09/30/84
Date Completed: 08/15/85
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 06/10/86

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL ASSESSMENT
Date Started: 06/17/91
Date Completed: 06/17/91
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMEDIAL INVESTIGATION
Date Started: 09/30/85
Date Completed: 12/31/92
Priority Level: Not reported
Operable Unit: VERDUGO
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 08/16/85
Date Completed: 02/24/04
Priority Level: Not reported
Operable Unit: VERDUGO
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Phased Completion

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 02/24/04
Priority Level: Final Remedy Selected at Site
Operable Unit: VERDUGO
Primary Responsibility: EPA Fund-Financed

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: CLOSE OUT REPORT
Date Started: / /
Date Completed: 05/20/04
Priority Level: Not reported
Operable Unit: VERDUGO
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: DELETION FROM NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 10/12/04
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Federal Register Details:
Fed Register Date: 10/12/04
Fed Register Volume: 69
Page Number: 48398

Fed Register Date: 06/10/86
Fed Register Volume: 51
Page Number: 21054

Fed Register Date: 10/15/84
Fed Register Volume: 49
Page Number: 40320

Click this hyperlink while viewing on your computer to access
2 additional US CERCLIS Financial: record(s) in the EDR Site Report.

US ENG CONTROLS:
EPA ID: CAD980894984
Site ID: 0902254
Name: SAN FERNANDO VALLEY (AREA 3)
Address: GLORIETTA WELLFIELD AREA
GLENDALE, CA 91209
EPA Region: 09

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

County: LOS ANGELES
Event Code: Not reported
Actual Date: 03/30/2004
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 02/24/2004
Operable Unit: 02
Contaminated Media : Groundwater
Engineering Control: No Action
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

ENVIROSTOR:
Facility ID: 19990010
Status: No Further Action
Status Date: 10/12/2004
Site Code: P31033
Site Type: Federal Superfund
Site Type Detailed: State Response or NPL
Acres: 5144
NPL: DELISTED
Regulatory Agencies: US EPA
Lead Agency: US EPA
Program Manager: Tedd Yargeau
Supervisor: Rita Kamat
Division Branch: Cleanup Chatsworth
Assembly: 39
Senate: 18
Special Program: EPA - Multi-Site Cooperative Agreement
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Joint State/Federal-Funded
Latitude: 34.22777
Longitude: -118.4130
APN: NONE SPECIFIED
Past Use: AEROSPACE MANUFACTURING/MAINTENANCE, MANUFACTURING - OTHER, METAL PLATING - CHROME, METAL PLATING - OTHER
Potential COC: Total Chromium (1:6 ratio Cr VI:Cr III Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Carbon tetrachloride Not reported
Confirmed COC: NONE SPECIFIED
Potential Description: AQUI, OTH, WELL
Alias Name: GLORIETTA AREA
Alias Type: Alternate Name
Alias Name: SAN FERNANDO VALLEY GW BASIN AREA 3
Alias Type: Alternate Name
Alias Name: CAD980894984
Alias Type: CERCLIS ID
Alias Name: 110009267989

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

Alias Type: EPA (FRS #)
Alias Name: 300127
Alias Type: Project Code (Site Code)
Alias Name: 300128
Alias Type: Project Code (Site Code)
Alias Name: 300287
Alias Type: Project Code (Site Code)
Alias Name: P31033
Alias Type: Project Code (Site Code)
Alias Name: 19990010
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Triage Meeting
Completed Date: 07/20/2015
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Calsite:
Region: GLENDALE
Facility ID: 19990010
Facility Type: NPJF
Type: NPL SITE, JOINT STATE/FEDERAL-FUNDED
Branch: SA
Branch Name: SO CAL - GLENDALE
File Name: Not reported
State Senate District: 01011984
Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name: ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency: ENVIRONMENTAL PROTECTION AGENCY
NPL: Delisted
SIC Code: 99
SIC Name: NONCLASSIFIABLE ESTABLISHMENTS
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Confirmed
Staff Member Responsible for Site: HSAEBFAR
Supervisor Responsible for Site: Not reported
Region Water Control Board: Not reported
Region Water Control Board Name: Not reported
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported
Lat/Long Description: Not reported

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

State Assembly District Code:	39
State Senate District Code:	20
Facility ID:	Not reported
Activity:	Not reported
Activity Name:	Not reported
AWP Code:	Not reported
Proposed Budget:	Not reported
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	Not reported
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	Not reported
Definition of Status:	Not reported
Liquids Removed (Gals):	Not reported
Liquids Treated (Gals):	Not reported
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	Not reported
For Industrial Reuse:	Not reported
For Residential Reuse:	Not reported
Unknown Type:	Not reported
Alternate Address:	GLORIETTA AREA
Alternate City,St,Zip:	LOS ANGELES, CA 91214
Alternate Address:	GLORIETTA WELLFIELD AREA
Alternate City,St,Zip:	GLENDALE, CA 91209
Background Info:	ties involve measuring the extent of contamination, developing The San Fernando Valley Ground Water Basin (SFVGWB) is located within the Upper Los Angeles River Area, which consists of the entire watershed of the Los angeles River and its various tributaries. The SFVGWB emcompasses approximately 112,000 acres of alluvial valley fill deposits and provides enough water to serve approximately 600,000 residents. The Basin is bounded on the north and the northwest by the Santa Susana Mountains, on the northeast by the San Gabriel Mountains, on the west by the Simi Hills and on the south by the Santa Monica Mountains. Area #1 of the SFVGWB covers 5,254 acres and is located in North Hollywood and adjacent to the City of Los Angeles. Area #2 of the SFVGWB covers 7,229 acres in the Crystal Springs area and is located in the Cities of Burbank, Glendale andLos Angeles. Area #3 covers 5,144 acres in the Glorietta area and is located in and adjacent to La Crescenta in the Verdugo Mountains. Area #4 and covers 5,829 acres in the Pollack area and is located in and adjacent to the Cities of Los Angeles and Glendale. Groundwater contamination in the SFVGWB is linked to prewar, postwar, and current industrialization in the San Fernando Valley. Contaminants of concern, consisting essentially of industrial solvents like volatile organic compounds (VOCs), e.g., trichloroethylene (TCE), perchloroethylene (PCE), and carbon tetrachloride (CTC), have been and/or are being used in many San Fernando Valley industries, such as aeronautical, automotive, dry

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

cleaning, and metal plating. These solvents have found their way to the groundwater basin as a result of improper use, storage, and disposal practices. The SFVGWB Superfund sites, added to the NPL in 1986, are areas where groundwater from wells have been found to contain VOCs above the state and federal drinking water standards. Groundwater contamination at numerous wells have been so severe with TCE, PCE, and CTC that these wells have essentially been put out of commission.

Exposure of receptors to contaminants can possibly occur through ingestion of contaminated drinking water, inhalation of VOC vapors released from the contaminated water as in taking showers, and dermal exposure as in washing or bathing. However, with the strict regulatory control over water quality by the Department's Office of Drinking Water (ODW), the RWQCB, and other agencies, residents are assured that the water they consume is safe and that no one is drinking water above regulatory standards.

Federal, state, and local agencies have been conducting investigations and cleanup of contaminated groundwater in the SFVGWB since contamination was discovered in 1979. These activi- and implementing cleanup remedies, and identifying responsible parties. EPA is overseeing the basinwide remedial investigation being conducted by the Los Angeles Department of Water and Power (LADWP) to study the groundwater flow patterns and the nature and extent of groundwater contamination within the eastern half of the SFVGWB.

The remedial investigation of the SFVGWB has currently been divided into two phases.

Phase I activities have included vertical profile borings and installation of monitoring wells to obtain preliminary contamination information. Monitoring wells have been installed as follows: 34 in North Hollywood (Area #1); 29 in Crystal Springs (Area #2); 7 in Glorietta (Area #3); and 17 in Pollack (Area #4). Information obtained from Phase I investigation activities identified the need for several operable units. Operable Unit is a federal term which is similar to the State's definition of a removal action.

Phase II activities consist of basinwide remedial investigation that is being conducted by LADWP.

Removal Actions (RAs):

North Hollywood (Area #1) -- Two RAs were identified for Area #1, the North Hollywood and the Burbank.

A Record of Decision (ROD) for the North Hollywood RA was signed in September 1987, selecting groundwater extraction and treatment (air stripping) of 2,000 gallons per minute (gpm) of contaminated water. This RA was constructed with funding from EPA and the State and has been treating contaminated groundwater since March 1989. This facility is located at 11845 Vose Street in the North Hollywood section of Los Angeles.

The second Area #1 RA will be located in Burbank. A ROD for this RA was signed in June 1989, again selecting groundwater extraction and treatment of about 12,000 gpm of contaminated water. Negotiations are continuing with PRPs for the design and construction of this RA.

Crystal Springs (Area #2) -- To date, only one RA has been identified for Area #2. This RA is known as the Glendale RA. LADWP is currently conducting a focused RI/FS for this proposed

SAN FERNANDO VALLEY (AREA 3) (Continued) **1000710136**

RA.
Glorietta and Pollack (Areas #3 and #4) --
Currently no RAs have been identified for Area #3. One RA is planned for Area #4, Pollack.
EPA and the RWQCB are identifying potential sources of contamination and pursuing PRPs that may be responsible for contaminating groundwater. As these PRPs are identified, individual site investigations and mitigation activities will be pursued.
Enforceable agreements and orders have been implemented at numerous specific potential source sites within the Basin by RWQCB and the Department.

Comments Date:	01011984
Comments:	This is the date the site was first listed AWP pursuant to
Comments Date:	01011984
Comments:	Section 25356.
Comments Date:	07251991
Comments:	Area 3 covers 5,144 acres in the Glorietta area and is located in
Comments Date:	07251991
Comments:	and adjacent to La Crescenta in the Verdugo Mountains. Ground-
Comments Date:	07251991
Comments:	water is contaminated with TCE, PCE, CTC.
ID Name:	BEP DATABASE PCODE
ID Value:	P31033
Alternate Name:	SAN FERNANDO VALLEY GW BASIN AREA 3GLORIETTA AREASAN FERNANDO VALLEY (AREA 3)
Special Programs Code:	MSCA
Special Programs Name:	MULTI-SITE COOPERATIVE AGREEMENT

ROD:
Full-text of USEPA Record of Decision(s) is available from EDR.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	19
Reg By:	CALSI
Reg Id:	19990010

E43 **HELO'S EXXON** **LUST** **S106175509**
West **12904 ROSCOE BLVD** **N/A**
1/4-1/2 **SUN VALLEY, CA 91352**
0.465 mi.
2456 ft. **Site 3 of 4 in cluster E**

Relative:
Lower

Actual:
816 ft.

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Los Angeles	
Facility Id:	913522507	
Status:	Case Closed	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	Not reported	
Case Type:	Soil	
Abatement Method Used at the Site:		Not reported
Global ID:	T0603702340	
W Global ID:	Not reported	
Staff:	TAS	
Local Agency:	19050	

HELO'S EXXON (Continued) **S106175509**

Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	Not reported	
Date Leak First Reported:		12/10/1999
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	Not reported	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		12/10/1999
Date the Case was Closed:		4/11/2001
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):		2072.0768830738985390911205055
Source of Cleanup Funding:		Not reported
Preliminary Site Assessment Workplan Submitted:		Not reported
Preliminary Site Assessment Began:		Not reported
Pollution Characterization Began:		Not reported
Remediation Plan Submitted:		Not reported
Remedial Action Underway:		Not reported
Post Remedial Action Monitoring Began:		Not reported
Enforcement Action Date:		Not reported
Historical Max MTBE Date:		Not reported
Hist Max MTBE Conc in Groundwater:		Not reported
Hist Max MTBE Conc in Soil:		Not reported
Significant Interim Remedial Action Taken:		Not reported
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	HELO'S EXXON	
RP Address:	12904 ROSCOE BLVD., SUN VALLEY, CA 91352	
Program:	LUST	
Lat/Long:	34.221713 / -1	
Local Agency Staff:	PEJ	
Beneficial Use:	Not reported	
Priority:	Not reported	
Cleanup Fund Id:	Not reported	
Suspended:	Not reported	
Assigned Name:	Not reported	
Summary:	SITE EVALUATED FOR MTBE POLLUTION, TUJUNGA WELLFIELD (FILE NO. 99-064)	

E44
West
1/4-1/2
0.465 mi.
2456 ft.

HELO'S EXXON
12904 ROSCOE BLVD
SUN VALLEY, CA 91352

Site 4 of 4 in cluster E

LUST **S101584895**
CA FID UST **N/A**
HAZNET
HIST CORTESE

Relative:
Lower

Actual:
816 ft.

LUST:

Region:	STATE
Global Id:	T0603702340
Latitude:	34.221329
Longitude:	-118.414767
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed

HELO'S EXXON (Continued) **S101584895**

Status Date:	04/11/2001
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	UST
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	913522507
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0603702340
Contact Type:	Regional Board Caseworker
Contact Name:	UST
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	BCP 04 UNKNOWN
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0603702340
Contact Type:	Local Agency Caseworker
Contact Name:	ELOY LUNA
Organization Name:	LOS ANGELES, CITY OF
Address:	200 North Main Street, Suite 1780
City:	LOS ANGELES
Email:	eloy.luna@lacity.org
Phone Number:	Not reported

Status History:

Global Id:	T0603702340
Status:	Completed - Case Closed
Status Date:	04/11/2001

Global Id:	T0603702340
Status:	Open - Case Begin Date
Status Date:	12/10/1999

Regulatory Activities:

Global Id:	T0603702340
Action Type:	Other
Date:	12/10/1999
Action:	Leak Reported

CA FID UST:

Facility ID:	19016659
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	2137873386
Mail To:	Not reported

HELO'S EXXON (Continued) **S101584895**

Mailing Address: 12904 ROSCOE BLVD
Mailing Address 2: Not reported
Mailing City,St,Zip: SUN VALLEY 913520000
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

HAZNET:
envid: S101584895
Year: 2013
GEPAID: CAC002726194
Contact: SURAPOL MEKPONGSATORN
Telephone: 6262010800
Mailing Name: Not reported
Mailing Address: 8225 COLDWATER CANYON AVE
Mailing City,St,Zip: NORTH HOLLYWOOD, CA 916051131
Gen County: Los Angeles
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 5.004
Cat Decode: Not reported
Method Decode: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: 913522507

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45 **BRIGHT REALITY** **WMUDS/SWAT** **S103441429**
North **LAUREL CANYON & JEROME** **N/A**
1/4-1/2 **SUN VALLEY, CA**
0.493 mi.
2603 ft.

Relative:
Higher

Actual:
871 ft.

WMUDS/SWAT:
Edit Date: Not reported
Complexity: Not reported
Primary Waste: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Base Meridian: Not reported
NPID: Not reported
Tonnage: 0
Regional Board ID: Not reported
Municipal Solid Waste: False
Superorder: False

BRIGHT REALITY (Continued) **S103441429**

Open To Public:	False
Waste List:	False
Agency Type:	Not reported
Agency Name:	BRIGHT REALTY
Agency Department:	Not reported
Agency Address:	Not reported
Agency City,St,Zip:	Not reported
Agency Contact:	Not reported
Agency Telephone:	Not reported
Land Owner Name:	Not reported
Land Owner Address:	Not reported
Land Owner City,St,Zip:	CA
Land Owner Contact:	Not reported
Land Owner Phone:	Not reported
Region:	4
Facility Type:	Not reported
Facility Description:	Not reported
Facility Telephone:	Not reported
SWAT Facility Name:	Not reported
Primary SIC:	Not reported
Secondary SIC:	Not reported
Comments:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System:	False
Solid Waste Assessment Test Program:	True
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act:	False
Department of Defence:	False
Solid Waste Assessment Test Program:	BRIGHT REALTY
Threat to Water Quality:	Not reported
Sub Chapter 15:	False
Regional Board Project Officer:	LT
Number of WMUDS at Facility:	1
Section Range:	Not reported
RCRA Facility:	Not reported
Waste Discharge Requirements:	Not reported
Self-Monitoring Rept. Frequency:	Not reported
Waste Discharge System ID:	4 190173NUR
Solid Waste Information ID:	Not reported

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46 **RICHARD E. BYRD HIGH SCHOOL** **ENVIROSTOR** **S102808013**
NNE **9171 TELFAIR AVENUE** **SCH** **N/A**
1/2-1 **SUN VALLEY, CA 91352**
0.785 mi.
4143 ft.

Relative:
Higher

Actual:
884 ft.

ENVIROSTOR:

Facility ID:	60000277
Status:	No Further Action
Status Date:	11/14/2011
Site Code:	304528
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	20.7
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Amit Pathak

RICHARD E. BYRD HIGH SCHOOL (Continued) **S102808013**

Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	39
Senate:	18
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	34.23335
Longitude:	-118.3971
APN:	2631-006-901, 2631-032-903
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic Naturally Occurring Asbestos (NOA Benzene Chlordane DDD DDE DDT Endrin Lead
Confirmed COC:	30001-NO 40002-NO 30003-NO 30004-NO 30006-NO 30007-NO 30008-NO 30010-NO 30013-NO
Potential Description:	SOIL
Alias Name:	LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	2631-006-901
Alias Type:	APN
Alias Name:	2631-032-903
Alias Type:	APN
Alias Name:	304528
Alias Type:	Project Code (Site Code)
Alias Name:	60000277
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Area C
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	07/11/2008
Comments:	Letter was sent to inform LAUSD to cordon off the Area C for any school use.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	11/14/2011
Comments:	DTSC prepared project close out Cost Recovery Unit Memorandum.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	05/12/2006
Comments:	PEA Required for Area B due to agriculture chemicals. LBP/ACM investigation required for Area A and Area B.
Completed Area Name:	Area B
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	07/12/2006
Comments:	With some comments to be addressed in future
Completed Area Name:	Area B
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report

RICHARD E. BYRD HIGH SCHOOL (Continued) **S102808013**

Completed Date:	01/22/2007
Comments:	DTSC approved the PEA with a No Further Action determination
Completed Area Name:	Area A
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Workplan
Completed Date:	12/04/2006
Comments:	Field work for LBP/OCP completed on 12/9/06
Completed Area Name:	Area A
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1 Addendum
Completed Date:	04/16/2007
Comments:	NFA for portion of the Area A that went for investigation
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Facility ID:	60000277
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	20.7
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Amit Pathak
Supervisor:	Shahir Haddad
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	304528
Assembly:	39
Senate:	18
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	11/14/2011
Restricted Use:	NO
Funding:	School District
Latitude:	34.23335
Longitude:	-118.3971
APN:	2631-006-901, 2631-032-903
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic, Naturally Occurring Asbestos (NOA, Benzene, Chlordane, DDD, DDE, DDT, Endrin, Lead
Confirmed COC:	30001-NO, 40002-NO, 30003-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30010-NO, 30013-NO
Potential Description:	SOIL
Alias Name:	LOS ANGELES UNIFIED SCHOOL DISTRICT

RICHARD E. BYRD HIGH SCHOOL (Continued) **S102808013**

Alias Type: Alternate Name
Alias Name: 2631-006-901
Alias Type: APN
Alias Name: 2631-032-903
Alias Type: APN
Alias Name: 304528
Alias Type: Project Code (Site Code)
Alias Name: 60000277
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Area C
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/11/2008
Comments: Letter was sent to inform LAUSD to cordon off the Area C for any school use.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/14/2011
Comments: DTSC prepared project close out Cost Recovery Unit Memorandum.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 05/12/2006
Comments: PEA Required for Area B due to agriculture chemicals. LBP/ACM investigation required for Area A and Area B.

Completed Area Name: Area B
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 07/12/2006
Comments: With some comments to be addressed in future

Completed Area Name: Area B
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 01/22/2007
Comments: DTSC approved the PEA with a No Further Action determination

Completed Area Name: Area A
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 12/04/2006
Comments: Field work for LBP/OCP completed on 12/9/06

Completed Area Name: Area A
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1 Addendum
Completed Date: 04/16/2007
Comments: NFA for portion of the Area A that went for investigation

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported

RICHARD E. BYRD HIGH SCHOOL (Continued) **S102808013**

Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

47
ENE
1/2-1
0.823 mi.
4346 ft.

ACCURATE ENGINEERING, INC.
8710 TELFAIR
SUN VALLEY, CA 91352

RCRA-LQG **1000426895**
ENVIROSTOR **CAD980892509**
EMI

Relative:
Higher

Actual:
851 ft.

RCRA-LQG:

Date form received by agency:	03/01/2014
Facility name:	ACCURATE ENGINEERING, INC.
Facility address:	8710 TELFAIR SUN VALLEY, CA 91352
EPA ID:	CAD980892509
Mailing address:	TELFAIR SUN VALLEY, CA 91352
Contact:	RASHESH PATEL
Contact address:	TELFAIR SUN VALLEY, CA 91352
Contact country:	Not reported
Contact telephone:	(818) 768-3919
Contact email:	ACCUENG@AOL.COM
EPA Region:	09
Land type:	Private
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	ROSALEE PALMER
Owner/operator address:	C/O WASHINGTON MUTUAL BANK YUBA CITY, CA 95991
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1997
Owner/Op end date:	Not reported
Owner/operator name:	ROSALIE PALMER
Owner/operator address:	1935 LINCOLN ROAD YUBA CITY, CA 95993

ACCURATE ENGINEERING, INC. (Continued) **1000426895**

Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 06/06/1975
Owner/Op end date: Not reported

Owner/operator name: ACCURATE ENGINEERING, INC.
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 10/01/1995
Owner/Op end date: Not reported

Owner/operator name: ACCURATE ENGINEERING, INC.
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: Yes
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 132
. Waste name: 132

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

Historical Generators:
Date form received by agency: 04/27/2012
Site name: ACCURATE ENGINEERING, INC.

ACCURATE ENGINEERING, INC. (Continued) **1000426895**

Classification: Large Quantity Generator

. Waste code: 132
. Waste name: 132

. Waste code: 181
. Waste name: 181

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D008
. Waste name: LEAD

Date form received by agency: 01/28/2010
Site name: ACCURATE ENGINEERING, INC.
Classification: Large Quantity Generator

. Waste code: 132
. Waste name: 132

. Waste code: 135
. Waste name: 135

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

Date form received by agency: 02/21/2008
Site name: ACCURATE ENGINEERING, INC.
Classification: Large Quantity Generator

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D008
. Waste name: LEAD

Date form received by agency: 02/28/2006
Site name: ACCURATE ENGINEERING, INC.
Classification: Large Quantity Generator

. Waste code: 132
. Waste name: 132

. Waste code: D002

ACCURATE ENGINEERING, INC. (Continued) **1000426895**

. Waste name: CORROSIVE WASTE

Date form received by agency: 09/01/1996
Site name: ACCURATE ENGINEERING CORP
Classification: Large Quantity Generator

Date form received by agency: 07/17/1996
Site name: ACCURATE ENGINEERING
Classification: Large Quantity Generator

Date form received by agency: 10/26/1995
Site name: ACCURATE ENGINEERING CORP
Classification: Large Quantity Generator

Date form received by agency: 03/24/1994
Site name: ACCURATE ENGINEERING
Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2013

Annual Waste Handled:
Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 22000

Waste code: D004
Waste name: ARSENIC
Amount (Lbs): 22000

Waste code: D008
Waste name: LEAD
Amount (Lbs): 300

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 09/27/2006
Date achieved compliance: 01/01/2008
Violation lead agency: EPA
Enforcement action: Not reported
Enforcement action date: 01/11/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

ACCURATE ENGINEERING, INC. (Continued) **1000426895**

Evaluation Action Summary:
Evaluation date: 09/27/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/01/2008
Evaluation lead agency: EPA

ENVIROSTOR:
Facility ID: 71002709
Status: Refer: Other Agency
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Chatsworth
Assembly: 39
Senate: 18
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.22777
Longitude: -118.3868
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD980892509
Alias Type: EPA Identification Number
Alias Name: 110000783313
Alias Type: EPA (FRS #)
Alias Name: 71002709
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1 Non-Submittal
Completed Date: 06/26/2000
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ACCURATE ENGINEERING, INC. (Continued) **1000426895**

EMI:

Year:	1987
County Code:	19
Air Basin:	SC
Facility ID:	48343
Air District Name:	SC
SIC Code:	3679
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1990
County Code:	19
Air Basin:	SC
Facility ID:	48343
Air District Name:	SC
SIC Code:	3443
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

48
NNW
1/2-1
0.841 mi.
4440 ft.

SUPERIOR THREAD ROLLING
12801 WENTWORTH ST
ARLETA, CA 91331

RCRA-SQG **1004677013**
ENVIROSTOR **CAR000092189**
FINDS
HAZNET
ECHO

Relative:
Higher

Actual:
873 ft.

RCRA-SQG:

Date form received by agency:	02/21/2001
Facility name:	SUPERIOR THREAD ROLLING
Facility address:	12801 WENTWORTH ST ARLETA, CA 91331
EPA ID:	CAR000092189
Contact:	JOHN BOHLIN
Contact address:	12801 WENTWORTH ST ARLETA, CA 91331
Contact country:	US
Contact telephone:	(818) 504-3626
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of

SUPERIOR THREAD ROLLING (Continued) **1004677013**

hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: SUPERIOR THREAD ROLLING
Owner/operator address: 12801 WENTWORTH ST
ARLETA, CA 91331
Owner/operator country: Not reported
Owner/operator telephone: (818) 504-3626
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

Violation Status: No violations found

ENVIROSTOR:
Facility ID: 60001084
Status: No Further Action
Status Date: 06/15/2011
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 2.58

SUPERIOR THREAD ROLLING (Continued) **1004677013**

NPL: NO
Regulatory Agencies: SMBRP, US EPA
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Rita Kamat
Division Branch: Cleanup Chatsworth
Assembly: 39
Senate: 18
Special Program: EPA - PASI
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: EPA Grant
Latitude: 34.23721
Longitude: -118.4112
APN: NONE SPECIFIED
Past Use: MANUFACTURING - METAL, UNKNOWN
Potential COC: Under Investigation Tetrachloroethylene (PCE
Confirmed COC: 30022-NO 31001-NO
Potential Description: OTH, SOIL, SV
Alias Name: 60001084
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: PA/SI Site Screening
Completed Date: 02/08/2010
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

FINDS:

Registry ID: 110012191993

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

SUPERIOR THREAD ROLLING (Continued) **1004677013**

HAZNET:

envid:	1004677013
Year:	2014
GEPAID:	CAR000092189
Contact:	THOMAS MUNDY
Telephone:	8185043626
Mailing Name:	Not reported
Mailing Address:	12801 WENTWORTH ST
Mailing City,St,Zip:	ARLETA, CA 913310000
Gen County:	Los Angeles
TSD EPA ID:	CAD097030993
TSD County:	Los Angeles
Waste Category:	Other inorganic solid waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.8428
Cat Decode:	Other inorganic solid waste
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Los Angeles

envid:	1004677013
Year:	2014
GEPAID:	CAR000092189
Contact:	THOMAS MUNDY
Telephone:	8185043626
Mailing Name:	Not reported
Mailing Address:	12801 WENTWORTH ST
Mailing City,St,Zip:	ARLETA, CA 913310000
Gen County:	Los Angeles
TSD EPA ID:	AZR000509950
TSD County:	99
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	2.2935
Cat Decode:	Unspecified oil-containing waste
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles

envid:	1004677013
Year:	2013
GEPAID:	CAR000092189
Contact:	THOMAS MUNDY
Telephone:	8185043626
Mailing Name:	Not reported
Mailing Address:	12801 WENTWORTH ST
Mailing City,St,Zip:	ARLETA, CA 913310000
Gen County:	Los Angeles
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	2.085
Cat Decode:	Not reported

SUPERIOR THREAD ROLLING (Continued) **1004677013**

Method Decode: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County: Not reported

envid: 1004677013
Year: 2013
GEPAID: CAR000092189
Contact: THOMAS MUNDY
Telephone: 8185043626
Mailing Name: Not reported
Mailing Address: 12801 WENTWORTH ST
Mailing City,St,Zip: ARLETA, CA 913310000
Gen County: Los Angeles
TSD EPA ID: NVT330010000
TSD County: 99
Waste Category: Not reported
Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons: 0.2
Cat Decode: Not reported
Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County: Not reported

envid: 1004677013
Year: 2013
GEPAID: CAR000092189
Contact: THOMAS MUNDY
Telephone: 8185043626
Mailing Name: Not reported
Mailing Address: 12801 WENTWORTH ST
Mailing City,St,Zip: ARLETA, CA 913310000
Gen County: Los Angeles
TSD EPA ID: CAD044429835
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 1.251
Cat Decode: Not reported
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Not reported

Click this hyperlink while viewing on your computer to access
59 additional CA_HAZNET: record(s) in the EDR Site Report.

ECHO:
Envid: 1004677013
Registry ID: 110012191993
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110012191993

49
NNW
1/2-1
0.867 mi.
4578 ft.

GOLDEN STATE MAGNETIC & PENETRANT LAB, INC
9301 LAUREL CANYON BLVD
ARLETA, CA 91331

RCRA-LQG
ENVIROSTOR
ICIS
ECHO

1001231349
CAR000039461

Relative:
Higher

Actual:
874 ft.

RCRA-LQG:

Date form received by agency:	10/22/2014
Facility name:	GOLDEN STATE MAGNETIC & PENETRANT LAB, INC
Facility address:	9301 LAUREL CANYON BLVD ARLETA, CA 91331
EPA ID:	CAR000039461
Mailing address:	LAUREL CANYON BLVD ARLETA, CA 91331
Contact:	JOANNE F WEINOE
Contact address:	LAUREL CANYON BLVD ARLETA, CA 91331
Contact country:	Not reported
Contact telephone:	(818) 767-5767
Telephone ext.:	12
Contact email:	JWEINOE@GSMP.COM
EPA Region:	09
Land type:	Private
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	JOANNE WEINOE
Owner/operator address:	LAUREL CANYON BLVD ARLETA, CA 91331
Owner/operator country:	Not reported
Owner/operator telephone:	(818) 767-5767
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	05/15/1998
Owner/Op end date:	Not reported

Owner/operator name:	JOANNE WEINOE
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	05/15/1998
Owner/Op end date:	Not reported

GOLDEN STATE MAGNETIC & PENETRANT LAB, INC (Continued) **1001231349**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Historical Generators:
Date form received by agency: 03/03/2010
Site name: GOLDEN STATE M & P LAB, INC
Classification: Large Quantity Generator

. Waste code: 135
. Waste name: 135

. Waste code: 212
. Waste name: 212

. Waste code: 214
. Waste name: 214

. Waste code: 792
. Waste name: 792

. Waste code: D001

GOLDEN STATE MAGNETIC & PENETRANT LAB, INC (Continued) **1001231349**

. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 05/05/1998
Site name: GOLDEN STATE M AND P LAB INC
Classification: Large Quantity Generator

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 05/05/1998
Site name: GODEN STATE M AND P LAB INC
Classification: Small Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 03/16/2009
Date achieved compliance: 05/21/2009
Violation lead agency: EPA
Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION
Enforcement action date: 04/17/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

GOLDEN STATE MAGNETIC & PENETRANT LAB, INC (Continued) **1001231349**

Area of violation: Generators - Records/Reporting
Date violation determined: 03/16/2009
Date achieved compliance: 05/21/2009
Violation lead agency: EPA
Enforcement action: SINGLE SITE CA/FO
Enforcement action date: 05/26/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 2500
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/26/2009
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 03/16/2009
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Generators - Records/Reporting
Date achieved compliance: 05/21/2009
Evaluation lead agency: EPA

Evaluation date: 03/16/2009
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Generators - Records/Reporting
Date achieved compliance: 05/21/2009
Evaluation lead agency: EPA

ENVIROSTOR:
Facility ID: 71003474
Status: Refer: Other Agency
Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Chatsworth
Assembly: 40
Senate: 18
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.23787
Longitude: -118.4106
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED

GOLDEN STATE MAGNETIC & PENETRANT LAB, INC (Continued) **1001231349**

Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAR000039461
Alias Type: EPA Identification Number
Alias Name: 71003474
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ICIS:
Enforcement Action ID: 09-2009-5032
FRS ID: 110042273633
Program ID: BR CAR000039461
Action Name: GOLDEN STATE M & P LAB
Full Address: 9301 LAUREL CANYON BLVD ARLETA CA 91331
State: California
Facility Name: GOLDEN STATE M & P LAB, INC
Facility Address: 9301 LAUREL CANYON BLVD
ARLETA, CA 91331
Enforcement Action Type: RCRA 3008A AO For Comp And/Or Penalty - Subtitle C Expedited Settlement Program
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2009-5032
FRS ID: 110042273633
Program ID: RCRAINFO CAR000039461
Action Name: GOLDEN STATE M & P LAB
Full Address: 9301 LAUREL CANYON BLVD ARLETA CA 91331
State: California
Facility Name: GOLDEN STATE M & P LAB, INC
Facility Address: 9301 LAUREL CANYON BLVD
ARLETA, CA 91331
Enforcement Action Type: RCRA 3008A AO For Comp And/Or Penalty - Subtitle C Expedited Settlement Program
Facility County: LOS ANGELES
EPA Region #: 9

Enforcement Action ID: 09-2009-5032
FRS ID: 110042273633
Program ID: FRS 110042273633
Action Name: GOLDEN STATE M & P LAB
Full Address: 9301 LAUREL CANYON BLVD ARLETA CA 91331
State: California

GOLDEN STATE MAGNETIC & PENETRANT LAB, INC (Continued) **1001231349**

Facility Name: GOLDEN STATE M & P LAB, INC
Facility Address: 9301 LAUREL CANYON BLVD
ARLETA, CA 91331
Enforcement Action Type: RCRA 3008A AO For Comp And/Or Penalty - Subtitle C Expedited Settlement Program
Facility County: LOS ANGELES
EPA Region #: 9

Program ID: BR CAR000039461
Facility Name: GOLDEN STATE M & P LAB, INC
Address: 9301 LAUREL CANYON BLVD
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110042273633
Facility Name: GOLDEN STATE M & P LAB, INC
Address: 9301 LAUREL CANYON BLVD
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Program ID: RCRAINFO CAR000039461
Facility Name: GOLDEN STATE M & P LAB, INC
Address: 9301 LAUREL CANYON BLVD
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

ECHO:
Envid: 1001231349
Registry ID: 110042273633
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110042273633

50
ENE
1/2-1
0.905 mi.
4777 ft.

DIXON HARD CHROME, INC.
11645 PENDLETON STREET
SUN VALLEY, CA 91352

ENVIROSTOR **1006816060**
ENF **N/A**
NPDES
WIP

Relative:
Higher

Actual:
863 ft.

ENVIROSTOR:
Facility ID: 71002228
Status: Refer: EPA
Status Date: 09/08/2011
Site Code: Not reported
Site Type: Evaluation
Site Type Detailed: Evaluation
Acres: 0.5
NPL: NO
Regulatory Agencies: SMBRP, RWQCB 4 - Los Angeles
Lead Agency: RWQCB 4 - Los Angeles
Program Manager: Not reported
Supervisor: Javier Hinojosa
Division Branch: Cleanup Chatsworth

DIXON HARD CHROME, INC. (Continued) **1006816060**

Assembly: 39
Senate: 18
Special Program: EPA - PASI
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.22918
Longitude: -118.3867
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD008392722
Alias Type: EPA Identification Number
Alias Name: 110000476976
Alias Type: EPA (FRS #)
Alias Name: 71002228
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: PA/SI Site Screening
Completed Date: 06/30/2010
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENF:
Region: 4
Facility Id: 221444
Agency Name: Dixon Hard Chrome, Inc.
Place Type: Manufacturing
Place Subtype: Manufacturing NEC
Facility Type: All other facilities
Agency Type: Privately-Owned Business
Of Agencies: 1
Place Latitude: 34.229348
Place Longitude: -118.385659
SIC Code 1: 3471
SIC Desc 1: Electroplating, Plating, Polishing, Anodizing, and Coloring
SIC Code 2: Not reported
SIC Desc 2: Not reported
SIC Code 3: Not reported
SIC Desc 3: Not reported
NAICS Code 1: Not reported
NAICS Desc 1: Not reported
NAICS Code 2: Not reported

DIXON HARD CHROME, INC. (Continued) **1006816060**

NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WIP
Program Category1:	MONITORING
Program Category2:	MONITORING
# Of Programs:	1
WDID:	4WIP1110365
Reg Measure Id:	166627
Reg Measure Type:	Unregulated
Region:	4
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/17/2005
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	225976
Region:	4
Order / Resolution Number:	LT911126
Enforcement Action Type:	13267 Letter
Effective Date:	11/26/1991
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 4WIP1110365
Description:	Not reported

DIXON HARD CHROME, INC. (Continued) **1006816060**

Program:	WIP
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	188642
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 19I000547
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	03/16/1992
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	LMDD Enterprises dba Dixon Hard Chrome
Discharge Address:	11645 Pendleton St
Discharge City:	Sun Valley
Discharge State:	California
Discharge Zip:	91352
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported

DIXON HARD CHROME, INC. (Continued) **1006816060**

DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	4
Regulatory Measure Id:	188642
Order No:	Not reported
Regulatory Measure Type:	Industrial
Place Id:	Not reported
WDID:	4 19I000547
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	5/9/2008
PROCESSED DATE:	3/16/1992
STATUS CODE NAME:	Active
STATUS DATE:	3/16/1992
PLACE SIZE:	21780
PLACE SIZE UNIT:	53
FACILITY CONTACT NAME:	Willie Macawili

DIXON HARD CHROME, INC. (Continued) **1006816060**

FACILITY CONTACT TITLE:	Not reported
FACILITY CONTACT PHONE:	818-767-9650
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	willie@dixonhardchrome.com
OPERATOR NAME:	LMDD Enterprises dba Dixon Hard Chrome
OPERATOR ADDRESS:	11645 Pendleton St
OPERATOR CITY:	Sun Valley
OPERATOR STATE:	California
OPERATOR ZIP:	91352
OPERATOR CONTACT NAME:	Willie Macawili
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	818-767-9650
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	willie@dixonhardchrome.com
OPERATOR TYPE:	Private Business
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	California
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	818-767-9650
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Los Angeles River
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	3471-Electroplating, Plating, Polishing, Anodizing, and Coloring
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

WIP:

Region:	4
File Number:	111.0365
File Status:	**Historical**
Staff:	JWOO
Facility Suite:	Not reported

51
NNW
1/2-1
0.951 mi.
5019 ft.

Relative:
Higher

Actual:
881 ft.

MILES CHEMICAL COMPANY
12801 RANGOON STREET
ARLETA, CA 91331

ENVIROSTOR
SLIC
CHMIRS
ENF
HWT
WIP

S106484866
N/A

ENVIROSTOR:

Facility ID:	60001085
Status:	No Further Action
Status Date:	06/15/2011
Site Code:	Not reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	1.2
NPL:	NO
Regulatory Agencies:	SMBRP, RWQCB 4 - Los Angeles, US EPA
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Cleanup Chatsworth
Assembly:	39
Senate:	18
Special Program:	EPA - PASI
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	EPA Grant
Latitude:	34.23813
Longitude:	-118.4121
APN:	2629027013
Past Use:	TRANSFER STATION, TRANSPORTATION - WAREHOUSING
Potential COC:	Under Investigation
Confirmed COC:	31001-NO
Potential Description:	SOIL, SV
Alias Name:	2629027013
Alias Type:	APN
Alias Name:	60001085
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	PA/SI Site Screening
Completed Date:	06/30/2009
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**

MILES CHEMICAL COMPANY (Continued) **S106484866**

Status Date:	07/15/2004
Global Id:	SL603799079
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Lead Agency Case Number:	Not reported
Latitude:	34.2384
Longitude:	-118.412436
Case Type:	Cleanup Program Site
Case Worker:	GJH
Local Agency:	Not reported
RB Case Number:	111.2659
File Location:	Not reported
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

CHMIRS:

OES Incident Number:	10-0386
OES notification:	01/19/2010
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Yes
Waterway:	Storm Drain
Spill Site:	Merchant/Business
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Gal(s)
Other:	Not reported
Date/Time:	38

MILES CHEMICAL COMPANY (Continued) **S106484866**

Year:	2010
Agency:	Los Angeles Dept of Water and Power
Incident Date:	1/19/2010
Admin Agency:	LACoFD Health Haz-Mat
Amount:	Not reported
Contained:	Yes
Site Type:	Storm Drain
E Date:	Not reported
Substance:	Transformer Oil (Mineral Oil)
Quantity Released:	100
Unknown:	Not reported
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	Not reported
Number of Injuries:	Not reported
Number of Fatalities:	Not reported
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported
Injuries:	Not reported
Fatals:	Not reported
Comments:	Not reported
Description:	Caller states substance released due to pole failure. Substance released to a parking lot and then into a storm drain. PCB content is unknown at this time.

ENF:

Region:	4
Facility Id:	227854
Agency Name:	Great Western
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Not reported
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	34.238907
Place Longitude:	-118.411122
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported

MILES CHEMICAL COMPANY (Continued) **S106484866**

Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WIP
Program Category1:	MONITORING
Program Category2:	MONITORING
# Of Programs:	1
WDID:	4WIP1112659
Reg Measure Id:	164111
Reg Measure Type:	Unregulated
Region:	4
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/17/2005
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	226400
Region:	4
Order / Resolution Number:	13267 Letter
Enforcement Action Type:	13267 Letter
Effective Date:	11/09/2000
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	11/09/2000
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 4WIP1112659
Description:	Not reported
Program:	WIP
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00

MILES CHEMICAL COMPANY (Continued) **S106484866**

Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

HWT:

Reg Num:	3867
Expiration Date:	12/31/2015

WIP:

Region:	4
File Number:	111.2659
File Status:	**Backlog**
Staff:	UNIDENTIFIED
Facility Suite:	Not reported

Count: 4 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NORTH HOLLYWOOD	S107737526	VALLEY REGION ES #7 SITE 14, 56400	SATICOY STREET/GENTRY AVENUE	91605	ENVIROSTOR, SCH
PACOIMA	1011845386	TUJUNGA WELLFIELD SITE DISCOVERY	ROSCOE BLVD AND NAGLE AVENUE		SEMS
PACOIMA	S111120540	THERMAL TECHNOLOGIES	11660 SHELDON STREET UNIT A	91331	ENVIROSTOR
PACOIMA, ARLETA, SUN	S111120536	TUJUNGA WELLFIELD DISCOVERY PROJEC	PACOIMA, ARLETA, SUN VALLEY, S	91331	ENVIROSTOR

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/13/2015
Date Data Arrived at EDR: 01/06/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 135

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/05/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/16/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 51

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 34

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/18/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 03/14/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 05/16/2016
Number of Days to Update: 61

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015
Date Data Arrived at EDR: 02/19/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 105
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 112
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 03/14/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 05/16/2016
Number of Days to Update: 61

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/14/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 49
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 120
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35
Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 119

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 58

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2015
Date Data Arrived at EDR: 12/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/15/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 54

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 04/07/2016
Date Data Arrived at EDR: 04/12/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 50

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/13/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/18/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 88

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 05/10/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/18/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 88

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 06/07/2016
Date Data Arrived at EDR: 06/09/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 14

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 06/01/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/08/2016
Date Data Arrived at EDR: 03/11/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 54

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/08/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 57

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/07/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 04/11/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 51

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/27/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 03/14/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 05/16/2016
Number of Days to Update: 61

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 03/14/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 05/16/2016
Number of Days to Update: 61

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2015
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 06/10/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015
Date Data Arrived at EDR: 09/03/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 61
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/18/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/12/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/24/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74
Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/07/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015
Date Data Arrived at EDR: 08/26/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 69
Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35
Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/12/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/18/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 28
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/09/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/10/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/26/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015
Date Data Arrived at EDR: 07/09/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 69
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/08/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/04/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/24/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/27/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/11/2016
Date Data Arrived at EDR: 03/15/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 80

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/07/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/03/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/03/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/08/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 06/20/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 03/01/2016
Date Data Arrived at EDR: 03/03/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 40

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/30/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 02/08/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 03/22/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 48

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 53

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 02/23/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 38

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 10/14/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 58

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/15/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2016
Date Data Arrived at EDR: 04/12/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 50

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/15/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 54

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/08/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 57

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/07/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 36

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/18/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/08/2016
Date Made Active in Reports: 05/16/2016
Number of Days to Update: 69

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/07/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/15/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 54

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 02/12/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 89

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/16/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/20/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 86

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/12/2016
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 48

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 04/06/2016
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 48

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/11/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 06/06/2016
Date Data Arrived at EDR: 06/09/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 12

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 18

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 04/29/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 45

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 22

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/24/2016
Date Data Arrived at EDR: 02/26/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 35

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/02/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 04/08/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 50

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2016
Date Data Arrived at EDR: 02/24/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 37

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/02/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/04/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 28

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 03/16/2016
Date Data Arrived at EDR: 03/21/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 44

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 04/26/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 50

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 03/01/2016
Date Data Arrived at EDR: 03/03/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 67

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/27/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 26

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 04/26/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 51

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/30/2016
Date Data Arrived at EDR: 04/01/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 38

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/01/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/18/2016
Date Data Arrived at EDR: 04/20/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 42

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/20/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/05/2016
Date Data Arrived at EDR: 04/26/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 36

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/11/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/02/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 58

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 04/07/2016
Date Data Arrived at EDR: 04/26/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 36

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/26/2016
Date Data Arrived at EDR: 03/01/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 64

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 21

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/15/2016
Date Data Arrived at EDR: 03/18/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 47
Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 04/18/2016
Date Data Arrived at EDR: 05/06/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 42
Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/17/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 35
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/17/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 35
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/11/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 21
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/11/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/09/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 56
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/13/2016
Date Data Arrived at EDR: 04/15/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 24
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/20/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/13/2016
Date Data Arrived at EDR: 04/15/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 47
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/20/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/02/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 56
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/06/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/02/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 56
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/06/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/15/2016
Date Data Arrived at EDR: 03/18/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 52

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/09/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 04/06/2016
Date Data Arrived at EDR: 04/08/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 26
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/23/2016
Date Data Arrived at EDR: 05/24/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 28
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 15
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 05/27/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/14/2016
Date Data Arrived at EDR: 03/15/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 55
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/08/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/25/2016
Next Scheduled EDR Contact: 09/12/2016
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 02/10/2016
Date Made Active in Reports: 04/01/2016
Number of Days to Update: 51

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 05/31/2016
Date Data Arrived at EDR: 06/02/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 19

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 03/18/2016
Date Data Arrived at EDR: 03/21/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 44

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/23/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/14/2016
Date Data Arrived at EDR: 03/22/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 48

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/08/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/14/2016
Date Data Arrived at EDR: 03/21/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 44

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/08/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 04/05/2016
Date Data Arrived at EDR: 04/08/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 26

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/01/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 34

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/28/2016
Next Scheduled EDR Contact: 07/11/2016
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 16

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/03/2016
Date Data Arrived at EDR: 05/10/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 38

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/21/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 49

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/13/2016
Next Scheduled EDR Contact: 08/22/2016
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 54

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/25/2016
Next Scheduled EDR Contact: 08/08/2016
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/26/2016
Date Data Arrived at EDR: 03/17/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 48

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/16/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 04/12/2016
Date Data Arrived at EDR: 04/19/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 43

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 04/04/2016
Next Scheduled EDR Contact: 07/18/2016
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 04/29/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 45

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/29/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/13/2016
Next Scheduled EDR Contact: 08/29/2016
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/12/2016
Next Scheduled EDR Contact: 07/25/2016
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/06/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 42

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/06/2016
Next Scheduled EDR Contact: 08/15/2016
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/18/2016
Next Scheduled EDR Contact: 08/01/2016
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 06/06/2016
Next Scheduled EDR Contact: 09/05/2016
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/13/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

JOHN H FRANCIS POLYTECHNIC HIGH SCHOOL
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

TARGET PROPERTY COORDINATES

Latitude (North):	34.221954 - 34° 13' 19.03''
Longitude (West):	118.404077 - 118° 24' 14.68''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	370667.0
UTM Y (Meters):	3787462.5
Elevation:	823 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5630789 VAN NUYS, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

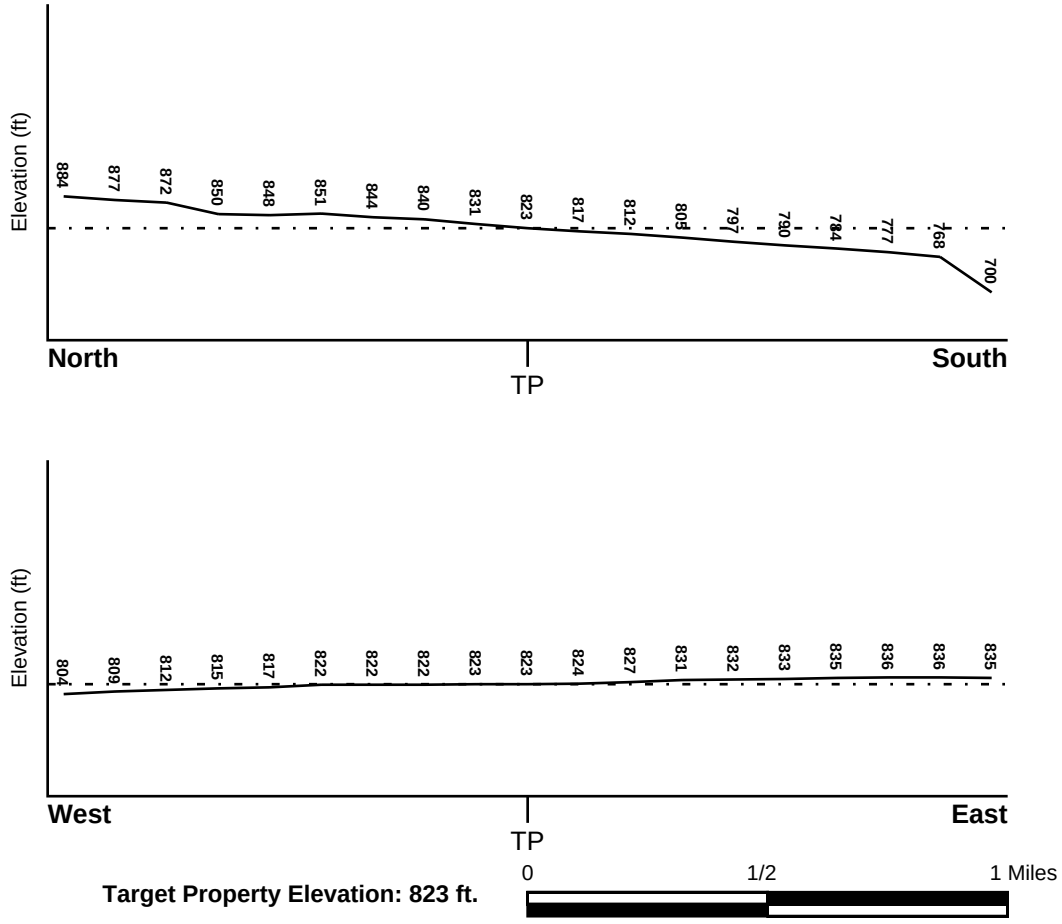
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
LOS ANGELES, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06037C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
VAN NUYS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBAN LAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 10 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Surficial Soil Types:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Shallow Soil Types:
fine sandy loam
gravelly - loam
sand
silty clay

Deeper Soil Types:
stratified
clay loam
silty clay loam
gravelly - sandy loam
coarse sand
sand
weathered bedrock
very fine sandy loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

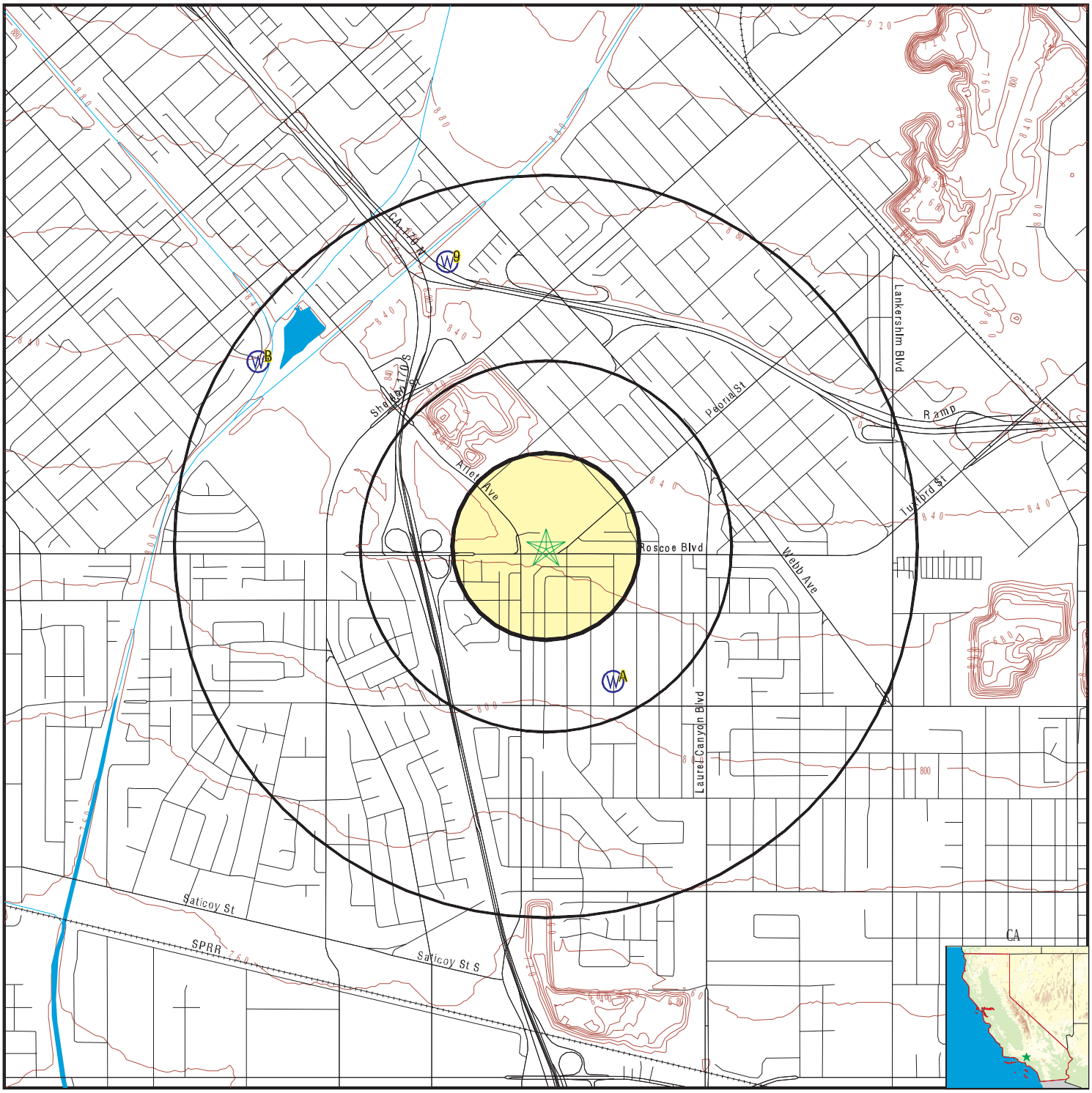
MAP ID	WELL ID	LOCATION FROM TP
A1	2166	1/4 - 1/2 Mile SSE
A2	2160	1/4 - 1/2 Mile SSE
A3	2159	1/4 - 1/2 Mile SSE
A4	2158	1/4 - 1/2 Mile SSE
A5	2162	1/4 - 1/2 Mile SSE
A6	2165	1/4 - 1/2 Mile SSE
A7	2164	1/4 - 1/2 Mile SSE
A8	2163	1/4 - 1/2 Mile SSE
9	CADW60000005584	1/2 - 1 Mile NNW
B10	2149	1/2 - 1 Mile WNW
B11	2150	1/2 - 1 Mile WNW
B12	2151	1/2 - 1 Mile WNW
B13	2146	1/2 - 1 Mile WNW
B14	2147	1/2 - 1 Mile WNW
B15	2148	1/2 - 1 Mile WNW
B16	2155	1/2 - 1 Mile WNW
B17	2156	1/2 - 1 Mile WNW
B18	2157	1/2 - 1 Mile WNW
B19	2152	1/2 - 1 Mile WNW
B20	2153	1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B21	2154	1/2 - 1 Mile WNW

PHYSICAL SETTING SOURCE MAP - 4660230.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	John H Francis Polytechnic High School	CLIENT:	Civil-Environmental-survey Group
ADDRESS:	12431 Roscoe Blvd Sun Valley CA 91352	CONTACT:	Skye Green
LAT/LONG:	34.221954 / 118.404077	INQUIRY #:	4660230.2s
		DATE:	June 28, 2016 4:08 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
A1 **SSE** **1/4 - 1/2 Mile** **Lower**	**CA WELLS**	**2166**

Water System Information:

Prime Station Code:	02N/15W-35G02 S	User ID:	MET
FRDS Number:	1910067120	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341300.0 1182400.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	RINALDI TOLUCA WELL 03		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	19-JUL-12	Findings:	1.15 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-JUL-12	Findings:	19.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-JUL-12	Findings:	5.25 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-AUG-12	Findings:	1.29 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-AUG-12	Findings:	19.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	16-AUG-12	Findings:	6.63 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	17-OCT-12	Findings:	1.19 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	17-OCT-12	Findings:	9.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	21-NOV-12	Findings:	1.64 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	9.42 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	11-JAN-13	Findings:	3.4 UG/L
Chemical:	VANADIUM		
Sample Collected:	11-JAN-13	Findings:	1.01 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JAN-13	Findings:	14. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	11-JAN-13	Findings:	9.21 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	27-FEB-13	Findings:	0.644 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	27-FEB-13	Findings:	6.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	26-MAR-13	Findings:	0.992 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	26-MAR-13	Findings:	7.42 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	30-MAY-13	Findings:	0.862 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-MAY-13	Findings:	14.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-MAY-13	Findings:	7.02 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	27-JUN-13	Findings:	0.781 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	27-JUN-13	Findings:	5.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	25-JUL-13	Findings:	0.802 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	25-JUL-13	Findings:	19.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-AUG-13	Findings:	0.797 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-SEP-13	Findings:	0.665 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-OCT-13	Findings:	1.13 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-OCT-13	Findings:	20.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-OCT-13	Findings:	6.53 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	25-NOV-13	Findings:	1.15 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	25-NOV-13	Findings:	7.34 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	12-DEC-13	Findings:	1.23 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-DEC-13	Findings:	7.76 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	13-FEB-14	Findings:	. 3.4 UG/L
Chemical:	VANADIUM		

Sample Collected:	13-FEB-14	Findings:	. 1.14 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-FEB-14	Findings:	. 15.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-FEB-14	Findings:	. 7.15 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	20-MAR-14	Findings:	. 1.09 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-MAR-14	Findings:	. 4.85 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	28-MAY-14	Findings:	. 1.58 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-MAY-14	Findings:	. 25.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-JUN-14	Findings:	. 2.37 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	18-JUL-14	Findings:	. 0.691 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	18-JUL-14	Findings:	. 1.95 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	18-JUL-14	Findings:	. 19.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-AUG-14	Findings:	. 2.46 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	22-AUG-14	Findings:	. 1.86 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	22-AUG-14	Findings:	. 0.895 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	11-SEP-14	Findings:	. 2.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11-SEP-14	Findings:	. 1.77 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-SEP-14	Findings:	. 1.08 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	20-NOV-14	Findings:	. 2. UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	20-NOV-14	Findings:	. 2.36 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-NOV-14	Findings:	. 1.45 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-NOV-14	Findings:	. 1.09 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	23-JAN-15	Findings:	. 1.29 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	23-JAN-15	Findings:	. 15.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-FEB-15	Findings:	. 3. UNITS
Chemical:	COLOR		
Sample Collected:	11-FEB-15	Findings:	. 680. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11-FEB-15	Findings:	. 199. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	11-FEB-15	Findings:	. 243. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	11-FEB-15	Findings:	. 0.135 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	11-FEB-15	Findings:	. 0.375 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	11-FEB-15	Findings:	. 303. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	11-FEB-15	Findings:	. 89.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	11-FEB-15	Findings:	. 19. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	11-FEB-15	Findings:	. 26.2 MG/L
Chemical:	SODIUM		
Sample Collected:	11-FEB-15	Findings:	. 4.66 MG/L
Chemical:	POTASSIUM		
Sample Collected:	11-FEB-15	Findings:	. 20. MG/L
Chemical:	CHLORIDE		
Sample Collected:	11-FEB-15	Findings:	. 0.284 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	11-FEB-15	Findings:	. 26.9 MG/L
Chemical:	SILICA		
Sample Collected:	11-FEB-15	Findings:	. 2.42 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	11-FEB-15	Findings:	. 3.2 UG/L
Chemical:	VANADIUM		
Sample Collected:	11-FEB-15	Findings:	. 3.08 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	11-FEB-15	Findings:	. 0.909 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-FEB-15	Findings:	. 437. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	11-FEB-15	Findings:	. 0.38
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	11-FEB-15	Findings:	. 13. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	11-FEB-15	Findings:	. 0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	11-FEB-15	Findings:	. 0.104 MG/L
Chemical:	BROMIDE		
Sample Collected:	11-FEB-15	Findings:	. 2940. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	14-APR-15	Findings:	. 3.3 UG/L
Chemical:	VANADIUM		
Sample Collected:	14-APR-15	Findings:	. 0.63 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	14-APR-15	Findings:	. 5.46 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	14-APR-15	Findings:	. 16.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-MAY-15	Findings:	. 0.555 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	19-MAY-15	Findings:	. 5.19 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAY-11	Findings:	0.962 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAY-11	Findings:	13.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAY-11	Findings:	4.09 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	28-OCT-11	Findings:	0.638 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-OCT-11	Findings:	18.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-FEB-12	Findings:	4. UNITS
Chemical:	COLOR		
Sample Collected:	14-FEB-12	Findings:	687. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	14-FEB-12	Findings:	277. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	14-FEB-12	Findings:	338. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	14-FEB-12	Findings:	0.11 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	14-FEB-12	Findings:	293. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	14-FEB-12	Findings:	86.8 MG/L
Chemical:	CALCIUM		
Sample Collected:	14-FEB-12	Findings:	18.5 MG/L
Chemical:	MAGNESIUM		

Sample Collected:	14-FEB-12	Findings:	25.9 MG/L
Chemical:	SODIUM		
Sample Collected:	14-FEB-12	Findings:	4.53 MG/L
Chemical:	POTASSIUM		
Sample Collected:	14-FEB-12	Findings:	20.5 MG/L
Chemical:	CHLORIDE		
Sample Collected:	14-FEB-12	Findings:	0.219 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	14-FEB-12	Findings:	23.5 MG/L
Chemical:	SILICA		
Sample Collected:	14-FEB-12	Findings:	122. UG/L
Chemical:	BARIUM		
Sample Collected:	14-FEB-12	Findings:	137. UG/L
Chemical:	BORON		
Sample Collected:	14-FEB-12	Findings:	3.2 UG/L
Chemical:	VANADIUM		
Sample Collected:	14-FEB-12	Findings:	2.48 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	14-FEB-12	Findings:	418. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	14-FEB-12	Findings:	0.22
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	14-FEB-12	Findings:	14.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-FEB-12	Findings:	0.15 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	14-FEB-12	Findings:	0.105 MG/L
Chemical:	BROMIDE		
Sample Collected:	14-FEB-12	Findings:	3370. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-MAR-12	Findings:	3.3 UG/L
Chemical:	VANADIUM		
Sample Collected:	08-MAR-12	Findings:	0.926 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-APR-12	Findings:	0.929 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-APR-12	Findings:	7.28 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09-MAY-12	Findings:	0.959 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-MAY-12	Findings:	7.54 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	07-JUN-12	Findings:	1.01 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	07-JUN-12	Findings:	4.1 UG/L
Chemical:	PERCHLORATE		

A2
SSE **CA WELLS** **2160**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02N/15W-26P05 S	User ID:	MET
FRDS Number:	1910067126	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341300.0 1182400.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	RINALDI TOLUCA WELL 09		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	06-MAY-11	Findings:	9.17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-OCT-11	Findings:	5. UNITS
Chemical:	COLOR		
Sample Collected:	27-OCT-11	Findings:	415. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	27-OCT-11	Findings:	167. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	27-OCT-11	Findings:	204. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	27-OCT-11	Findings:	0.166 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	27-OCT-11	Findings:	0.506 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	27-OCT-11	Findings:	165. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	27-OCT-11	Findings:	48.6 MG/L
Chemical:	CALCIUM		
Sample Collected:	27-OCT-11	Findings:	10.6 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	27-OCT-11	Findings:	26.3 MG/L
Chemical:	SODIUM		
Sample Collected:	27-OCT-11	Findings:	3.36 MG/L
Chemical:	POTASSIUM		
Sample Collected:	27-OCT-11	Findings:	14.3 MG/L
Chemical:	CHLORIDE		

Sample Collected:	27-OCT-11	Findings:	0.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	27-OCT-11	Findings:	23.5 MG/L
Chemical:	SILICA		
Sample Collected:	27-OCT-11	Findings:	113. UG/L
Chemical:	BARIUM		
Sample Collected:	27-OCT-11	Findings:	175. UG/L
Chemical:	BORON		
Sample Collected:	27-OCT-11	Findings:	1.21 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	27-OCT-11	Findings:	279. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	27-OCT-11	Findings:	9.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	27-OCT-11	Findings:	6.33 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-OCT-11	Findings:	5.e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	27-OCT-11	Findings:	1430. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	23-FEB-12	Findings:	9.17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-APR-12	Findings:	0.588 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-MAY-12	Findings:	0.636 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-MAY-12	Findings:	10.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-JUL-12	Findings:	9.44 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-OCT-12	Findings:	9.57 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-NOV-12	Findings:	1.25 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10-JAN-13	Findings:	10.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-MAY-13	Findings:	0.679 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-MAY-13	Findings:	10. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-MAY-13	Findings:	0.617 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	25-JUL-13	Findings:	10.5 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	20-SEP-13	Findings:	10.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-OCT-13	Findings:	17.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-FEB-14	Findings:	. 10.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-14	Findings:	. 10.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JUL-14	Findings:	. 10.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-SEP-14	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	09-SEP-14	Findings:	. 532. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09-SEP-14	Findings:	. 184. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	09-SEP-14	Findings:	. 224. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09-SEP-14	Findings:	. 0.156 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	09-SEP-14	Findings:	. 0.825 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09-SEP-14	Findings:	. 231. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09-SEP-14	Findings:	. 67.6 MG/L
Chemical:	CALCIUM		
Sample Collected:	09-SEP-14	Findings:	. 15. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09-SEP-14	Findings:	. 25.5 MG/L
Chemical:	SODIUM		
Sample Collected:	09-SEP-14	Findings:	. 3.73 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09-SEP-14	Findings:	. 18.1 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09-SEP-14	Findings:	. 0.242 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09-SEP-14	Findings:	. 25.6 MG/L
Chemical:	SILICA		
Sample Collected:	09-SEP-14	Findings:	. 116. UG/L
Chemical:	BARIUM		
Sample Collected:	09-SEP-14	Findings:	. 123. UG/L
Chemical:	BORON		
Sample Collected:	09-SEP-14	Findings:	. 2.14 PCI/L
Chemical:	URANIUM (PCI/L)		

Sample Collected:	09-SEP-14	Findings:	. 360. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09-SEP-14	Findings:	- 4.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	09-SEP-14	Findings:	. 10.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-SEP-14	Findings:	. 8.2e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	09-SEP-14	Findings:	. 2400. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06-NOV-14	Findings:	. 1.23 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	20-NOV-14	Findings:	. 1.24 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	23-JAN-15	Findings:	. 11.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-APR-15	Findings:	. 12.3 MG/L
Chemical:	NITRATE (AS NO3)		

A3
SSE **CA WELLS 2159**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02N/15W-26P04 S	User ID:	MET
FRDS Number:	1910067125	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341300.0 1182400.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	RINALDI TOLUCA WELL 08		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	06-APR-12	Findings:	0.51 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	24-JUL-12	Findings:	0.766 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	23-OCT-12	Findings:	0.618 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	23-OCT-12	Findings:	8.82 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-OCT-12	Findings:	54.81 UG/L
Chemical:	TOTAL TRIHALOMETHANES		

Sample Collected:	11-JAN-13	Findings:	0.923 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JAN-13	Findings:	4.724 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	30-MAY-13	Findings:	2.216 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	25-JUL-13	Findings:	0.57 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	25-JUL-13	Findings:	0.909 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	20-AUG-13	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	20-AUG-13	Findings:	595. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	20-AUG-13	Findings:	192. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	20-AUG-13	Findings:	234. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	20-AUG-13	Findings:	0.144 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	20-AUG-13	Findings:	0.525 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	20-AUG-13	Findings:	221. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	20-AUG-13	Findings:	65.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	20-AUG-13	Findings:	13.7 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	20-AUG-13	Findings:	24.5 MG/L
Chemical:	SODIUM		
Sample Collected:	20-AUG-13	Findings:	3.61 MG/L
Chemical:	POTASSIUM		
Sample Collected:	20-AUG-13	Findings:	24. MG/L
Chemical:	CHLORIDE		
Sample Collected:	20-AUG-13	Findings:	0.257 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	20-AUG-13	Findings:	27.3 MG/L
Chemical:	SILICA		
Sample Collected:	20-AUG-13	Findings:	134. UG/L
Chemical:	BARIUM		
Sample Collected:	20-AUG-13	Findings:	196. UG/L
Chemical:	BORON		
Sample Collected:	20-AUG-13	Findings:	2.01 PCI/L
Chemical:	URANIUM (PCI/L)		

Sample Collected:	20-AUG-13	Findings:	355. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	20-AUG-13	Findings:	7.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	20-AUG-13	Findings:	15.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-AUG-13	Findings:	0.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	20-AUG-13	Findings:	8.3e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	20-AUG-13	Findings:	3470. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	28-OCT-13	Findings:	1.21 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-OCT-13	Findings:	15.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-FEB-14	Findings:	. 0.607 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-APR-14	Findings:	. 0.622 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JUL-14	Findings:	. 0.523 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-NOV-14	Findings:	. 1.94 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	23-JAN-15	Findings:	. 0.989 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	14-APR-15	Findings:	. 0.899 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-MAY-11	Findings:	0.596 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	27-OCT-11	Findings:	11.4 MG/L
Chemical:	NITRATE (AS NO3)		

A4
SSE **CA WELLS** **2158**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02N/15W-26P03 S	User ID:	MET
FRDS Number:	1910067124	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341300.0 1182400.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	RINALDI TOLUCA WELL 07		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		

Sample Collected:	09-MAY-11	Findings:	9.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-OCT-11	Findings:	5. UNITS
Chemical:	COLOR		
Sample Collected:	27-OCT-11	Findings:	475. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	27-OCT-11	Findings:	178. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	27-OCT-11	Findings:	217. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	27-OCT-11	Findings:	0.129 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	27-OCT-11	Findings:	0.549 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	27-OCT-11	Findings:	203. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	27-OCT-11	Findings:	59.4 MG/L
Chemical:	CALCIUM		
Sample Collected:	27-OCT-11	Findings:	13.2 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	27-OCT-11	Findings:	23.5 MG/L
Chemical:	SODIUM		
Sample Collected:	27-OCT-11	Findings:	3.69 MG/L
Chemical:	POTASSIUM		
Sample Collected:	27-OCT-11	Findings:	20.1 MG/L
Chemical:	CHLORIDE		
Sample Collected:	27-OCT-11	Findings:	0.246 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	27-OCT-11	Findings:	23.9 MG/L
Chemical:	SILICA		
Sample Collected:	27-OCT-11	Findings:	114. UG/L
Chemical:	BARIUM		
Sample Collected:	27-OCT-11	Findings:	178. UG/L
Chemical:	BORON		
Sample Collected:	27-OCT-11	Findings:	1.34 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	27-OCT-11	Findings:	298. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	27-OCT-11	Findings:	2.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	27-OCT-11	Findings:	10.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-OCT-11	Findings:	0.15 NTU
Chemical:	TURBIDITY, LABORATORY		

Sample Collected:	27-OCT-11	Findings:	9.e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	27-OCT-11	Findings:	2430. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	23-FEB-12	Findings:	14.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-JUL-12	Findings:	17.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-OCT-12	Findings:	1.64 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	23-OCT-12	Findings:	16.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-OCT-12	Findings:	4.87 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	21-NOV-12	Findings:	5.26 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	11-JAN-13	Findings:	1.48 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JAN-13	Findings:	15.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JAN-13	Findings:	5.4 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	26-MAR-13	Findings:	4.26 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	30-MAY-13	Findings:	1.15 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-MAY-13	Findings:	15.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-MAY-13	Findings:	0.605 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	25-JUL-13	Findings:	0.518 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	25-JUL-13	Findings:	16.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	25-JUL-13	Findings:	0.504 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	28-OCT-13	Findings:	1.49 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-OCT-13	Findings:	15.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-FEB-14	Findings:	. 0.867 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-FEB-14	Findings:	. 16. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	28-MAY-14	Findings:	. 0.617 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-MAY-14	Findings:	. 14. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JUL-14	Findings:	. 13.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-NOV-14	Findings:	. 1.53 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	20-NOV-14	Findings:	. 1.54 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	23-JAN-15	Findings:	. 14.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-APR-15	Findings:	. 14.8 MG/L
Chemical:	NITRATE (AS NO3)		

A5
SSE **CA WELLS 2162**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02N/15W-35B01 S	User ID:	MET
FRDS Number:	1910067121	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341300.0 1182400.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	RINALDI TOLUCA WELL 04		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	12-DEC-13	Findings:	1.12 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-DEC-13	Findings:	7.02 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	13-FEB-14	Findings:	. 0.646 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-FEB-14	Findings:	. 17.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-FEB-14	Findings:	. 4.49 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	10-JUN-14	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	10-JUN-14	Findings:	. 716. US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	10-JUN-14	Findings:	. 214. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	10-JUN-14	Findings:	. 261. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	10-JUN-14	Findings:	. 0.144 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	10-JUN-14	Findings:	. 0.442 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	10-JUN-14	Findings:	. 306. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	10-JUN-14	Findings:	. 89.4 MG/L
Chemical:	CALCIUM		
Sample Collected:	10-JUN-14	Findings:	. 20. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	10-JUN-14	Findings:	. 27.6 MG/L
Chemical:	SODIUM		
Sample Collected:	10-JUN-14	Findings:	. 4.17 MG/L
Chemical:	POTASSIUM		
Sample Collected:	10-JUN-14	Findings:	. 22.6 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10-JUN-14	Findings:	. 0.31 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10-JUN-14	Findings:	. 26.5 MG/L
Chemical:	SILICA		
Sample Collected:	10-JUN-14	Findings:	. 130. UG/L
Chemical:	BARIUM		
Sample Collected:	10-JUN-14	Findings:	. 134. UG/L
Chemical:	BORON		
Sample Collected:	10-JUN-14	Findings:	. 4.02 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	10-JUN-14	Findings:	. 471. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	10-JUN-14	Findings:	. 0.11
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	10-JUN-14	Findings:	. 21.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUN-14	Findings:	. 0.119 MG/L
Chemical:	BROMIDE		
Sample Collected:	10-JUN-14	Findings:	. 4830. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	18-JUL-14	Findings:	. 1.74 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	18-JUL-14	Findings:	. 1.03 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	18-JUL-14	Findings:	. 23.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JUL-14	Findings:	. 0.821 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07-NOV-14	Findings:	. 2.15 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	23-JAN-15	Findings:	. 1.47 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	23-JAN-15	Findings:	. 0.899 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	23-JAN-15	Findings:	. 22.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-MAR-15	Findings:	. 1.87 UG/L
Chemical:	DCPA (TOTAL DI & MONO ACID DEGRADATES)		
Sample Collected:	02-APR-15	Findings:	. 0.825 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	02-APR-15	Findings:	. 1.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	02-APR-15	Findings:	. 17.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-MAY-15	Findings:	. 1.78 UG/L
Chemical:	DCPA (TOTAL DI & MONO ACID DEGRADATES)		
Sample Collected:	19-MAY-15	Findings:	. 4.09 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	05-MAY-11	Findings:	3.4 UG/L
Chemical:	VANADIUM		
Sample Collected:	05-MAY-11	Findings:	0.795 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-MAY-11	Findings:	14.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-MAY-11	Findings:	5.84 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	14-JUN-11	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	14-JUN-11	Findings:	750. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	14-JUN-11	Findings:	210. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	14-JUN-11	Findings:	256. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	14-JUN-11	Findings:	0.153 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	14-JUN-11	Findings:	0.388 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		

Sample Collected:	14-JUN-11	Findings:	350. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	14-JUN-11	Findings:	102. MG/L
Chemical:	CALCIUM		
Sample Collected:	14-JUN-11	Findings:	23.1 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	14-JUN-11	Findings:	29. MG/L
Chemical:	SODIUM		
Sample Collected:	14-JUN-11	Findings:	4.32 MG/L
Chemical:	POTASSIUM		
Sample Collected:	14-JUN-11	Findings:	22.3 MG/L
Chemical:	CHLORIDE		
Sample Collected:	14-JUN-11	Findings:	0.286 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	14-JUN-11	Findings:	25.7 MG/L
Chemical:	SILICA		
Sample Collected:	14-JUN-11	Findings:	126. UG/L
Chemical:	BARIUM		
Sample Collected:	14-JUN-11	Findings:	126. UG/L
Chemical:	BORON		
Sample Collected:	14-JUN-11	Findings:	5.2 UG/L
Chemical:	SELENIUM		
Sample Collected:	14-JUN-11	Findings:	3.62 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	14-JUN-11	Findings:	484. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	14-JUN-11	Findings:	0.31
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	14-JUN-11	Findings:	17.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-JUN-11	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	14-JUN-11	Findings:	0.145 MG/L
Chemical:	BROMIDE		
Sample Collected:	14-JUN-11	Findings:	3930. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	28-OCT-11	Findings:	0.523 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	28-OCT-11	Findings:	14. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-FEB-12	Findings:	15.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-MAR-12	Findings:	3.2 UG/L
Chemical:	VANADIUM		

Sample Collected:	06-APR-12	Findings:	0.768 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-APR-12	Findings:	5.21 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09-MAY-12	Findings:	0.236 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09-MAY-12	Findings:	0.534 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-MAY-12	Findings:	16.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-MAY-12	Findings:	0.101 MG/L
Chemical:	BROMIDE		
Sample Collected:	19-JUL-12	Findings:	0.939 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-JUL-12	Findings:	21.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-JUL-12	Findings:	4.57 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-AUG-12	Findings:	1.17 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-AUG-12	Findings:	20.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-OCT-12	Findings:	1.12 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	17-OCT-12	Findings:	8.25 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	21-NOV-12	Findings:	1.58 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JAN-13	Findings:	3.2 UG/L
Chemical:	VANADIUM		
Sample Collected:	11-JAN-13	Findings:	0.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JAN-13	Findings:	14.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JAN-13	Findings:	7.94 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	27-FEB-13	Findings:	4.4 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	26-MAR-13	Findings:	7. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	30-MAY-13	Findings:	0.731 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-MAY-13	Findings:	14.9 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	30-MAY-13	Findings:	6.08 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	27-JUN-13	Findings:	4.34 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	25-JUL-13	Findings:	19.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-OCT-13	Findings:	1.27 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-OCT-13	Findings:	17.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-OCT-13	Findings:	8.11 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	25-NOV-13	Findings:	0.928 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	25-NOV-13	Findings:	7.16 UG/L
Chemical:	PERCHLORATE		

A6
SSE **CA WELLS** **2165**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02N/15W-35G01 S	User ID:	MET
FRDS Number:	1910067119	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341300.0 1182400.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	RINALDI TOLUCA WELL 02		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	28-OCT-11	Findings:	1.75 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-OCT-11	Findings:	22. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-FEB-12	Findings:	3.1 UG/L
Chemical:	VANADIUM		
Sample Collected:	22-FEB-12	Findings:	1.25 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-MAR-12	Findings:	3.5 UG/L
Chemical:	VANADIUM		
Sample Collected:	08-MAR-12	Findings:	1.02 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	04-APR-12	Findings:	0.761 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-MAY-12	Findings:	0.703 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-JUN-12	Findings:	0.889 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-JUL-12	Findings:	1. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-AUG-12	Findings:	1.17 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	17-OCT-12	Findings:	0.893 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	17-OCT-12	Findings:	5.97 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	29-NOV-12	Findings:	1.17 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	26-FEB-13	Findings:	3.3 UG/L
Chemical:	VANADIUM		
Sample Collected:	26-FEB-13	Findings:	0.654 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	26-MAR-13	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	26-MAR-13	Findings:	630. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	26-MAR-13	Findings:	225. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	26-MAR-13	Findings:	274. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	26-MAR-13	Findings:	0.113 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	26-MAR-13	Findings:	0.316 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	26-MAR-13	Findings:	271. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	26-MAR-13	Findings:	80.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	26-MAR-13	Findings:	16.7 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	26-MAR-13	Findings:	26.8 MG/L
Chemical:	SODIUM		
Sample Collected:	26-MAR-13	Findings:	4.53 MG/L
Chemical:	POTASSIUM		
Sample Collected:	26-MAR-13	Findings:	19.9 MG/L
Chemical:	CHLORIDE		

Sample Collected:	26-MAR-13	Findings:	0.251 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	26-MAR-13	Findings:	28. MG/L
Chemical:	SILICA		
Sample Collected:	26-MAR-13	Findings:	111. UG/L
Chemical:	BARIUM		
Sample Collected:	26-MAR-13	Findings:	126. UG/L
Chemical:	BORON		
Sample Collected:	26-MAR-13	Findings:	3.1 UG/L
Chemical:	VANADIUM		
Sample Collected:	26-MAR-13	Findings:	2.41 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	26-MAR-13	Findings:	0.95 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	26-MAR-13	Findings:	383. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	26-MAR-13	Findings:	0.14
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	26-MAR-13	Findings:	21.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-MAR-13	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	26-MAR-13	Findings:	9.8e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	26-MAR-13	Findings:	4780. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	30-MAY-13	Findings:	0.646 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-MAY-13	Findings:	4.45 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	25-JUN-13	Findings:	0.813 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	23-JUL-13	Findings:	0.941 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	23-JUL-13	Findings:	21.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-AUG-13	Findings:	1.15 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-SEP-13	Findings:	0.992 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	24-OCT-13	Findings:	1.38 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	24-OCT-13	Findings:	31.4 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	25-NOV-13	Findings:	1.23 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-FEB-14	Findings:	. 1.04 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-FEB-14	Findings:	. 4.73 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	18-MAR-14	Findings:	. 1. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	22-MAY-14	Findings:	. 3.31 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	22-MAY-14	Findings:	. 30.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-JUN-14	Findings:	. 5.23 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	17-JUL-14	Findings:	. 4.57 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-AUG-14	Findings:	. 0.845 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-AUG-14	Findings:	. 5.99 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-SEP-14	Findings:	. 0.949 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-SEP-14	Findings:	. 5.99 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-NOV-14	Findings:	. 1.29 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07-NOV-14	Findings:	. 1.51 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-NOV-14	Findings:	. 6.59 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-DEC-14	Findings:	. 2.71 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-JAN-15	Findings:	. 4.56 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10-FEB-15	Findings:	. 1.81 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10-APR-15	Findings:	. 3.6 UG/L
Chemical:	VANADIUM		
Sample Collected:	17-APR-15	Findings:	. 0.875 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	17-APR-15	Findings:	. 10.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	15-MAY-15	Findings:	. 0.825 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	15-MAY-15	Findings:	. 8.73 UG/L
Chemical:	TRICHLOROETHYLENE		

A7
SSE **CA WELLS** **2164**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02N/15W-35B03 S	User ID:	MET
FRDS Number:	1910067123	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341300.0 1182400.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	RINALDI TOLUCA WELL 06		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	14-JUN-11	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	14-JUN-11	Findings:	649. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	14-JUN-11	Findings:	210. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	14-JUN-11	Findings:	256. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	14-JUN-11	Findings:	0.147 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	14-JUN-11	Findings:	0.576 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	14-JUN-11	Findings:	290. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	14-JUN-11	Findings:	83.7 MG/L
Chemical:	CALCIUM		
Sample Collected:	14-JUN-11	Findings:	19.6 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	14-JUN-11	Findings:	25.3 MG/L
Chemical:	SODIUM		
Sample Collected:	14-JUN-11	Findings:	4.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	14-JUN-11	Findings:	19.2 MG/L
Chemical:	CHLORIDE		
Sample Collected:	14-JUN-11	Findings:	0.244 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

Sample Collected:	14-JUN-11	Findings:	27.1 MG/L
Chemical:	SILICA		
Sample Collected:	14-JUN-11	Findings:	120. UG/L
Chemical:	BARIUM		
Sample Collected:	14-JUN-11	Findings:	137. UG/L
Chemical:	BORON		
Sample Collected:	14-JUN-11	Findings:	2.75 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	14-JUN-11	Findings:	421. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	14-JUN-11	Findings:	- 1.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	14-JUN-11	Findings:	11.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-JUN-11	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	14-JUN-11	Findings:	0.118 MG/L
Chemical:	BROMIDE		
Sample Collected:	14-JUN-11	Findings:	2530. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	27-OCT-11	Findings:	8.73 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-FEB-12	Findings:	11.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-JUL-12	Findings:	13.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-OCT-12	Findings:	12.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JAN-13	Findings:	12.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-MAY-13	Findings:	13.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	25-JUL-13	Findings:	14.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-OCT-13	Findings:	15.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-FEB-14	Findings:	. 16.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-MAY-14	Findings:	. 16.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUN-14	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	10-JUN-14	Findings:	. 728. US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	10-JUN-14	Findings:	. 234. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	10-JUN-14	Findings:	. 285. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	10-JUN-14	Findings:	. 0.15 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	10-JUN-14	Findings:	. 0.563 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	10-JUN-14	Findings:	. 326. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	10-JUN-14	Findings:	. 95. MG/L
Chemical:	CALCIUM		
Sample Collected:	10-JUN-14	Findings:	. 21.5 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	10-JUN-14	Findings:	. 27.6 MG/L
Chemical:	SODIUM		
Sample Collected:	10-JUN-14	Findings:	. 4.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	10-JUN-14	Findings:	. 26.1 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10-JUN-14	Findings:	. 0.262 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10-JUN-14	Findings:	. 27.4 MG/L
Chemical:	SILICA		
Sample Collected:	10-JUN-14	Findings:	. 153. UG/L
Chemical:	BARIUM		
Sample Collected:	10-JUN-14	Findings:	. 152. UG/L
Chemical:	BORON		
Sample Collected:	10-JUN-14	Findings:	. 3.62 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	10-JUN-14	Findings:	. 463. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	10-JUN-14	Findings:	- 2.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	10-JUN-14	Findings:	. 16.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUN-14	Findings:	. 0.137 MG/L
Chemical:	BROMIDE		
Sample Collected:	10-JUN-14	Findings:	. 3750. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	18-JUL-14	Findings:	. 16.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-NOV-14	Findings:	. 1.5 UG/L
Chemical:	CHROMIUM, HEXAVALENT		

Sample Collected:	23-JAN-15	Findings:	. 16.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-MAY-11	Findings:	9.13 MG/L
Chemical:	NITRATE (AS NO3)		

A8
SSE **CA WELLS** **2163**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02N/15W-35B02 S	User ID:	MET
FRDS Number:	1910067122	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341300.0 1182400.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	RINALDI TOLUCA WELL 05		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	06-MAY-11	Findings:	20. MG/L
Chemical:	CHLORIDE		
Sample Collected:	06-MAY-11	Findings:	412. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06-MAY-11	Findings:	12.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-OCT-11	Findings:	5. UNITS
Chemical:	COLOR		
Sample Collected:	27-OCT-11	Findings:	608. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	27-OCT-11	Findings:	226. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	27-OCT-11	Findings:	276. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	27-OCT-11	Findings:	0.172 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	27-OCT-11	Findings:	0.517 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	27-OCT-11	Findings:	286. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	27-OCT-11	Findings:	83.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	27-OCT-11	Findings:	19.1 MG/L
Chemical:	MAGNESIUM		

Sample Collected:	27-OCT-11	Findings:	23.8 MG/L
Chemical:	SODIUM		
Sample Collected:	27-OCT-11	Findings:	4.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	27-OCT-11	Findings:	18.9 MG/L
Chemical:	CHLORIDE		
Sample Collected:	27-OCT-11	Findings:	0.256 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	27-OCT-11	Findings:	25.4 MG/L
Chemical:	SILICA		
Sample Collected:	27-OCT-11	Findings:	141. UG/L
Chemical:	BARIUM		
Sample Collected:	27-OCT-11	Findings:	124. UG/L
Chemical:	BORON		
Sample Collected:	27-OCT-11	Findings:	2.81 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	27-OCT-11	Findings:	426. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	27-OCT-11	Findings:	4.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	27-OCT-11	Findings:	11.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-OCT-11	Findings:	0.109 MG/L
Chemical:	BROMIDE		
Sample Collected:	27-OCT-11	Findings:	2510. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	23-FEB-12	Findings:	13.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-JUL-12	Findings:	17.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	16-AUG-12	Findings:	23.2 MG/L
Chemical:	CHLORIDE		
Sample Collected:	16-AUG-12	Findings:	0.269 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	16-AUG-12	Findings:	468. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	16-AUG-12	Findings:	18.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-OCT-12	Findings:	17.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-JUN-13	Findings:	0.992 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	27-JUN-13	Findings:	26.6 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	25-JUL-13	Findings:	1.28 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	25-JUL-13	Findings:	28.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-AUG-13	Findings:	1.52 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	26-AUG-13	Findings:	29.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-AUG-13	Findings:	0.503 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	20-SEP-13	Findings:	1.14 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-SEP-13	Findings:	0.512 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-OCT-13	Findings:	0.529 UG/L
Chemical:	1,2-DICHLOROETHANE		
Sample Collected:	28-OCT-13	Findings:	1.36 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-OCT-13	Findings:	16.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	25-NOV-13	Findings:	0.98 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-DEC-13	Findings:	0.746 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12-DEC-13	Findings:	0.508 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-FEB-14	Findings:	. 0.81 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-FEB-14	Findings:	. 19.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-MAR-14	Findings:	. 0.846 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	28-MAY-14	Findings:	. 0.659 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	28-MAY-14	Findings:	. 22.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-JUN-14	Findings:	. 0.651 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-SEP-14	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	09-SEP-14	Findings:	. 734. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09-SEP-14	Findings:	. 220. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		

Sample Collected:	09-SEP-14	Findings:	. 268. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	09-SEP-14	Findings:	. 0.141 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	09-SEP-14	Findings:	. 0.539 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	09-SEP-14	Findings:	. 330. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	09-SEP-14	Findings:	. 95.8 MG/L
Chemical:	CALCIUM		
Sample Collected:	09-SEP-14	Findings:	. 22. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	09-SEP-14	Findings:	. 27.7 MG/L
Chemical:	SODIUM		
Sample Collected:	09-SEP-14	Findings:	. 4.45 MG/L
Chemical:	POTASSIUM		
Sample Collected:	09-SEP-14	Findings:	. 25. MG/L
Chemical:	CHLORIDE		
Sample Collected:	09-SEP-14	Findings:	. 0.258 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09-SEP-14	Findings:	. 25.3 MG/L
Chemical:	SILICA		
Sample Collected:	09-SEP-14	Findings:	. 137. UG/L
Chemical:	BARIUM		
Sample Collected:	09-SEP-14	Findings:	. 128. UG/L
Chemical:	BORON		
Sample Collected:	09-SEP-14	Findings:	. 3.95 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	09-SEP-14	Findings:	. 503. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09-SEP-14	Findings:	- 3.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	09-SEP-14	Findings:	. 21.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-SEP-14	Findings:	. 0.123 MG/L
Chemical:	BROMIDE		
Sample Collected:	09-SEP-14	Findings:	. 4810. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	20-NOV-14	Findings:	. 2.11 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	23-JAN-15	Findings:	. 21.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-APR-15	Findings:	. 21.6 MG/L
Chemical:	NITRATE (AS NO3)		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
9		
NNW	**CA WELLS**	**CADW60000005584**
1/2 - 1 Mile		
Higher		

Objectid:	5584
Latitude:	34.233077
Longitude:	-118.408711
Site code:	342331N1184087W001
State well numbe:	02N15W25C001S
Local well name:	'4896A'
Well use id:	1
Well use descrip:	Observation
County id:	19
County name:	Los Angeles
Basin code:	'4-12'
Basin desc:	San Fernando Valley
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000005584

B10		
WNW	**CA WELLS**	**2149**
1/2 - 1 Mile		
Higher		

Water System Information:

Prime Station Code:	02N/15W-25L05 S	User ID:	MET
FRDS Number:	1910067181	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 04		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	19-MAY-11	Findings:	0.294 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	19-MAY-11	Findings:	0.541 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	19-MAY-11	Findings:	234. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	19-MAY-11	Findings:	70.9 MG/L
Chemical:	CALCIUM		

Sample Collected:	19-MAY-11	Findings:	13.8 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	19-MAY-11	Findings:	24.8 MG/L
Chemical:	SODIUM		
Sample Collected:	19-MAY-11	Findings:	3.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	19-MAY-11	Findings:	18.5 MG/L
Chemical:	CHLORIDE		
Sample Collected:	19-MAY-11	Findings:	0.238 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	19-MAY-11	Findings:	24. MG/L
Chemical:	SILICA		
Sample Collected:	19-MAY-11	Findings:	166. UG/L
Chemical:	BARIUM		
Sample Collected:	19-MAY-11	Findings:	117. UG/L
Chemical:	BORON		
Sample Collected:	19-MAY-11	Findings:	1.61 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	19-MAY-11	Findings:	335. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	19-MAY-11	Findings:	0.17
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	19-MAY-11	Findings:	17.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAR-15	Findings:	. 32.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-APR-15	Findings:	. 28.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-MAY-11	Findings:	7.2e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	19-MAY-11	Findings:	3930. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	29-JUN-11	Findings:	14.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-MAY-15	Findings:	. 20.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-JUL-11	Findings:	15.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-AUG-11	Findings:	15. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-SEP-11	Findings:	14.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-OCT-11	Findings:	12.4 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	21-NOV-11	Findings:	14. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-DEC-11	Findings:	16.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JAN-12	Findings:	15. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	15-MAR-12	Findings:	0.574 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	15-MAR-12	Findings:	0.95 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	15-MAR-12	Findings:	18.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAY-12	Findings:	1.83 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	2.34 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	16.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-12	Findings:	0.286 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08-JUN-12	Findings:	2.77 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JUN-12	Findings:	3.52 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-JUN-12	Findings:	17.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JUL-12	Findings:	6.78 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11-JUL-12	Findings:	0.937 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11-JUL-12	Findings:	7.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JUL-12	Findings:	19.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-AUG-12	Findings:	8.08 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	1.36 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	10.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	26.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-AUG-12	Findings:	8.e-003 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		

Sample Collected:	20-SEP-12	Findings:	7.39 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	1.44 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	10.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	25.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-SEP-12	Findings:	8.e-003 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	29-OCT-12	Findings:	1.61 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	29-OCT-12	Findings:	0.61 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	29-OCT-12	Findings:	4.33 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-OCT-12	Findings:	23.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-OCT-12	Findings:	8.e-003 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	13-DEC-12	Findings:	3.27 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	0.891 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	7.12 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	23.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-DEC-12	Findings:	1.4e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	22-JAN-13	Findings:	2.15 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	0.599 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	4.16 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	23. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-JAN-13	Findings:	9.e-003 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	14-FEB-13	Findings:	0.972 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	14-FEB-13	Findings:	1.6 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	14-FEB-13	Findings:	22.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-MAR-13	Findings:	0.637 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-MAR-13	Findings:	23.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-APR-13	Findings:	23.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-APR-13	Findings:	6.e-003 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	21-MAY-13	Findings:	0.919 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-MAY-13	Findings:	1.09 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-MAY-13	Findings:	20.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JUN-13	Findings:	0.64 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	18-JUN-13	Findings:	0.814 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	18-JUN-13	Findings:	20.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUL-13	Findings:	0.764 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10-JUL-13	Findings:	20.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAR-14	Findings:	. 25.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-14	Findings:	. 32.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-14	Findings:	. 3.e-003 UG/L
Chemical:	N-NITROSODI-N-BUTYLAMINE (NDBA)		
Sample Collected:	13-MAY-14	Findings:	. 3. UNITS
Chemical:	COLOR		
Sample Collected:	13-MAY-14	Findings:	. 626. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-MAY-14	Findings:	. 192. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	13-MAY-14	Findings:	. 234. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	13-MAY-14	Findings:	. 0.144 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	13-MAY-14	Findings:	. 0.365 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		

Sample Collected:	13-MAY-14	Findings:	. 254. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	13-MAY-14	Findings:	. 73.7 MG/L
Chemical:	CALCIUM		
Sample Collected:	13-MAY-14	Findings:	. 17.1 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	13-MAY-14	Findings:	. 24.3 MG/L
Chemical:	SODIUM		
Sample Collected:	13-MAY-14	Findings:	. 3.89 MG/L
Chemical:	POTASSIUM		
Sample Collected:	13-MAY-14	Findings:	. 24.7 MG/L
Chemical:	CHLORIDE		
Sample Collected:	13-MAY-14	Findings:	. 0.275 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	13-MAY-14	Findings:	. 25. MG/L
Chemical:	SILICA		
Sample Collected:	13-MAY-14	Findings:	. 135. UG/L
Chemical:	BARIUM		
Sample Collected:	13-MAY-14	Findings:	. 108. UG/L
Chemical:	BORON		
Sample Collected:	13-MAY-14	Findings:	. 1.94 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	13-MAY-14	Findings:	. 392. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	13-MAY-14	Findings:	. 0.11
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	13-MAY-14	Findings:	. 31.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-MAY-14	Findings:	. 0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	13-MAY-14	Findings:	. 8.7e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	13-MAY-14	Findings:	. 7050. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	05-JUN-14	Findings:	. 35.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUL-14	Findings:	. 23.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-FEB-11	Findings:	25.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-MAR-11	Findings:	22.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-AUG-14	Findings:	. 21.2 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	05-SEP-14	Findings:	. 20.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-NOV-14	Findings:	. 1.87 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	13-NOV-14	Findings:	. 21.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-APR-11	Findings:	19.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-MAY-11	Findings:	4. UNITS
Chemical:	COLOR		
Sample Collected:	19-MAY-11	Findings:	563. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	19-MAY-11	Findings:	210. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	19-MAY-11	Findings:	256. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	18-DEC-14	Findings:	. 25.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-15	Findings:	. 26.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-FEB-15	Findings:	. 30.7 MG/L
Chemical:	NITRATE (AS NO3)		

B11
WNW
1/2 - 1 Mile
Higher

CA WELLS **2150**

Water System Information:

Prime Station Code:	02N/15W-25L06 S	User ID:	MET
FRDS Number:	1910067182	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 05		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	20-SEP-12	Findings:	0.561 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	20-SEP-12	Findings:	8.37 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	4.09 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	20-SEP-12	Findings:	17.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	33.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	25-OCT-12	Findings:	2.95 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	2.56 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	11.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	30.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-12	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	07-NOV-12	Findings:	639. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07-NOV-12	Findings:	216. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	07-NOV-12	Findings:	264. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	07-NOV-12	Findings:	0.313 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	07-NOV-12	Findings:	275. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	07-NOV-12	Findings:	80. MG/L
Chemical:	CALCIUM		
Sample Collected:	07-NOV-12	Findings:	18.3 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	07-NOV-12	Findings:	25.3 MG/L
Chemical:	SODIUM		
Sample Collected:	07-NOV-12	Findings:	4.54 MG/L
Chemical:	POTASSIUM		
Sample Collected:	07-NOV-12	Findings:	28.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07-NOV-12	Findings:	0.227 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07-NOV-12	Findings:	26.9 MG/L
Chemical:	SILICA		
Sample Collected:	07-NOV-12	Findings:	130. UG/L
Chemical:	BARIUM		
Sample Collected:	04-JAN-11	Findings:	0.503 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	23.5 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	07-NOV-12	Findings:	109. UG/L
Chemical:	BORON		
Sample Collected:	07-NOV-12	Findings:	. 1.36 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07-NOV-12	Findings:	2.01 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	07-NOV-12	Findings:	387. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	07-NOV-12	Findings:	0.25
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	07-NOV-12	Findings:	29.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-12	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	07-NOV-12	Findings:	0.1 MG/L
Chemical:	BROMIDE		
Sample Collected:	07-NOV-12	Findings:	6750. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	07-NOV-12	Findings:	2.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-NOV-12	Findings:	1.6 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-NOV-12	Findings:	8.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	5310. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-FEB-11	Findings:	0.837 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	1.33 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	20.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-FEB-11	Findings:	20.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-FEB-11	Findings:	4650. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	09-MAR-11	Findings:	0.265 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	21-NOV-12	Findings:	3.77 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	1.87 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	10.3 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	21-NOV-12	Findings:	30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-DEC-12	Findings:	1.98 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	1.05 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	6.71 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	27.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-DEC-12	Findings:	1.e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	26-DEC-12	Findings:	1.66 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	26-DEC-12	Findings:	0.863 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	26-DEC-12	Findings:	5.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	1.68 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	0.512 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	2.78 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	19.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-MAR-11	Findings:	4470. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	26-DEC-12	Findings:	26.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-13	Findings:	1.15 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	3.19 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	25. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-13	Findings:	1.1e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	07-AUG-13	Findings:	2.26 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	3. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	19.7 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	06-APR-11	Findings:	20.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-APR-11	Findings:	4680. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04-SEP-13	Findings:	1.19 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	1.64 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	20.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-OCT-13	Findings:	0.782 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-OCT-13	Findings:	1.12 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-OCT-13	Findings:	20.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-DEC-13	Findings:	22.5 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04-DEC-13	Findings:	0.28 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04-MAY-11	Findings:	19.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-MAY-11	Findings:	4380. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-JUN-11	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	08-JUN-11	Findings:	550. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08-JUN-11	Findings:	192. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08-JUN-11	Findings:	234. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08-JUN-11	Findings:	0.366 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	08-JUN-11	Findings:	232. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	08-JUN-11	Findings:	66. MG/L
Chemical:	CALCIUM		
Sample Collected:	08-JUN-11	Findings:	16.2 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08-JUN-11	Findings:	24.5 MG/L
Chemical:	SODIUM		
Sample Collected:	08-JUN-11	Findings:	3.85 MG/L
Chemical:	POTASSIUM		

Sample Collected:	08-JUN-11	Findings:	18.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08-JUN-11	Findings:	0.245 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08-JUN-11	Findings:	26.2 MG/L
Chemical:	SILICA		
Sample Collected:	08-JUN-11	Findings:	128. UG/L
Chemical:	BARIUM		
Sample Collected:	04-DEC-13	Findings:	21.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-14	Findings:	. 23.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-FEB-14	Findings:	. 21.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-11	Findings:	341. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08-JUN-11	Findings:	18. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-11	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	08-JUN-11	Findings:	4060. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-JUN-11	Findings:	0.63 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	0.84 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-APR-14	Findings:	. 0.606 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 20.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JUN-14	Findings:	. 28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JUL-14	Findings:	. 0.515 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 24.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-11	Findings:	0.694 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	0.967 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 3.88 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	07-AUG-14	Findings:	. 0.512 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 4.26 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 21.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-SEP-14	Findings:	. 5.25 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 0.678 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 5.61 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 21.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-NOV-14	Findings:	. 1.18 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	12-NOV-14	Findings:	. 2.64 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-JUL-11	Findings:	13.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-JUL-11	Findings:	3090. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-AUG-11	Findings:	0.543 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	0.789 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	17.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-NOV-14	Findings:	. 3.19 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-NOV-14	Findings:	. 19.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-14	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	03-DEC-14	Findings:	. 565. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-DEC-14	Findings:	. 184. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-DEC-14	Findings:	. 224. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03-DEC-14	Findings:	. 234. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-DEC-14	Findings:	. 67.3 MG/L
Chemical:	CALCIUM		

Sample Collected:	03-DEC-14	Findings:	. 15.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03-DEC-14	Findings:	. 22.9 MG/L
Chemical:	SODIUM		
Sample Collected:	03-DEC-14	Findings:	. 3.58 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03-DEC-14	Findings:	. 19.4 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-DEC-14	Findings:	. 0.26 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-DEC-14	Findings:	. 109. UG/L
Chemical:	BARIUM		
Sample Collected:	03-DEC-14	Findings:	. 101. UG/L
Chemical:	BORON		
Sample Collected:	03-DEC-14	Findings:	. 1.19 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	03-DEC-14	Findings:	. 335. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-DEC-14	Findings:	. 0.44
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03-DEC-14	Findings:	. 19.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-14	Findings:	. 7.4e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	03-DEC-14	Findings:	. 4420. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-DEC-14	Findings:	. 2.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	3850. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-SEP-11	Findings:	14.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-14	Findings:	. 2.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-JAN-15	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	21-JAN-15	Findings:	. 548. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	21-JAN-15	Findings:	. 185. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	21-JAN-15	Findings:	. 226. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	21-JAN-15	Findings:	. 0.178 UG/L
Chemical:	PHOSPHATE (AS PO4)		

Sample Collected:	21-JAN-15	Findings:	. 0.327 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	21-JAN-15	Findings:	. 243. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	21-JAN-15	Findings:	. 70.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	21-JAN-15	Findings:	. 16.4 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	21-JAN-15	Findings:	. 23.7 MG/L
Chemical:	SODIUM		
Sample Collected:	21-JAN-15	Findings:	. 3.78 MG/L
Chemical:	POTASSIUM		
Sample Collected:	21-JAN-15	Findings:	. 19.6 MG/L
Chemical:	CHLORIDE		
Sample Collected:	21-JAN-15	Findings:	. 0.265 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	21-JAN-15	Findings:	. 26.6 MG/L
Chemical:	SILICA		
Sample Collected:	21-JAN-15	Findings:	. 117. UG/L
Chemical:	BARIUM		
Sample Collected:	21-JAN-15	Findings:	. 110. UG/L
Chemical:	BORON		
Sample Collected:	21-JAN-15	Findings:	. 1.3 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	21-JAN-15	Findings:	. 1.68 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	21-JAN-15	Findings:	. 2.42 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-SEP-11	Findings:	3190. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06-OCT-11	Findings:	14.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-OCT-11	Findings:	3330. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	21-JAN-15	Findings:	. 2.62 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-JAN-15	Findings:	. 339. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	21-JAN-15	Findings:	. 0.24
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	21-JAN-15	Findings:	. 19.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-JAN-15	Findings:	. 7.4e-002 MG/L
Chemical:	BROMIDE		

Sample Collected:	21-JAN-15	Findings:	. 4470. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-FEB-15	Findings:	. 1.74 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-FEB-15	Findings:	. 1.85 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-FEB-15	Findings:	. 19.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-MAR-15	Findings:	. 1.32 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 1.62 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 20.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	31-OCT-11	Findings:	2.3e-002 UG/L
Chemical:	N-NITROSODIETHYLAMINE (NDEA)		
Sample Collected:	09-NOV-11	Findings:	15.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-NOV-11	Findings:	3430. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	07-APR-15	Findings:	. 2.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-APR-15	Findings:	. 2.14 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-APR-15	Findings:	. 18.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAY-15	Findings:	. 5.98 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 0.676 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 5.51 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 19.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-DEC-11	Findings:	14.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-DEC-11	Findings:	7.e-003 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	08-DEC-11	Findings:	3340. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04-JAN-12	Findings:	16.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JAN-12	Findings:	7.e-003 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		

Sample Collected:	04-JAN-12	Findings:	3660. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	18-JAN-12	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	18-JAN-12	Findings:	564. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	18-JAN-12	Findings:	206. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	18-JAN-12	Findings:	251. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	18-JAN-12	Findings:	0.184 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	18-JAN-12	Findings:	0.394 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	18-JAN-12	Findings:	230. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	18-JAN-12	Findings:	66.7 MG/L
Chemical:	CALCIUM		
Sample Collected:	18-JAN-12	Findings:	15.4 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	18-JAN-12	Findings:	22.8 MG/L
Chemical:	SODIUM		
Sample Collected:	18-JAN-12	Findings:	3.95 MG/L
Chemical:	POTASSIUM		
Sample Collected:	18-JAN-12	Findings:	19.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	18-JAN-12	Findings:	0.299 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	18-JAN-12	Findings:	23.2 MG/L
Chemical:	SILICA		
Sample Collected:	18-JAN-12	Findings:	128. UG/L
Chemical:	BARIUM		
Sample Collected:	18-JAN-12	Findings:	1.94 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	18-JAN-12	Findings:	357. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	18-JAN-12	Findings:	0.23
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	18-JAN-12	Findings:	16.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JAN-12	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	18-JAN-12	Findings:	6.5e-002 MG/L
Chemical:	BROMIDE		

Sample Collected:	18-JAN-12	Findings:	3650. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-FEB-12	Findings:	17.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-FEB-12	Findings:	1.e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	08-FEB-12	Findings:	3890. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	15-MAR-12	Findings:	0.767 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	15-MAR-12	Findings:	1.28 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	15-MAR-12	Findings:	18.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	15-MAR-12	Findings:	1.1e-002 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	15-MAR-12	Findings:	2.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	29-MAY-12	Findings:	1.49 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	1.98 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	16.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAY-12	Findings:	7.e-003 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	20-JUN-12	Findings:	3.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	0.848 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	5.09 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	20.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-JUN-12	Findings:	6.e-003 UG/L
Chemical:	1,2,3-TRICHLOROPROPANE		
Sample Collected:	13-JUL-12	Findings:	5.94 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	1.65 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	9.35 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	27-AUG-12	Findings:	7.68 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	2.59 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	15.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	33.5 MG/L
Chemical:	NITRATE (AS NO3)		

B12
WNW
1/2 - 1 Mile
Higher

CA WELLS **2151**

Water System Information:

Prime Station Code:	02N/15W-25L07 S	User ID:	MET
FRDS Number:	1910067183	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 06		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	08-JUN-11	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	08-JUN-11	Findings:	566. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08-JUN-11	Findings:	198. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08-JUN-11	Findings:	242. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08-JUN-11	Findings:	0.346 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	08-JUN-11	Findings:	240. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	08-JUN-11	Findings:	69.4 MG/L
Chemical:	CALCIUM		
Sample Collected:	08-JUN-11	Findings:	16.3 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08-JUN-11	Findings:	25.7 MG/L
Chemical:	SODIUM		
Sample Collected:	08-JUN-11	Findings:	4.02 MG/L
Chemical:	POTASSIUM		

Sample Collected:	08-JUN-11	Findings:	21.2 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08-JUN-11	Findings:	0.242 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08-JUN-11	Findings:	26.5 MG/L
Chemical:	SILICA		
Sample Collected:	08-JUN-11	Findings:	142. UG/L
Chemical:	BARIUM		
Sample Collected:	08-JUN-11	Findings:	350. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08-JUN-11	Findings:	0.17
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	08-JUN-11	Findings:	21.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-11	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	08-JUN-11	Findings:	4920. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-JAN-14	Findings:	. 5.77 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-JAN-14	Findings:	. 344. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08-JAN-14	Findings:	. 23. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-14	Findings:	3.5e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	05-FEB-14	Findings:	. 11.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-FEB-14	Findings:	. 1.71 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-FEB-14	Findings:	. 10.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-FEB-14	Findings:	. 24.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-MAR-14	Findings:	. 11.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 2.58 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 12.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 27.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-APR-14	Findings:	. 25. MG/L
Chemical:	CHLORIDE		

Sample Collected:	09-APR-14	Findings:	. 17.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 3.98 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	10. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	1.5 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	11. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	10.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	1.96 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	11.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 15.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 366. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09-APR-14	Findings:	. 29.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-MAY-14	Findings:	. 15.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-MAY-14	Findings:	. 3.41 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-MAY-14	Findings:	. 13.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-MAY-14	Findings:	. 27.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JUN-14	Findings:	. 12.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 2.51 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 11.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 27.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JUL-14	Findings:	. 25.2 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09-JUL-14	Findings:	. 17.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 3.82 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	06-JUL-11	Findings:	8.94 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-JUL-11	Findings:	1.63 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-JUL-11	Findings:	9.63 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-JUL-11	Findings:	20.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JUL-14	Findings:	. 14.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 392. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09-JUL-14	Findings:	. 30.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-AUG-14	Findings:	. 20.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 3.94 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 17.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 33.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-AUG-14	Findings:	. 0.582 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 29.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 6.34 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 22.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-SEP-14	Findings:	. 0.748 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04-NOV-14	Findings:	. 29. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-JUL-11	Findings:	4560. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-AUG-11	Findings:	20.2 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-AUG-11	Findings:	10.4 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	1.98 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	03-AUG-11	Findings:	11.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	340. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-AUG-11	Findings:	20.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-AUG-11	Findings:	4610. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04-NOV-14	Findings:	. 5.32 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-NOV-14	Findings:	. 21.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-NOV-14	Findings:	. 31.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-NOV-14	Findings:	. 0.59 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	13-NOV-14	Findings:	. 27. MG/L
Chemical:	CHLORIDE		
Sample Collected:	13-NOV-14	Findings:	. 395. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-DEC-14	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	03-DEC-14	Findings:	. 691. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-DEC-14	Findings:	. 224. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-DEC-14	Findings:	. 273. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03-DEC-14	Findings:	. 299. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-DEC-14	Findings:	. 86.6 MG/L
Chemical:	CALCIUM		
Sample Collected:	03-DEC-14	Findings:	. 20. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03-DEC-14	Findings:	. 24.9 MG/L
Chemical:	SODIUM		
Sample Collected:	03-DEC-14	Findings:	. 4.13 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03-DEC-14	Findings:	. 27. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-DEC-14	Findings:	. 0.238 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-DEC-14	Findings:	. 143. UG/L
Chemical:	BARIUM		

Sample Collected:	03-DEC-14	Findings:	. 108. UG/L
Chemical:	BORON		
Sample Collected:	03-DEC-14	Findings:	. 1.33 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	03-DEC-14	Findings:	. 419. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-DEC-14	Findings:	. 0.21
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03-DEC-14	Findings:	. 31.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-14	Findings:	. 0.127 MG/L
Chemical:	BROMIDE		
Sample Collected:	03-DEC-14	Findings:	. 7200. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-DEC-14	Findings:	. 22. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-SEP-11	Findings:	0.261 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07-SEP-11	Findings:	12.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-SEP-11	Findings:	2.06 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-SEP-11	Findings:	11.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-SEP-11	Findings:	22.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-SEP-11	Findings:	5000. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06-OCT-11	Findings:	0.251 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-DEC-14	Findings:	. 3.5 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-DEC-14	Findings:	. 16. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-DEC-14	Findings:	. 0.57 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	21-JAN-15	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	21-JAN-15	Findings:	. 674. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	21-JAN-15	Findings:	. 224. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	21-JAN-15	Findings:	. 273. MG/L
Chemical:	BICARBONATE ALKALINITY		

Sample Collected:	21-JAN-15	Findings:	. 0.172 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	21-JAN-15	Findings:	. 0.399 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	21-JAN-15	Findings:	. 306. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	21-JAN-15	Findings:	. 88.7 MG/L
Chemical:	CALCIUM		
Sample Collected:	21-JAN-15	Findings:	. 20.6 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	21-JAN-15	Findings:	. 25.4 MG/L
Chemical:	SODIUM		
Sample Collected:	21-JAN-15	Findings:	. 4.26 MG/L
Chemical:	POTASSIUM		
Sample Collected:	21-JAN-15	Findings:	. 26.9 MG/L
Chemical:	CHLORIDE		
Sample Collected:	21-JAN-15	Findings:	. 0.239 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	21-JAN-15	Findings:	. 27.6 MG/L
Chemical:	SILICA		
Sample Collected:	21-JAN-15	Findings:	. 153. UG/L
Chemical:	BARIUM		
Sample Collected:	21-JAN-15	Findings:	. 117. UG/L
Chemical:	BORON		
Sample Collected:	21-JAN-15	Findings:	. 1.39 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	21-JAN-15	Findings:	. 2.61 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	06-OCT-11	Findings:	15.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-OCT-11	Findings:	2.51 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-OCT-11	Findings:	14.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-OCT-11	Findings:	22.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-OCT-11	Findings:	5010. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	09-NOV-11	Findings:	11.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-NOV-11	Findings:	2.49 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	21-JAN-15	Findings:	. 29.9 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	21-JAN-15	Findings:	. 6.16 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	21-JAN-15	Findings:	. 21.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-JAN-15	Findings:	. 423. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	21-JAN-15	Findings:	. 0.25
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	21-JAN-15	Findings:	. 31.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-JAN-15	Findings:	. 0.655 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	21-JAN-15	Findings:	. 0.128 MG/L
Chemical:	BROMIDE		
Sample Collected:	21-JAN-15	Findings:	. 7140. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	05-FEB-15	Findings:	. 24.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 4.7 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 17.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 31.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-FEB-15	Findings:	. 0.54 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 25.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 5.34 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 19.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 30.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-MAR-15	Findings:	. 0.554 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 25.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09-NOV-11	Findings:	11.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-NOV-11	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-NOV-11	Findings:	4740. UG/L
Chemical:	NITRATE + NITRITE (AS N)		

Sample Collected:	08-DEC-11	Findings:	20.4 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08-DEC-11	Findings:	12.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-DEC-11	Findings:	2.62 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-DEC-11	Findings:	12.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-DEC-11	Findings:	21.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-15	Findings:	. 35.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 6.73 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 23.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 426. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08-APR-15	Findings:	. 30.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-15	Findings:	. 0.766 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 1.13 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	06-MAY-15	Findings:	. 41.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 5.36 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-MAY-15	Findings:	. 8.91 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 26.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAY-15	Findings:	. 0.944 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 0.508 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	20-MAY-15	Findings:	. 34.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 0.516 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	20-MAY-15	Findings:	. 7.34 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	08-DEC-11	Findings:	4830. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04-JAN-12	Findings:	11.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-JAN-12	Findings:	2.43 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JAN-12	Findings:	10.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JAN-12	Findings:	21.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JAN-12	Findings:	4890. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	18-JAN-12	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	18-JAN-12	Findings:	561. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	18-JAN-12	Findings:	199. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	18-JAN-12	Findings:	243. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	18-JAN-12	Findings:	0.19 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	18-JAN-12	Findings:	0.37 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	18-JAN-12	Findings:	231. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	18-JAN-12	Findings:	66.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	18-JAN-12	Findings:	15.5 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	18-JAN-12	Findings:	22.9 MG/L
Chemical:	SODIUM		
Sample Collected:	18-JAN-12	Findings:	3.79 MG/L
Chemical:	POTASSIUM		
Sample Collected:	18-JAN-12	Findings:	20.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	18-JAN-12	Findings:	0.241 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	18-JAN-12	Findings:	22.9 MG/L
Chemical:	SILICA		
Sample Collected:	18-JAN-12	Findings:	134. UG/L
Chemical:	BARIUM		
Sample Collected:	20-MAY-15	Findings:	. 23.3 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	20-MAY-15	Findings:	. 33.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-MAY-15	Findings:	. 0.808 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	18-JAN-12	Findings:	1.94 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	18-JAN-12	Findings:	344. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	18-JAN-12	Findings:	0.16
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	18-JAN-12	Findings:	21.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JAN-12	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	18-JAN-12	Findings:	8.2e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	18-JAN-12	Findings:	4900. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-FEB-12	Findings:	16. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-FEB-12	Findings:	3.36 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-FEB-12	Findings:	15.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-FEB-12	Findings:	23.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-FEB-12	Findings:	5400. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	25-OCT-12	Findings:	0.52 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	25-OCT-12	Findings:	43.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	0.767 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	25-OCT-12	Findings:	11.1 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	38.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	39.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	25-OCT-12	Findings:	1.07 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	0.627 UG/L
Chemical:	TOTAL TRIHALOMETHANES		

Sample Collected:	07-NOV-12	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	07-NOV-12	Findings:	677. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07-NOV-12	Findings:	225. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	07-NOV-12	Findings:	274. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	07-NOV-12	Findings:	297. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	07-NOV-12	Findings:	86.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	07-NOV-12	Findings:	19.4 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	07-NOV-12	Findings:	25.3 MG/L
Chemical:	SODIUM		
Sample Collected:	07-NOV-12	Findings:	4.42 MG/L
Chemical:	POTASSIUM		
Sample Collected:	07-NOV-12	Findings:	28.1 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07-NOV-12	Findings:	0.206 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07-NOV-12	Findings:	27. MG/L
Chemical:	SILICA		
Sample Collected:	07-NOV-12	Findings:	155. UG/L
Chemical:	BARIUM		
Sample Collected:	07-NOV-12	Findings:	. 1.48 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07-NOV-12	Findings:	2.61 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	07-NOV-12	Findings:	404. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	07-NOV-12	Findings:	0.34
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	07-NOV-12	Findings:	36.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-12	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	07-NOV-12	Findings:	0.13 MG/L
Chemical:	BROMIDE		
Sample Collected:	07-NOV-12	Findings:	8190. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	07-NOV-12	Findings:	1.16 UG/L
Chemical:	1,4-DIOXANE		

Sample Collected:	07-NOV-12	Findings:	33. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-NOV-12	Findings:	7.8 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-NOV-12	Findings:	28. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-NOV-12	Findings:	0.82 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	31.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	0.572 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	21-NOV-12	Findings:	7.93 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	28.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	34.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-NOV-12	Findings:	0.956 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	0.505 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	12-DEC-12	Findings:	29.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	6.98 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	26.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	31.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-DEC-12	Findings:	0.831 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	24.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	5.08 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	21.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	30.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-FEB-13	Findings:	21.4 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-FEB-13	Findings:	3.96 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	06-FEB-13	Findings:	18.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-FEB-13	Findings:	30.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-FEB-13	Findings:	24.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	4. UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	19.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	11.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	2.46 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	13.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	24.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JAN-11	Findings:	5610. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	19-JAN-11	Findings:	22.5 MG/L
Chemical:	CHLORIDE		
Sample Collected:	19-JAN-11	Findings:	346. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09-FEB-11	Findings:	13.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-FEB-11	Findings:	3.02 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	30.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAR-13	Findings:	19.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-MAR-13	Findings:	3.92 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-MAR-13	Findings:	17.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAR-13	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	24.1 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-APR-13	Findings:	17. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-APR-13	Findings:	3.1 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	03-APR-13	Findings:	15.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-APR-13	Findings:	378. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-APR-13	Findings:	27.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-MAY-13	Findings:	15. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-MAY-13	Findings:	2.89 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-FEB-11	Findings:	16.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-FEB-11	Findings:	25.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-MAR-11	Findings:	16.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	4.08 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	18.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	28.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-MAY-13	Findings:	13.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-MAY-13	Findings:	27.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-JUN-13	Findings:	14.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-JUN-13	Findings:	2.58 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-JUN-13	Findings:	11.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-JUN-13	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUL-13	Findings:	24. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-JUL-13	Findings:	0.224 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-JUL-13	Findings:	15.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-JUL-13	Findings:	3.06 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	6350. UG/L
Chemical:	NITRATE + NITRITE (AS N)		

Sample Collected:	09-MAR-11	Findings:	3.e-003 UG/L
Chemical:	N-NITROSODIETHYLAMINE (NDEA)		
Sample Collected:	06-APR-11	Findings:	23.3 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06-APR-11	Findings:	12.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-APR-11	Findings:	2.79 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-APR-11	Findings:	14.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-APR-11	Findings:	354. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06-APR-11	Findings:	25.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUL-13	Findings:	13.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-JUL-13	Findings:	378. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-JUL-13	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUL-13	Findings:	0.101 MG/L
Chemical:	BROMIDE		
Sample Collected:	07-AUG-13	Findings:	14.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	2.42 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	11.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	27.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-SEP-13	Findings:	19.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	4.34 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	16.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	29.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-OCT-13	Findings:	24.6 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09-OCT-13	Findings:	21. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-OCT-13	Findings:	3.91 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	06-APR-11	Findings:	5710. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04-MAY-11	Findings:	8.96 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-MAY-11	Findings:	1.91 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-MAY-11	Findings:	10.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-MAY-11	Findings:	22.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-MAY-11	Findings:	5020. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	09-OCT-13	Findings:	15.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-OCT-13	Findings:	375. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	09-OCT-13	Findings:	30.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-NOV-13	Findings:	10.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-NOV-13	Findings:	2.29 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-NOV-13	Findings:	10.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-NOV-13	Findings:	25.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-DEC-13	Findings:	9. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	1.68 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	8.62 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	24.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-14	Findings:	. 21. MG/L
Chemical:	CHLORIDE		
Sample Collected:	08-JAN-14	Findings:	. 5.38 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JAN-14	Findings:	. 0.881 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

B13
WNW
1/2 - 1 Mile
Higher

CA WELLS **2146**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Water System Information:

Prime Station Code:	02N/15W-25L02 S	User ID:	MET
FRDS Number:	1910067178	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 01		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	04-APR-13	Findings:	20.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-MAY-13	Findings:	26.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JUN-13	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUL-13	Findings:	25.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-AUG-13	Findings:	25.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-13	Findings:	25.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-OCT-13	Findings:	25.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-13	Findings:	2.61 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	07-NOV-13	Findings:	25.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-13	Findings:	2.9 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07-NOV-13	Findings:	3. PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	03-DEC-13	Findings:	19.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-14	Findings:	. 26.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-FEB-14	Findings:	. 26.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAR-14	Findings:	. 26.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-14	Findings:	. 27.7 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	03-APR-14	Findings:	. 3.e-003 UG/L
Chemical:	N-NITROSODI-N-BUTYLAMINE (NDBA)		
Sample Collected:	15-MAY-14	Findings:	. 27.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUN-14	Findings:	. 28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUL-14	Findings:	. 29.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-AUG-14	Findings:	. 29.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-14	Findings:	. 29.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-NOV-14	Findings:	. 3.8 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	13-NOV-14	Findings:	. 29.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-14	Findings:	. 29.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-15	Findings:	. 29.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-FEB-15	Findings:	. 28.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAR-15	Findings:	. 0.543 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAR-15	Findings:	. 28.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-APR-15	Findings:	. 29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-MAY-15	Findings:	. 29.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-JAN-11	Findings:	19.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-APR-11	Findings:	28.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-AUG-11	Findings:	23.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-OCT-11	Findings:	21.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-DEC-11	Findings:	21.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JAN-12	Findings:	21.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAY-12	Findings:	19.3 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	13-JUN-12	Findings:	5. UNITS
Chemical:	COLOR		
Sample Collected:	13-JUN-12	Findings:	615. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-JUN-12	Findings:	188. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	13-JUN-12	Findings:	229. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	13-JUN-12	Findings:	0.156 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	13-JUN-12	Findings:	0.415 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	13-JUN-12	Findings:	258. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	13-JUN-12	Findings:	74.8 MG/L
Chemical:	CALCIUM		
Sample Collected:	13-JUN-12	Findings:	17.3 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	13-JUN-12	Findings:	24.4 MG/L
Chemical:	SODIUM		
Sample Collected:	13-JUN-12	Findings:	3.17 MG/L
Chemical:	POTASSIUM		
Sample Collected:	13-JUN-12	Findings:	19.4 MG/L
Chemical:	CHLORIDE		
Sample Collected:	13-JUN-12	Findings:	0.255 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	13-JUN-12	Findings:	22.3 MG/L
Chemical:	SILICA		
Sample Collected:	13-JUN-12	Findings:	132. UG/L
Chemical:	BARIUM		
Sample Collected:	13-JUN-12	Findings:	2.28 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	13-JUN-12	Findings:	387. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	13-JUN-12	Findings:	0.27
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	13-JUN-12	Findings:	18.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUN-12	Findings:	8.1e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	13-JUN-12	Findings:	4220. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	20-SEP-12	Findings:	24.2 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	29-OCT-12	Findings:	23.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-NOV-12	Findings:	23.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-DEC-12	Findings:	23.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-JAN-13	Findings:	24. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-FEB-13	Findings:	21.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-MAR-13	Findings:	21.5 MG/L
Chemical:	NITRATE (AS NO3)		

B14
WNW **CA WELLS 2147**
1/2 - 1 Mile
Higher

Water System Information:

Prime Station Code:	02N/15W-25L03 S	User ID:	MET
FRDS Number:	1910067179	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 02		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	08-JAN-15	Findings:	. 19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-FEB-15	Findings:	. 17.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAR-15	Findings:	. 18.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-APR-15	Findings:	. 21.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-MAY-15	Findings:	. 24.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-JUL-11	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	26-JUL-11	Findings:	568. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	26-JUL-11	Findings:	182. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		

Sample Collected:	26-JUL-11	Findings:	222. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	26-JUL-11	Findings:	0.202 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	26-JUL-11	Findings:	0.33 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	26-JUL-11	Findings:	246. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	26-JUL-11	Findings:	71.3 MG/L
Chemical:	CALCIUM		
Sample Collected:	26-JUL-11	Findings:	16.5 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	26-JUL-11	Findings:	25. MG/L
Chemical:	SODIUM		
Sample Collected:	26-JUL-11	Findings:	3.69 MG/L
Chemical:	POTASSIUM		
Sample Collected:	26-JUL-11	Findings:	19. MG/L
Chemical:	CHLORIDE		
Sample Collected:	26-JUL-11	Findings:	0.25 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	26-JUL-11	Findings:	22.3 MG/L
Chemical:	SILICA		
Sample Collected:	26-JUL-11	Findings:	125. UG/L
Chemical:	BARIUM		
Sample Collected:	26-JUL-11	Findings:	1.81 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	26-JUL-11	Findings:	358. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	26-JUL-11	Findings:	0.3
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	26-JUL-11	Findings:	19.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-JUL-11	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	26-JUL-11	Findings:	8.1e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	26-JUL-11	Findings:	4460. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	20-OCT-11	Findings:	16.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-DEC-11	Findings:	15.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JAN-12	Findings:	15.7 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	29-MAY-12	Findings:	17.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-14	Findings:	. 21.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	15-MAY-14	Findings:	. 21.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUN-14	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	10-JUN-14	Findings:	. 608. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10-JUN-14	Findings:	. 178. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	10-JUN-14	Findings:	. 217. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	10-JUN-14	Findings:	. 0.166 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	10-JUN-14	Findings:	. 0.358 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	10-JUN-14	Findings:	. 261. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	10-JUN-14	Findings:	. 73.8 MG/L
Chemical:	CALCIUM		
Sample Collected:	10-JUN-14	Findings:	. 18.6 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	10-JUN-14	Findings:	. 22.4 MG/L
Chemical:	SODIUM		
Sample Collected:	10-JUN-14	Findings:	. 3.51 MG/L
Chemical:	POTASSIUM		
Sample Collected:	10-JUN-14	Findings:	. 19.7 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10-JUN-14	Findings:	. 0.263 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10-JUN-14	Findings:	. 24.5 MG/L
Chemical:	SILICA		
Sample Collected:	10-JUN-14	Findings:	. 117. UG/L
Chemical:	BARIUM		
Sample Collected:	10-JUN-14	Findings:	. 2.01 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	10-JUN-14	Findings:	. 386. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	10-JUN-14	Findings:	. 0.12
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	10-JUN-14	Findings:	. 21.4 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	10-JUN-14	Findings:	. 8.6e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	10-JUN-14	Findings:	. 4840. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	10-JUL-14	Findings:	. 21.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-AUG-14	Findings:	. 22.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-14	Findings:	. 23.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-NOV-14	Findings:	. 2.47 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	13-NOV-14	Findings:	. 18. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-DEC-14	Findings:	. 18.5 MG/L
Chemical:	NITRATE (AS NO3)		

B15
WNW **CA WELLS** **2148**
1/2 - 1 Mile
Higher

Water System Information:

Prime Station Code:	02N/15W-25L04 S	User ID:	MET
FRDS Number:	1910067180	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 03		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	30-AUG-11	Findings:	16. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-OCT-11	Findings:	13.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	15-NOV-11	Findings:	7. UNITS
Chemical:	COLOR		
Sample Collected:	15-NOV-11	Findings:	460. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	15-NOV-11	Findings:	185. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	15-NOV-11	Findings:	226. MG/L
Chemical:	BICARBONATE ALKALINITY		

Sample Collected:	15-NOV-11	Findings:	0.162 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	15-NOV-11	Findings:	0.584 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	15-NOV-11	Findings:	192. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	15-NOV-11	Findings:	57.9 MG/L
Chemical:	CALCIUM		
Sample Collected:	15-NOV-11	Findings:	11.6 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	15-NOV-11	Findings:	23.8 MG/L
Chemical:	SODIUM		
Sample Collected:	15-NOV-11	Findings:	3.35 MG/L
Chemical:	POTASSIUM		
Sample Collected:	15-NOV-11	Findings:	11.7 MG/L
Chemical:	CHLORIDE		
Sample Collected:	15-NOV-11	Findings:	0.291 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	15-NOV-11	Findings:	22.3 MG/L
Chemical:	SILICA		
Sample Collected:	15-NOV-11	Findings:	123. UG/L
Chemical:	BARIUM		
Sample Collected:	15-NOV-11	Findings:	135. UG/L
Chemical:	BORON		
Sample Collected:	15-NOV-11	Findings:	1.21 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	15-NOV-11	Findings:	276. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	15-NOV-11	Findings:	0.31
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	15-NOV-11	Findings:	8.15 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	15-NOV-11	Findings:	0.75 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	15-NOV-11	Findings:	4.4e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	15-NOV-11	Findings:	1840. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	22-DEC-11	Findings:	0.274 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	22-DEC-11	Findings:	15.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JAN-12	Findings:	16. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	29-MAY-12	Findings:	0.51 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	15.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-12	Findings:	0.537 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JUL-12	Findings:	16.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-AUG-12	Findings:	18.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-SEP-12	Findings:	1.37 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	18-SEP-12	Findings:	1.46 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	18-SEP-12	Findings:	18.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-OCT-12	Findings:	3.19 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	29-OCT-12	Findings:	0.522 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	29-OCT-12	Findings:	3.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-OCT-12	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-NOV-12	Findings:	0.252 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	20-NOV-12	Findings:	3. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-NOV-12	Findings:	0.547 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	20-NOV-12	Findings:	3.15 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-NOV-12	Findings:	19.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-DEC-12	Findings:	2.12 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	2.52 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	18.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-JAN-13	Findings:	1.22 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	1.24 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	22-JAN-13	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-FEB-13	Findings:	17.6 MG/L
Chemical:	CHLORIDE		
Sample Collected:	14-FEB-13	Findings:	0.266 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	14-FEB-13	Findings:	0.729 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	14-FEB-13	Findings:	0.747 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	14-FEB-13	Findings:	18.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-MAR-13	Findings:	0.577 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	14-MAR-13	Findings:	18.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-APR-13	Findings:	19.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUL-14	Findings:	. 22.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-AUG-14	Findings:	. 21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-14	Findings:	. 20.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-NOV-14	Findings:	. 3. UNITS
Chemical:	COLOR		
Sample Collected:	12-NOV-14	Findings:	. 616. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12-NOV-14	Findings:	. 172. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	12-NOV-14	Findings:	. 210. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12-NOV-14	Findings:	. 0.172 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	12-NOV-14	Findings:	. 0.354 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	12-NOV-14	Findings:	. 264. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	12-NOV-14	Findings:	. 75.4 MG/L
Chemical:	CALCIUM		
Sample Collected:	12-NOV-14	Findings:	. 18.4 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12-NOV-14	Findings:	. 22.5 MG/L
Chemical:	SODIUM		

Sample Collected:	12-NOV-14	Findings:	. 3.37 MG/L
Chemical:	POTASSIUM		
Sample Collected:	12-NOV-14	Findings:	. 19.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12-NOV-14	Findings:	. 0.274 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12-NOV-14	Findings:	. 25.4 MG/L
Chemical:	SILICA		
Sample Collected:	12-NOV-14	Findings:	. 129. UG/L
Chemical:	BARIUM		
Sample Collected:	12-NOV-14	Findings:	. 1.95 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	12-NOV-14	Findings:	. 1.88 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	12-NOV-14	Findings:	. 373. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12-NOV-14	Findings:	. 0.18
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	12-NOV-14	Findings:	. 21.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-NOV-14	Findings:	. 0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	12-NOV-14	Findings:	. 8.7e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	12-NOV-14	Findings:	. 4930. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-DEC-14	Findings:	. 22.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-15	Findings:	. 22.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAR-15	Findings:	. 22.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-APR-15	Findings:	. 23.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-MAY-15	Findings:	. 22.7 MG/L
Chemical:	NITRATE (AS NO3)		

B16
WNW
1/2 - 1 Mile
Higher

CA WELLS **2155**

Water System Information:

Prime Station Code:	02N/15W-25L11 S	User ID:	MET
FRDS Number:	1910067187	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 10		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 1910067
System Name: LOS ANGELES-CITY, DEPT. OF WATER & POWER
Organization That Operates System:
P.O. BOX 51111, ROOM 1420
LOS ANGELES, CA 90051
Pop Served: 3700000 Connections: 657422
Area Served: LOS ANGELES

Sample Collected:	30-AUG-11	Findings:	3.09 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-SEP-11	Findings:	2.58 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-MAR-15	Findings:	. 4.15 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	03-APR-15	Findings:	. 2.18 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 50.6 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-APR-15	Findings:	. 1.16 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 13.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 29.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-MAY-15	Findings:	. 2.27 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 59.7 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-MAY-15	Findings:	. 1.26 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 13.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 30.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-OCT-11	Findings:	2.38 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-NOV-11	Findings:	11.7 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	21-NOV-11	Findings:	0.852 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-NOV-11	Findings:	5.18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-DEC-11	Findings:	10.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	22-DEC-11	Findings:	0.875 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	22-DEC-11	Findings:	5.58 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JAN-12	Findings:	4.78 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAY-12	Findings:	0.845 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	8.63 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	29-MAY-12	Findings:	5.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	17.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-JUN-12	Findings:	1.17 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	9.9 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-JUN-12	Findings:	0.577 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	8.29 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	20.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUL-12	Findings:	1.48 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	11.9 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-JUL-12	Findings:	0.695 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	9.57 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	23.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-AUG-12	Findings:	1.89 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	14.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	27-AUG-12	Findings:	0.828 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	10.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	32.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-SEP-12	Findings:	3. UNITS
Chemical:	COLOR		

Sample Collected:	26-SEP-12	Findings:	931. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	26-SEP-12	Findings:	272. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	26-SEP-12	Findings:	332. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	26-SEP-12	Findings:	0.159 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	26-SEP-12	Findings:	0.414 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	26-SEP-12	Findings:	420. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	26-SEP-12	Findings:	122. MG/L
Chemical:	CALCIUM		
Sample Collected:	26-SEP-12	Findings:	27.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	26-SEP-12	Findings:	34.4 MG/L
Chemical:	SODIUM		
Sample Collected:	26-SEP-12	Findings:	4.99 MG/L
Chemical:	POTASSIUM		
Sample Collected:	26-SEP-12	Findings:	35.9 MG/L
Chemical:	CHLORIDE		
Sample Collected:	26-SEP-12	Findings:	0.316 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	26-SEP-12	Findings:	28.2 MG/L
Chemical:	SILICA		
Sample Collected:	26-SEP-12	Findings:	218. UG/L
Chemical:	BARIUM		
Sample Collected:	26-SEP-12	Findings:	106. UG/L
Chemical:	BORON		
Sample Collected:	26-SEP-12	Findings:	6.16 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	26-SEP-12	Findings:	2.74 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	26-SEP-12	Findings:	21.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	26-SEP-12	Findings:	1.6 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	26-SEP-12	Findings:	14.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	26-SEP-12	Findings:	600. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	26-SEP-12	Findings:	0.3
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		

Sample Collected:	26-SEP-12	Findings:	40.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-SEP-12	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	26-SEP-12	Findings:	0.208 MG/L
Chemical:	BROMIDE		
Sample Collected:	26-SEP-12	Findings:	9240. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	26-SEP-12	Findings:	5.02 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	30-OCT-12	Findings:	0.93 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	30-OCT-12	Findings:	10.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	30-OCT-12	Findings:	4.96 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-OCT-12	Findings:	23.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-NOV-12	Findings:	1.55 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	28-NOV-12	Findings:	14.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	28-NOV-12	Findings:	0.722 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	28-NOV-12	Findings:	8.16 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	28-NOV-12	Findings:	28.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-DEC-12	Findings:	1.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	20.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-DEC-12	Findings:	0.976 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	10.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	29.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-DEC-12	Findings:	4.01 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	22-JAN-13	Findings:	1.47 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	24. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		

Sample Collected:	22-JAN-13	Findings:	0.865 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	9.94 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	29.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-JAN-13	Findings:	4.43 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	13-FEB-13	Findings:	1.31 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	7.61 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-FEB-13	Findings:	0.522 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	8.77 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-MAR-13	Findings:	1.36 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-MAR-13	Findings:	9.64 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	21-MAR-13	Findings:	0.844 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	21-MAR-13	Findings:	10.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-MAR-13	Findings:	28.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-APR-13	Findings:	1.47 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	17-APR-13	Findings:	13.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	17-APR-13	Findings:	0.833 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	17-APR-13	Findings:	10.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	17-APR-13	Findings:	30.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-MAY-13	Findings:	1.33 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-MAY-13	Findings:	10.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	21-MAY-13	Findings:	0.783 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	21-MAY-13	Findings:	8.79 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-MAY-13	Findings:	30.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-JUN-13	Findings:	1.16 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	19-JUN-13	Findings:	6.79 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	19-JUN-13	Findings:	0.729 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	19-JUN-13	Findings:	7.69 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-JUN-13	Findings:	28.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUL-13	Findings:	1.26 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10-JUL-13	Findings:	10.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	10-JUL-13	Findings:	0.879 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10-JUL-13	Findings:	8.69 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10-JUL-13	Findings:	28.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-AUG-13	Findings:	1.28 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-AUG-13	Findings:	13.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-AUG-13	Findings:	1.04 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-AUG-13	Findings:	8.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-AUG-13	Findings:	27.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-13	Findings:	1.49 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	9.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-SEP-13	Findings:	1.36 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	9.36 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	29.2 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	16-OCT-13	Findings:	1.99 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	16-OCT-13	Findings:	26. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	16-OCT-13	Findings:	1.63 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	16-OCT-13	Findings:	11.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-OCT-13	Findings:	31.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-13	Findings:	4.71 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07-NOV-13	Findings:	1.72 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07-NOV-13	Findings:	4.42 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	07-NOV-13	Findings:	1.71 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	23.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	07-NOV-13	Findings:	1.33 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	10.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	31.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-13	Findings:	3.3 UG/L
Chemical:	VANADIUM		
Sample Collected:	03-DEC-13	Findings:	2.21 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-DEC-13	Findings:	28.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-DEC-13	Findings:	1.52 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-DEC-13	Findings:	13. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-DEC-13	Findings:	32.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-14	Findings:	. 3.3 UG/L
Chemical:	VANADIUM		
Sample Collected:	09-JAN-14	Findings:	. 2.46 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JAN-14	Findings:	. 40.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		

Sample Collected:	09-JAN-14	Findings:	. 1.43 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-JAN-14	Findings:	. 15.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JAN-14	Findings:	. 32.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-FEB-14	Findings:	. 1.99 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-FEB-14	Findings:	. 32.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-FEB-14	Findings:	. 1.09 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-FEB-14	Findings:	. 11.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-FEB-14	Findings:	. 29.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAR-14	Findings:	. 2.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-MAR-14	Findings:	. 39.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-MAR-14	Findings:	. 1.37 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-MAR-14	Findings:	. 15. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAR-14	Findings:	. 34.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-14	Findings:	. 1.83 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-APR-14	Findings:	. 37.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-APR-14	Findings:	. 0.95 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-APR-14	Findings:	. 10.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-APR-14	Findings:	. 27.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-14	Findings:	. 2.e-003 UG/L
Chemical:	N-NITROSODI-N-BUTYLAMINE (NDBA)		
Sample Collected:	15-MAY-14	Findings:	. 2.21 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	15-MAY-14	Findings:	. 54.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	15-MAY-14	Findings:	. 0.848 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	15-MAY-14	Findings:	. 12.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	15-MAY-14	Findings:	. 30.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-JUN-14	Findings:	. 1.82 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-JUN-14	Findings:	. 50.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-JUN-14	Findings:	. 0.991 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-JUN-14	Findings:	. 10.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-JUN-14	Findings:	. 28.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUL-14	Findings:	. 0.977 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-JUL-14	Findings:	. 23.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-JUL-14	Findings:	. 0.548 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-JUL-14	Findings:	. 6.28 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-JUL-14	Findings:	. 25.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-AUG-14	Findings:	. 1.43 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12-AUG-14	Findings:	. 23.9 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	12-AUG-14	Findings:	. 0.686 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12-AUG-14	Findings:	. 9.13 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-AUG-14	Findings:	. 27.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-14	Findings:	. 1.93 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-SEP-14	Findings:	. 38.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-SEP-14	Findings:	. 1.03 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-SEP-14	Findings:	. 12.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-SEP-14	Findings:	. 29.1 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	13-NOV-14	Findings:	. 1.13 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	13-NOV-14	Findings:	. 3.01 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-NOV-14	Findings:	. 70.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-NOV-14	Findings:	. 1.55 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-NOV-14	Findings:	. 17.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-NOV-14	Findings:	. 32.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-NOV-14	Findings:	. 4.84 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-DEC-14	Findings:	. 2.84 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 69.6 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	16-DEC-14	Findings:	. 1.45 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 15.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 32.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-15	Findings:	. 2.53 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 58.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-JAN-15	Findings:	. 1.3 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 14.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 32.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-15	Findings:	. 1.1 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	06-FEB-15	Findings:	. 3.6 UG/L
Chemical:	VANADIUM		
Sample Collected:	06-FEB-15	Findings:	. 2.45 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-FEB-15	Findings:	. 58.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-FEB-15	Findings:	. 1.24 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	06-FEB-15	Findings:	. 14.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-FEB-15	Findings:	. 32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-MAR-15	Findings:	. 2.99 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 69.6 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	19-MAR-15	Findings:	. 1.45 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 18.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 31.1 MG/L
Chemical:	NITRATE (AS NO3)		

B17
WNW
1/2 - 1 Mile
Higher

CA WELLS **2156**

Water System Information:

Prime Station Code:	02N/15W-25L12 S	User ID:	MET
FRDS Number:	1910067188	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 11		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	03-JUL-14	Findings:	. 4.58 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-JUL-14	Findings:	. 17.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-AUG-14	Findings:	. 3.3 UG/L
Chemical:	VANADIUM		
Sample Collected:	12-AUG-14	Findings:	. 1.46 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12-AUG-14	Findings:	. 97.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	12-AUG-14	Findings:	. 1.14 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12-AUG-14	Findings:	. 10.5 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	12-AUG-14	Findings:	. 20.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-14	Findings:	. 1.81 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-SEP-14	Findings:	. 87.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-SEP-14	Findings:	. 1.63 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-SEP-14	Findings:	. 14.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-SEP-14	Findings:	. 22.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-NOV-14	Findings:	. 1.11 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	13-NOV-14	Findings:	. 2.55 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-NOV-14	Findings:	. 118. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-NOV-14	Findings:	. 1.64 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-JAN-11	Findings:	1.58 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-JAN-11	Findings:	9.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-JAN-11	Findings:	0.913 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-JAN-11	Findings:	12.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-JAN-11	Findings:	21.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-FEB-11	Findings:	0.629 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-NOV-14	Findings:	. 18.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-NOV-14	Findings:	. 26.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-NOV-14	Findings:	. 4.57 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-DEC-14	Findings:	. 2.78 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 116. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	16-DEC-14	Findings:	. 2.42 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	16-DEC-14	Findings:	. 19.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 25.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	16-DEC-14	Findings:	. 4.67 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08-JAN-15	Findings:	. 2.23 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 120. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-JAN-15	Findings:	. 1.77 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 15.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 24. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-15	Findings:	. 4.26 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	06-FEB-15	Findings:	. 1.77 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-FEB-15	Findings:	. 129. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-FEB-15	Findings:	. 1.69 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	6.69 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	17.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-FEB-15	Findings:	. 12.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-FEB-15	Findings:	. 22.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-MAR-15	Findings:	. 2.22 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 102. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	19-MAR-15	Findings:	. 1.69 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 14.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 22. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-15	Findings:	. 1.78 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	03-APR-15	Findings:	. 98. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-APR-15	Findings:	. 1.55 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 12.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 21.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-MAY-15	Findings:	. 1.21 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 66. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-MAY-15	Findings:	. 1.1 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	14-APR-11	Findings:	6.11 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-MAY-15	Findings:	. 8.83 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 22.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-JUN-11	Findings:	5.29 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	29-JUN-11	Findings:	0.609 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-JUL-11	Findings:	5.58 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-OCT-11	Findings:	3.31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-NOV-11	Findings:	7.26 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	21-NOV-11	Findings:	5.36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-DEC-11	Findings:	5.01 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	22-DEC-11	Findings:	4.47 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JAN-12	Findings:	0.785 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	18-JAN-12	Findings:	3.77 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAY-12	Findings:	0.939 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	9.34 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		

Sample Collected:	29-MAY-12	Findings:	7.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	12.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-JUN-12	Findings:	1.56 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	33.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-JUN-12	Findings:	0.765 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	11.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	16.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUL-12	Findings:	2.31 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	50.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-JUL-12	Findings:	1.09 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	16.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	22. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUL-12	Findings:	6.1 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	13-JUL-12	Findings:	1.07 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	26-JUL-12	Findings:	6.5 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	27-AUG-12	Findings:	2.78 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	46.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	27-AUG-12	Findings:	1.03 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	17.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	28.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-AUG-12	Findings:	5.4 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	27-AUG-12	Findings:	1.06 UG/L
Chemical:	1,4-DIOXANE		

Sample Collected:	17-MAY-13	Findings:	1.84 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	17-MAY-13	Findings:	71.9 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	17-MAY-13	Findings:	0.898 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	17-MAY-13	Findings:	13.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	17-MAY-13	Findings:	26.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-MAY-13	Findings:	4.73 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	18-JUN-13	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	18-JUN-13	Findings:	820. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	18-JUN-13	Findings:	267. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	18-JUN-13	Findings:	326. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	18-JUN-13	Findings:	0.175 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	18-JUN-13	Findings:	346. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	18-JUN-13	Findings:	100. MG/L
Chemical:	CALCIUM		
Sample Collected:	18-JUN-13	Findings:	23.5 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	18-JUN-13	Findings:	34.2 MG/L
Chemical:	SODIUM		
Sample Collected:	18-JUN-13	Findings:	4.69 MG/L
Chemical:	POTASSIUM		
Sample Collected:	18-JUN-13	Findings:	27.2 MG/L
Chemical:	CHLORIDE		
Sample Collected:	18-JUN-13	Findings:	0.265 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	18-JUN-13	Findings:	28.9 MG/L
Chemical:	SILICA		
Sample Collected:	18-JUN-13	Findings:	160. UG/L
Chemical:	BARIUM		
Sample Collected:	18-JUN-13	Findings:	131. UG/L
Chemical:	BORON		
Sample Collected:	18-JUN-13	Findings:	3.2 UG/L
Chemical:	VANADIUM		

Sample Collected:	18-JUN-13	Findings:	4.76 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	18-JUN-13	Findings:	1.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	18-JUN-13	Findings:	49.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	18-JUN-13	Findings:	0.919 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	18-JUN-13	Findings:	12.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	18-JUN-13	Findings:	524. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	18-JUN-13	Findings:	0.15
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	18-JUN-13	Findings:	26.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JUN-13	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	18-JUN-13	Findings:	0.155 MG/L
Chemical:	BROMIDE		
Sample Collected:	18-JUN-13	Findings:	5890. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	18-JUN-13	Findings:	4.51 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	11-JUL-13	Findings:	1.85 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11-JUL-13	Findings:	63.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	11-JUL-13	Findings:	1.06 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	11-JUL-13	Findings:	13.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JUL-13	Findings:	26.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JUL-13	Findings:	4.3 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	11-JUL-13	Findings:	1.09 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	21-AUG-13	Findings:	1.98 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-AUG-13	Findings:	51.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	21-AUG-13	Findings:	1.06 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	21-AUG-13	Findings:	13.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-AUG-13	Findings:	26.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-13	Findings:	2.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	58. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-SEP-13	Findings:	1.25 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	14.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	26.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-13	Findings:	4.04 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-OCT-13	Findings:	2.18 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	16-OCT-13	Findings:	51.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	16-OCT-13	Findings:	1.21 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	16-OCT-13	Findings:	15. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-OCT-13	Findings:	27.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	16-OCT-13	Findings:	1.02 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	07-NOV-13	Findings:	2.04 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	43.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	07-NOV-13	Findings:	1.12 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	13.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	26.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-13	Findings:	2.48 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-DEC-13	Findings:	56.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-DEC-13	Findings:	1.24 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	03-DEC-13	Findings:	15.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-DEC-13	Findings:	26.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-13	Findings:	4.33 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09-JAN-14	Findings:	. 2.64 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JAN-14	Findings:	. 98.6 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	09-JAN-14	Findings:	. 1.56 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-JAN-14	Findings:	. 17.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JAN-14	Findings:	. 26.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-14	Findings:	. 4.81 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09-JAN-14	Findings:	. 1.07 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	15-MAY-14	Findings:	. 1.97 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	15-MAY-14	Findings:	. 140. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	15-MAY-14	Findings:	. 1.68 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	15-MAY-14	Findings:	. 12.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	15-MAY-14	Findings:	. 21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-JUN-14	Findings:	. 1.4 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-JUN-14	Findings:	. 93.9 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-JUN-14	Findings:	. 1.33 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-JUN-14	Findings:	. 9.29 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-JUN-14	Findings:	. 19.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUL-14	Findings:	. 0.688 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-JUL-14	Findings:	. 82.6 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		

Sample Collected:	03-JUL-14	Findings:	. 0.734 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

B18
WNW
1/2 - 1 Mile
Higher

CA WELLS **2157**

Water System Information:

Prime Station Code:	02N/15W-25L13 S	User ID:	MET
FRDS Number:	1910067189	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 12		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	29-JAN-13	Findings:	71.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	29-JAN-13	Findings:	12.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-MAR-13	Findings:	3.08 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	14-MAR-13	Findings:	1.62 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	14-MAR-13	Findings:	3.08 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	14-MAR-13	Findings:	69.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	14-MAR-13	Findings:	2.06 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	14-MAR-13	Findings:	10.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-APR-13	Findings:	46.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	30-APR-13	Findings:	2.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-APR-13	Findings:	11.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	15-MAY-13	Findings:	17. MG/L
Chemical:	CHLORIDE		
Sample Collected:	15-MAY-13	Findings:	0.427 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

Sample Collected:	06-JAN-11	Findings:	102. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-JAN-11	Findings:	1.79 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	0.923 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	75.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-FEB-11	Findings:	0.568 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	4.53 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	17-MAR-11	Findings:	0.729 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	17-MAR-11	Findings:	65.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	17-MAR-11	Findings:	3.38 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	14-APR-11	Findings:	0.789 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	14-APR-11	Findings:	63.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	14-APR-11	Findings:	0.527 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	14-APR-11	Findings:	3.95 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-MAY-11	Findings:	0.79 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-MAY-11	Findings:	65.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	09-MAY-11	Findings:	0.53 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-MAY-11	Findings:	3.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-JUN-11	Findings:	5.14 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-JUL-11	Findings:	0.699 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-JUL-11	Findings:	53. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-JUL-11	Findings:	2.85 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-AUG-11	Findings:	0.642 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	30-AUG-11	Findings:	57.6 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	30-AUG-11	Findings:	3.08 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-AUG-11	Findings:	9.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-SEP-11	Findings:	0.621 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	26-SEP-11	Findings:	49.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	26-SEP-11	Findings:	2.59 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-OCT-11	Findings:	0.549 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-OCT-11	Findings:	46.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-OCT-11	Findings:	2.53 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-OCT-11	Findings:	9.04 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-NOV-11	Findings:	5.67 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-DEC-11	Findings:	6.29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JAN-12	Findings:	50.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	18-JAN-12	Findings:	1.53 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	18-JAN-12	Findings:	8.73 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAY-12	Findings:	44.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	29-MAY-12	Findings:	1.98 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	3.1 UG/L
Chemical:	VANADIUM		
Sample Collected:	20-JUN-12	Findings:	0.512 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	53.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-JUN-12	Findings:	2.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-JUN-12	Findings:	9.79 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	20-JUN-12	Findings:	5.49 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	11-JUL-12	Findings:	0.563 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	11-JUL-12	Findings:	52.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	11-JUL-12	Findings:	2.52 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JUL-12	Findings:	10. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	25-JUL-12	Findings:	4. UNITS
Chemical:	COLOR		
Sample Collected:	25-JUL-12	Findings:	607. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	25-JUL-12	Findings:	228. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	25-JUL-12	Findings:	278. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	25-JUL-12	Findings:	0.172 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	25-JUL-12	Findings:	0.505 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	25-JUL-12	Findings:	265. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	25-JUL-12	Findings:	75.3 MG/L
Chemical:	CALCIUM		
Sample Collected:	25-JUL-12	Findings:	18.7 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	25-JUL-12	Findings:	27.8 MG/L
Chemical:	SODIUM		
Sample Collected:	25-JUL-12	Findings:	3.65 MG/L
Chemical:	POTASSIUM		
Sample Collected:	25-JUL-12	Findings:	16.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	25-JUL-12	Findings:	0.427 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	25-JUL-12	Findings:	28.5 MG/L
Chemical:	SILICA		
Sample Collected:	25-JUL-12	Findings:	117. UG/L
Chemical:	BARIUM		
Sample Collected:	25-JUL-12	Findings:	174. UG/L
Chemical:	BORON		
Sample Collected:	25-JUL-12	Findings:	3.5 UG/L
Chemical:	VANADIUM		

Sample Collected:	25-JUL-12	Findings:	3.48 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	25-JUL-12	Findings:	369. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	25-JUL-12	Findings:	3.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	25-JUL-12	Findings:	10.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	25-JUL-12	Findings:	9.9e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	25-JUL-12	Findings:	2280. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	21-AUG-12	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	21-AUG-12	Findings:	617. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	21-AUG-12	Findings:	229. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	21-AUG-12	Findings:	279. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	21-AUG-12	Findings:	0.178 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	21-AUG-12	Findings:	0.424 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	21-AUG-12	Findings:	276. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	21-AUG-12	Findings:	78.2 MG/L
Chemical:	CALCIUM		
Sample Collected:	21-AUG-12	Findings:	19.6 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	21-AUG-12	Findings:	28.6 MG/L
Chemical:	SODIUM		
Sample Collected:	21-AUG-12	Findings:	3.83 MG/L
Chemical:	POTASSIUM		
Sample Collected:	21-AUG-12	Findings:	17.3 MG/L
Chemical:	CHLORIDE		
Sample Collected:	21-AUG-12	Findings:	0.416 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	21-AUG-12	Findings:	29.6 MG/L
Chemical:	SILICA		
Sample Collected:	21-AUG-12	Findings:	112. UG/L
Chemical:	BARIUM		
Sample Collected:	21-AUG-12	Findings:	134. UG/L
Chemical:	BORON		

Sample Collected:	21-AUG-12	Findings:	3.28 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	21-AUG-12	Findings:	0.645 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-AUG-12	Findings:	44.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	21-AUG-12	Findings:	2.98 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-AUG-12	Findings:	399. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	21-AUG-12	Findings:	0.18
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	21-AUG-12	Findings:	10.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-AUG-12	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	21-AUG-12	Findings:	0.116 MG/L
Chemical:	BROMIDE		
Sample Collected:	21-AUG-12	Findings:	2440. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	20-SEP-12	Findings:	0.72 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	48.7 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-SEP-12	Findings:	3.34 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	12. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-OCT-12	Findings:	26. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	30-OCT-12	Findings:	1.13 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	30-OCT-12	Findings:	11.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-NOV-12	Findings:	18.2 MG/L
Chemical:	CHLORIDE		
Sample Collected:	28-NOV-12	Findings:	0.364 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	28-NOV-12	Findings:	18.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	28-NOV-12	Findings:	12.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-DEC-12	Findings:	45.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		

Sample Collected:	13-DEC-12	Findings:	0.613 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	12.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	15-MAY-13	Findings:	43.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	15-MAY-13	Findings:	2.51 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	15-MAY-13	Findings:	11.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	15-MAY-13	Findings:	0.105 MG/L
Chemical:	BROMIDE		
Sample Collected:	18-JUN-13	Findings:	37.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	18-JUN-13	Findings:	2.24 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	18-JUN-13	Findings:	11.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JUL-13	Findings:	16.7 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11-JUL-13	Findings:	0.411 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	11-JUL-13	Findings:	37.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	11-JUL-13	Findings:	2.37 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	11-JUL-13	Findings:	11.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JUL-13	Findings:	9.8e-002 MG/L
Chemical:	BROMIDE		
Sample Collected:	21-AUG-13	Findings:	37.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	21-AUG-13	Findings:	2.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-AUG-13	Findings:	11.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-13	Findings:	44.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-SEP-13	Findings:	2.71 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	11.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-OCT-13	Findings:	3.1 UG/L
Chemical:	VANADIUM		

Sample Collected:	03-OCT-13	Findings:	39.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-OCT-13	Findings:	2.35 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-OCT-13	Findings:	11.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-13	Findings:	25.6 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	07-NOV-13	Findings:	2.09 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	11.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-13	Findings:	28.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-DEC-13	Findings:	2.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-DEC-13	Findings:	11.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-FEB-14	Findings:	. 22.9 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-FEB-14	Findings:	. 0.873 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-FEB-14	Findings:	. 11. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-14	Findings:	. 25.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-APR-14	Findings:	. 1.28 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-APR-14	Findings:	. 13.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-14	Findings:	. 3.e-003 UG/L
Chemical:	N-NITROSODI-N-BUTYLAMINE (NDBA)		
Sample Collected:	15-MAY-14	Findings:	. 37. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	15-MAY-14	Findings:	. 1.66 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	15-MAY-14	Findings:	. 14.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUL-14	Findings:	. 16.6 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-JUL-14	Findings:	. 0.654 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-JUL-14	Findings:	. 11.3 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	12-AUG-14	Findings:	. 26.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	12-AUG-14	Findings:	. 1.55 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-AUG-14	Findings:	. 11.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-14	Findings:	. 31.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-SEP-14	Findings:	. 1.75 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-SEP-14	Findings:	. 11.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-NOV-14	Findings:	. 0.579 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-NOV-14	Findings:	. 49.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-NOV-14	Findings:	. 3.69 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-NOV-14	Findings:	. 15.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	16-DEC-14	Findings:	. 0.528 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 54.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	16-DEC-14	Findings:	. 0.543 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 2.83 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 15.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-15	Findings:	. 44.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-JAN-15	Findings:	. 2.59 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 15.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-FEB-15	Findings:	. 41.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-FEB-15	Findings:	. 2.12 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-FEB-15	Findings:	. 15.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-MAR-15	Findings:	. 0.56 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	19-MAR-15	Findings:	. 44. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	19-MAR-15	Findings:	. 2.77 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 15.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-15	Findings:	. 0.505 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 39.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-APR-15	Findings:	. 2.78 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 15.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-MAY-15	Findings:	. 29.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-MAY-15	Findings:	. 2.12 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 16.7 MG/L
Chemical:	NITRATE (AS NO3)		

B19
WNW
1/2 - 1 Mile
Higher

CA WELLS **2152**

Water System Information:

Prime Station Code:	02N/15W-25L08 S	User ID:	MET
FRDS Number:	1910067184	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 07		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420		
	LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	07-SEP-11	Findings:	6900. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06-OCT-11	Findings:	12.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-OCT-11	Findings:	6.36 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-OCT-11	Findings:	3.36 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	06-OCT-11	Findings:	16.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-OCT-11	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-OCT-11	Findings:	5860. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04-MAR-15	Findings:	. 24. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 23.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	04-MAR-15	Findings:	. 0.563 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	04-MAR-15	Findings:	. 6.41 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 23. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-MAR-15	Findings:	. 0.633 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 23. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 27.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-APR-15	Findings:	. 6.1 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 23.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 34.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-15	Findings:	. 0.613 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 1.33 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	06-MAY-15	Findings:	. 19.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 35.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-MAY-15	Findings:	. 5.7 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 21.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 35.2 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	09-NOV-11	Findings:	12.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-NOV-11	Findings:	7.36 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	09-NOV-11	Findings:	4.33 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-NOV-11	Findings:	16.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-NOV-11	Findings:	26.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-NOV-11	Findings:	6070. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06-MAY-15	Findings:	. 0.586 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 17.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 29.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-MAY-15	Findings:	. 4.82 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 19.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 36.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-DEC-11	Findings:	12.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-DEC-11	Findings:	6.59 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-DEC-11	Findings:	3.8 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-DEC-11	Findings:	15.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-DEC-11	Findings:	27.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-DEC-11	Findings:	6110. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04-JAN-12	Findings:	12.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-JAN-12	Findings:	6.92 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	04-JAN-12	Findings:	4.18 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JAN-12	Findings:	16.1 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	04-JAN-12	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JAN-12	Findings:	6330. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-FEB-12	Findings:	10.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-FEB-12	Findings:	8.96 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-FEB-12	Findings:	3.56 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-FEB-12	Findings:	15.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-FEB-12	Findings:	27.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-FEB-12	Findings:	6250. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	25-OCT-12	Findings:	0.238 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	25-OCT-12	Findings:	0.911 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	25-OCT-12	Findings:	31.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	0.632 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	25-OCT-12	Findings:	10.2 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	35.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	40.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	25-OCT-12	Findings:	0.714 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	0.665 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	25-OCT-12	Findings:	0.15 MG/L
Chemical:	BROMIDE		
Sample Collected:	07-NOV-12	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	07-NOV-12	Findings:	728. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07-NOV-12	Findings:	230. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	07-NOV-12	Findings:	281. MG/L
Chemical:	BICARBONATE ALKALINITY		

Sample Collected:	07-NOV-12	Findings:	0.365 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	07-NOV-12	Findings:	324. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	07-NOV-12	Findings:	95.5 MG/L
Chemical:	CALCIUM		
Sample Collected:	07-NOV-12	Findings:	20.7 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	07-NOV-12	Findings:	27.1 MG/L
Chemical:	SODIUM		
Sample Collected:	07-NOV-12	Findings:	4.77 MG/L
Chemical:	POTASSIUM		
Sample Collected:	07-NOV-12	Findings:	29.3 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07-NOV-12	Findings:	0.208 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07-NOV-12	Findings:	27.4 MG/L
Chemical:	SILICA		
Sample Collected:	07-NOV-12	Findings:	168. UG/L
Chemical:	BARIUM		
Sample Collected:	07-NOV-12	Findings:	. 1.71 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	07-NOV-12	Findings:	3.02 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	07-NOV-12	Findings:	448. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	07-NOV-12	Findings:	0.43
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	07-NOV-12	Findings:	37.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-12	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	07-NOV-12	Findings:	0.15 MG/L
Chemical:	BROMIDE		
Sample Collected:	07-NOV-12	Findings:	8520. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	07-NOV-12	Findings:	1.2 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	07-NOV-12	Findings:	0.59 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	07-NOV-12	Findings:	23. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-NOV-12	Findings:	7.4 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	07-NOV-12	Findings:	27. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-NOV-12	Findings:	0.59 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	0.71 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	21-NOV-12	Findings:	24.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	5.34 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	21-NOV-12	Findings:	0.646 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	21-NOV-12	Findings:	8.64 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	28.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	36.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-NOV-12	Findings:	0.698 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	0.59 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	29-NOV-12	Findings:	0.156 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	12-DEC-12	Findings:	0.601 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	12-DEC-12	Findings:	21.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	5.24 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	12-DEC-12	Findings:	0.58 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	12-DEC-12	Findings:	7.06 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	26.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	34.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-DEC-12	Findings:	0.642 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	1.1 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	14-DEC-12	Findings:	1.05 UG/L
Chemical:	1,4-DIOXANE		

Sample Collected:	09-JAN-13	Findings:	17.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	8.15 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	09-JAN-13	Findings:	5.26 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	21. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	34.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-13	Findings:	1.01 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	06-FEB-13	Findings:	11.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-FEB-13	Findings:	10.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-FEB-13	Findings:	3.49 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-FEB-13	Findings:	15.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-FEB-13	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-FEB-13	Findings:	13.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	10.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-FEB-13	Findings:	3.59 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	16.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	33.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JAN-11	Findings:	0.517 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	04-JAN-11	Findings:	22. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	7.01 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	21.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	35.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JAN-11	Findings:	0.593 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

Sample Collected:	04-JAN-11	Findings:	0.555 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	06-MAR-13	Findings:	15. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-MAR-13	Findings:	13.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-MAR-13	Findings:	4.53 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-MAR-13	Findings:	18.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAR-13	Findings:	33.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	16.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-APR-13	Findings:	12.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-APR-13	Findings:	4.57 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-APR-13	Findings:	19.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-APR-13	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	0.502 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	03-APR-13	Findings:	1.12 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	03-APR-13	Findings:	5.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	08-MAY-13	Findings:	14.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-MAY-13	Findings:	12.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-MAY-13	Findings:	4.21 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	8110. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	09-FEB-11	Findings:	0.526 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	09-FEB-11	Findings:	20.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-FEB-11	Findings:	5.27 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	09-FEB-11	Findings:	7.04 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	09-FEB-11	Findings:	22. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-FEB-11	Findings:	34.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-FEB-11	Findings:	0.561 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	09-FEB-11	Findings:	0.569 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	08-MAY-13	Findings:	17.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-MAY-13	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-JUN-13	Findings:	14.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-JUN-13	Findings:	12.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-JUN-13	Findings:	3.86 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-JUN-13	Findings:	15.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-JUN-13	Findings:	33.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUL-13	Findings:	14.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-JUL-13	Findings:	13.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-JUL-13	Findings:	4.4 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-JUL-13	Findings:	17.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-JUL-13	Findings:	33.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-MAR-11	Findings:	14.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	8.17 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	09-MAR-11	Findings:	5.72 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	19. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-MAR-11	Findings:	33.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-MAR-11	Findings:	7640. UG/L
Chemical:	NITRATE + NITRITE (AS N)		

Sample Collected:	06-APR-11	Findings:	18.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-APR-11	Findings:	6.96 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-APR-11	Findings:	6.12 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	19.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	13.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	07-AUG-13	Findings:	5.17 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	19.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	33.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-AUG-13	Findings:	0.523 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	18.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	16.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	04-SEP-13	Findings:	5.43 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	19.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	34.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-OCT-13	Findings:	19.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-OCT-13	Findings:	15.9 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	09-OCT-13	Findings:	5.8 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-OCT-13	Findings:	19.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-OCT-13	Findings:	35.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-APR-11	Findings:	22.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-APR-11	Findings:	33.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-APR-11	Findings:	0.517 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

Sample Collected:	06-APR-11	Findings:	7660. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04-MAY-11	Findings:	17.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-MAY-11	Findings:	5.93 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	04-MAY-11	Findings:	5.76 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-OCT-13	Findings:	1.06 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	06-NOV-13	Findings:	20.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-NOV-13	Findings:	11. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-NOV-13	Findings:	6.25 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-NOV-13	Findings:	20.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-NOV-13	Findings:	33.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-NOV-13	Findings:	0.623 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	27.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	9.97 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	04-DEC-13	Findings:	7. UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	23.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	33.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-DEC-13	Findings:	0.729 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08-JAN-14	Findings:	. 29.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JAN-14	Findings:	. 7. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-JAN-14	Findings:	. 7.04 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JAN-14	Findings:	. 24.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-JAN-14	Findings:	. 32.3 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	08-JAN-14	Findings:	. 0.651 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04-MAY-11	Findings:	20.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-MAY-11	Findings:	31.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-MAY-11	Findings:	0.501 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04-MAY-11	Findings:	7100. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-JUN-11	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	08-JUN-11	Findings:	694. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08-JUN-11	Findings:	228. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08-JUN-11	Findings:	278. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08-JUN-11	Findings:	0.418 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	08-JUN-11	Findings:	304. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	08-JUN-11	Findings:	88.4 MG/L
Chemical:	CALCIUM		
Sample Collected:	08-JUN-11	Findings:	20.3 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08-JUN-11	Findings:	28.3 MG/L
Chemical:	SODIUM		
Sample Collected:	08-JUN-11	Findings:	4.44 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08-JUN-11	Findings:	26.5 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08-JUN-11	Findings:	0.216 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08-JUN-11	Findings:	27.4 MG/L
Chemical:	SILICA		
Sample Collected:	08-JUN-11	Findings:	178. UG/L
Chemical:	BARIUM		
Sample Collected:	09-JAN-14	Findings:	. 1.17 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	09-JAN-14	Findings:	3.3e-002 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	05-FEB-14	Findings:	. 32. UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	05-FEB-14	Findings:	. 9.25 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-FEB-14	Findings:	. 7.69 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-FEB-14	Findings:	. 27.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-FEB-14	Findings:	. 33.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-FEB-14	Findings:	. 0.698 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	05-FEB-14	Findings:	. 0.541 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05-MAR-14	Findings:	. 21.7 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 7.79 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-MAR-14	Findings:	. 6.5 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 21.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-MAR-14	Findings:	. 0.702 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 23. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 9.36 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	09-APR-14	Findings:	. 0.528 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	09-APR-14	Findings:	. 7.33 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 22. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 35.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-APR-14	Findings:	. 0.69 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	428. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08-JUN-11	Findings:	0.25
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	08-JUN-11	Findings:	31.2 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	08-JUN-11	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	08-JUN-11	Findings:	7050. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-JUN-11	Findings:	17. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	4.4 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	18. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 1.27 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	07-MAY-14	Findings:	. 25.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-MAY-14	Findings:	. 13.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	07-MAY-14	Findings:	. 0.552 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	07-MAY-14	Findings:	. 8.02 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-MAY-14	Findings:	. 23.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-MAY-14	Findings:	. 35.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-MAY-14	Findings:	. 0.684 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 22.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 13.6 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	04-JUN-14	Findings:	. 0.502 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	04-JUN-14	Findings:	. 6.63 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 22.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JUN-14	Findings:	. 0.699 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 19.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 15.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		

Sample Collected:	09-JUL-14	Findings:	. 6.41 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 19.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 36.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JUL-14	Findings:	. 0.516 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	18.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	6.14 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-JUN-11	Findings:	5.47 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JUN-11	Findings:	20.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-JUL-11	Findings:	17.4 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-JUL-11	Findings:	6.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-JUL-11	Findings:	4.87 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 1.25 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	07-AUG-14	Findings:	. 11.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 9.35 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	07-AUG-14	Findings:	. 2.89 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 12.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 36.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-SEP-14	Findings:	. 27.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 13.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-SEP-14	Findings:	. 0.66 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	03-SEP-14	Findings:	. 7.14 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 24.6 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	03-SEP-14	Findings:	. 35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-SEP-14	Findings:	. 0.78 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04-NOV-14	Findings:	. 34.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-NOV-14	Findings:	. 10.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	04-NOV-14	Findings:	. 0.67 UG/L
Chemical:	1,1-DICHLOROETHANE		
Sample Collected:	04-NOV-14	Findings:	. 8.22 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-NOV-14	Findings:	. 26.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-NOV-14	Findings:	. 33.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-JUL-11	Findings:	18.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-JUL-11	Findings:	29.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-JUL-11	Findings:	6570. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-AUG-11	Findings:	20.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	5.17 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-AUG-11	Findings:	5.96 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	22.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	30.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-AUG-11	Findings:	0.51 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	04-NOV-14	Findings:	. 0.78 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	03-DEC-14	Findings:	. 4. UNITS
Chemical:	COLOR		
Sample Collected:	03-DEC-14	Findings:	. 792. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-DEC-14	Findings:	. 246. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-DEC-14	Findings:	. 300. MG/L
Chemical:	BICARBONATE ALKALINITY		

Sample Collected:	03-DEC-14	Findings:	. 0.473 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	03-DEC-14	Findings:	. 343. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-DEC-14	Findings:	. 101. MG/L
Chemical:	CALCIUM		
Sample Collected:	03-DEC-14	Findings:	. 22. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03-DEC-14	Findings:	. 27.7 MG/L
Chemical:	SODIUM		
Sample Collected:	03-DEC-14	Findings:	. 4.56 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03-DEC-14	Findings:	. 28.8 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-DEC-14	Findings:	. 0.243 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-DEC-14	Findings:	. 185. UG/L
Chemical:	BARIUM		
Sample Collected:	03-DEC-14	Findings:	. 112. UG/L
Chemical:	BORON		
Sample Collected:	03-DEC-14	Findings:	. 1.72 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	03-DEC-14	Findings:	. 482. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-DEC-14	Findings:	. 0.28
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03-DEC-14	Findings:	. 35.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-14	Findings:	. 0.159 MG/L
Chemical:	BROMIDE		
Sample Collected:	03-DEC-14	Findings:	. 7940. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-DEC-14	Findings:	. 1.31 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	03-DEC-14	Findings:	. 18. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-DEC-14	Findings:	. 8.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-DEC-14	Findings:	. 3.6 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	6810. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	07-SEP-11	Findings:	15.4 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	07-SEP-11	Findings:	3.93 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-SEP-11	Findings:	17.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-SEP-11	Findings:	30.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-14	Findings:	. 15. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-DEC-14	Findings:	. 0.54 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	07-JAN-15	Findings:	. 21.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-JAN-15	Findings:	. 20.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	07-JAN-15	Findings:	. 5.64 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-JAN-15	Findings:	. 20.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-JAN-15	Findings:	. 35.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-JAN-15	Findings:	. 0.619 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 21.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 21.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-FEB-15	Findings:	. 5.6 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 20. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 35.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-FEB-15	Findings:	. 0.651 UG/L
Chemical:	CIS-1,2-DICHLOROETHYLENE		

B20
WNW
1/2 - 1 Mile
Higher

CA WELLS **2153**

Water System Information:

Prime Station Code:	02N/15W-25L09 S	User ID:	MET
FRDS Number:	1910067185	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 08		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 1910067
System Name: LOS ANGELES-CITY, DEPT. OF WATER & POWER
Organization That Operates System:
P.O. BOX 51111, ROOM 1420
LOS ANGELES, CA 90051
Pop Served: 3700000 Connections: 657422
Area Served: LOS ANGELES

Sample Collected:	27-AUG-12	Findings:	13.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	12.9 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	32.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	35.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-AUG-12	Findings:	0.676 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	20-SEP-12	Findings:	1.52 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	20-SEP-12	Findings:	14. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	15.9 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	33.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-SEP-12	Findings:	37.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-SEP-12	Findings:	0.733 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	25-OCT-12	Findings:	0.728 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	25-OCT-12	Findings:	6.77 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	8.42 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	18.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	25-OCT-12	Findings:	25.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JAN-11	Findings:	1.11 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	4.6 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-NOV-12	Findings:	3. UNITS
Chemical:	COLOR		

Sample Collected:	07-NOV-12	Findings:	661. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07-NOV-12	Findings:	208. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	07-NOV-12	Findings:	254. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	07-NOV-12	Findings:	0.396 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	07-NOV-12	Findings:	286. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	07-NOV-12	Findings:	84.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	07-NOV-12	Findings:	18.5 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	07-NOV-12	Findings:	27.3 MG/L
Chemical:	SODIUM		
Sample Collected:	07-NOV-12	Findings:	4.37 MG/L
Chemical:	POTASSIUM		
Sample Collected:	07-NOV-12	Findings:	25. MG/L
Chemical:	CHLORIDE		
Sample Collected:	07-NOV-12	Findings:	0.203 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	07-NOV-12	Findings:	27.1 MG/L
Chemical:	SILICA		
Sample Collected:	07-NOV-12	Findings:	152. UG/L
Chemical:	BARIUM		
Sample Collected:	07-NOV-12	Findings:	2.48 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	07-NOV-12	Findings:	417. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	07-NOV-12	Findings:	0.29
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	07-NOV-12	Findings:	30.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-12	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	07-NOV-12	Findings:	0.121 MG/L
Chemical:	BROMIDE		
Sample Collected:	07-NOV-12	Findings:	6870. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	07-NOV-12	Findings:	6.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-NOV-12	Findings:	5.5 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	07-NOV-12	Findings:	15. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	8.24 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JAN-11	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JAN-11	Findings:	5860. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-FEB-11	Findings:	1.5 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	9.51 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-FEB-11	Findings:	2.74 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	7.72 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	26.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-NOV-12	Findings:	6.75 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	6.86 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	17.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-NOV-12	Findings:	32.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-DEC-12	Findings:	3.81 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	5.82 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	15. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	12-DEC-12	Findings:	32.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-FEB-11	Findings:	27.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-FEB-11	Findings:	6180. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	10-MAR-11	Findings:	2.54 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10-MAR-11	Findings:	3.81 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10-MAR-11	Findings:	16. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	26-DEC-12	Findings:	2.91 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	26-DEC-12	Findings:	4.95 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	26-DEC-12	Findings:	12.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	26-DEC-12	Findings:	33.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-13	Findings:	1.97 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	3.23 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	9.04 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JAN-13	Findings:	32.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAR-13	Findings:	1.54 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-MAR-13	Findings:	3.15 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-MAR-13	Findings:	7.48 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAR-13	Findings:	32.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-MAR-11	Findings:	3620. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06-APR-11	Findings:	1.41 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-APR-11	Findings:	2.12 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-APR-11	Findings:	9.88 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-APR-11	Findings:	2230. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-APR-13	Findings:	1.88 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-APR-13	Findings:	3.42 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-APR-13	Findings:	8.47 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-APR-13	Findings:	33.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-MAY-13	Findings:	1.78 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	08-MAY-13	Findings:	3.23 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-MAY-13	Findings:	7.71 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-MAY-13	Findings:	31.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-MAY-11	Findings:	4.61 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-MAY-11	Findings:	1040. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-JUN-11	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	08-JUN-11	Findings:	490. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08-JUN-11	Findings:	204. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08-JUN-11	Findings:	249. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08-JUN-11	Findings:	0.635 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	08-JUN-11	Findings:	200. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	08-JUN-11	Findings:	59.2 MG/L
Chemical:	CALCIUM		
Sample Collected:	08-JUN-11	Findings:	12.6 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08-JUN-11	Findings:	28.1 MG/L
Chemical:	SODIUM		
Sample Collected:	08-JUN-11	Findings:	3.87 MG/L
Chemical:	POTASSIUM		
Sample Collected:	08-JUN-11	Findings:	14.6 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08-JUN-11	Findings:	0.196 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08-JUN-11	Findings:	27.9 MG/L
Chemical:	SILICA		
Sample Collected:	05-JUN-13	Findings:	1.93 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-JUN-13	Findings:	3.07 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-JUN-13	Findings:	7.11 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-JUN-13	Findings:	31.5 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	03-JUL-13	Findings:	2.07 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-JUL-13	Findings:	3.35 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-JUL-13	Findings:	7.98 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-JUL-13	Findings:	31.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-AUG-13	Findings:	2.61 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	3.4 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	8.69 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-AUG-13	Findings:	31.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-11	Findings:	157. UG/L
Chemical:	BARIUM		
Sample Collected:	08-JUN-11	Findings:	104. UG/L
Chemical:	BORON		
Sample Collected:	08-JUN-11	Findings:	295. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08-JUN-11	Findings:	- 0.13
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	08-JUN-11	Findings:	5.14 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-SEP-13	Findings:	2.87 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	4.01 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	9.11 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-SEP-13	Findings:	32.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-OCT-13	Findings:	2.95 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-OCT-13	Findings:	3.61 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-OCT-13	Findings:	9.17 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-OCT-13	Findings:	34.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-11	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		

Sample Collected:	08-JUN-11	Findings:	1160. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06-NOV-13	Findings:	5.32 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-NOV-13	Findings:	5.25 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-NOV-13	Findings:	14.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-NOV-13	Findings:	32.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-DEC-13	Findings:	0.938 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	04-DEC-13	Findings:	9.86 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	10.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	04-DEC-13	Findings:	9.23 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	21.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-DEC-13	Findings:	32.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-DEC-13	Findings:	0.559 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	08-JAN-14	Findings:	. 0.776 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	08-JAN-14	Findings:	. 10.8 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JAN-14	Findings:	. 8.82 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-JAN-14	Findings:	. 8.01 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JAN-14	Findings:	. 19.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-JAN-14	Findings:	. 31.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-14	Findings:	. 1.08 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	06-JUL-11	Findings:	5.18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-JUL-11	Findings:	1170. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	05-FEB-14	Findings:	. 0.991 UG/L
Chemical:	CARBON TETRACHLORIDE		

Sample Collected:	05-FEB-14	Findings:	. 13.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-FEB-14	Findings:	. 5.23 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	05-FEB-14	Findings:	. 9.11 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-FEB-14	Findings:	. 22. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-FEB-14	Findings:	. 35.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-FEB-14	Findings:	. 0.629 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	05-MAR-14	Findings:	. 0.613 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	05-MAR-14	Findings:	. 8.54 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 6.73 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 19. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-MAR-14	Findings:	. 38. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-APR-14	Findings:	. 5. UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 4.38 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 11. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-APR-14	Findings:	. 36.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-AUG-11	Findings:	2.08 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	14. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-AUG-11	Findings:	1.84 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	7.37 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-AUG-11	Findings:	21.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-AUG-11	Findings:	4910. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	09-APR-14	Findings:	. 3.e-003 UG/L
Chemical:	N-NITROSODI-N-BUTYLAMINE (NDBA)		

Sample Collected:	09-MAY-14	Findings:	. 5.21 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-MAY-14	Findings:	. 5.62 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-MAY-14	Findings:	. 12.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-MAY-14	Findings:	. 38.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JUN-14	Findings:	. 3.23 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 3.66 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 9.07 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JUN-14	Findings:	. 38.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JUL-14	Findings:	. 2.35 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 2.33 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 6.18 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JUL-14	Findings:	. 35.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-SEP-11	Findings:	5.45 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-SEP-11	Findings:	1230. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06-OCT-11	Findings:	4.96 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-AUG-14	Findings:	. 1.58 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 1.53 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 4.9 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-AUG-14	Findings:	. 37.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-SEP-14	Findings:	. 6.08 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 30.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-SEP-14	Findings:	. 2.59 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	03-SEP-14	Findings:	. 11.7 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-SEP-14	Findings:	. 33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-DEC-14	Findings:	. 3. UNITS
Chemical:	COLOR		
Sample Collected:	10-DEC-14	Findings:	. 896. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10-DEC-14	Findings:	. 262. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	10-DEC-14	Findings:	. 320. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	10-DEC-14	Findings:	. 0.426 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	10-DEC-14	Findings:	. 398. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	10-DEC-14	Findings:	. 116. MG/L
Chemical:	CALCIUM		
Sample Collected:	10-DEC-14	Findings:	. 26.3 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	10-DEC-14	Findings:	. 30.5 MG/L
Chemical:	SODIUM		
Sample Collected:	10-DEC-14	Findings:	. 4.88 MG/L
Chemical:	POTASSIUM		
Sample Collected:	10-DEC-14	Findings:	. 32.6 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10-DEC-14	Findings:	. 0.236 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10-DEC-14	Findings:	. 185. UG/L
Chemical:	BARIUM		
Sample Collected:	10-DEC-14	Findings:	. 104. UG/L
Chemical:	BORON		
Sample Collected:	06-OCT-11	Findings:	1120. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	09-NOV-11	Findings:	0.815 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-NOV-11	Findings:	1.89 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-NOV-11	Findings:	9.52 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-DEC-14	Findings:	. 3.95 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	10-DEC-14	Findings:	. 569. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		

Sample Collected:	10-DEC-14	Findings:	. 0.27
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	10-DEC-14	Findings:	. 39.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-DEC-14	Findings:	. 0.188 MG/L
Chemical:	BROMIDE		
Sample Collected:	10-DEC-14	Findings:	. 8920. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	10-DEC-14	Findings:	. 4.6 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10-DEC-14	Findings:	. 7.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	10-DEC-14	Findings:	. 3.2 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10-DEC-14	Findings:	. 12. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-NOV-11	Findings:	2150. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-DEC-11	Findings:	0.821 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-DEC-11	Findings:	2.51 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-DEC-11	Findings:	11.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-DEC-11	Findings:	2690. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	28-DEC-11	Findings:	4.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	07-JAN-15	Findings:	. 4.11 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-JAN-15	Findings:	. 3.11 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-JAN-15	Findings:	. 11.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-JAN-15	Findings:	. 41.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-FEB-15	Findings:	. 3.62 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 2.92 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 10.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-FEB-15	Findings:	. 40.7 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	04-MAR-15	Findings:	. 3.76 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 3.39 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JAN-12	Findings:	0.504 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	04-JAN-12	Findings:	1.23 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-JAN-12	Findings:	3.36 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-JAN-12	Findings:	14.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04-JAN-12	Findings:	3270. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	08-FEB-12	Findings:	0.55 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-FEB-12	Findings:	1.39 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-FEB-12	Findings:	4.44 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-FEB-12	Findings:	18.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-FEB-12	Findings:	4080. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	15-MAR-12	Findings:	2.03 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	15-MAR-12	Findings:	29.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	15-MAR-12	Findings:	2.63 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 11.6 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	04-MAR-15	Findings:	. 42. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-APR-15	Findings:	. 2.98 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 2.41 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 8.72 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-APR-15	Findings:	. 39.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-MAY-15	Findings:	. 3.25 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	06-MAY-15	Findings:	. 2.8 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	15-MAR-12	Findings:	10.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	15-MAR-12	Findings:	37.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAY-12	Findings:	1.9 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	3.19 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	8.65 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	21.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAY-12	Findings:	2.e-003 UG/L
Chemical:	N-NITROSODIMETHYLAMINE (NDMA)		
Sample Collected:	13-JUN-12	Findings:	5. UNITS
Chemical:	COLOR		
Sample Collected:	13-JUN-12	Findings:	643. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-JUN-12	Findings:	206. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	13-JUN-12	Findings:	251. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	13-JUN-12	Findings:	0.138 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	13-JUN-12	Findings:	0.466 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	13-JUN-12	Findings:	270. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	13-JUN-12	Findings:	78.5 MG/L
Chemical:	CALCIUM		
Sample Collected:	13-JUN-12	Findings:	17.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	13-JUN-12	Findings:	25.7 MG/L
Chemical:	SODIUM		
Sample Collected:	13-JUN-12	Findings:	3.97 MG/L
Chemical:	POTASSIUM		
Sample Collected:	13-JUN-12	Findings:	22.4 MG/L
Chemical:	CHLORIDE		
Sample Collected:	13-JUN-12	Findings:	0.223 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	13-JUN-12	Findings:	25.1 MG/L
Chemical:	SILICA		

Sample Collected:	13-JUN-12	Findings:	149. UG/L
Chemical:	BARIUM		
Sample Collected:	06-MAY-15	Findings:	. 10. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-MAY-15	Findings:	. 40.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUN-12	Findings:	2.28 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	13-JUN-12	Findings:	3.49 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-JUN-12	Findings:	5.83 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-JUN-12	Findings:	13.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-JUN-12	Findings:	403. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	13-JUN-12	Findings:	4.e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	13-JUN-12	Findings:	24.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUN-12	Findings:	0.1 MG/L
Chemical:	BROMIDE		
Sample Collected:	13-JUN-12	Findings:	5450. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	13-JUN-12	Findings:	5.e-003 UG/L
Chemical:	N-NITROSODIETHYLAMINE (NDEA)		
Sample Collected:	13-JUL-12	Findings:	0.706 UG/L
Chemical:	CARBON TETRACHLORIDE		
Sample Collected:	13-JUL-12	Findings:	7.93 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	9.63 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	21.2 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	26.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUL-12	Findings:	1.2e-002 UG/L
Chemical:	N-NITROSODIETHYLAMINE (NDEA)		
Sample Collected:	27-AUG-12	Findings:	1.34 UG/L
Chemical:	CARBON TETRACHLORIDE		

B21
WNW
1/2 - 1 Mile
Higher

CA WELLS **2154**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Water System Information:

Prime Station Code:	02N/15W-25L10 S	User ID:	MET
FRDS Number:	1910067186	County:	Los Angeles
District Number:	15	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	341345.0 1182500.0	Precision:	1 Mile (One Minute)
Source Name:	TUJUNGA WELL 09		
System Number:	1910067		
System Name:	LOS ANGELES-CITY, DEPT. OF WATER & POWER		
Organization That Operates System:			
	P.O. BOX 51111, ROOM 1420 LOS ANGELES, CA 90051		
Pop Served:	3700000	Connections:	657422
Area Served:	LOS ANGELES		
Sample Collected:	09-MAY-11	Findings:	3.68 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-JUN-11	Findings:	3.58 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-JUL-11	Findings:	3.17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-AUG-11	Findings:	3.15 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-SEP-11	Findings:	2.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-OCT-11	Findings:	2.55 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	31-JAN-12	Findings:	0.859 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	31-JAN-12	Findings:	5.89 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-MAY-12	Findings:	1.93 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	26.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	29-MAY-12	Findings:	0.79 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	6.68 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-MAY-12	Findings:	24.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUN-12	Findings:	4. UNITS
Chemical:	COLOR		
Sample Collected:	13-JUN-12	Findings:	689. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-JUN-12	Findings:	234. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		

Sample Collected:	13-JUN-12	Findings:	285. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	13-JUN-12	Findings:	0.15 UG/L
Chemical:	PHOSPHATE (AS PO4)		
Sample Collected:	13-JUN-12	Findings:	0.485 MG/L
Chemical:	TOTAL ORGANIC CARBON (TOC)		
Sample Collected:	13-JUN-12	Findings:	293. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	13-JUN-12	Findings:	86.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	13-JUN-12	Findings:	19. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	13-JUN-12	Findings:	27.6 MG/L
Chemical:	SODIUM		
Sample Collected:	13-JUN-12	Findings:	4.27 MG/L
Chemical:	POTASSIUM		
Sample Collected:	13-JUN-12	Findings:	23.3 MG/L
Chemical:	CHLORIDE		
Sample Collected:	13-JUN-12	Findings:	0.284 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	13-JUN-12	Findings:	25.4 MG/L
Chemical:	SILICA		
Sample Collected:	13-JUN-12	Findings:	159. UG/L
Chemical:	BARIUM		
Sample Collected:	13-JUN-12	Findings:	105. UG/L
Chemical:	BORON		
Sample Collected:	13-JUN-12	Findings:	2.61 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	13-JUN-12	Findings:	2.41 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-JUN-12	Findings:	26.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-JUN-12	Findings:	1.2 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-JUN-12	Findings:	7.46 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-JUN-12	Findings:	430. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	13-JUN-12	Findings:	0.18
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	13-JUN-12	Findings:	24.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUN-12	Findings:	0.122 MG/L
Chemical:	BROMIDE		

Sample Collected:	13-JUN-12	Findings:	5560. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	13-JUL-12	Findings:	2.21 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	2.51 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	8.48 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-JUL-12	Findings:	25.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-AUG-12	Findings:	2.85 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	2.76 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	10.8 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	27-AUG-12	Findings:	35.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-SEP-12	Findings:	4.62 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	26-SEP-12	Findings:	4.97 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	26-SEP-12	Findings:	17.5 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	26-SEP-12	Findings:	47.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-SEP-12	Findings:	0.526 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	29-OCT-12	Findings:	1.35 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	29-OCT-12	Findings:	6.02 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	29-OCT-12	Findings:	1.45 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	29-OCT-12	Findings:	5.78 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	29-OCT-12	Findings:	26.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-NOV-12	Findings:	1.3 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	28-NOV-12	Findings:	1.49 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	28-NOV-12	Findings:	6.23 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	28-NOV-12	Findings:	29.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-DEC-12	Findings:	1.48 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	11. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	13-DEC-12	Findings:	1.81 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	7.64 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-DEC-12	Findings:	30.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-JAN-13	Findings:	1.17 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	15.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	22-JAN-13	Findings:	1.76 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	5.95 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	22-JAN-13	Findings:	30.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-FEB-13	Findings:	0.925 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	1.14 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	4.92 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	13-FEB-13	Findings:	26.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-MAR-13	Findings:	1.04 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-MAR-13	Findings:	1.77 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	21-MAR-13	Findings:	5.94 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-MAR-13	Findings:	29.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-APR-13	Findings:	1.33 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	17-APR-13	Findings:	2.3 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	17-APR-13	Findings:	7.75 UG/L
Chemical:	TRICHLOROETHYLENE		

Sample Collected:	17-APR-13	Findings:	31.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-MAY-13	Findings:	1.13 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	21-MAY-13	Findings:	1.71 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	21-MAY-13	Findings:	5.95 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	21-MAY-13	Findings:	30.6 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-JUN-13	Findings:	1.02 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	19-JUN-13	Findings:	1.54 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	19-JUN-13	Findings:	5.02 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-JUN-13	Findings:	28.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-JUL-13	Findings:	1.09 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	10-JUL-13	Findings:	1.92 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	10-JUL-13	Findings:	5.83 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	10-JUL-13	Findings:	28.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-AUG-13	Findings:	1.14 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-AUG-13	Findings:	1.96 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-AUG-13	Findings:	5.71 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-AUG-13	Findings:	27.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-SEP-13	Findings:	1.25 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	2.3 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	5.98 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	05-SEP-13	Findings:	29.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	16-OCT-13	Findings:	1.66 UG/L
Chemical:	TETRACHLOROETHYLENE		

Sample Collected:	16-OCT-13	Findings:	2.82 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	16-OCT-13	Findings:	7.11 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-OCT-13	Findings:	33.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-NOV-13	Findings:	2.38 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	29.2 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	07-NOV-13	Findings:	1.39 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	8.11 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	07-NOV-13	Findings:	31.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-DEC-13	Findings:	4.1 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-DEC-13	Findings:	25.9 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-DEC-13	Findings:	1.67 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-DEC-13	Findings:	8.71 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-DEC-13	Findings:	29.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-14	Findings:	. 4.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	09-JAN-14	Findings:	. 28. UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	09-JAN-14	Findings:	. 2.76 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09-JAN-14	Findings:	. 12. UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	09-JAN-14	Findings:	. 29.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-14	Findings:	5.e-003 UG/L
Chemical:	N-NITROSODIETHYLAMINE (NDEA)		
Sample Collected:	06-FEB-14	Findings:	. 1.76 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-FEB-14	Findings:	. 6.55 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-FEB-14	Findings:	. 2.13 UG/L
Chemical:	1,1-DICHLOROETHYLENE		

Sample Collected:	06-FEB-14	Findings:	. 7.87 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-FEB-14	Findings:	. 30.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	16-DEC-14	Findings:	. 2.46 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 21.5 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	16-DEC-14	Findings:	. 1.73 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 11.3 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	16-DEC-14	Findings:	. 38.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-15	Findings:	. 2.2 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 19.9 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	08-JAN-15	Findings:	. 1.41 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 9.61 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-JAN-15	Findings:	. 37.4 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-FEB-11	Findings:	0.676 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	2.24 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	08-FEB-11	Findings:	11.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-FEB-15	Findings:	. 2.04 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	06-FEB-15	Findings:	. 17.3 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	06-FEB-15	Findings:	. 1.38 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06-FEB-15	Findings:	. 9.1 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	06-FEB-15	Findings:	. 38.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-MAR-15	Findings:	. 2.78 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 19.8 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		

Sample Collected:	19-MAR-15	Findings:	. 1.64 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 12.4 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	19-MAR-15	Findings:	. 38.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-15	Findings:	. 1.69 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 7.1 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	03-APR-15	Findings:	. 1.05 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 7.89 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	03-APR-15	Findings:	. 36.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-MAR-11	Findings:	1.29 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	17-MAR-11	Findings:	8.2 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-APR-11	Findings:	3.24 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	20-MAY-15	Findings:	. 1.92 UG/L
Chemical:	TETRACHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 13.4 UG/L
Chemical:	TRICHLOROFLUOROMETHANE		
Sample Collected:	20-MAY-15	Findings:	. 1.06 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 9.26 UG/L
Chemical:	TRICHLOROETHYLENE		
Sample Collected:	20-MAY-15	Findings:	. 37.2 MG/L
Chemical:	NITRATE (AS NO3)		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
91352	18	2

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 91352

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

Inquiry Number: 4660230.2s
June 28, 2016

EDR Summary Radius Map Report

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

12431 ROSCOE BLVD
SUN VALLEY, CA 91352

COORDINATES

Latitude (North):	34.2219540 - 34° 13' 19.03''
Longitude (West):	118.4040770 - 118° 24' 14.67''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	370667.0
UTM Y (Meters):	3787462.5
Elevation:	823 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	TP
Source:	U.S. Geological Survey

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140515
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	CITY OF LOS ANGELES	12431 ROSCO BLVD	HAZNET		TP
A2	LAUSD--FRANCIS POLYT	12431 ROSCOE BLVD.	FINDS, ECHO		TP
A3	CITY OF LOS ANGELES	12431 ROSCOE BLVD	HAZNET		TP
A4	POLYTECHNIC HIGH SCH	12431 ROSCOE BLVD	FINDS, ECHO		TP
A5	CITY OF LOS ANGELES-	12431 ROSCOE BLVD	HAZNET		TP
A6	LAUSD--FRANCIS POLYT	12431 ROSCOE BLVD.	RCRA-SQG		TP
A7	POLYTECHNIC HIGH SCH	12431 ROSCOE BLVD	RCRA-LQG		TP
A8	CITY OF LOS ANGELES	12431 ROSCOE BLVD	HAZNET		TP
A9	FRANCIS POLYTECHNIC	12431 ROSCOE BOULEVA	ENVIROSTOR, SCH		TP
A10	LAUSD/ FRANCIS POLYT	12431 ROSCOE BLVD	HAZNET		TP
A11	LAUSD-NORTH HOLLYWOO	12431 ROSCOE BLVD	HAZNET		TP
Reg	SAN FERNANDO VALLEY	NORTH HOLLYWOOD WELL	NPL, SEMS, US ENG CONTROLS, US INST CONTROL,...	Same	1 ft.
12	LEWIS CONTINUATION H	12508 WICKS ST	RCRA-LQG	Higher	18, 0.003, NNW
B13	EAST VALLEY AREA NEW	8451 ARLETA AVENUE	ENVIROSTOR, SCH	Higher	58, 0.011, NW
A14		12440 ROSCOE BLVD	EDR Hist Auto	Lower	70, 0.013, SW
A15	MOBIL STATION HNG	12450 ROSCOE BLVD	LUST, HIST CORTESE	Lower	71, 0.013, SW
A16	AVANTI 33 (STATE)	12450 ROSCOE BLVD	HIST UST	Lower	71, 0.013, SW
A17	JED GAS STATION	12450 ROSCOE BLVD	CA FID UST	Lower	71, 0.013, SW
A18	JED GAS STATION	12450 ROSCOE BLVD	LUST, SWEEPS UST	Lower	71, 0.013, SW
A19	MOBIL SERVICE STATIO	12450 ROSCOE BLVD	UST	Lower	71, 0.013, SW
A20		12450 ROSCOE BLVD	EDR Hist Auto	Lower	71, 0.013, SW
B21	CITY OF LA DWP	8501 ARLETA AVE	UST	Higher	81, 0.015, NW
B22	LOS ANGELES DEPARTME	8501 N ARLETA AVE	SWEEPS UST, CA FID UST	Higher	81, 0.015, NW
B23	CITY OF LADWP	8501 ARLETA AVE	LUST, CHMIRS, HIST CORTESE, NPDES	Higher	81, 0.015, NW
B24	BYRD MIDDLE SCHOOL	8501 ARLETA AVE	RCRA-LQG, FINDS, ECHO	Higher	81, 0.015, NW
25	ROSCOE SITE	12500-12522 W ROSCOE	US BROWNFIELDS, ECHO	Lower	181, 0.034, WSW
26		12334 BURTON ST	EDR Hist Auto	Lower	509, 0.096, SE
27	PAM TRUCKING	8739 REMICK AVENUE	HWT	Higher	749, 0.142, North
C28	LA SHELDON ARLETA LI	12455 WICKS ST	RCRA-SQG, FINDS, ECHO	Lower	752, 0.142, NNW
C29	SHELDON-ARLETA	12455 WICKS ST	SWF/LF, HIST UST, NPDES	Lower	752, 0.142, NNW
C30	SHELDON ARLETA GAS R	12455 WICKS ST	HIST UST	Lower	752, 0.142, NNW
C31	SHELDON-ARLETA LANDF	12455 WICKS ST.	SWF/LF	Lower	752, 0.142, NNW
C32	SHELDON-ARLETA YARD	12455 WICKS ST	SWEEPS UST, CA FID UST	Lower	752, 0.142, NNW
33	HIRO PHOTO LAB	8365 LAUREL AVE	RCRA-SQG, FINDS, ECHO	Higher	826, 0.156, ENE
D34	TEMPCO ENGINEERING,	8866 LAUREL CNYN	HIST CORTESE	Higher	1418, 0.269, NNE
D35	TEMPCO ENGINEERING,	8866 LAUREL CNYN	HIST CORTESE	Higher	1418, 0.269, NNE
D36	TEMPCO ENGINEERING,	8866 LAUREL CYN BLVD	RCRA-SQG, LUST, UST, SWEEPS UST, CA FID UST,...	Higher	1418, 0.269, NNE
37	ARCO #1959	12050 ROSCOE BLVD	LUST, SWEEPS UST, CA FID UST, HIST CORTESE	Higher	1672, 0.317, East
38	RECYCLING INC	8907 LAUREL CANYON B	SWRCY	Higher	1747, 0.331, North

MAPPED SITES SUMMARY

Target Property Address:
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
39	M & R PLATING	11679 SHELDON STREET	ENVIROSTOR	Higher	1768, 0.335, NW
E40	ROSCOE SHELL MKT.	12858 ROSCOE BLVD	LUST, CA FID UST	Lower	2256, 0.427, West
E41	ROSCOE SHELL MKT	12858 ROSCOE	LUST, HIST CORTESE	Lower	2256, 0.427, West
42	SAN FERNANDO VALLEY	GLORIETTA WELLFIELD	Delisted NPL, SEMS, US ENG CONTROLS, ENVIROSTOR,...	Higher	2327, 0.441, NW
E43	HELO'S EXXON	12904 ROSCOE BLVD	LUST	Lower	2456, 0.465, West
E44	HELO'S EXXON	12904 ROSCOE BLVD	LUST, CA FID UST, HAZNET, HIST CORTESE	Lower	2456, 0.465, West
45	BRIGHT REALITY	LAUREL CANYON & JERO	WMUDS/SWAT	Higher	2603, 0.493, North
46	RICHARD E. BYRD HIGH	9171 TELFAIR AVENUE	ENVIROSTOR, SCH	Higher	4143, 0.785, NNE
47	ACCURATE ENGINEERING	8710 TELFAIR	RCRA-LQG, ENVIROSTOR, EMI	Higher	4346, 0.823, ENE
48	SUPERIOR THREAD ROLL	12801 WENTWORTH ST	RCRA-SQG, ENVIROSTOR, FINDS, HAZNET, ECHO	Higher	4440, 0.841, NNW
49	GOLDEN STATE MAGNETI	9301 LAUREL CANYON B	RCRA-LQG, ENVIROSTOR, ICIS, ECHO	Higher	4578, 0.867, NNW
50	DIXON HARD CHROME, I	11645 PENDLETON STRE	ENVIROSTOR, ENF, NPDES, WIP	Higher	4777, 0.905, ENE
51	MILES CHEMICAL COMPA	12801 RANGOON STREET	ENVIROSTOR, SLIC, CHMIRS, ENF, HWT, WIP	Higher	5019, 0.951, NNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
CITY OF LOS ANGELES 12431 ROSCO BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777001410	N/A
LAUSD--FRANCIS POLYT 12431 ROSCOE BLVD. SUN VALLEY, CA 91352	FINDS Registry ID:: 110022033084 ECHO	N/A
CITY OF LOS ANGELES 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777001355	N/A
POLYTECHNIC HIGH SCH 12431 ROSCOE BLVD SUN VALLEY, CA 91352	FINDS Registry ID:: 110037378619 ECHO	N/A
CITY OF LOS ANGELES- 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777000957	N/A
LAUSD--FRANCIS POLYT 12431 ROSCOE BLVD. SUN VALLEY, CA 91352	RCRA-SQG EPA ID:: CAD982039315	CAD982039315
POLYTECHNIC HIGH SCH 12431 ROSCOE BLVD SUN VALLEY, CA 91352	RCRA-LQG EPA ID:: CAR000195750	CAR000195750
CITY OF LOS ANGELES 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777001440	N/A
FRANCIS POLYTECHNIC 12431 ROSCOE BOULEVA PANORAMA CITY, CA 91402	ENVIROSTOR Facility Id: 19820072 Status: No Further Action SCH	N/A

	Facility Id: 19820072 Status: No Further Action	
LAUSD/ FRANCIS POLYT 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAD982039315	N/A
LAUSD-NORTH HOLLYWOO 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAR000195750	N/A

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: A review of the NPL list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

Federal Delisted NPL site list

Delisted NPL: A review of the Delisted NPL list, as provided by EDR, and dated 03/07/2016 has revealed that there is 1 Delisted NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***19***

EXECUTIVE SUMMARY

Federal CERCLIS list

SEMS: A review of the SEMS list, as provided by EDR, and dated 03/07/2016 has revealed that there are 2 SEMS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***
SAN FERNANDO VALLEY	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***19***

Federal RCRA generators list

RCRA-LQG: A review of the RCRA-LQG list, as provided by EDR, and dated 12/09/2015 has revealed that there are 2 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEWIS CONTINUATION H	12508 WICKS ST	NNW 0 - 1/8 (0.003 mi.)	12	11
BYRD MIDDLE SCHOOL	***8501 ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B24***	***14***

RCRA-SQG: A review of the RCRA-SQG list, as provided by EDR, and dated 12/09/2015 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HIRO PHOTO LAB	***8365 LAUREL AVE***	***ENE 1/8 - 1/4 (0.156 mi.)***	***33***	***16***

Lower Elevation	Address	Direction / Distance	Map ID	Page
LA SHELDON ARLETA LI	***12455 WICKS ST***	***NNW 1/8 - 1/4 (0.142 mi.)***	***C28***	***15***

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A review of the US ENG CONTROLS list, as provided by EDR, and dated 09/10/2015 has revealed that there are 2 US ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***
SAN FERNANDO VALLEY	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***19***

US INST CONTROL: A review of the US INST CONTROL list, as provided by EDR, and dated 09/10/2015 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

State- and tribal - equivalent CERCLIS

ENVIROSTOR: A review of the ENVIROSTOR list, as provided by EDR, and dated 05/02/2016 has revealed that there are 10 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY Facility Id: 19990011 Status: Active	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***
EAST VALLEY AREA NEW Facility Id: 19940001 Status: No Further Action	***8451 ARLETA AVENUE***	***NW 0 - 1/8 (0.011 mi.)***	***B13***	***11***
M & R PLATING Facility Id: 60001503 Status: Refer: EPA	11679 SHELDON STREET	NW 1/4 - 1/2 (0.335 mi.)	39	18
SAN FERNANDO VALLEY Facility Id: 19990010 Status: No Further Action	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***19***
RICHARD E. BYRD HIGH Facility Id: 60000277 Status: No Further Action	***9171 TELFAIR AVENUE***	***NNE 1/2 - 1 (0.785 mi.)***	***46***	***20***
ACCURATE ENGINEERING Facility Id: 71002709 Status: Refer: Other Agency	***8710 TELFAIR***	***ENE 1/2 - 1 (0.823 mi.)***	***47***	***21***
SUPERIOR THREAD ROLL Facility Id: 60001084 Status: No Further Action	***12801 WENTWORTH ST***	***NNW 1/2 - 1 (0.841 mi.)***	***48***	***21***
GOLDEN STATE MAGNETI Facility Id: 71003474 Status: Refer: Other Agency	***9301 LAUREL CANYON B***	***NNW 1/2 - 1 (0.867 mi.)***	***49***	***22***
DIXON HARD CHROME, I Facility Id: 71002228 Status: Refer: EPA	***11645 PENDLETON STRE***	***ENE 1/2 - 1 (0.905 mi.)***	***50***	***22***
MILES CHEMICAL COMPA Facility Id: 60001085 Status: No Further Action	***12801 RANGOON STREET***	***NNW 1/2 - 1 (0.951 mi.)***	***51***	***22***

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: A review of the SWF/LF list, as provided by EDR, and dated 05/16/2016 has revealed that there are 2 SWF/LF sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELDON-ARLETA	***12455 WICKS ST***	***NNW 1/8 - 1/4 (0.142 mi.)***	***C29***	***15***
Site ID: 2020 Status: Closed				
SHELDON-ARLETA LANDF	12455 WICKS ST.	NNW 1/8 - 1/4 (0.142 mi.)	C31	15
Facility ID: 19-AR-0835 Operational Status: Closed Regulation Status: Unpermitted Facility Status: closure work complete and land redevelopment in progress				

State and tribal leaking storage tank lists

LUST: A review of the LUST list, as provided by EDR, and dated 03/14/2016 has revealed that there are 9 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF LADWP	***8501 ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B23***	***13***
Status: Completed - Case Closed Facility Id: 913522461 Status: Case Closed Global Id: T0603702336 Global ID: T0603702336				
TEMPCO ENGINEERING,	***8866 LAUREL CYN BLVD***	***NNE 1/4 - 1/2 (0.269 mi.)***	***D36***	***17***
Status: Completed - Case Closed Facility Id: 913521125 Facility Id: 913521125A Status: Case Closed Global Id: T0603702314 Global Id: T0603774984 Global Id: T0603702315 Global ID: T0603702314 Global ID: T0603702315				
ARCO #1959	***12050 ROSCOE BLVD***	***E 1/4 - 1/2 (0.317 mi.)***	***37***	***17***
Status: Completed - Case Closed Facility Id: 916056852 Status: Case Closed Global Id: T0603702586 Global ID: T0603702586				

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL STATION HNG	***12450 ROSCOE BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***A15***	***11***
Status: Completed - Case Closed				

Global Id: T0603702338				
JED GAS STATION Facility Id: 913522489 Status: Case Closed Global ID: T0603702338	***12450 ROSCOE BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***A18***	***12***
ROSCOE SHELL MKT. Facility Id: 913522498 Status: Case Closed Global ID: T0603702339	***12858 ROSCOE BLVD***	***W 1/4 - 1/2 (0.427 mi.)***	***E40***	***18***
ROSCOE SHELL MKT Status: Completed - Case Closed Global Id: T0603798415 Global Id: T0603702339	***12858 ROSCOE***	***W 1/4 - 1/2 (0.427 mi.)***	***E41***	***19***
HELO'S EXXON Facility Id: 913522507 Status: Case Closed Global ID: T0603702340	12904 ROSCOE BLVD	W 1/4 - 1/2 (0.465 mi.)	E43	20
HELO'S EXXON Status: Completed - Case Closed Global Id: T0603702340	***12904 ROSCOE BLVD***	***W 1/4 - 1/2 (0.465 mi.)***	***E44***	***20***

State and tribal registered storage tank lists

UST: A review of the UST list, as provided by EDR, and dated 03/14/2016 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF LA DWP Facility Id: 24609	8501 ARLETA AVE	NW 0 - 1/8 (0.015 mi.)	B21	13

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL SERVICE STATIO Facility Id: 24731	12450 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A19	12

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/22/2015 has revealed that there is 1 US BROWNFIELDS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROSCOE SITE	***12500-12522 W ROSCOE***	***WSW 0 - 1/8 (0.034 mi.)***	***25***	***14***

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: A review of the WMUDS/SWAT list, as provided by EDR, and dated 04/01/2000 has revealed that there is 1 WMUDS/SWAT site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BRIGHT REALITY	LAUREL CANYON & JERO	N 1/4 - 1/2 (0.493 mi.)	45	20

SWRCY: A review of the SWRCY list, as provided by EDR, and dated 03/15/2016 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RECYCLING INC Cert Id: RC227919.001	8907 LAUREL CANYON B	N 1/4 - 1/2 (0.331 mi.)	38	18

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 2 HIST Cal-Sites sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***
SAN FERNANDO VALLEY	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***19***

SCH: A review of the SCH list, as provided by EDR, and dated 05/02/2016 has revealed that there is 1 SCH site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EAST VALLEY AREA NEW Facility Id: 19940001 Status: No Further Action	***8451 ARLETA AVENUE***	***NW 0 - 1/8 (0.011 mi.)***	***B13***	***11***

Local Lists of Registered Storage Tanks

SWEEPS UST: A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 3 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOS ANGELES DEPARTME Status: A	***8501 N ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B22***	***13***

Tank Status: A
Comp Number: 8114

Lower Elevation	Address	Direction / Distance	Map ID	Page
JED GAS STATION	***12450 ROSCOE BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***A18***	***12***
Status: A Tank Status: A Comp Number: 354				
SHELDON-ARLETA YARD	***12455 WICKS ST***	***NNW 1/8 - 1/4 (0.142 mi.)***	***C32***	***16***
Comp Number: 3270				

HIST UST: A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
AVANTI 33 (STATE)	12450 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A16	12
Facility Id: 00000003985				
SHELDON-ARLETA	***12455 WICKS ST***	***NNW 1/8 - 1/4 (0.142 mi.)***	***C29***	***15***
Facility Id: 00000060960				
SHELDON ARLETA GAS R	12455 WICKS ST	NNW 1/8 - 1/4 (0.142 mi.)	C30	15
Facility Id: 00000064870				

CA FID UST: A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOS ANGELES DEPARTME	***8501 N ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B22***	***13***
Facility Id: 19056589 Status: A				

Lower Elevation	Address	Direction / Distance	Map ID	Page
JED GAS STATION	12450 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A17	12
Facility Id: 19055299 Status: A				
SHELDON-ARLETA YARD	***12455 WICKS ST***	***NNW 1/8 - 1/4 (0.142 mi.)***	***C32***	***16***
Facility Id: 19025310 Status: I				

Other Ascertainable Records

ROD: A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there are 2

EXECUTIVE SUMMARY

ROD sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***
SAN FERNANDO VALLEY	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***19***

PRP: A review of the PRP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 PRP site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

ICIS: A review of the ICIS list, as provided by EDR, and dated 01/23/2015 has revealed that there is 1 ICIS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

CONSENT: A review of the CONSENT list, as provided by EDR, and dated 12/31/2014 has revealed that there is 1 CONSENT site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

FINDS: A review of the FINDS list, as provided by EDR, and dated 07/20/2015 has revealed that there is 1 FINDS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

Cortese: A review of the Cortese list, as provided by EDR, and dated 03/28/2016 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***
Envirostor Id: 19990011				
Cleanup Status: ACTIVE				

EXECUTIVE SUMMARY

HIST CORTESE: A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 8 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF LADWP Reg Id: 913522461	***8501 ARLETA AVE***	***NW 0 - 1/8 (0.015 mi.)***	***B23***	***13***
TEMPCO ENGINEERING, Reg Id: 913521125A	8866 LAUREL CNYN	NNE 1/4 - 1/2 (0.269 mi.)	D34	16
TEMPCO ENGINEERING, Reg Id: 913521125	8866 LAUREL CNYN	NNE 1/4 - 1/2 (0.269 mi.)	D35	16
ARCO #1959 Reg Id: 916056852	***12050 ROSCOE BLVD***	***E 1/4 - 1/2 (0.317 mi.)***	***37***	***17***
SAN FERNANDO VALLEY Reg Id: 19990010	***GLORIETTA WELLFIELD***	***NW 1/4 - 1/2 (0.441 mi.)***	***42***	***19***

Lower Elevation	Address	Direction / Distance	Map ID	Page
MOBIL STATION HNG Reg Id: 913522489	***12450 ROSCOE BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***A15***	***11***
ROSCOE SHELL MKT	***12858 ROSCOE***	***W 1/4 - 1/2 (0.427 mi.)***	***E41***	***19***
HELO'S EXXON Reg Id: 913522507	***12904 ROSCOE BLVD***	***W 1/4 - 1/2 (0.465 mi.)***	***E44***	***20***

HWT: A review of the HWT list, as provided by EDR, and dated 04/11/2016 has revealed that there is 1 HWT site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PAM TRUCKING Reg Num: 5751	8739 REMICK AVENUE	N 1/8 - 1/4 (0.142 mi.)	27	14

ECHO: A review of the ECHO list, as provided by EDR, and dated 09/20/2015 has revealed that there is 1 ECHO site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN FERNANDO VALLEY	***NORTH HOLLYWOOD WELL***	***0 - 1/8 (0.000 mi.)***	***0***	***10***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 3

EXECUTIVE SUMMARY

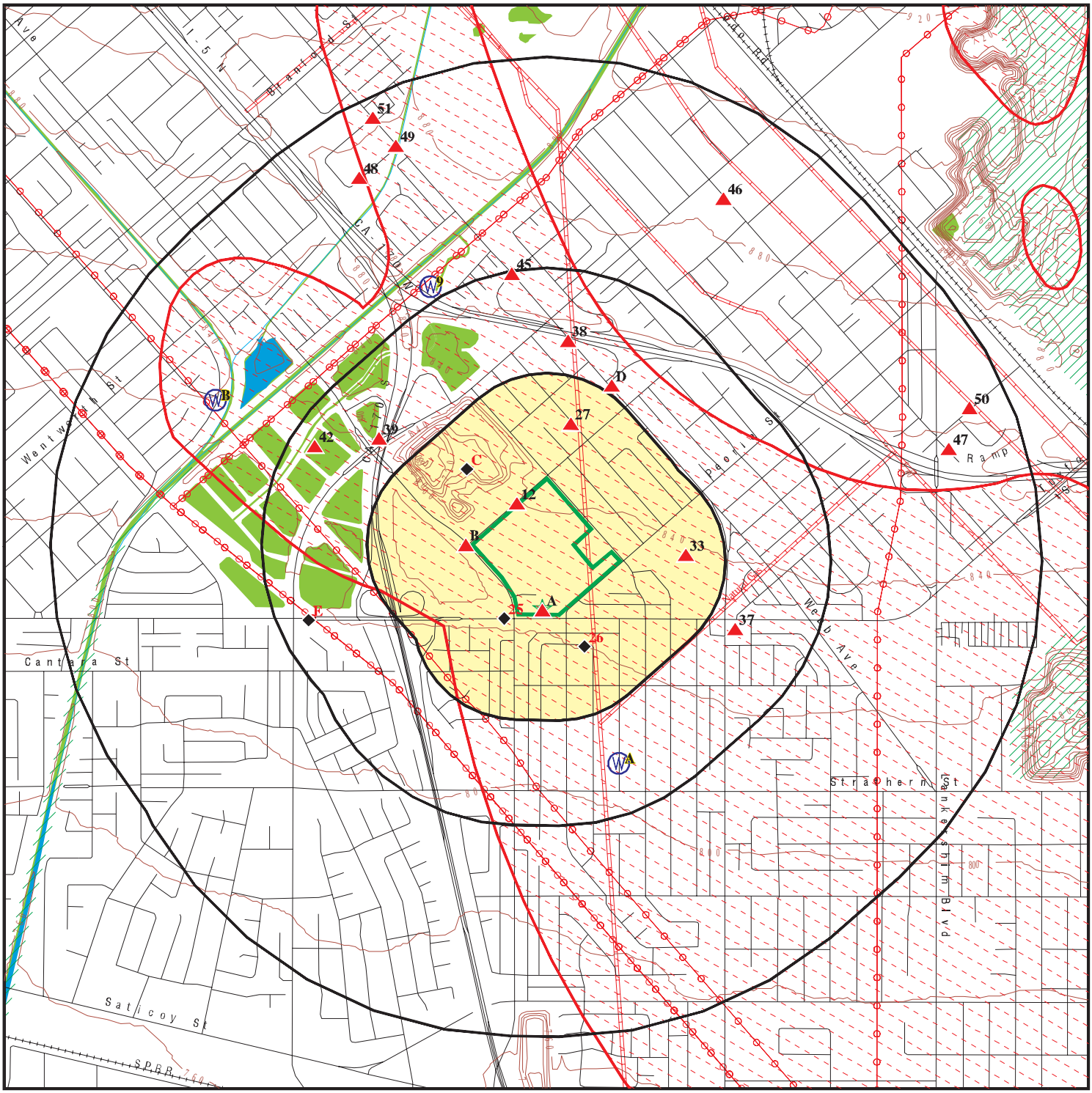
EDR Hist Auto sites within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	12440 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A14	11
Not reported	12450 ROSCOE BLVD	SW 0 - 1/8 (0.013 mi.)	A20	13
Not reported	12334 BURTON ST	SE 0 - 1/8 (0.096 mi.)	26	14

Count: 4 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NORTH HOLLYWOOD	S107737526	VALLEY REGION ES #7 SITE 14, 56400	SATICOY STREET/GENTRY AVENUE	91605	ENVIROSTOR, SCH
PACOIMA	1011845386	TUJUNGA WELLFIELD SITE DISCOVERY	ROSCOE BLVD AND NAGLE AVENUE		SEMS
PACOIMA	S111120540	THERMAL TECHNOLOGIES	11660 SHELDON STREET UNIT A	91331	ENVIROSTOR
PACOIMA, ARLETA, SUN	S111120536	TUJUNGA WELLFIELD DISCOVERY PROJEC	PACOIMA, ARLETA, SUN VALLEY, S	91331	ENVIROSTOR

OVERVIEW MAP - 4660230.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: John H Francis Polytechnic High School ADDRESS: 12431 Roscoe Blvd Sun Valley CA 91352 LAT/LONG: 34.221954 / 118.404077	CLIENT: Civil-Environmental-survey Group CONTACT: Skye Green INQUIRY #: 4660230.2s DATE: June 28, 2016 4:03 pm

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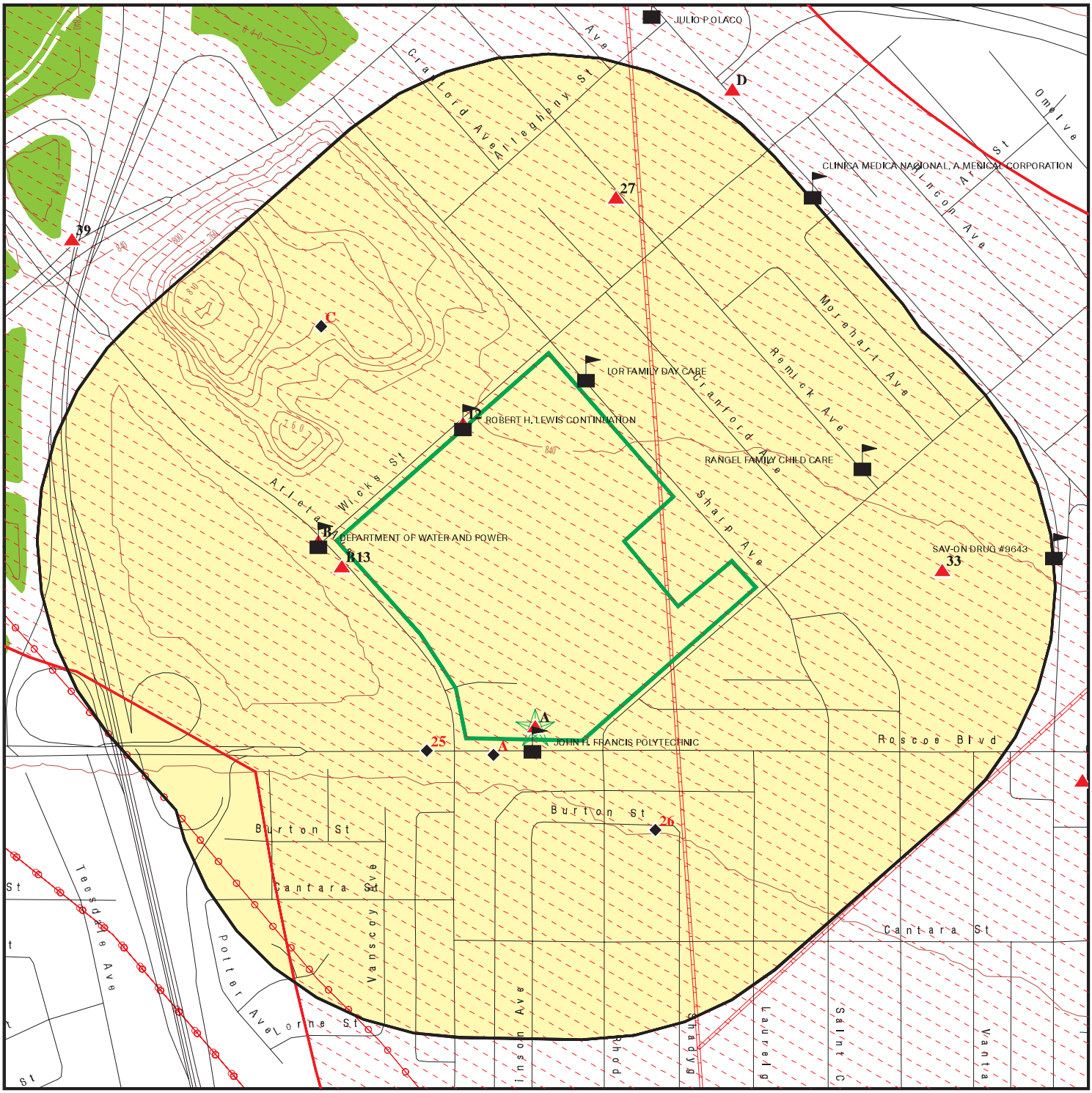
DETAIL MAP - 4660230.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	John H Francis Polytechnic High School	CLIENT:	Civil-Environmental-survey Group
ADDRESS:	12431 Roscoe Blvd Sun Valley CA 91352	CONTACT:	Skye Green
		INQUIRY #:	4660230.2s
LAT/LONG:	34.221954 / 118.404077	DATE:	June 28, 2016 4:07 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	1	0	NR	1
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	0	1	NR	NR	2
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250	1	2	0	NR	NR	NR	3
RCRA-SQG	0.250	1	0	2	NR	NR	NR	3
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		1	0	1	NR	NR	2
US INST CONTROL	0.500		1	0	0	NR	NR	1
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000	1	2	0	2	6	NR	11
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	2	0	NR	NR	2
State and tribal leaking storage tank lists								
LUST	0.500		3	0	6	NR	NR	9

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		2	0	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		1	0	0	NR	NR	1
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	1	NR	NR	1
SWRCY	0.500		0	0	1	NR	NR	1
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
AOCONCERN	1.000		0	0	0	0	NR	0
HIST Cal-Sites	1.000		1	0	1	0	NR	2
SCH	0.250	1	1	0	NR	NR	NR	2
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		2	1	NR	NR	NR	3
HIST UST	0.250		1	2	NR	NR	NR	3
CA FID UST	0.250		2	1	NR	NR	NR	3
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		1	0	1	0	NR	2
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		1	NR	NR	NR	NR	1
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		1	NR	NR	NR	NR	1
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		1	0	0	0	NR	1
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001	2	1	NR	NR	NR	NR	3
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		1	0	0	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001	6	0	NR	NR	NR	NR	6
HIST CORTESE	0.500		2	0	6	NR	NR	8
LOS ANGELES CO. HMS	0.001		0	NR	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
HWT	0.250		0	1	NR	NR	NR	1
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
LA Co. Site Mitigation	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ECHO	0.001	2	1	NR	NR	NR	NR	3
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		3	NR	NR	NR	NR	3
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		14	33	9	21	6	0	83

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target
Property
CITY OF LOS ANGELES - DPW - BUREAU SANIT
12431 ROSCO BLVD
SUN VALLEY, CA 91352
HAZNET **S113021421**
N/A

Actual:
823 ft.

Click here for full text details

HAZNET
GEPAID: CAH777001410

A2
Target
Property
LAUSD--FRANCIS POLYTECHNIC HS
12431 ROSCOE BLVD.
SUN VALLEY, CA 91352
FINDS **1008310322**
ECHO **N/A**

Actual:
823 ft.

Click here for full text details

FINDS
Registry ID:: 110022033084

A3
Target
Property
CITY OF LOS ANGELES - DPW - BUREAU SANIT
12431 ROSCOE BLVD
SUN VALLEY, CA 91352
HAZNET **S113021396**
N/A

Actual:
823 ft.

Click here for full text details

HAZNET
GEPAID: CAH777001355

A4
Target
Property
POLYTECHNIC HIGH SCHOOL
12431 ROSCOE BLVD
SUN VALLEY, CA 91352
FINDS **1011917615**
ECHO **N/A**

Actual:
823 ft.

Click here for full text details

FINDS
Registry ID:: 110037378619

A5
Target
Property
CITY OF LOS ANGELES-DPW
12431 ROSCOE BLVD
SUN VALLEY, CA 91352
HAZNET **S113021169**
N/A

Actual:
823 ft.

Click here for full text details

HAZNET
GEPAID: CAH777000957

A6
Target Property

LAUSD--FRANCIS POLYTECHNIC HS
12431 ROSCOE BLVD.
SUN VALLEY, CA 91352

RCRA-SQG **1008194416**
CAD982039315

Actual:
823 ft.

Click here for full text details

RCRA-SQG
EPA Id: CAD982039315

A7
Target Property

POLYTECHNIC HIGH SCHOOL
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

RCRA-LQG **1011861622**
CAR000195750

Actual:
823 ft.

Click here for full text details

RCRA-LQG
EPA Id: CAR000195750

A8
Target Property

CITY OF LOS ANGELES - DPW - BUREAU SANIT
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

HAZNET **S113021439**
N/A

Actual:
823 ft.

Click here for full text details

HAZNET
GEPAID: CAH777001440

A9
Target Property

FRANCIS POLYTECHNIC HIGH SCHOOL
12431 ROSCOE BOULEVARD
PANORAMA CITY, CA 91402

ENVIROSTOR **S105628600**
SCH **N/A**

Actual:
823 ft.

Click here for full text details

ENVIROSTOR
Facility Id: 19820072
Status: No Further Action

SCH
Facility Id: 19820072
Status: No Further Action

A10
Target Property

LAUSD/ FRANCIS POLYTECHNIC HS
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

HAZNET **S113013220**
N/A

Actual:
823 ft.

Click here for full text details

HAZNET
GEPAID: CAD982039315

A11
Target
Property

LAUSD-NORTH HOLLYWOOD POLY CAS
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

HAZNET **S113178708**
N/A

Actual:
823 ft.

Click here for full text details

HAZNET
GEPAID: CAR000195750

NPL
Region

< 1/8
1 ft.

SAN FERNANDO VALLEY (AREA 1)
NORTH HOLLYWOOD WELLFIELD AREA
NORTH HOLLYWOOD, CA 91601

Click here for full text details

NPL **1000709322**
SEMS **CAD980894893**
US ENG CONTROLS
US INST CONTROL
ENVIROSTOR
HIST Cal-Sites
ROD
PRP
ICIS
CONSENT
FINDS
Cortese
ECHO

NPL
Cerclis ID:: 902251
EPA Id: CAD980894893

SEMS
Site ID: 0902251
EPA Id: CAD980894893

US ENG CONTROLS
EPA ID:: CAD980894893
EPA ID:: CAD980894893

US INST CONTROL
EPA ID:: CAD980894893

ENVIROSTOR
Facility Id: 19990011
Status: Active

ROD
EPA ID:: CAD980894893

ICIS
FRS ID:: 110009267961

FINDS
Registry ID:: 110009267961

SAN FERNANDO VALLEY (AREA 1) (Continued) **1000709322**

Cortese
Envirostor Id: 19990011
Cleanup Status: ACTIVE

12
NNW
< 1/8
0.003 mi.
18 ft.

Relative:
Higher

LEWIS CONTINUATION HIGH SCHOOL **RCRA-LQG** **1011861590**
12508 WICKS ST **CAR000195206**
SUN VALLEY, CA 91352

Click here for full text details

RCRA-LQG
EPA Id: CAR000195206

B13
NW
< 1/8
0.011 mi.
58 ft.

Relative:
Higher

EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A **ENVIROSTOR** **S105628653**
8451 ARLETA AVENUE **SCH** **N/A**
SUN VALLEY, CA 91352

Click here for full text details

ENVIROSTOR
Facility Id: 19940001
Status: No Further Action

SCH
Facility Id: 19940001
Status: No Further Action

A14
SW
< 1/8
0.013 mi.
70 ft.

Relative:
Lower

EDR Hist Auto **1015191745**
12440 ROSCOE BLVD **N/A**
SUN VALLEY, CA 91352

Click here for full text details

A15
SW
< 1/8
0.013 mi.
71 ft.

Relative:
Lower

MOBIL STATION HNG **LUST** **S103626589**
12450 ROSCOE BLVD **HIST CORTESE** **N/A**
SUN VALLEY, CA 91352

Click here for full text details

LUST
Status: Completed - Case Closed
Global Id: T0603702338

Click here to access the California GeoTracker records for this facility

HIST CORTESE

MOBIL STATION HNG (Continued) **S103626589**

Reg Id: 913522489

A16
SW
< 1/8
0.013 mi.
71 ft.

Relative:
Lower

AVANTI 33 (STATE) **HIST UST** **U001567766**
12450 ROSCOE BLVD **N/A**
SUN VALLEY, CA 91352

Click here for full text details

HIST UST
Facility Id: 00000003985

A17
SW
< 1/8
0.013 mi.
71 ft.

Relative:
Lower

JED GAS STATION **CA FID UST** **S101587324**
12450 ROSCOE BLVD **N/A**
SUN VALLEY, CA 91352

Click here for full text details

CA FID UST
Status: A
Facility Id: 19055299

A18
SW
< 1/8
0.013 mi.
71 ft.

Relative:
Lower

JED GAS STATION **LUST** **S104406377**
12450 ROSCOE BLVD **SWEEPS UST** **N/A**
SUN VALLEY, CA 91352

Click here for full text details

LUST
Status: Case Closed
Facility Id: 913522489
Global ID: T0603702338

SWEEPS UST
Status: A
Tank Status: A
Comp Number: 354

A19
SW
< 1/8
0.013 mi.
71 ft.

Relative:
Lower

MOBIL SERVICE STATION HNG **UST** **U003781098**
12450 ROSCOE BLVD **N/A**
SUN VALLEY, CA 91352

Click here for full text details

UST
Facility Id: 24731

A20
SW
< 1/8
0.013 mi.
71 ft.

Relative:
Lower

12450 ROSCOE BLVD
SUN VALLEY, CA 91352

EDR Hist Auto **1015191917**
N/A

Click here for full text details

B21
NW
< 1/8
0.015 mi.
81 ft.

Relative:
Higher

CITY OF LA DWP
8501 ARLETA AVE
SUN VALLEY, CA 91352

UST **U003781003**
N/A

Click here for full text details

UST
Facility Id: 24609

B22
NW
< 1/8
0.015 mi.
81 ft.

Relative:
Higher

LOS ANGELES DEPARTMENT OF WATER AND POWER
8501 N ARLETA AVE
SUN VALLEY, CA 91352

SWEEPS UST **S101588343**
CA FID UST **N/A**

Click here for full text details

SWEEPS UST
Status: A
Tank Status: A
Comp Number: 8114

CA FID UST
Status: A
Facility Id: 19056589

B23
NW
< 1/8
0.015 mi.
81 ft.

Relative:
Higher

CITY OF LADWP
8501 ARLETA AVE
SUN VALLEY, CA 91352

LUST **S104406375**
CHMIRS **N/A**
HIST CORTESE
NPDES

Click here for full text details

LUST
Status: Case Closed
Status: Completed - Case Closed
Facility Id: 913522461
Global Id: T0603702336
Global ID: T0603702336

Click here to access the California GeoTracker records for this facility

CHMIRS
OES Incident Number: 7-4307
OES Incident Number: 3-2289

HIST CORTESE

CITY OF LADWP (Continued) **S104406375**

Reg Id: 913522461

B24
NW
< 1/8
0.015 mi.
81 ft.

Relative:
Higher

BYRD MIDDLE SCHOOL **RCRA-LQG** **1001967355**
8501 ARLETA AVE **FINDS** **CAR000068031**
SUN VALLEY, CA 91352 **ECHO**

Click here for full text details

RCRA-LQG
EPA Id: CAR000068031

FINDS
Registry ID:: 110002933773

25
WSW
< 1/8
0.034 mi.
181 ft.

Relative:
Lower

ROSCOE SITE **US BROWNFIELDS** **1018119711**
12500-12522 W ROSCOE BLVD **ECHO** **N/A**
PACOIMA, CA 91331

Click here for full text details

US BROWNFIELDS
ACRES property ID: 176504

26
SE
< 1/8
0.096 mi.
509 ft.

Relative:
Lower

EDR Hist Auto **1015189585**

12334 BURTON ST **N/A**
NORTH HOLLYWOOD, CA 91605

Click here for full text details

27
North
1/8-1/4
0.142 mi.
749 ft.

Relative:
Higher

PAM TRUCKING **HWT** **S117312153**
8739 REMICK AVENUE **N/A**
SUN VALLEY, CA 91352

Click here for full text details

HWT
Reg Num: 5751

C28
NNW
1/8-1/4
0.142 mi.
752 ft.

Relative:
Lower

LA SHELDON ARLETA LIBRARY
12455 WICKS ST
LOS ANGELES, CA 90012

RCRA-SQG
FINDS
ECHO

1000381491
CAD981990534

Click here for full text details

RCRA-SQG
EPA Id: CAD981990534

FINDS
Registry ID:: 110002768452

C29
NNW
1/8-1/4
0.142 mi.
752 ft.

Relative:
Lower

SHELDON-ARLETA
12455 WICKS ST
SUN VALLEY, CA 91352

SWF/LF
HIST UST
NPDES

U001567820
N/A

Click here for full text details

SWF/LF
Status: Closed
Site ID: 2020

HIST UST
Facility Id: 00000060960

NPDES
Facility Status: Active

C30
NNW
1/8-1/4
0.142 mi.
752 ft.

Relative:
Lower

SHELDON ARLETA GAS RECOVERY FA
12455 WICKS ST
SUN VALLEY, CA 91352

HIST UST

U001567819
N/A

Click here for full text details

HIST UST
Facility Id: 00000064870

C31
NNW
1/8-1/4
0.142 mi.
752 ft.

Relative:
Lower

SHELDON-ARLETA LANDFILL
12455 WICKS ST.
LOS ANGELES, CA 91352

SWF/LF

S105036243
N/A

Click here for full text details

SWF/LF
Facility Status: closure work complete and land redevelopment in progress
Regulation Status: Unpermitted
Facility ID: 19-AR-0835
Operational Status: Closed

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
C32 **NNW** **1/8-1/4** **0.142 mi.** **752 ft.** **Relative:** **Lower**	**SHELDON-ARLETA YARD** **12455 WICKS ST** **SUN VALLEY, CA 91352** **Click here for full text details** **SWEEPS UST** Comp Number: 3270 **CA FID UST** Status: I Facility Id: 19025310	**SWEEPS UST** **CA FID UST**	**S101618532** **N/A**
33 **ENE** **1/8-1/4** **0.156 mi.** **826 ft.** **Relative:** **Higher**	**HIRO PHOTO LAB** **8365 LAUREL AVE** **SUN VALLEY, CA 91352** **Click here for full text details** **RCRA-SQG** EPA Id: CAD981457732 **FINDS** Registry ID:: 110002714126	**RCRA-SQG** **FINDS** **ECHO**	**1000326473** **CAD981457732**
D34 **NNE** **1/4-1/2** **0.269 mi.** **1418 ft.** **Relative:** **Higher**	**TEMPCO ENGINEERING, INC.** **8866 LAUREL CNYN** **SUN VALLEY, CA 91352** **Click here for full text details** **HIST CORTESE** Reg Id: 913521125A	**HIST CORTESE**	**S105026812** **N/A**
D35 **NNE** **1/4-1/2** **0.269 mi.** **1418 ft.** **Relative:** **Higher**	**TEMPCO ENGINEERING, INC** **8866 LAUREL CNYN** **SUN VALLEY, CA 91352** **Click here for full text details** **HIST CORTESE** Reg Id: 913521125	**HIST CORTESE**	**S105026811** **N/A**

D36
NNE
1/4-1/2
0.269 mi.
1418 ft.

Relative:
Higher

TEMPCO ENGINEERING, INC
8866 LAUREL CYN BLVD
SUN VALLEY, CA 91352

Click here for full text details

Database(s): RCRA-SQG, LUST, UST, SWEEPS UST, CA FID UST, FINDS, NPDES, ECHO

EDR ID Number: 1000345745
EPA ID Number: CAD982401705

RCRA-SQG
EPA Id: CAD982401705

LUST
Status: Case Closed
Status: Completed - Case Closed
Facility Id: 913521125
Facility Id: 913521125A
Global Id: T0603702314
Global Id: T0603774984
Global Id: T0603702315
Global ID: T0603702314
Global ID: T0603702315

Click here to access the California GeoTracker records for this facility

UST
Facility Id: 24621

SWEEPS UST
Status: A
Comp Number: 5270

CA FID UST
Status: A
Facility Id: 19001089

FINDS
Registry ID:: 110002804476

NPDES
Facility Status: Active

37
East
1/4-1/2
0.317 mi.
1672 ft.

Relative:
Higher

ARCO #1959
12050 ROSCOE BLVD
NORTH HOLLYWOOD, CA 91605

Click here for full text details

Database(s): LUST, SWEEPS UST, CA FID UST, HIST CORTESE

EDR ID Number: S101583348
EPA ID Number: N/A

LUST
Status: Case Closed
Status: Completed - Case Closed

ARCO #1959 (Continued) **S101583348**

Facility Id: 916056852
Global Id: T0603702586
Global ID: T0603702586

Click here to access the California GeoTracker records for this facility

SWEEPS UST
Status: A
Tank Status: A
Comp Number: 1602

CA FID UST
Status: A
Facility Id: 19003485

HIST CORTESE
Reg Id: 916056852

38
North
1/4-1/2
0.331 mi.
1747 ft.

Relative:
Higher

RECYCLING INC **SWRCY** **S108991910**
8907 LAUREL CANYON BLVD **N/A**
SUN VALLEY, CA 91352

Click here for full text details

SWRCY
Cert Id: RC227919.001

39
NW
1/4-1/2
0.335 mi.
1768 ft.

Relative:
Higher

M & R PLATING **ENVIROSTOR** **S111120539**
11679 SHELDON STREET **N/A**
PACOIMA, CA 91331

Click here for full text details

ENVIROSTOR
Facility Id: 60001503
Status: Refer: EPA

E40
West
1/4-1/2
0.427 mi.
2256 ft.

Relative:
Lower

ROSCOE SHELL MKT. **LUST** **S101584364**
12858 ROSCOE BLVD **CA FID UST** **N/A**
SUN VALLEY, CA 91352

Click here for full text details

LUST
Status: Case Closed
Facility Id: 913522498
Global ID: T0603702339

CA FID UST

ROSCOE SHELL MKT. (Continued) **S101584364**

Status: A
Facility Id: 19010803

E41
West
1/4-1/2
0.427 mi.
2256 ft.

Relative:
Lower

ROSCOE SHELL MKT **LUST** **S105126377**
12858 ROSCOE **HIST CORTESE** **N/A**
SUN VALLEY, CA 91352

Click here for full text details

LUST
Status: Completed - Case Closed
Global Id: T0603798415
Global Id: T0603702339

Click here to access the California GeoTracker records for this facility

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42
NW
1/4-1/2
0.441 mi.
2327 ft.

Relative:
Higher

SAN FERNANDO VALLEY (AREA 3) **Delisted NPL** **1000710136**
GLORIETTA WELLFIELD AREA **SEMS** **CAD980894984**
GLENDALE, CA 91209 **US ENG CONTROLS**
ENVIROSTOR
HIST Cal-Sites
ROD
HIST CORTESE

Click here for full text details

Delisted NPL
EPA ID:: CAD980894984
Site ID:: 902254

SEMS
Site ID: 0902254
EPA Id: CAD980894984

US ENG CONTROLS
EPA ID:: CAD980894984
EPA ID:: CAD980894984

ENVIROSTOR
Facility Id: 19990010
Status: No Further Action

ROD
EPA ID:: CAD980894984

HIST CORTESE
Reg Id: 19990010

E43
West
1/4-1/2
0.465 mi.
2456 ft.

Relative:
Lower

HELO'S EXXON
12904 ROSCOE BLVD
SUN VALLEY, CA 91352

LUST **S106175509**
N/A

Click here for full text details

LUST
Status: Case Closed
Facility Id: 913522507
Global ID: T0603702340

E44
West
1/4-1/2
0.465 mi.
2456 ft.

Relative:
Lower

HELO'S EXXON
12904 ROSCOE BLVD
SUN VALLEY, CA 91352

LUST **S101584895**
CA FID UST **N/A**
HAZNET
HIST CORTESE

Click here for full text details

LUST
Status: Completed - Case Closed
Global Id: T0603702340

Click here to access the California GeoTracker records for this facility

CA FID UST
Status: A
Facility Id: 19016659

HAZNET
GEPAID: CAC002726194

HIST CORTESE
Reg Id: 913522507

45
North
1/4-1/2
0.493 mi.
2603 ft.

Relative:
Higher

BRIGHT REALITY
LAUREL CANYON & JEROME
SUN VALLEY, CA

WMUDS/SWAT **S103441429**
N/A

Click here for full text details

46
NNE
1/2-1
0.785 mi.
4143 ft.

Relative:
Higher

RICHARD E. BYRD HIGH SCHOOL
9171 TELFAIR AVENUE
SUN VALLEY, CA 91352

ENVIROSTOR **S102808013**
SCH **N/A**

Click here for full text details

ENVIROSTOR
Facility Id: 60000277
Status: No Further Action

RICHARD E. BYRD HIGH SCHOOL (Continued) **S102808013**

SCH
Facility Id: 60000277
Status: No Further Action

47
ENE
1/2-1
0.823 mi.
4346 ft.

Relative:
Higher

ACCURATE ENGINEERING, INC.
8710 TELFAIR
SUN VALLEY, CA 91352

RCRA-LQG
ENVIROSTOR
EMI

1000426895
CAD980892509

Click here for full text details

RCRA-LQG
EPA Id: CAD980892509

ENVIROSTOR
Facility Id: 71002709
Status: Refer: Other Agency

EMI
Facility Id: 48343

48
NNW
1/2-1
0.841 mi.
4440 ft.

Relative:
Higher

SUPERIOR THREAD ROLLING
12801 WENTWORTH ST
ARLETA, CA 91331

RCRA-SQG
ENVIROSTOR
FINDS
HAZNET
ECHO

1004677013
CAR000092189

Click here for full text details

RCRA-SQG
EPA Id: CAR000092189

ENVIROSTOR
Facility Id: 60001084
Status: No Further Action

FINDS
Registry ID:: 110012191993

HAZNET
GEPAID: CAR000092189

49
NNW
1/2-1
0.867 mi.
4578 ft.

Relative:
Higher

GOLDEN STATE MAGNETIC & PENETRANT LAB, INC
9301 LAUREL CANYON BLVD
ARLETA, CA 91331

RCRA-LQG
ENVIROSTOR
ICIS
ECHO

1001231349
CAR000039461

Click here for full text details

RCRA-LQG
EPA Id: CAR000039461

ENVIROSTOR
Facility Id: 71003474
Status: Refer: Other Agency

ICIS
FRS ID:: 110042273633

50
ENE
1/2-1
0.905 mi.
4777 ft.

Relative:
Higher

DIXON HARD CHROME, INC.
11645 PENDLETON STREET
SUN VALLEY, CA 91352

ENVIROSTOR
ENF
NPDES
WIP

1006816060
N/A

Click here for full text details

ENVIROSTOR
Facility Id: 71002228
Status: Refer: EPA

ENF
Status: Historical
Facility Id: 221444
Status: Historical

NPDES
Facility Status: Active

WIP
Facility Status: Historical

51
NNW
1/2-1
0.951 mi.
5019 ft.

Relative:
Higher

MILES CHEMICAL COMPANY
12801 RANGOON STREET
ARLETA, CA 91331

ENVIROSTOR
SLIC
CHMIRS
ENF
HWT
WIP

S106484866
N/A

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ENVIROSTOR
Facility Id: 60001085
Status: No Further Action

SLIC

MILES CHEMICAL COMPANY (Continued) **S106484866**

Facility Status: Completed - Case Closed
Global Id: SL603799079

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CHMIRS
OES Incident Number: 10-0386

ENF
Status: Historical
Facility Id: 227854
Status: Historical

HWT
Reg Num: 3867

WIP
Facility Status: Backlog

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	08/01/2009	09/10/2009	10/01/2009
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	02/29/2016	03/07/2016	05/04/2016
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	12/31/2015	05/10/2016	06/17/2016
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	04/11/2016	04/27/2016	06/17/2016
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	03/28/2016	03/30/2016	05/09/2016
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	03/07/2016	03/08/2016	05/04/2016
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	02/08/2016	02/24/2016	04/01/2016
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2014	03/22/2016	05/09/2016
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	01/26/2016	01/29/2016	03/22/2016
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	05/02/2016	05/04/2016	06/21/2016
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	04/25/2016	04/29/2016	06/21/2016
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	02/17/2016	02/23/2016	04/01/2016
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	04/07/2016	04/12/2016	06/01/2016
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2014	10/14/2015	12/11/2015
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	02/22/2016	02/24/2016	04/01/2016
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	04/11/2016	04/12/2016	06/01/2016
CA	LDS	Land Disposal Sites Listing	State Water Qualilty Control Board	03/14/2016	03/16/2016	05/16/2016
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	03/08/2016	03/11/2016	05/04/2016
CA	LUST	Geotracker's Leaking Underground Fuel Tank Report	State Water Resources Control Board	03/14/2016	03/16/2016	05/16/2016
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	MCS	Military Cleanup Sites Listing	State Water Resources Control Board	03/14/2016	03/16/2016	05/16/2016
CA	MINES	Mines Site Location Listing	Department of Conservation	03/15/2016	03/16/2016	05/09/2016
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	02/29/2016	03/08/2016	05/04/2016
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	09/10/2015	01/05/2016	02/12/2016
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	05/16/2016	05/18/2016	06/23/2016
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	03/07/2016	03/08/2016	05/16/2016
CA	PROC	Certified Processors Database	Department of Conservation	03/15/2016	03/16/2016	05/09/2016
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	05/02/2016	05/04/2016	06/21/2016
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	05/02/2016	05/04/2016	06/21/2016
CA	SLIC	Statewide SLIC Cases	State Water Resources Control Board	03/14/2016	03/16/2016	05/16/2016
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	05/16/2016	05/18/2016	06/21/2016
CA	SWRCY	Recycler Database	Department of Conservation	03/15/2016	03/16/2016	05/09/2016
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	02/12/2016	03/16/2016	06/13/2016
CA	UST	Active UST Facilities	SWRCB	03/14/2016	03/16/2016	05/04/2016
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	06/07/2016	06/09/2016	06/23/2016
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	05/02/2016	05/04/2016	06/21/2016
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	04/15/2015	04/17/2015	06/23/2015
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2013	02/24/2015	09/30/2015
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	12/31/2014	04/17/2015	06/02/2015
US	CORRACTS	Corrective Action Report	EPA	12/09/2015	03/02/2016	04/05/2016
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	03/01/2016	03/03/2016	04/05/2016
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	Delisted NPL	National Priority List Deletions	EPA	03/07/2016	04/05/2016	04/15/2016
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	09/20/2015	09/23/2015	01/04/2016
US	EDR Hist Auto	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	03/28/2016	03/30/2016	05/20/2016
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	11/13/2015	01/06/2016	05/20/2016
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	07/20/2015	09/09/2015	11/03/2015
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	01/31/2015	07/08/2015	10/13/2015
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	02/22/2016	02/24/2016	05/20/2016

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	03/11/2016	03/15/2016	06/03/2016
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	06/24/2015	06/26/2015	09/02/2015
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	01/23/2015	02/06/2015	03/09/2015
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	10/27/2015	10/29/2015	01/04/2016
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	01/07/2016	01/08/2016	02/18/2016
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	02/05/2016	04/29/2016	06/03/2016
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	02/17/2016	04/27/2016	06/03/2016
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	12/11/2015	02/19/2016	06/03/2016
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	10/09/2015	02/12/2016	06/03/2016
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	10/13/2015	10/23/2015	02/18/2016
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	02/25/2016	04/27/2016	06/03/2016
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	10/20/2015	10/29/2015	01/04/2016
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	01/07/2016	01/08/2016	02/18/2016
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	02/05/2016	04/29/2016	06/03/2016
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	11/05/2015	11/13/2015	01/04/2016
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	12/03/2015	02/04/2016	06/03/2016
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	09/23/2014	11/25/2014	01/29/2015
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	01/26/2016	02/05/2016	06/03/2016
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	02/25/2016	04/27/2016	06/03/2016
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	11/25/2014	11/26/2014	01/29/2015
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/18/2014	03/18/2014	04/24/2014
US	LUCIS	Land Use Control Information System	Department of the Navy	05/28/2015	05/29/2015	06/11/2015
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	03/07/2016	03/18/2016	04/15/2016
US	NPL	National Priority List	EPA	03/07/2016	04/05/2016	04/15/2016
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	07/01/2014	10/15/2014	11/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	Proposed NPL	Proposed National Priority List Sites	EPA	03/07/2016	04/05/2016	04/15/2016
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/07/2015	07/09/2015	09/16/2015
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	12/09/2015	03/02/2016	04/05/2016
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	12/09/2015	03/02/2016	04/05/2016
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	12/09/2015	03/02/2016	04/05/2016
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	12/09/2015	03/02/2016	04/05/2016
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	12/09/2015	03/02/2016	04/05/2016
US	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2015	08/26/2015	11/03/2015
US	ROD	Records Of Decision	EPA	11/25/2013	12/12/2013	02/24/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	SEMS	Superfund Enterprise Management System	EPA	03/07/2016	04/05/2016	04/15/2016
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	03/07/2016	04/05/2016	04/15/2016
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2014	11/24/2015	04/05/2016
US	TSCA	Toxic Substances Control Act	EPA	12/31/2012	01/15/2015	01/29/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/20/2015	10/27/2015	01/04/2016
US	US AIRS MINOR	Air Facility System Data	EPA	10/20/2015	10/27/2015	01/04/2016
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/22/2015	12/23/2015	02/18/2016
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	02/18/2016	03/07/2016	06/03/2016
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	09/10/2015	09/11/2015	11/03/2015
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	09/01/2015	09/03/2015	11/03/2015
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	02/18/2016	03/07/2016	06/03/2016
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	09/10/2015	09/11/2015	11/03/2015
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	02/09/2016	03/02/2016	04/15/2016
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	UXO	Unexploded Ordnance Sites	Department of Defense	10/25/2015	01/29/2016	04/05/2016
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	07/30/2013	08/19/2013	10/03/2013
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2013	07/17/2015	08/12/2015
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	05/01/2016	05/06/2016	06/17/2016
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2014	07/24/2015	08/18/2015
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2013	06/19/2015	07/15/2015
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	12/31/2015	04/14/2016	06/03/2016

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	Daycare Centers	Sensitive Receptor: Licensed Facilities	Department of Social Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
CA	State Wetlands	Wetland Inventory	Department of Fish & Game			
US	Topographic Map		U.S. Geological Survey			

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

JOHN H FRANCIS POLYTECHNIC HIGH SCHOOL
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

TARGET PROPERTY COORDINATES

Latitude (North):	34.221954 - 34° 13' 19.03''
Longitude (West):	118.404077 - 118° 24' 14.68''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	370667.0
UTM Y (Meters):	3787462.5
Elevation:	823 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5630789 VAN NUYS, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

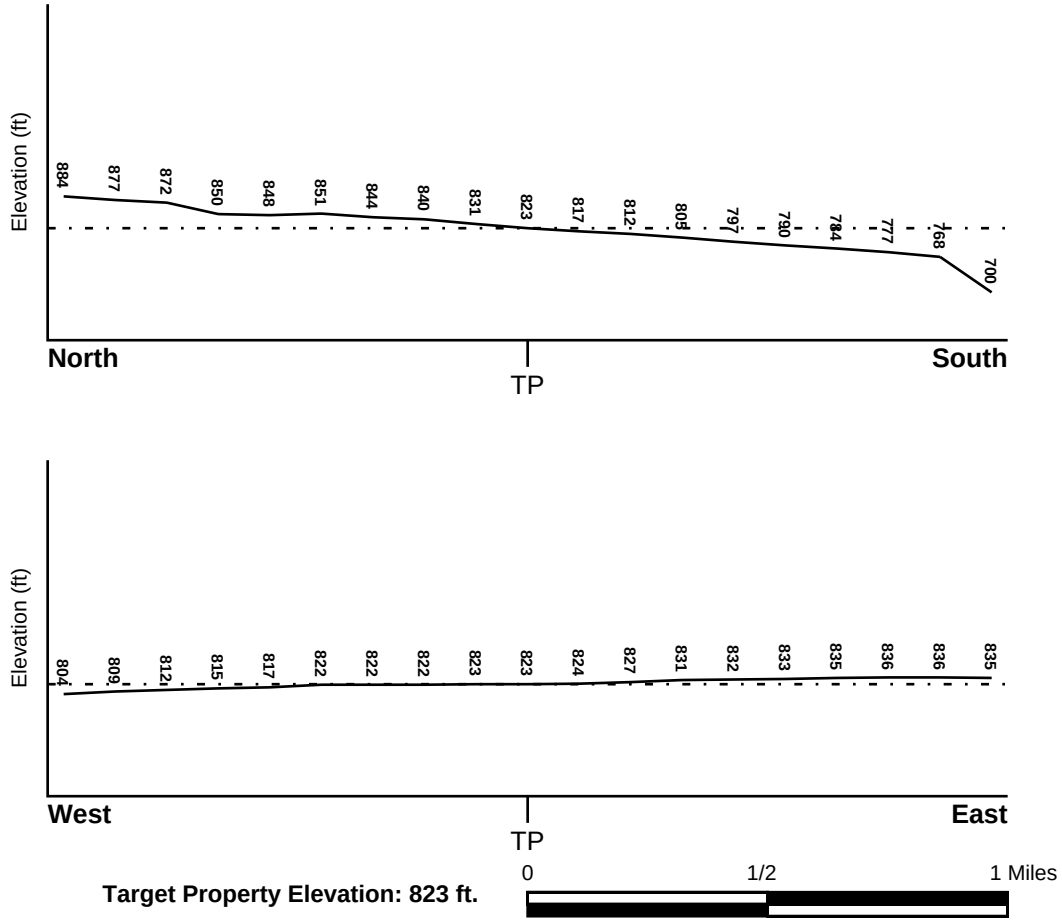
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
LOS ANGELES, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06037C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
VAN NUYS	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBAN LAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 10 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Surficial Soil Types:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Shallow Soil Types:
fine sandy loam
gravelly - loam
sand
silty clay

Deeper Soil Types:
stratified
clay loam
silty clay loam
gravelly - sandy loam
coarse sand
sand
weathered bedrock
very fine sandy loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

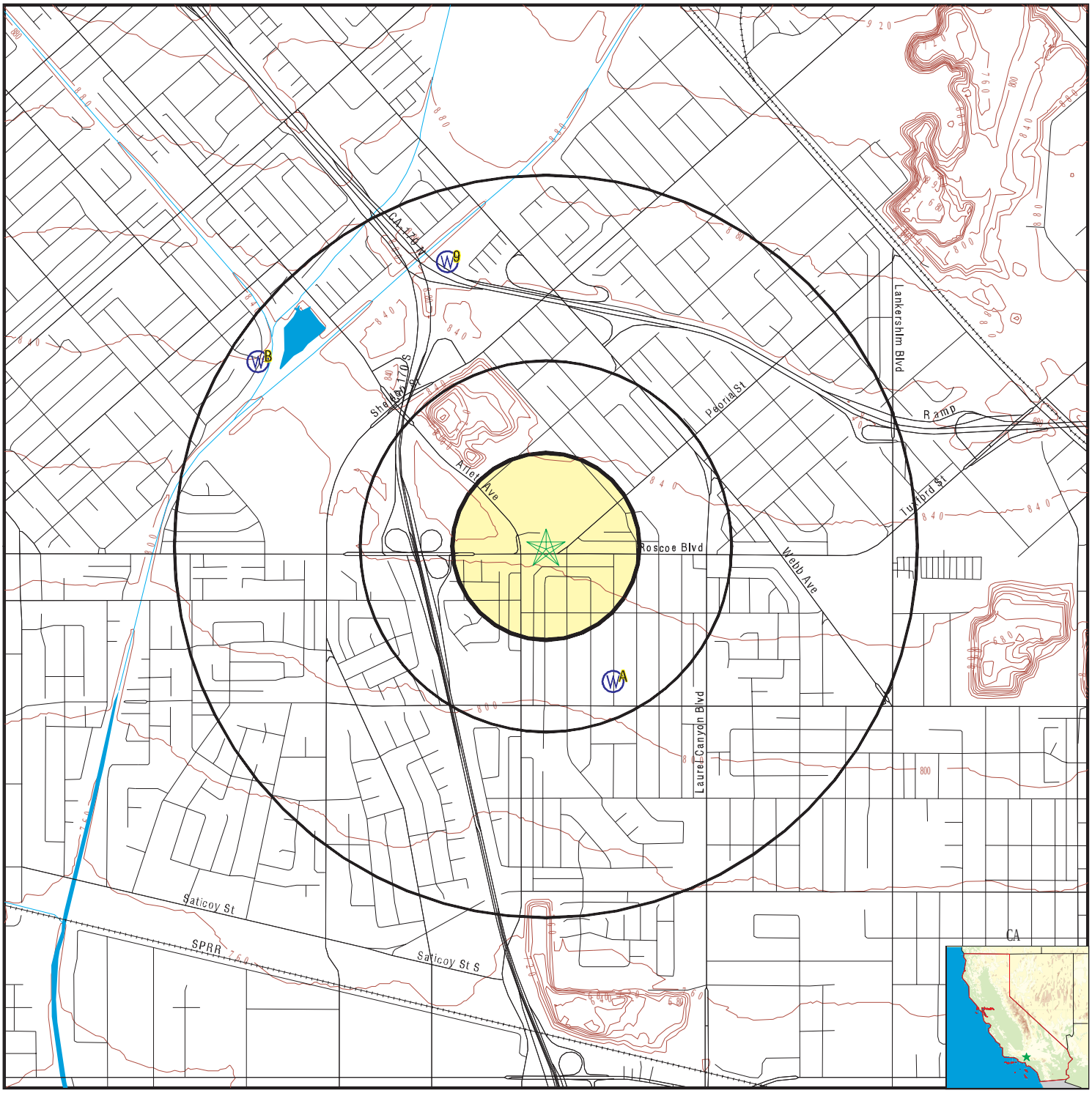
MAP ID	WELL ID	LOCATION FROM TP
A1	2166	1/4 - 1/2 Mile SSE
A2	2160	1/4 - 1/2 Mile SSE
A3	2159	1/4 - 1/2 Mile SSE
A4	2158	1/4 - 1/2 Mile SSE
A5	2162	1/4 - 1/2 Mile SSE
A6	2165	1/4 - 1/2 Mile SSE
A7	2164	1/4 - 1/2 Mile SSE
A8	2163	1/4 - 1/2 Mile SSE
9	CADW60000005584	1/2 - 1 Mile NNW
B10	2149	1/2 - 1 Mile WNW
B11	2150	1/2 - 1 Mile WNW
B12	2151	1/2 - 1 Mile WNW
B13	2146	1/2 - 1 Mile WNW
B14	2147	1/2 - 1 Mile WNW
B15	2148	1/2 - 1 Mile WNW
B16	2155	1/2 - 1 Mile WNW
B17	2156	1/2 - 1 Mile WNW
B18	2157	1/2 - 1 Mile WNW
B19	2152	1/2 - 1 Mile WNW
B20	2153	1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B21	2154	1/2 - 1 Mile WNW

PHYSICAL SETTING SOURCE MAP - 4660230.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	John H Francis Polytechnic High School	CLIENT:	Civil-Environmental-survey Group
ADDRESS:	12431 Roscoe Blvd Sun Valley CA 91352	CONTACT:	Skye Green
LAT/LONG:	34.221954 / 118.404077	INQUIRY #:	4660230.2s
		DATE:	June 28, 2016 4:08 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
A1 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**2166**
A2 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**2160**
A3 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**2159**
A4 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**2158**
A5 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**2162**
A6 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**2165**
A7 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**2164**
A8 **SSE** **1/4 - 1/2 Mile** **Lower**	Click here for full text details	**CA WELLS**	**2163**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
9 **NNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**CADW60000005584**
B10 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2149**
B11 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2150**
B12 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2151**
B13 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2146**
B14 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2147**
B15 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2148**
B16 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2155**
B17 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2156**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation		Database	EDR ID Number
B18 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2157**
B19 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2152**
B20 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2153**
B21 **WNW** **1/2 - 1 Mile** **Higher**	Click here for full text details	**CA WELLS**	**2154**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
91352	18	2

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 91352

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.000 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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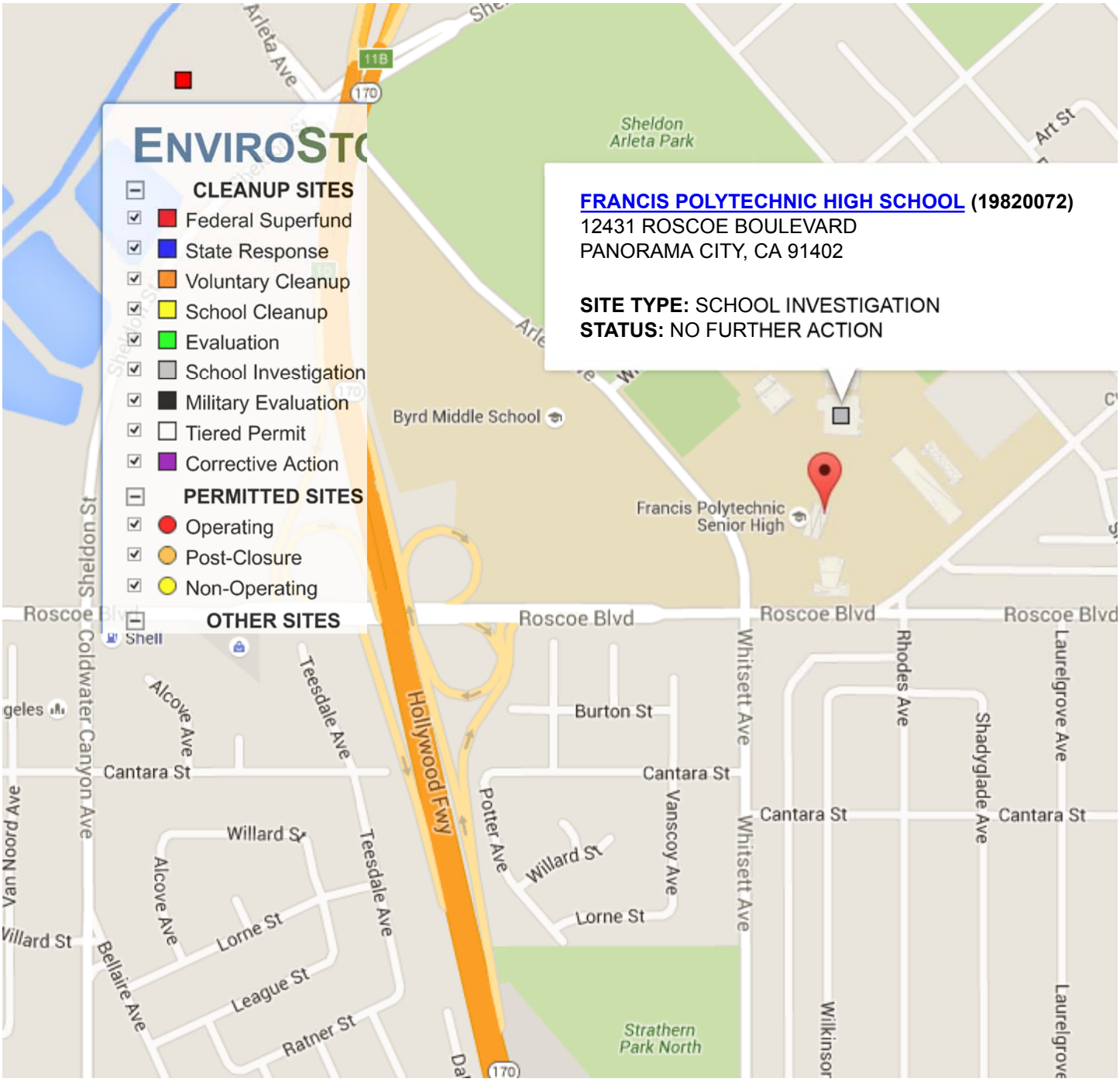
Appendix E:

Regulatory File Review



SITES CURRENTLY VISIBLE ON MAP — 2 SITES LISTED — EXPORT THIS LIST TO EXCEL

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
FRANCIS POLYTECHNIC HIGH SCHOOL	NO FURTHER ACTION	SCHOOL INVESTIGATION	12431 ROSCOE BOULEVARD	PANORAMA CITY
SAN FERNANDO VALLEY (AREA 3)	NO FURTHER ACTION	FEDERAL SUPERFUND	GLORIETTA WELLFIELD AREA	GLENDALE

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIROSTOR

FRANCIS POLYTECHNIC HIGH SCHOOL (19820072)

SIGN UP FOR EMAIL ALERTS

12431 ROSCOE BOULEVARD
PANORAMA CITY, CA 91402
LOS ANGELES COUNTY
SITE TYPE: SCHOOL

SUPERVISOR: JAVIER HINOJOSA
OFFICE: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH
SCHOOL DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

Site Information

CLEANUP STATUS
NO FURTHER ACTION AS OF 5/4/2004

SITE TYPE: SCHOOL
NATIONAL PRIORITIES LIST: NO
ACRES: 47 ACRES
APN: 2634019900
CLEANUP OVERSIGHT AGENCIES:
DTSC - SITE CLEANUP PROGRAM - LEAD

SCHOOL DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT
ENVIROSTOR ID: 19820072
SITE CODE: 300772
SPECIAL PROGRAM:
FUNDING: SCHOOL DISTRICT
ASSEMBLY DISTRICT: 39
SENATE DISTRICT: 18

Regulatory Profile

PAST USE(S) THAT CAUSED CONTAMINATION
EDUCATIONAL SERVICES

POTENTIAL CONTAMINANTS OF CONCERN
LEAD
VOLATILE ORGANICS (8260B VOCS)

POTENTIAL MEDIA AFFECTED
SOIL, SOIL VAPOR

Site History

The School was constructed in 1956. The site is adjacent to the former Sheldon-Arleta Landfill which operated from 1962 to 1974.

Despite a PEA - NFA determination issued 12/19/00, the District elected to conduct an SSI to further evaluate soil gas impacts from the former Sheldon-Arleta Landfill which operated from 1962 to 1974 and was located adjacent to the proposed High School expansion site. DTSC issued a NFA determination on the SSI on 3/25/04.

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Completed Activities

	DOCUMENT TYPE	DATE COMPLETED	COMMENTS
	Supplemental Site Investigation Report	3/25/2004	
[VIEW DOCS]	Soil Gas Sampling Report Monitoring Event #4	6/27/2003	Soil Gas Sampling Report Monitoring Event #4
[VIEW DOCS]	Soil Gas Sampling Report Monitoring Event #3	3/12/2003	Soil Gas Sampling Report Monitoring Event #3
[VIEW DOCS]	Soil Gas Sampling Report Monitoring Event #2	7/30/2002	Soil Gas Sampling Report Monitoring Event #2
[VIEW DOCS]	Soil Gas Sampling Report Event #1	7/15/2002	Soil Gas Sampling Report Event #1
[VIEW DOCS]	Preliminary Endangerment Assessment Report	7/12/2001	

[VIEW DOCS]	Final Supplemental Work Plan	4/23/2001	Final Supplemental Work Plan
[VIEW DOCS]	Preliminary Endangerment Assessment Report	12/19/2000	
[VIEW DOCS]	Final Soil-Gas Monitoring Work Plan	10/13/2000	Final Soil-Gas Monitoring Work Plan
[VIEW DOCS]	Environmental Oversight Agreement	2/10/2000	DTSC entered into a Master Oversight Agreement (Agreement), (Docket Number HSA-A 99/00-051) with the Los Angeles Unified School District (LAUSD) on February 10, 2000. DTSC made a "No Further Action" determination on the site. LAUSD is conducting vapor monitoring pursuant to a PEA recommendation. DTSC concurs with the monitoring, activities, however it is not required. Received soil gas monitoring reports round 3 on 03/26/03.
[VIEW DOCS]	Technical Memorandum - Preliminary Air Sampling Investigation	11/18/1999	Preliminary Air Sampling Investigation Vol 1
[VIEW DOCS]	Technical Memorandum - Preliminary Air Sampling Investigation Vol 2	11/18/1999	Preliminary Air Sampling Investigation Vol 2
[VIEW DOCS]	Technical Memorandum - Preliminary Air Sampling Investigation Vol 3	11/18/1999	Preliminary Air Sampling Investigation Vol 3

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Research Request Form

CITY LA DBS
DEPARTMENT OF BUILDING AND SAFETY

DATE: _____ **Q-MATIC TICKET #** (office use only) _____

NAME: Skye Green **COMPANY NAME:** CES Group

TELEPHONE #: 714-398-6363 **FAX # :**

REFERRED BY: _____ **PHONE #:** _____

FAXING OPTIONS: Records Counter, LADBS Fax to one of the numbers below (check one):

☐ (213) 482-6862
Metro Office
201 N. Figueroa St., 1st. Flr,Rm 110
Los Angeles, CA 90012

☐ (818) 374-5013
Van Nuys Office
6262 Van Nuys Bl.
Van Nuys, CA 91401

PROPERTY ADDRESS(ES): Please research the following addresses **(IN PERSON: One Address submitted at a time) (FAXING: Up to 3 addresses per request)**

Use of Existing Building: School (John H Francis Polytechnic HS)

COMMENTS: Reason for Records Request:

Information Requested:

Copies of Documents range from **$0.10 to $1.50** per page (excluding blueprint copies)
Select from the following by checking the box next to it - for further clarification of request, use comments box

☒ BUILDING PERMITS ❑ PLOT PLAN	❑ CERTIFICATES OF OCCUPANCY	☒ GRADING DOCUMENTS	**For Office Use Only:** _____PCIS
❑ MECHANICAL PERMITS ❑ ELECTRICAL PERMITS 1985 - 1990 and 1997 - Present	☒ VIOLATIONS	☒ MODIFICATIONS/BOARD FILES	_____IDIS _____Microfilm
AFFIDAVITS/Z.I.NO._____			_____Manual Search

❒ BLUEPRINTS ($8.00 Service Fee, plus a SD Surcharge Fee (Section 98.0416 of the LAMC) and $1.00 per page.

No plans available for Single Family Dwellings and Commercial buildings 3 stories and under, prior to 1978.

To obtain copies of blueprints on file, all of the following requirements must be submitted:
1. A release letter from the current owner.
2. A copy of the current owner's Grant Deed.
3. A release letter from the architect and engineer whose stamp is on the plans.
   Letters must be on Letterhead and have engineer/architect's stamp and signature.

LOS ANGELES FIRE DEPARTMENT
UNDERGROUND TANKS REQUEST FOR FIRE PREVENTION RECORDS
ADDRESS: 200 NORTH MAIN ST., 17TH FLR. RM. 1700

NEW OFFICE# - 213-978-3700 NEW EMAIL lafd.usttestnotify@lacity.org

PLEASE GIVE US 7 TO 10 BUSINESS DAYS TO HONOR YOUR REQUEST.

ONE ADDRESS ONLY - PER SHEET

⬇ COMPLETE THIS BOX. ONE FOR EACH PROPERTY CONCERNED ⬇

PHONE NO: (714) 398-6363 EMAIL: sgreen@cesgroup.co

NAME OF REQUESTER (PLEASE PRINT): Skye Green

REPRESENTING (COMPANY NAME): CES Group

SIGNATURE: _____ DATE: 6 / 30 / 16

DRIVER LIC NO: A7799089 EXP: 3/5/18

ADDRESS FOR WHICH RECORDS ARE REQUESTED: 12431 Roscoe Blvd, Sun Valley

(John H Francis Polytechnic High School)

REASON FOR REQUEST: Planned construction at site and Phase I

NO COPY SERVICES ALLOWED

FOR OFFICE USE ONLY:

☐ REVIEW ONLY (NO COPIES)

☐ REQUEST COPIES

NUMBER OF PAGES: _____

X .10 ¢

= _____

+ $11.00

TOTAL FEE AMOUNT: _____

BILLING & ACCOUNTS RECEIVABLE
16TH FL, Rm. 1620, 200 N. MAIN (REV CODE #3887)

NO FILE FOUND

SOUTH COAST AQMD

Facility INformation Detail (FIND)

Equipment List

Facility ID 1055

Company Name L.A.U.S.D., POLYTECHNIC HIGH SCHOOL

Address 12431 ROSCOE BLVD
SUN VALLEY, CA 91352

Appl_Nbr	Permit_Nbr	Issued_Date	Permit_Status	Eq_Type	Equip_Description	Appl_Date	Appl_Status
530944				Basic	RULE 1415 PLAN NOTIFICATIONS	12/22/2011	BANKING/ PLAN GRANTED, NON BILLABLE
508236				Basic	RULE 1415 PLAN NOTIFICATIONS	2/16/2010	BANKING/ PLAN GRANTED, NON BILLABLE
388577				Basic	BOILER-(<2MMBTU/HR) R-222	6/21/2001	BANKING/ PLAN GRANTED, NON BILLABLE
388578				Basic	BOILER-(<2MMBTU/HR) R-222	6/21/2001	BANKING/ PLAN GRANTED, NON BILLABLE
388579				Basic	BOILER-(<2MMBTU/HR) R-222	6/21/2001	BANKING/ PLAN GRANTED, NON BILLABLE
388580				Basic	BOILER-(<2MMBTU/HR) R-222	6/21/2001	BANKING/ PLAN GRANTED, NON BILLABLE
380453				Basic	RULE 1415 PLAN NOTIFICATIONS	1/25/2001	BANKING/ PLAN GRANTED, NON BILLABLE
232336	D31142	11/5/1990	INACTIVE	Basic	BOILER (<5 MMBTU/HR) NAT GAS ONLY	6/28/1990	PERMIT TO OPERATE GRANTED
209075	D24684	7/19/1990	INACTIVE	Basic	BOILER (<5 MMBTU/HR) NAT GAS ONLY	6/2/1989	PERMIT TO OPERATE GRANTED
209076	D24685	7/19/1990	INACTIVE	Basic	BOILER (<5 MMBTU/HR) NAT GAS ONLY	6/2/1989	PERMIT TO OPERATE GRANTED
Z02905	A05575		INACTIVE	Control	SPRAY BOOTH PAINT AND SOLVENT		PERMIT TO OPERATE GRANTED
Z02906	A05576		INACTIVE	Control	SPRAY BOOTH PAINT AND SOLVENT		PERMIT TO OPERATE GRANTED
G00518	A05577		INACTIVE	Control	SPRAY BOOTH PAINT AND SOLVENT		PERMIT TO OPERATE GRANTED

Parcel Details

- Property records are kept at the North District Office
- How frequently is this site updated? (and other FAQs)

Property Information

Assessor's ID No:	2634-019-900
Address:	12431 ROSCOE BLVD LOS ANGELES CA 91352
Property Type:	Other
Region / Cluster:	03 / 03900
Tax Rate Area (TRA):	00013

- View Assessor Map
- View Index map

Recent Sales Information

Latest Sale Date:

Indicated Sale Price:

Search for Recent Sales

2015 Roll Values

Recording Date:	02/45/1967
Land:	$0
Improvements:	$0
Personal Property:	$0
Fixtures:	$0
Homeowners' Exemption:	$0
Real Estate Exemption:	$0
Personal Property Exemption:	$0
Fixture Exemptions:	$0

- 2015 Annual taxes
- Property tax payment FAQs
- Estimate supplemental taxes

Property Boundary Description

TRACT # 19166 LOT 1



PURPOSE: The closed Sheldon-Arleta landfill is located in the immediate vicinity of Francis Polytechnic High School (FPHS), Byrd Middle School, new Valley Region Middle School #3, and Lewis Continuation High School. This Fact Sheet is provided to inform interested persons, including school staff, parents, and school safety personnel, of the following aspects concerning migration of landfill gas associated with landfill:

- An overview of the nature of the potential landfill gas hazard at the school;
- A description of the gas detection, mitigation, and alarm system installed at the school; and
- Where to find additional information.

OVERVIEW: From the time FPHS opened in 1957 until 1962, the site to the north of the school was an active gravel pit. After this time, the gravel pit was transformed into the Sheldon-Arleta landfill, which was operated by the City of Los Angeles for a period of twelve years until it was closed in 1974. Throughout the 1980's and early 1990's, landfill gas infiltration was found to have taken place in the boys' and girl's gymnasium buildings at FPHS. In 1992, the City of Los Angeles determined that influx of water beneath the former landfill from adjacent water spreading basins caused the migration of landfill gas onto the school property. In 1993, the City of Los Angeles Bureau of Sanitation (BOS) took responsibility for the monitoring and control of landfill gas, including methane, at FPSH.

Landfill gas is a byproduct of the biological degradation of organic refuse deposited in a landfill. It continues to be generated after closure of a landfill in progressively decreasing quantities as the biodegradable material is consumed. Landfill gas is typically composed of the following constituents:

- Methane, 45% to 60%
- Carbon dioxide, 40% to 60%
- Nitrogen, 2% to 5%
- Oxygen, 0.1% to 1%
- Ammonia, 0.1% to 1%
- Non-methane organic chemicals, 0.01% to 0.6%
- Hydrogen sulfide and other sulfides, trace levels

Methane is an odorless, colorless, non-toxic, flammable gas that is a major constituent of natural gas. Fire and explosions due to accumulations of methane in confined spaces is the principal hazards associated with potential methane gas seepage at the school.

Carbon dioxide and nitrogen are odorless, colorless, non-toxic gases, which pose a hazard of simple asphyxiation because they contribute to the displacement of air containing sufficient oxygen.

Ammonia is flammable and toxic in great enough concentrations; however, at the concentrations found in landfill gas it is unlikely to present a hazard.

Non-methane organic chemicals present in landfill gas may include aromatic and chlorinated hydrocarbons. The potential hazards vary by chemical, but some may be carcinogenic or toxic at relatively small concentrations. These compounds are routinely monitored at the Sheldon-Arleta landfill and reported quarterly to the South Coast Air Quality Management District (SCAQMD).

Hydrogen sulfide and other sulfides can be smelled at very low concentrations and are one of the primary contributors to odors around landfills. Generally, high concentrations of sulfides are toxic; however, their odor may be detected at concentrations four orders of magnitude less than their permissible exposure limit (the Cal-OSHA 8-hour time weighted average permissible exposure limit for hydrogen sulfide is 10 ppm and its odor recognition threshold is in the range of 0.0005 to 0.001). These compounds are also routinely monitored at the Sheldon-Arleta landfill and reported to the SCAQMD.

LANDFILL GAS MITIGATION SYSTEM DESCRIPTION:

There are 20 landfill gas Perimeter Probes located along the perimeter of the Sheldon-Arleta Landfill and 34 landfill gas Migration Wells (MW). Concentrations of methane in landfill gas at the PP and MW are measured monthly by BOS personnel to ensure that landfill gas collection systems are being properly operated to prevent migration of landfill gas beyond the landfill perimeter. The BOS also maintains a continuous electronic methane monitoring and alarm system at FPSH, which includes operating methane control systems at the FPSH boys and girls gym buildings. These systems are a combination of passive and active venting of subsurface gas. Recently, to counteract potential spreading of landfill gas due to water infiltration from the adjacent spreading basins, the BOS has augmented the landfill gas collection and control system at the former Sheldon-Arleta landfill with additional gas extraction wells at the landfill.

The FPHS gas monitoring equipment is located in the electrical room across from the school's main office and is connected to an autodialer and annunciator panel. The system is controlled by a programmable controller to continuously monitor 24 methane sensors located throughout the school campus. Through the autodialer device, key City and LAUSD personnel will automatically notified whenever the methane sensors detect methane concentrations exceeding 15% of the lower explosive limit (LEL) of methane gas. A 'window box' style annunciator panel located in the Administration office will also display which sensors are in alarm and deteting high methane concentrations.

REFERENCES:

a) Methane Safety Program Reference Guide
b) Methane System Operation & Maintenance Manual
   i. (1) copy at school
   ii. (1) copy at OEHS
c) Methane Alarm Response Protocol
   i. posted near alarm panel at school
   ii. distributed to OEHS Duty Officers
   iii. distributed to LASPD Watch Officers
d) Methane Alarm Call Tree & Contact Information
   i. distributed to school methane safety team
   ii. distributed to OEHS Duty Officers
   iii. distributed to LASPD Watch Officers

ASSISTANCE: For assistance or further information please contact

Jeffrey Otter
Methane Mitigation Project Manager Contract Professional
LAUSD Office of Environmental Health & Safety
Office: (213) 241-6284 | Cell: (714) 350-5374
Jeffrey.Otter@lausd.net

or

Ed Morelan
Site Assessment Program Administrator
LAUSD Office of Environmental Health & Safety
Office: (213) 792-4585
Alexander.Morelan@lausd.net

LA COUNTY - PUBLIC HEALTH 6/30/16

FERGUSON COMPLEX
VISITOR PASS
DATE: JUNE 30TH 16

- Derick Taylor - Plant Manager III 818-767-4860 dlt723z@lausd.k12.ca.us
- 5/21/12 - Submittal of Consolidated Contingency Plan
  - yes haz mat. generate haz waste - required to provide info to CUPA
  - no USTs, ASTs
  - Gasoline drums, diesel drums, compressed gas cylinders
  - Chemistry
  - haz mat type = mixture, liquid 55 gal/day ave. 110 gal/day max
  - steel drums. Stored in ambient temp & press.

gasoline (
- 49.99 misc hydrocarbons
- 24.99 xylene, mixed isomers
- 24.99 toluene

) > fuel bunker (location) 55-gal

diesel fuel > fuel bunker (location) 55 gal/day ave 110 gal/day max
steel drum - 55 gal

(maintenance)

Plant manager's storage area
- waste paint (water based) - 55 gal
  35 gal/day ave 75 gal/day max
  plastic / nonmetallic drum 75 gal/yr
- GYM FINISH - 5 gal container
  plastic / nonmetallic drum
  propylene glycol monomethyl ether
  aminated acylic polymer - chloride & bromide salt
  gamma-butyrolactone - 1
  reaction products epichlorohydrin & Biphenol
  Benzyl alcohol - 2

(all ambient temp & press)

(maintenance)

- FLOURESCENT LAMPS, BULBS, METAL HALIDE LAMPS
  waste (0.5 yd³) container > box
  240 lb ave/day 480 lb/day max 480 lb total/yr

FUEL BUNKER - contaminated gasoline 55 gal container steel drum

PLANT MANGER'S OFFICE - lead paint debris - solid waste
55 gal metal drum

(maintenance)
PLANT MGR STORAGE AREA - waste flammable liquids 55 gal drum
8 gal/day ave, 15 gal/day max, 15 gal/yr
paint thinner, petroleum distillate

(maintenance)
- waste aerosols - 5 gal fiber drum
  10 lb/day ave, 20 lb/day max, 20 lb/day yr
  solid waste

cont'd : . . .

SCIENCE STORAGE AREA - Waste oxidizing liquid 5gal plastic/nonmetallic
0.5 gal/day ave, 1 gal/day max, 1 gal/yr
ammonium nitrate, lead nitrate
- Waste nitric acid 5 gal plastic/nonmetal
0.5 gal/day ave, 1 gal/day max, 1 gal/yr
- Waste corrosive liquid basic inorganic 16 gal plastic/nonmet
2.5 gal/day ave max, 5 gal/day max, 5 gal/yr
Sodium hydroxide - Waste corrosive liquid basic inorganic
- Waste corrosive liquid acid - 16 gal plastic/nonmetal
HCl, sulfuric acid

(MAINTENANCE) - Waste Oil - used oil 30 gal drum plastic/nonmetal
4.5 gal/day ave, 8.5 gal/day max, 8.5 gal/yr
- maintenance items(s) & science class (4)

SMALL QUANTITY GENERATOR INSPECTION REPORT - labeling - improper - corrected 11/8/12 minor violation
2012 & 2007 inspection
NOV issued to properly label haz waste containers
shipping documents associated w/ items on list + contaminated rags
waste liquids & solids - 2012, 2009, 2010
OEHS documents

PERMIT - HAZARDOUS WASTE & HAZ MAT MANAGEMENT PROGRAM
0-5 employees, 1-3 chemicals 2010-2011

FIELD NOTES - no auto class or photo
waste streams = paint, oil, lights, gym finish

ENV. TRAINING RECORDS
2007 - no violations - Inspection Report
DTSC WASTE MANIFEST REPORT 2007 - unspecified aqueous solutions
asbestos containing waste, inorganic solid waste
other, off-spec, aged, or surplus organics
ACM (1995, 2000, 2002, 2003)

HAZ MAT / waste pick up request 2007
OEHS haz waste pick up request
LAUSD PBR Shipping Paper - non RCRA liquids haz waste 2005, 2007
+ formaldehyde (flammable)
Jose Padilla - 2006 > Certificate of Completion of Occupational Safety Training
Octavio Leon - 2006

ZIMAS

Public

Search Reports Resources News!

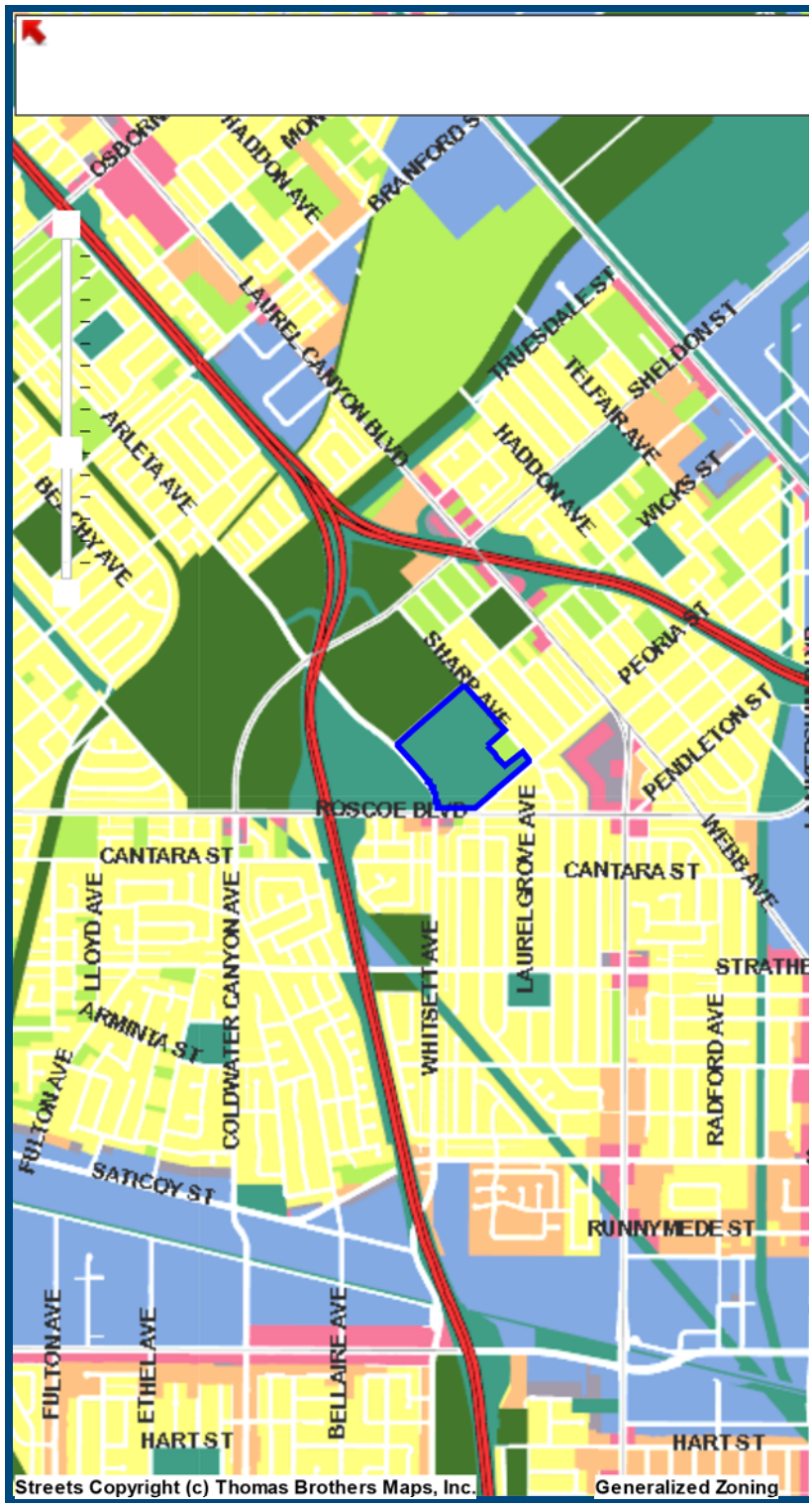
12431 W ROSCOE BLVD

Font: A A A +/-

Address/Legal

Site Address	12431 W ROSCOE BLVD
Site Address	12508 W WICKS ST
Site Address	12546 W WICKS ST
Site Address	8541 N SHARP AVE
Site Address	8443 N SHARP AVE
Site Address	8431 N SHARP AVE
Site Address	12468 W WICKS ST
Site Address	12500 W WICKS ST
ZIP Code	91352
PIN Number	192B165 87
Lot/Parcel Area (Calculated)	1,618,380.7 (sq ft)
Thomas Brothers Grid	PAGE 532 - GRID E1
Thomas Brothers Grid	PAGE 532 - GRID F1
Thomas Brothers Grid	PAGE 532 - GRID F2
Assessor Parcel No. (APN)	2634019900
Tract	TR 19166
Map Reference	M B 593-97/98
Block	None
Lot	LT 1
Arb (Lot Cut Reference)	None
Map Sheet	192B161
Map Sheet	192B165

- Jurisdictional
- Planning and Zoning
- Assessor
- Case Numbers
- Citywide/Code Amendment Cases
- Additional
- Seismic Hazards
- Economic Development Areas
- Public Safety



Terms & Conditions

City of Los Angeles
Department of City Planning

7/31/2016
PARCEL PROFILE REPORT

PROPERTY ADDRESSES
12431 W ROSCOE BLVD
12508 W WICKS ST
12546 W WICKS ST
8541 N SHARP AVE
8443 N SHARP AVE
8431 N SHARP AVE
12468 W WICKS ST
12500 W WICKS ST

ZIP CODES
91352

RECENT ACTIVITY
None

CASE NUMBERS
CPC-4099-CU
CPC-1995-148-GPC
ORD-171148-SA50
OB-11203
OB-11082
OB-10963

Address/Legal Information	
PIN Number	192B165 87
Lot/Parcel Area (Calculated)	1,618,380.7 (sq ft)
Thomas Brothers Grid	PAGE 532 - GRID E1
	PAGE 532 - GRID F1
	PAGE 532 - GRID F2
Assessor Parcel No. (APN)	2634019900
Tract	TR 19166
Map Reference	M B 593-97/98
Block	None
Lot	LT 1
Arb (Lot Cut Reference)	None
Map Sheet	192B161
	192B165
Jurisdictional Information	
Community Plan Area	Sun Valley - La Tuna Canyon
Area Planning Commission	North Valley
Neighborhood Council	Sun Valley
Council District	CD 6 - Nury Martinez
Census Tract #	1210.10
LADBS District Office	Van Nuys
Planning and Zoning Information	
Special Notes	None
Zoning	[Q]PF-1XL
Zoning Information (ZI)	ZI-2374 LOS ANGELES STATE ENTERPRISE ZONE
	ZI-2427 Freeway Adjacent Advisory Notice for Sensitive Uses
General Plan Land Use	Public Facilities
General Plan Footnote(s)	Yes
Hillside Area (Zoning Code)	No
Baseline Hillside Ordinance	No
Baseline Mansionization Ordinance	No
Specific Plan Area	None
Special Land Use / Zoning	None
Design Review Board	No
Historic Preservation Review	No
Historic Preservation Overlay Zone	None
Other Historic Designations	None
Other Historic Survey Information	None
Mills Act Contract	None
POD - Pedestrian Oriented Districts	None
CDO - Community Design Overlay	None
NSO - Neighborhood Stabilization Overlay	No
Sign District	No
Streetscape	No
Adaptive Reuse Incentive Area	None
Ellis Act Property	No
Rent Stabilization Ordinance (RSO)	No

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(*) - APN Area is provided "as is" from the Los Angeles County's Public Works, Flood Control, Benefit Assessment.

CRA - Community Redevelopment Agency	None
Central City Parking	No
Downtown Parking	No
Building Line	None
500 Ft School Zone	Active: Francis Polytechnic Senior High School Active: Richard E. Byrd Middle School
500 Ft Park Zone	Active: Cesar Chavez Recreation Complex
Assessor Information	
Assessor Parcel No. (APN)	2634019900
APN Area (Co. Public Works)*	33.080 (ac)
Use Code	8800 - Government Owned
Assessed Land Val.	$1,545,012
Assessed Improvement Val.	$0
Last Owner Change	02/45/67
Last Sale Amount	$0
Tax Rate Area	13
Deed Ref No. (City Clerk)	None
Building 1	No data for building 1
Building 2	No data for building 2
Building 3	No data for building 3
Building 4	No data for building 4
Building 5	No data for building 5
Additional Information	
Airport Hazard	None
Coastal Zone	None
Farmland	Area Not Mapped
Very High Fire Hazard Severity Zone	No
Fire District No. 1	No
Flood Zone	None
Watercourse	No
Hazardous Waste / Border Zone Properties	No
Methane Hazard Site	Methane Zone
High Wind Velocity Areas	No
Special Grading Area (BOE Basic Grid Map A-13372)	No
Oil Wells	None
Seismic Hazards	
Active Fault Near-Source Zone	
Nearest Fault (Distance in km)	2.02350624
Nearest Fault (Name)	Verdugo
Region	Transverse Ranges and Los Angeles Basin
Fault Type	B
Slip Rate (mm/year)	0.50000000
Slip Geometry	Reverse
Slip Type	Unconstrained
Down Dip Width (km)	18.00000000
Rupture Top	0.00000000
Rupture Bottom	13.00000000
Dip Angle (degrees)	45.00000000
Maximum Magnitude	6.90000000
Alquist-Priolo Fault Zone	No
Landslide	No
Liquefaction	No
Preliminary Fault Rupture Study Area	No
Tsunami Inundation Zone	No

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Economic Development Areas	
Business Improvement District	None
Promise Zone	No
Renewal Community	No
Revitalization Zone	None
State Enterprise Zone	LOS ANGELES STATE ENTERPRISE ZONE
Targeted Neighborhood Initiative	None
Public Safety	
Police Information	
Bureau	Valley
Division / Station	Foothill
Reporting District	1681
Fire Information	
Bureau	Valley
Batallion	14
District / Fire Station	89
Red Flag Restricted Parking	No

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(*) - APN Area is provided "as is" from the Los Angeles County's Public Works, Flood Control, Benefit Assessment.

CASE SUMMARIES

Note: Information for case summaries is retrieved from the Planning Department's Plan Case Tracking System (PCTS) database.

Case Number:	CPC-4099-CU
Required Action(s):	CU-CONDITIONAL USE
Project Descriptions(s):	Data Not Available
Case Number:	CPC-1995-148-GPC
Required Action(s):	GPC-GENERAL PLAN/ZONING CONSISTENCY (AB283)
Project Descriptions(s):	GENERAL PLAN/ZONE CONSISTENCY PROGRAM PLAN AMENDMENTS AND ZONECHANGES (PUBLIC FACILITIES, OPEN SPACE II AND CLEAN UP

DATA NOT AVAILABLE

ORD-171148-SA50

OB-11203

OB-11082

OB-10963

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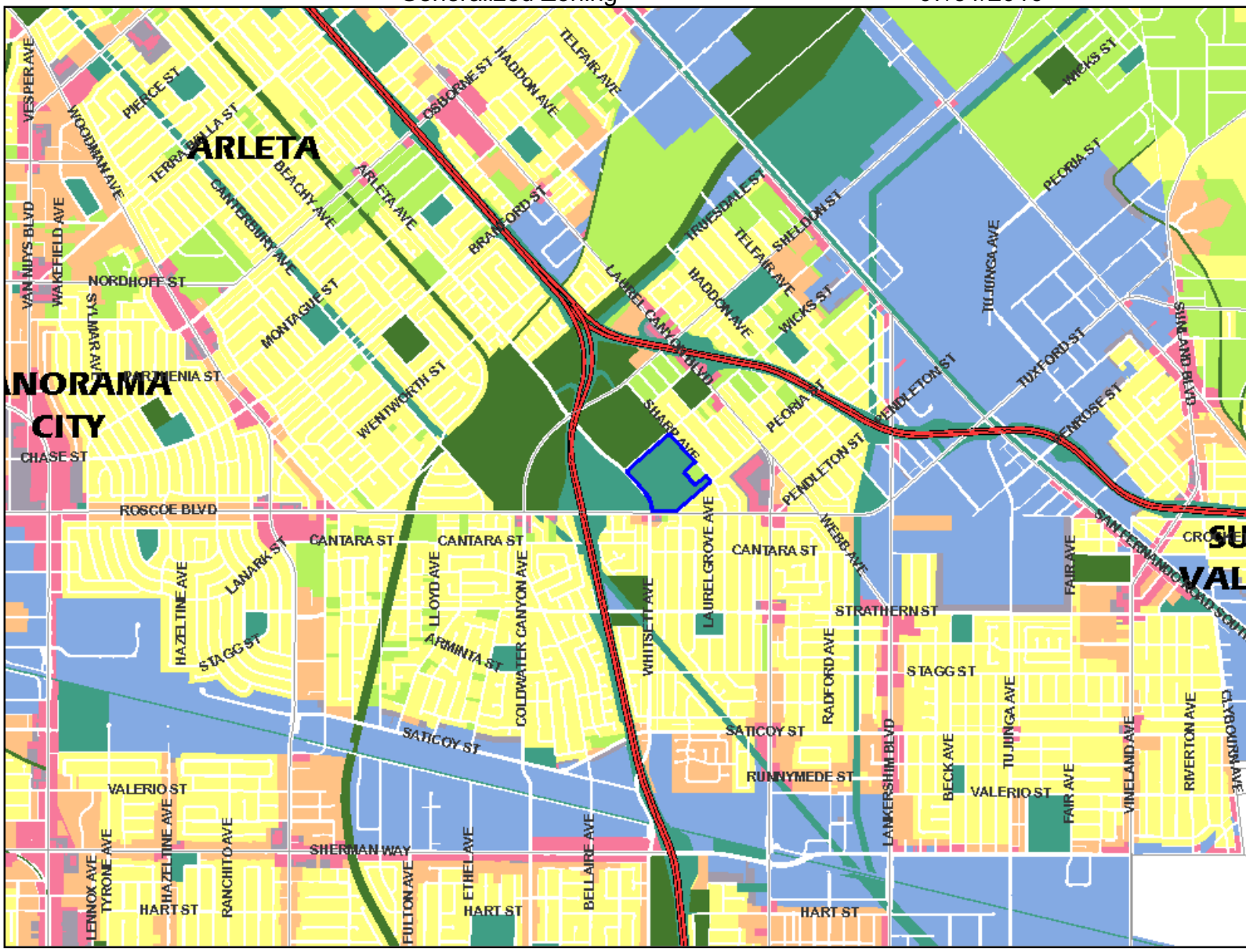
ZIMAS PUBLIC

Generalized Zoning

07/31/2016



Address: 12431 W ROSCOE BLVD
APN: 2634019900
PIN #: 192B165 87

Tract: TR 19166
Block: None
Lot: LT 1
Arb: None

Zoning: [Q]PF-1XL
General Plan: Public Facilities

LEGEND

GENERALIZED ZONING

- OS, GW
- A, RA
- RE, RS, R1, RU, RZ, RW1
- R2, RD, RMP, RW2, R3, RAS, R4, R5
- CR, C1, C1.5, C2, C4, C5, CW, ADP, LASED, CEC, USC, PVSP
- CM, MR, WC, CCS, UV, UI, UC, M1, M2, LAX, M3, SL
- P, PB
- PF
- HILLSIDE

GENERAL PLAN LAND USE

LAND USE

RESIDENTIAL

- Minimum Residential
- Very Low / Very Low I Residential
- Very Low II Residential
- Low / Low I Residential
- Low II Residential
- Low Medium / Low Medium I Residential
- Low Medium II Residential
- Medium Residential
- High Medium Residential
- High Density Residential
- Very High Medium Residential

COMMERCIAL

- Limited Commercial
- Limited Commercial - Mixed Medium Residential
- Highway Oriented Commercial
- Highway Oriented and Limited Commercial
- Highway Oriented Commercial - Mixed Medium Residential
- Neighborhood O□ce Commercial
- Community Commercial
- Community Commercial -Mixed High Residential
- Regional Center Commercial

INDUSTRIAL

- Commercial Manufacturing
- Limited Manufacturing
- Light Manufacturing
- Heavy Manufacturing
- Hybrid Industrial

PARKING

- Parking Bu□er

PORT OF LOS ANGELES

- General / Bulk Cargo - Non Hazardous (Industrial / Commercial)
- General / Bulk Cargo - Hazard
- Commercial Fishing
- Recreation and Commercial
- Intermodal Container Transfer Facility Site

LOS ANGELES INTERNATIONAL AIRPORT

- Airport Landside
- Airport Airside
- Airport Northside

OPEN SPACE / PUBLIC FACILITIES

- Open Space
- Public / Open Space
- Public / Quasi-Public Open Space
- Other Public Open Space
- Public Facilities

FRAMEWORK

COMMERCIAL

- Neighborhood Commercial
- General Commercial
- Community Commercial
- Regional Mixed Commercial

INDUSTRIAL

- Limited Industrial
- Light Industrial

CIRCULATION

STREET

- Arterial Mountain Road
- Collector Scenic Street
- Collector Street
- Collector Street (Hillside)
- Collector Street (Modified)
- Collector Street (Proposed)
- Country Road
- Divided Major Highway II
- Divided Secondary Scenic Highway
- Local Scenic Road
- Local Street
- Major Highway (Modified)
- Major Highway I
- Major Highway II
- Major Highway II (Modified)
- Major Scenic Highway
- Major Scenic Highway (Modified)
- Major Scenic Highway II
- Mountain Collector Street
- Park Road
- Parkway
- Principal Major Highway
- Private Street
- Scenic Divided Major Highway II
- Scenic Park
- Scenic Parkway
- Secondary Highway
- Secondary Highway (Modified)
- Secondary Scenic Highway
- Special Collector Street
- Super Major Highway

FREEWAYS

- Freeway
- Interchange
- On-Ramp / Off- Ramp
- Railroad
- Scenic Freeway Highway

MISC. LINES

- Airport Boundary
- Bus Line
- Coastal Zone Boundary
- Coastline Boundary
- Collector Scenic Street (Proposed)
- Commercial Areas
- Commercial Center
- Community Redevelopment Project Area
- Country Road
- DWP Power Lines
- Desirable Open Space
- Detached Single Family House
- Endangered Ridgeline
- Equestrian and/or Hiking Trail
- Hiking Trail
- Historical Preservation
- Horsekeeping Area
- Local Street
- MSA Desirable Open Space
- Major Scenic Controls
- Multi-Purpose Trail
- Natural Resource Reserve
- Park Road
- Park Road (Proposed)
- Quasi-Public
- Rapid Transit Line
- Residential Planned Development
- Scenic Highway (Obsolete)
- Secondary Scenic Controls
- Secondary Scenic Highway (Proposed)
- Site Boundary
- Southern California Edison Power
- Special Study Area
- Specific Plan Area
- Stagecoach Line
- Wildlife Corridor

POINTS OF INTEREST

- Alternative Youth Hostel (Proposed)
- Animal Shelter
- Area Library
- Area Library (Proposed)
- Bridge
- Campground
- Campground (Proposed)
- Cemetery
- HW Church
- City Hall
- Community Center
- Community Library
- Community Library (Proposed Expansion)
- Community Library (Proposed)
- Community Park
- Community Park (Proposed Expansion)
- Community Park (Proposed)
- Community Transit Center
- Convalescent Hospital
- Correctional Facility
- Cultural / Historic Site (Proposed)
- Cultural / Historical Site
- Cultural Arts Center
- DMV DMV Office
- DWP DWP
- DWP Pumping Station
- Equestrian Center
- Fire Department Headquarters
- Fire Station
- Fire Station (Proposed Expansion)
- Fire Station (Proposed)
- Fire Supply & Maintenance
- Fire Training Site
- Fireboat Station
- Health Center / Medical Facility
- Helistop
- Historic Monument
- Historical / Cultural Monument
- Horsekeeping Area
- Horsekeeping Area (Proposed)
- Horticultural Center
- Hospital
- Hospital (Proposed)
- HW House of Worship
- e Important Ecological Area
- e Important Ecological Area (Proposed)
- Interpretive Center (Proposed)
- JC Junior College
- MTA / Metrolink Station
- MTA Station
- MTA Stop
- MWD MWD Headquarters
- Maintenance Yard
- Municipal Office Building
- P Municipal Parking lot
- Neighborhood Park
- Neighborhood Park (Proposed Expansion)
- Neighborhood Park (Proposed)
- Oil Collection Center
- Parking Enforcement
- HQ Police Headquarters
- Police Station
- Police Station (Proposed Expansion)
- Police Station (Proposed)
- Police Training site
- PO Post Office
- Power Distribution Station
- Power Distribution Station (Proposed)
- Power Receiving Station
- Power Receiving Station (Proposed)
- C Private College
- E Private Elementary School
- Private Golf Course
- Private Golf Course (Proposed)
- JH Private Junior High School
- PS Private Pre-School
- Private Recreation & Cultural Facility
- SH Private Senior High School
- SF Private Special School
- Public Elementary (Proposed Expansion)
- Public Elementary School
- Public Elementary School (Proposed)
- Public Golf Course
- Public Golf Course (Proposed)
- Public Housing
- Public Housing (Proposed Expansion)
- JH Public Junior High School
- JH Public Junior High School (Proposed)
- MS Public Middle School
- SH Public Senior High School
- SH Public Senior High School (Proposed)
- Pumping Station
- Pumping Station (Proposed)
- Refuse Collection Center
- Regional Library
- Regional Library (Proposed Expansion)
- Regional Library (Proposed)
- Regional Park
- Regional Park (Proposed)
- RPD Residential Plan Development
- Scenic View Site
- Scenic View Site (Proposed)
- ADM School District Headquarters
- SC School Unspecified Loc/Type (Proposed)
- Skill Center
- SS Social Services
- ★ Special Feature
- Special Recreation (a)
- SF Special School Facility
- SF Special School Facility (Proposed)
- Steam Plant
- SM Surface Mining
- Trail & Assembly Area
- Trail & Assembly Area (Proposed)
- UTL Utility Yard
- Water Tank Reservoir
- Wildlife Migration Corridor
- Wildlife Preserve Gate

SCHOOLS/PARKS WITH 500 FT. BUFFER

- Existing School/Park Site
- Planned School/Park Site
- Inside 500 Ft. Bu□er

- Aquatic Facilities
- Beaches
- Charter School
- Child Care Centers
- Elementary School
- Golf Course
- High School
- Historic Sites
- Horticulture/Gardens
- Middle School
- Opportunity School
- Other Facilities
- Park / Recreation Centers
- Parks
- Performing / Visual Arts Centers
- Recreation Centers
- Span School
- Special Education School
- Senior Citizen Centers
- Skate Parks

OTHER SYMBOLS

- Lot Line
- Tract Line
- Lot Cut
- Easement
- Zone Boundary
- Building Line
- Lot Split
- Community Driveway
- Tract Map
- Parcel Map
- J Lot Ties
- Building Outlines 2014
- Building Outlines 2008

- Airport Hazard Zone
- Census Tract
- Coastal Zone
- Council District
- LADBS District O□ce
- Downtown Parking
- Fault Zone
- Fire District No. 1

- Flood Zone
- Hazardous Waste
- High Wind Zone
- Hillside Grading
- Historic Preservation Overlay Zone
- Speci□c Plan Area
- Very High Fire Hazard Severity Zone
- Oil Wells

Appendix F:

Vapor Encroachment Evaluation

John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

Inquiry Number: 4660230.9s
June 28, 2016

EDR Vapor Encroachment Screen

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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SECTION	PAGE
Executive Summary	ES1
Primary Map	2
Secondary Map	3
Aerial Photography	4
Map Findings	5
Record Sources and Currency	GR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

STANDARD ENVIRONMENTAL RECORDS	Maximum Search Distance*	Summary: property	1/10	1/10 - 1/3
Federal NPL	0.333	0	1	0
Federal CERCLIS	0.333	0	1	0
Federal RCRA CORRACTS facilities list	0.333	0	0	0
Federal RCRA TSD facilities list	0.333	0	0	0
Federal RCRA generators list	property	2	-	-
Federal institutional controls / engineering controls registries	0.333	0	1	0
Federal ERNS list	property	0	-	-
State and tribal - equivalent NPL	0.333	0	0	0
State and tribal - equivalent CERCLIS	0.333	1	2	0
State and tribal landfill / solid waste disposal	0.333	0	0	3
State and tribal leaking storage tank lists	0.333	0	3	2
State and tribal registered storage tank lists	property	0	-	-
State and tribal institutional control / engineering control registries	not searched	-	-	-
State and tribal voluntary cleanup sites	0.333	0	0	0
State and tribal Brownfields sites	0.333	0	0	0
Other Standard Environmental Records	1.0	9	5	5

HISTORICAL USE RECORDS				
Former manufactured Gas Plants	0.333	0	0	0
Historical Gas Stations	0.125	0	3	0
Historical Dry Cleaners	0.125	0	0	0
Exclusive Recovered Govt. Archives	property	0	-	-

*Each category may include several separate databases, each having a different search distance. For each category, the table reports the maximum search distance applied. See the section 'Record Sources and Currency' for information on individual databases.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

JOHN H FRANCIS POLYTECHNIC HIGH SCHOOL
12431 ROSCOE BLVD
SUN VALLEY, CA 91352

COORDINATES

Latitude (North):	34.221954 - 34° 13′ 19.035645″
Longitude (West):	118.404077 - 118° 24′ 14.672241″
Elevation:	823 ft. above sea level

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records.

Site	Database(s)
CITY OF LOS ANGELES - DPW - BUREAU SANIT 12431 ROSCO BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777001410
LAUSD--FRANCIS POLYTECHNIC HS 12431 ROSCOE BLVD. SUN VALLEY, CA 91352	FINDS Registry ID:: 110022033084 ECHO
CITY OF LOS ANGELES - DPW - BUREAU SANIT 12431 ROSCOE BLVD SUN VALLEY, CA 913520000	HAZNET GEPAID: CAH777001355
POLYTECHNIC HIGH SCHOOL 12431 ROSCOE BLVD SUN VALLEY, CA 91352	ECHO FINDS Registry ID:: 110037378619
CITY OF LOS ANGELES-DPW 12431 ROSCOE BLVD SUN VALLEY, CA 913520000	HAZNET GEPAID: CAH777000957
LAUSD--FRANCIS POLYTECHNIC HS 12431 ROSCOE BLVD. SUN VALLEY, CA 91352	RCRA-SQG EPA ID:: CAD982039315 EPA ID:: CAD982039315
POLYTECHNIC HIGH SCHOOL 12431 ROSCOE BLVD SUN VALLEY, CA 91352	RCRA-LQG EPA ID:: CAR000195750
CITY OF LOS ANGELES - DPW - BUREAU SANIT 12431 ROSCOE BLVD SUN VALLEY, CA 91352	HAZNET GEPAID: CAH777001440
FRANCIS POLYTECHNIC HIGH SCHOOL 12431 ROSCOE BOULEVARD PANORAMA CITY, CA 91402	SCH Status: No Further Action Facility Id: 19820072 ENVIROSTOR Status: No Further Action Facility Id: 19820072

EXECUTIVE SUMMARY

Site	Database(s)
LAUSD/ FRANCIS POLYTECHNIC HS 12431 ROSCOE BLVD SUN VALLEY, CA 913520000	HAZNET GEPAID: CAD982039315
LAUSD-NORTH HOLLYWOOD POLY CAS 12431 ROSCOE BLVD SUN VALLEY, CA 913520000	HAZNET GEPAID: CAR000195750

EXECUTIVE SUMMARY

PHYSICAL SETTING INFORMATION

Flood Zone:	Available
NWI Wetlands:	Available

AQUIFLOW®

Search Radius: 0.333 Mile.

No Aquiflow sites reported.

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	URBAN LAND
Soil Surface Texture:	variable
Hydrologic Group:	Not reported
Soil Drainage Class:	Not reported
Hydric Status:	Hydric Status: Soil does not meet the requirements for a hydric soil.
Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 10 inches
Depth to Bedrock Max:	> 10 inches

Soil Layer Information

	Boundary			Classification			
Layer	**Upper**	**Lower**	**Soil Texture Class**	**AASHTO Group**	**Unified Soil**	**Permeability Rate (in/hr)**	**Soil Reaction (pH)**
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

EXECUTIVE SUMMARY

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Surficial Soil Types:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Shallow Soil Types:
fine sandy loam
gravelly - loam
sand
silty clay

Deeper Soil Types:
stratified
clay loam
silty clay loam
gravelly - sandy loam
coarse sand
sand
weathered bedrock
very fine sandy loam

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
SAN FERNANDO VALLEY (AREA 1) CONSENT: Federal NPL ROD: Federal NPL SEMS: Federal CERCLIS NPL: Federal NPL ICIS: Other Standard Environmental Records US ENG CONTROLS: Federal institutional controls / engineering controls registries PRP: Other Standard Environmental Records FINDS: Other Standard Environmental Records ECHO: Other Standard Environmental Records US INST CONTROL: Federal institutional controls / engineering controls registries HIST Cal-Sites: State and tribal - equivalent CERCLIS Cortese: Other Standard Environmental Records ENVIROSTOR: State and tribal - equivalent CERCLIS	NORTH HOLLYWOOD WELLFIELD AREA	<1/10 N	Region	13
CITY OF LOS ANGELES - DPW - BUREAU SANIT HAZNET: Other Standard Environmental Records	12431 ROSCO BLVD	Property	▲ A1	97
LAUSD--FRANCIS POLYTECHNIC HS FINDS: Other Standard Environmental Records ECHO: Other Standard Environmental Records	12431 ROSCOE BLVD.	Property	▲ A2	99
CITY OF LOS ANGELES - DPW - BUREAU SANIT HAZNET: Other Standard Environmental Records	12431 ROSCOE BLVD	Property	▲ A3	100
POLYTECHNIC HIGH SCHOOL ECHO: Other Standard Environmental Records FINDS: Other Standard Environmental Records	12431 ROSCOE BLVD	Property	▲ A4	102
CITY OF LOS ANGELES-DPW HAZNET: Other Standard Environmental Records	12431 ROSCOE BLVD	Property	▲ A5	103
LAUSD--FRANCIS POLYTECHNIC HS RCRA-SQG: Federal RCRA generators list	12431 ROSCOE BLVD.	Property	▲ A6	105
POLYTECHNIC HIGH SCHOOL RCRA-LQG: Federal RCRA generators list	12431 ROSCOE BLVD	Property	▲ A7	107
CITY OF LOS ANGELES - DPW - BUREAU SANIT HAZNET: Other Standard Environmental Records	12431 ROSCOE BLVD	Property	▲ A8	109
FRANCIS POLYTECHNIC HIGH SCHOOL SCH: Other Standard Environmental Records ENVIROSTOR: State and tribal - equivalent CERCLIS	12431 ROSCOE BOULEVARD	Property	▲ A9	110
LAUSD/ FRANCIS POLYTECHNIC HS HAZNET: Other Standard Environmental Records	12431 ROSCOE BLVD	Property	▲ A10	117

EXECUTIVE SUMMARY

Name	Address	Dist/Dir	Map ID	Page
LAUSD-NORTH HOLLYWOOD POLY CAS HAZNET: Other Standard Environmental Records	12431 ROSCOE BLVD	Property	▲ A11	119
EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A SCH: Other Standard Environmental Records ENVIROSTOR: State and tribal - equivalent CERCLIS	8451 ARLETA AVENUE	<1/10 NW	▲ B12	121
MOBIL STATION HNG LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records	12450 ROSCOE BLVD	<1/10 SW	▼ A14	126
JED GAS STATION SWEEPS UST: State and tribal registered storage tank lists LUST: State and tribal leaking storage tank lists	12450 ROSCOE BLVD	<1/10 SW	▼ A15	128
CITY OF LADWP LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records CHMIRS: Other Standard Environmental Records NPDES: Other Standard Environmental Records	8501 ARLETA AVE	<1/10 NW	▲ B17	134
ROSCOE SITE US BROWNFIELDS: Other Standard Environmental Records ECHO: Other Standard Environmental Records	12500-12522 W ROSCOE BLVD	<1/10 WSW	▼ 18	142
SHELDON-ARLETA HIST UST: State and tribal registered storage tank lists NPDES: Other Standard Environmental Records SWF/LF: State and tribal landfill / solid waste disposal	12455 WICKS ST	1/10 - 1/3 NNW	▼ C20	146
SHELDON-ARLETA LANDFILL SWF/LF: State and tribal landfill / solid waste disposal	12455 WICKS ST.	1/10 - 1/3 NNW	▼ C21	151
TEMPCO ENGINEERING, INC. HIST CORTESE: Other Standard Environmental Records	8866 LAUREL CNYN	1/10 - 1/3 NNE	▲ D22	153
TEMPCO ENGINEERING, INC HIST CORTESE: Other Standard Environmental Records	8866 LAUREL CNYN	1/10 - 1/3 NNE	▲ D23	154
TEMPCO ENGINEERING, INC RCRA-SQG: Federal RCRA generators list FINDS: Other Standard Environmental Records ECHO: Other Standard Environmental Records UST: State and tribal registered storage tank lists SWEEPS UST: State and tribal registered storage tank lists LUST: State and tribal leaking storage tank lists CA FID UST: State and tribal registered storage tank lists NPDES: Other Standard Environmental Records	8866 LAUREL CYN BLVD	1/10 - 1/3 NNE	▲ D24	155
ARCO #1959 SWEEPS UST: State and tribal registered storage tank lists LUST: State and tribal leaking storage tank lists CA FID UST: State and tribal registered storage tank lists HIST CORTESE: Other Standard Environmental Records	12050 ROSCOE BLVD	1/10 - 1/3 E	▲ 25	166

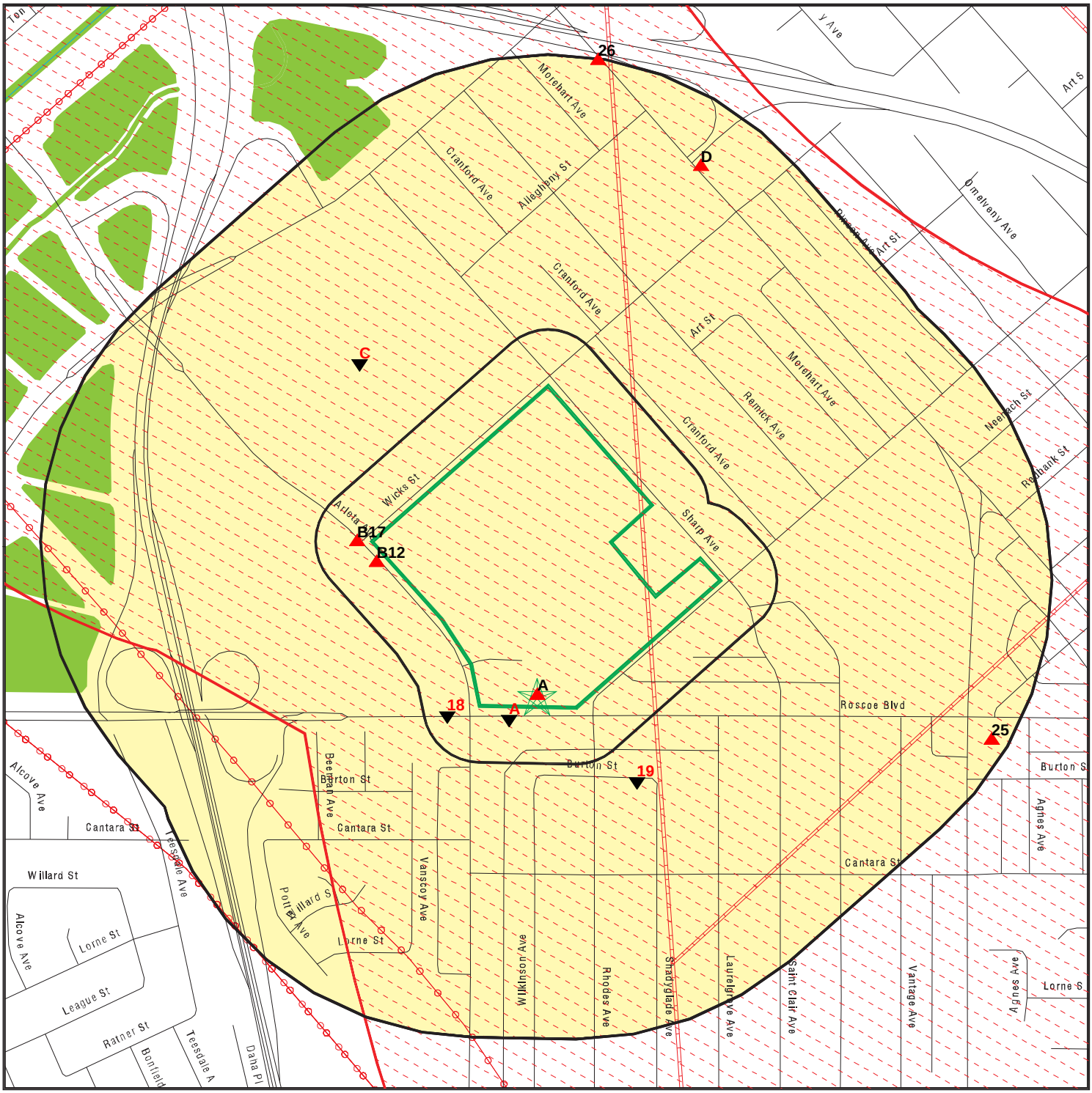
EXECUTIVE SUMMARY

Name	Address	Dist/Dir	Map ID	Page
RECYCLING INC	8907 LAUREL CANYON BLVD	1/10 - 1/3 N	▲ 26	171
SWRCY: State and tribal landfill / solid waste disposal				

HISTORICAL USE RECORDS

Name	Address	Dist/Dir	Map ID	Page
12440 ROSCOE BLVD	12440 ROSCOE BLVD	<1/10 SW	▼ A13	125
EDR Hist Auto: Historical Gas Stations				
12450 ROSCOE BLVD	12450 ROSCOE BLVD	<1/10 SW	▼ A16	132
EDR Hist Auto: Historical Gas Stations				
12334 BURTON ST	12334 BURTON ST	<1/10 SE	▼ 19	145
EDR Hist Auto: Historical Gas Stations				

PRIMARY MAP - 4660230.9S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- Areas of Concern

SITE NAME:	John H Francis Polytechnic High School	CLIENT:	Civil-Environmental-survey Group
ADDRESS:	12431 Roscoe Blvd Sun Valley CA 91352	CONTACT:	Skye Green
LAT/LONG:	34.221954 / 118.404077	INQUIRY #:	4660230.9s
		DATE:	June 28, 2016 4:59 pm

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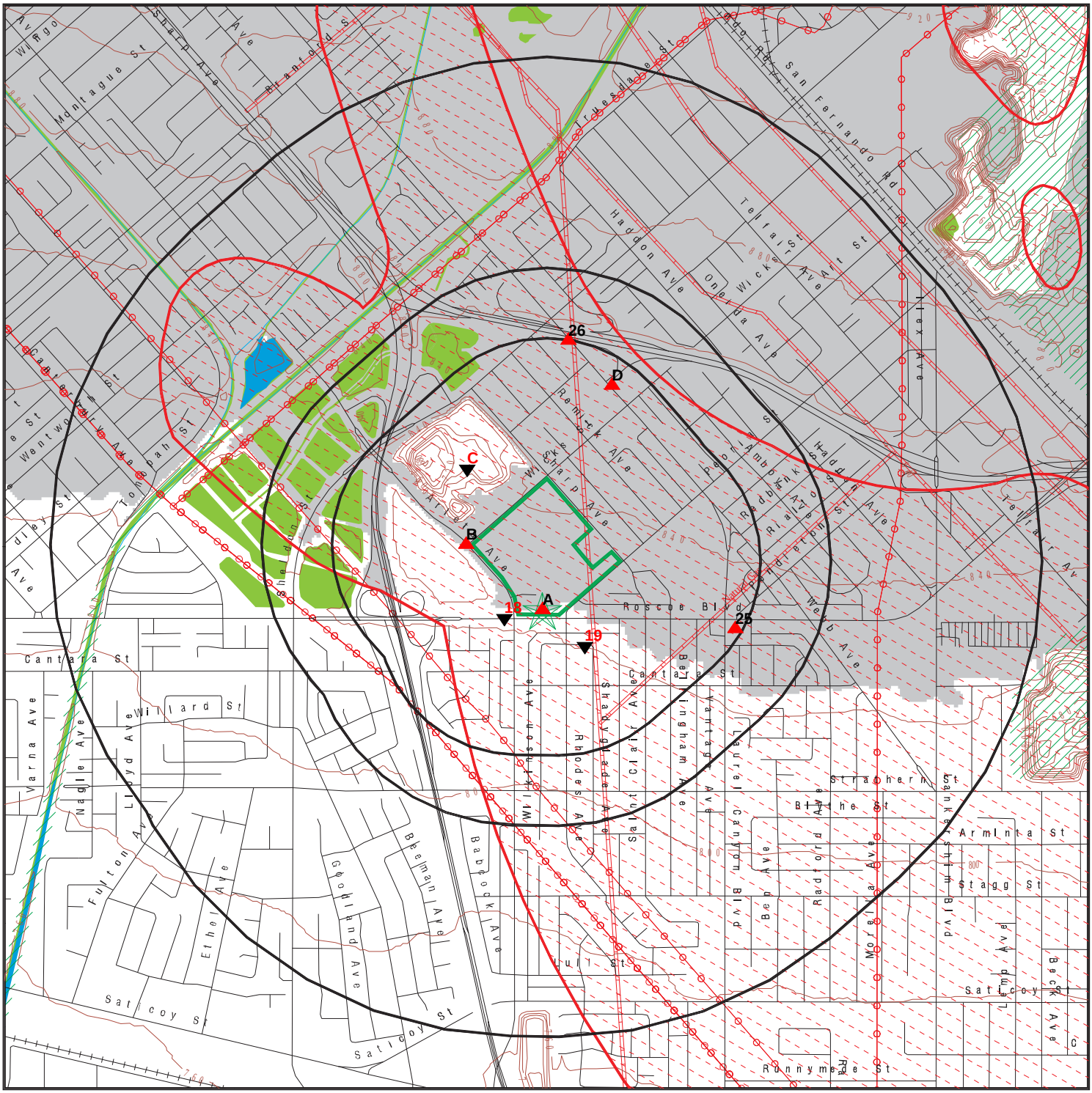
SECONDARY MAP - 4660230.9S


A
B
C
D
18
19
25
26
Roscoe Blvd
Cantara St
Willard St
Saticoy St
Strathern St
Blythe St
Armlnta St
Stagg St
Runnymede St
Sharp Ave
Remick Ave
Haddon Ave
Oneida Ave
Telfair Ave
Wicks Blvd
Lindley Ave
Varna Ave
Nagle Ave
Lloyd Ave
Fulton Ave
Ethel Ave
Gothland Ave
Beeman Ave
Babcock Ave
Shelburne St
Wentworth St
Tonopah St
Montague St
Wilbur Ave
Branford St
Sheldon St
San Fernando Rd
Hayvenhurst Ave
Woodley Ave
Balboa Blvd
Morella Ave
Lassen St
Beck Ave
Lamp
Shirley Ave
Clair Ave
Yarnell Ave
Cantaloupe Ave
Rhodes Ave
Wilbur Ave
Amboy Ave
Reseda Blvd
Webb Ave
Alexander Ave
Tampa Ave
Darby Ave
Etiwanda Ave
Wilbur Ave
Sharp Ave
Artesia Ave
Remick Ave
Haddon Ave
Oneida Ave
Telfair Ave
Wicks Blvd
Alexander Ave
Tampa Ave
Darby Ave
Etiwanda Ave
Reseda Blvd
Amboy Ave
Webb Ave
Balboa Blvd
Morella Ave
Lassen St
Beck Ave
Lamp
Shirley Ave
Clair Ave
Yarnell Ave
Cantaloupe Ave
Rhodes

AERIAL PHOTOGRAPHY - 4660230.9s



SITE NAME:	John H Francis Polytechnic High School	CLIENT:	Civil-Environmental-survey Group
ADDRESS:	12431 Roscoe Blvd Sun Valley CA 91352	CONTACT:	Skye Green
		INQUIRY #:	4660230.9s
LAT/LONG:	34.221954 / 118.404077	DATE:	June 28, 2016 5:01 pm

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MAP FINDINGS

LEGEND

FACILITY NAME **FACILITY ADDRESS, CITY, ST, ZIP**		EDR SITE ID NUMBER
▼ MAP ID#	Direction Distance Range (Distance feet / miles) Relative Elevation Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.

Worksheet:

Comments:
Comments may be added on the online Vapor Encroachment Worksheet.

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

SAN FERNANDO VALLEY (AREA 1) NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA, 91601		1000709322
Region	N <1/10 (0 ft. / 0 mi.)	Federal NPL Federal CERCLIS Federal institutional controls / engineering controls registries State and tribal - equivalent CERCLIS Other Standard Environmental Records

Worksheet:

CONSENT: Federal NPL

EPA ID:	CAD980894893
Site ID:	Not Reported
Case Title:	U.S. V. ALLIED-SIGNAL, ET AL.
Court Num:	93-6490
District:	California, Cent
Entered Date:	19970514
	Full-text of the consent decree for this site issued by the United States District Court is available from EDR. Contact your EDR Account Executive.

ROD: Federal NPL

Full-text of USEPA Record of Decision(s) is available from EDR.

SEMS: Federal CERCLIS

Site ID:	902251
EPA ID:	CAD980894893
Federal Facility:	N
NPL:	Currently on the Final NPL
Non NPL Status:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Following information was gathered from the prior CERCLIS update completed in 10/2013: :

Site ID:	0902251
EPA ID:	CAD980894893
Facility County:	LOS ANGELES
Short Name:	SAN FERNANDO VALLEY (AREA
Congressional District:	28
IFMS ID:	0959
SMSA Number:	4480
USGC Hydro Unit:	18070105
Federal Facility:	Not a Federal Facility
DMNSN Number:	9336.00000
Site Orphan Flag:	N
RCRA ID:	Not Reported
USGS Quadrangle:	Not Reported
Site Init By Prog:	Not Reported
NFRAP Flag:	Not Reported
Parent ID:	Not Reported
RST Code:	I
EPA Region:	09
Classification:	Wells
Site Settings Code:	UR
NPL Status:	Currently on the Final NPL
DMNSN Unit Code:	ACRE
RBRAC Code:	Not Reported
RResp Fed Agency Code:	Not Reported
Non NPL Status:	Not Reported
Non NPL Status Date:	/ /
Site Fips Code:	06037
CC Concurrence Date:	/ /
CC Concurrence FY:	Not Reported
Alias EPA ID:	Not Reported
Site FUDS Flag:	Not Reported

CERCLIS Site Contact Name(s):

Contact ID:	13002702.00000
Contact Name:	Zizi Searles
Contact Tel:	(415) 972-3178
Contact Title:	Remedial Project Manager (RPM)
Contact Email:	Not Reported
Contact ID:	13003854.00000
Contact Name:	Leslie Ramirez
Contact Tel:	(415) 972-3978
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not Reported
Contact ID:	13003858.00000
Contact Name:	Sharon Murray
Contact Tel:	(415) 972-4250

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not Reported
Contact ID:	13004003.00000
Contact Name:	Carl Brickner
Contact Tel:	Not Reported
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not Reported
Contact ID:	13002904.00000
Contact Name:	Lisa Hanusiak
Contact Tel:	(415) 972-3152
Contact Title:	Remedial Project Manager (RPM)
Contact Email:	Not Reported
Contact ID:	13002785.00000
Contact Name:	Kelly Manheimer
Contact Tel:	(415) 972-3290
Contact Title:	Remedial Project Manager (RPM)
Contact Email:	Not Reported
Contact ID:	13004928.00000
Contact Name:	Jamey Watt
Contact Tel:	(415) 972-3175
Contact Title:	Remedial Project Manager (RPM)
Contact Email:	Not Reported

CERCLIS Site Alias Name(s):

Alias ID:	101
Alias Name:	SAN FERNANDO VALLEY- N HOLLYWOOD WELLFLD
Alias Address:	Not Reported NORTH HOLLYWOOD & BURBANK, CA 91600
Alias ID:	201
Alias Name:	NORTH HOLLYWOOD OPERABLE UNIT
Alias Address:	Not Reported CA
Alias ID:	301
Alias Name:	BURBANK OPERABLE UNIT
Alias Address:	Not Reported CA
Alias ID:	302
Alias Name:	SAN FERNANDO VALLEY (AREA 1)
Alias Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Alias ID:	303
Alias Name:	SAN FERNANDO VALLEY (AREA 1)
Alias Address:	NORTH HOLLYWOOD WELLFIELD AREA LOS ANGELES, CA 91601
Alias ID:	201
Alias ID:	301

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Alias Comments:

OPERABLE UNIT 1* BURBANK WELL FIELD IN VICINITY OF BURBANK AIRPORT & FACILITY. *

OPERABLE UNIT 2. *

BURBANK/LOCKHEED OPERABLE UNIT.

Site Description:

The North Hollywood-Burbank Well Field is located within the North Hollywood National Priorities List (NPL) Site, which is one of four NPL sites in the San Fernando Valley. It is also located in the San Fernando Valley Groundwater Basin. The sites were proposed for inclusion on the NPL because of the discovery of trichloroethylene and other volatile organic contaminants (VOCs) in the groundwater. The San Fernando Valley Groundwater Basin comprises 112,000 acres of valley fill situated among the Coastal Ranges within the Los Angeles metropolitan area. The area is used for residential, commercial, and industrial purposes. Groundwater from the basin is distributed by various municipalities and water districts to the residents of the metropolitan area. The Los Angeles Department of Water and Power (DWP) operates the North Hollywood-Burbank Well Field to provide drinking water to the residents of the City of Los Angeles, located to the south of the San Fernando Valley.The San Fernando Groundwater Basin can provide drinking water for approximately 500,000 people residing in the San Fernando Valley and Los Angeles. In times of water shortages, the groundwater shortage can be drawn upon to supply about one million people. It is also an important source of water for the Cities of Burbank, Glendale, and San Fernando.The North Hollywood Operable Unit (NHOU) is one of two geographically-defined operable units within the San Fernando Valley (SFV) (Area 1) Superfund Site. The NHOU comprises approximately 4 square miles of contaminated groundwater underlying an area of mixed industrial, commercial, and residential land use in the community of North Hollywood (a district of the City of Los Angeles). The NHOU is approximately 15 miles north of downtown Los Angeles and immediately west of the City of Burbank, and has approximate Site boundaries of Sun Valley and Interstate 5 to the north, State Highway 170 and Lankershim Boulevard to the west, the Burbank Airport to the east, and Burbank Boulevard to the south. The EPA is the lead agency for the current and planned future groundwater remedial activities at the NHOU. The EPA's response activities at the NHOU are and have been conducted under the authority established in the federal Superfund law, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. Section 9601 et seq. The lead state agency is the California Department of Toxic Substances Control (DTSC). The Los Angeles Regional Water Quality Control Board (RWQCB) has provided and continues to

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

provide substantial support, particularly with the investigation and cleanup of sources of contamination in the SFV. The expected source of cleanup monies for the NHOU is an enforcement settlement with the Potentially Responsible Parties (PRPs).Prior to World War II, most land in the SFV was occupied by farms, orchards, and ranchland. By 1949, after the war, nearly all the land in Burbank and North Hollywood was occupied by housing developments, industrial facilities, retail establishments, and the Burbank Airport. Accompanying these land use changes in the 1940s was a substantial increase in population and groundwater withdrawals from the SFV. In the 1950s, the North Hollywood, Erwin, Whitnall, and Verdugo Well Fields were constructed by the Los Angeles Department of Water and Power (LADWP) in the North Hollywood area to meet the increasing demand for water. In 1968, groundwater withdrawals from the SFV were reduced to achieve "safe yield" from the basin, and more surface water was imported to the basin from external sources. In 1979, industrial contamination was found in groundwater in the San Gabriel Valley (to the east of the SFV), prompting the California Department of Public Health (CDPH; formerly the California Department of Health Services) to request that all major water providers in the region, including those in the SFV, sample and analyze groundwater for potential industrial contaminants. Trichloroethylene (TCE) and tetrachloroethylene (PCE) were consistently detected in a large number of production wells in the SFV at concentrations greater than Federal and State Maximum Contaminant Levels (MCLs) for drinking water. TCE and PCE were widely used in the San Fernando Valley starting in the 1940s for dry cleaning and for degreasing machinery. Disposal was not well regulated at that time, and releases volatile organic compound (VOC)-contaminated groundwater that extends from the NHOU to the southeast. To replace wells within the NHOU area contaminated by TCE and PCE, and to provide more operational flexibility for groundwater recharge and pumping in the SFV, LADWP constructed the Rinaldi-Toluca Well Field in 1988 and 1989, and the Tujunga Well Field in 1993. Based on the significant levels of groundwater contamination present in the SFV and the impact of that contamination on numerous municipal water supply wells, EPA added four SFV Sites to the National Priorities List (NPL) in 1986 and defined them as areas of regional groundwater contamination. Three of the four Sites (Areas 1, 2 and 4) are contiguous areas within whose boundaries are well fields that serve the water supply systems for the cities of Los Angeles, Burbank and Glendale. There is a large, continuous plume of groundwater contamination that runs through these three Sites. The fourth Site, Area 3,

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

lies in the Verdugo basin, a geographically separate area of the eastern San Fernando Valley.In the SFV Area 1 Site, located at the upgradient end of the contaminated groundwater plume, the selection and implementation of the initial interim remedy - the Existing NHOU Extraction and Treatment System - for the LADWP's North Hollywood well field was given fast-track status because of the potential for contamination to spread to other well fields and areas of uncontaminated groundwater. In 1986, LADWP completed the Operable Unit Feasibility Study for the North Hollywood Well Field Area of the North Hollywood-Burbank NPL Site, which was the basis for selection and implementation of the Existing NHOU Extraction and Treatment System. The 1987 Record of Decision (ROD) for the Site selected the Existing NHOU Extraction and Treatment System as an interim groundwater containment remedy. In 1989, LADWP constructed the Existing NHOU Extraction and Treatment System with financial support from EPA. The Existing NHOU Extraction and Treatment System consists of eight groundwater extraction wells (NHE-1 through NHE-8), an air-stripping treatment system to remove VOCs from the extracted groundwater, activated carbon filters to remove VOCs from the air stream, and ancillary equipment. The treated groundwater is discharged into an LADWP blending facility where it is combined with water from other sources before entering the LADWP water supply system. The Existing NHOU Extraction and Treatment System commenced operation in December 1989 and remains in operation today. In 1989, EPA issued a ROD for the Burbank OU (BOU) of the SFV Area 1 Site. That ROD also selected an interim remedy (containment) for the VOC-contaminated groundwater within the Burbank area, where ten of the city's water supply wells had been shut down due to contamination. The BOU remedy, which provides treated water for the City of Burbank's water supply system, began operation in 1996 and remains in operation to this day.OU01 1991 ESD:In June 1986, the United States Environmental Protection Agency (EPA) evaluated the threat posed by a number of well fields within the San Fernando and Verdugo Groundwater Basins, and designated them as National Priorities List (NPL) hazardous substance sites. Industrial chemicals had been detected in groundwater from these areas. Although four sites in the basin were listed on the NPL, EPA and DWP are managing the investigation of the four sites and the adjacent area as a single project consistent with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Section 104(d)(4). The San Fernando Valley Groundwater Basin (SFVGB) has historically been, and continues to be, an important source of drinking water for the Los Angeles metropolitan area,

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

including the unincorporated area of La Cresenta, and the cities of Burbank, Glendale, and San Fernando. The groundwater basin provides these communities with enough water to serve approximately 600,000 residents.Groundwater from the SFVGB is used for residential, commercial, and industrial purposes, and is especially important during years of drought. The groundwater that has become contaminated is difficult to replace. The current water supply from surface water may not always be available in the future because of periodic drought conditions and state and federal water rights issues.The Burbank Operable Unit (OU) was developed to address the areal extent of groundwater contamination that is presently generally located in the area of the Burbank Well Field and including any areas to which the groundwater contamination migrates. The Site is part of the SFV Area 1 (North Hollywood) NPL site and includes an area beyond that originally designated as SFV Area 1. The City of Burbank's production wells have been shut down because the water they produce contained trichloroethylene (TCE) and perchloroethylene (PCE) in concentrations exceeding state and federal maximum contaminant levels (MCLs). Consequently, the City of Burbank now purchases 100 percent of its water, which is imported supply, from the Metropolitan Water District of SouthernCalifornia (MWD).On June 30, 1989, the U.S. Environmental Protection Agency (EPA) signed a Record of Decision (ROD) for the San Fernando Valley (SFV) Area 1 - Burbank Operable Unit (Burbank OU). The Burbank OU is the second OU, but is named OU03 at the SFV Area 1 NPL site. The purpose of this Explanation of Significant Differences (ESD) is to explain the significant differences between the interim remedial action originally selected in the 1989 ROD and the interim remedy which will be implemented at the Site. EPA is issuing this ESD in order to take into account technical data received after the ROD was signed in June of 1989 and to clarify any ambiguities regarding the selected remedy. An Explanation of Significant Differences addressing OU01 the San Fernando Site was completed in November, 1990.Operable Unit 3:The following gives a brief background of the Burbank Operable unit (OU) and a short summary of the remedy selected in the Record of Decision (ROD) and modified by Explanation of Significant Differences (ESD) 1. Further background information can be found in the ROD (dated June 30, 1989), and in ESD1 (dated November 20, 1990), as well as in other documents in the Burbank OU Administrative Record.In June 1986, the U.S. Environmental Protection Agency (EPA) evaluated the threat posed by groundwater contamination at a number of water supply wellfields within the San Fernando Valley and Verdugo

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

groundwater basins. The chief contaminants of concern are trichloroethylene (TCE) and perchloroethylene (PCE). As a result of its investigation, EPA designated four wellfield areas as National Priorities List (NPL) sites. EPA is managing the four sites as a single project consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104(d)(4).The San Fernando Valley Groundwater Basin has historically been an important source of drinking water for the Los Angeles metropolitan area, including the City of Burbank. The groundwater basin provides enough water to serve approximately 600,000 residents.Groundwater extracted from the basin is especially important during years of drought. Due to contamination by volatile organic chemicals (VOC), including TCE and PCE, beneficial use of the groundwater resource has been partially lost. Surface water supplies have replaced the lost resource, but are costly, and may not be available in the future due to periodic drought conditions and the potential for changing water rights policy.The Burbank OU is located within the San Fernando Valley groundwater basin and encompasses wellfields which were operated by the City of Burbank prior to being shut down as a result of contamination. The Burbank OU was specifically developed to address this areal extent of groundwater contamination.The City of Burbank's production wells have been shut down since the early 1980s because of the presence of TCE and PCE in concentrations exceeding federal and state Maximum Contaminant Levels (MCL). Consequently, the city purchases close to one hundred percent of its water from the Metropolitan Water District of Southern California, which supplies surface water imported from outside the San Fernando basin. (The city does operate a granular activated carbon groundwater extraction and treatment plant during parts of the year, but the contribution of this plant toward meeting the overall water demand is small).On June 30, 1989, EPA signed a Record of Decision (ROD) for the San Fernando Valley Area 1 Superfund Site, Burbank Operable Unit OU. On November 21, 1990, EPA signed an Explanation of Significant Differences (ESD1) modifying the interim remedial action selected in the ROD.A second ESD addressing the Burbank Operable Unit (Operable Unit 3) at the San Fernando Valley (Area 1) site was completed in February 1997.In December 1992, a remedial investigation (RI) for the SFV groundwater basin, including installation and subsequent regular monitoring of 84 groundwater wells, was completed under a cooperative agreement between EPA and the LADWP. The RI was conducted to evaluate the groundwater quality throughout the SFV basin and assist in identifying the best treatment method(s) and optimal locations to

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

install groundwater treatment systems to address the SFV groundwater contaminationEPA listed the SFV Sites as groundwater only, with the intent to focus on addressing the regional groundwater contamination, with an agreement with the state agencies to address the sources. From the late 1980s to late 1990s, EPA provided funds to RWQCB to conduct assessments of facilities in the SFV to determine the extent of solvent usage and to assess past and current chemical handling, storage, and disposal practices. These investigations were conducted pursuant to RWQCB's Well Investigation Program and resulted in source remediation activities under RWQCB oversight at several facilities within the SFV, including two within the NHOU. Source investigations and remediation activities are currently in progress under the lead of RWQCB and DTSC. In 1993, 1998, 2003, and 2008, EPA conducted five-year reviews (as required by CERCLA) to evaluate the protectiveness of the NHOU interim remedy. The Third NHOU Five-Year Review reported that the TCE and PCE groundwater plume that the remedy was designed to capture was migrating vertically and laterally beyond the remedy's zone of hydraulic control. This conclusion was based largely on EPA's evaluation of the current NHOU groundwater conditions and LADWP findings in the Draft Evaluation of the North Hollywood Operable Unit and Options to Enhance Its Effectiveness. The Final Evaluation of the North Hollywood Operable Unit and Options to Enhance Its Effectiveness also raised concerns regarding detections of total chromium and hexavalent chromium in extraction well NHE-2 of the NHOU interim remedy. Well NHE-2 is located just a short distance from the former Bendix facility, one of the major VOC sources in the NHOU. In July 2006, after a year of unusually high rainfall and rising groundwater levels in the SFV, the total chromium concentration detected at NHOU extraction well NHE-2 began to increase. Chromium was used in the metal plating and aerospace industry (metal fabrication), as well as for corrosion inhibition in industrial cooling towers, from the 1940s through the 1980s. It was also used extensively at the former Bendix facility. In 2007, the elevated concentrations of chromium at well NHE-2 caused total chromium concentrations in the combined NHOU treatment system effluent to exceed 30 micrograms per liter (ug/L) (60 percent of the state MCL). As a result, CDPH advised LADWP to shut down well NHE-2 or divert the water produced by the well to a nonpotable use. Chromium concentrations at this well have subsequently ranged from approximately 280 to 440 ug/L. In addition, 1, 4-dioxane was detected at well NHE-2 during 2007 and 2008 at concentrations ranging from 4 to 7 ug/L. There is no MCL for 1, 4-dioxane, but the CDPH

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

notification level for 1, 4-dioxane is 3 ug/L. Extraction well NHE-2 remained shut down until September 2008, when the installation of a wellhead VOC treatment unit and modification of the discharge piping were completed, which allowed this well to return to service. The NHE-2 effluent, which still contains elevated levels of chromium, is currently discharged to the Los Angeles Bureau of Sanitation sewer system. This work was conducted by Honeywell International (a corporate successor to Bendix) as an interim measure, pursuant to a Cleanup and Abatement Order (CAO) from RWQCB that requires Honeywell to clean up the chromium contamination and to restore lost water caused by the shut down of well NHE-2. A long-term wellhead treatment system for well NHE-2, including treatment for chromium and, if necessary, 1,4-dioxane, to meet drinking water standards is expected to be implemented pursuant to the RWQCB CAO prior to the implementation of the NHOU Second Interim Remedy.Following construction and start up of the Existing NHOU Extraction and Treatment System, EPA issued general and special notice letters to PRPs. In 1996 and 1997, EPA reached two separate settlements with PRPs in which the settling parties agreed to pay EPA's past costs and fund operation of the Existing NHOU Extraction and Treatment System for the remainder of its fifteen-year term. In 2008, when the funds collected pursuant to the 1996 and 1997 settlements were close to being exhausted, EPA entered into an administrative order on consent with a number of parties from 1996 and 1997 settlements and issued a unilateral administrative order to the remaining viable parties in order to secure funding to continue operating the Existing NHOU Extraction and Treatment System until the Second Interim Remedy is constructed and operational. In preparation for the selection and implementation of the Second Interim Remedy, EPA has conducted additional PRP search activity. The RWQCB has issued CAOs to two parties in the NHOU. In December 1987, Lockheed was issued a CAO directing it to remediate contaminated soil and groundwater at Plant B-1 (in the BOU) and to complete a comprehensive Site assessment at all of Lockheed's other Burbank Airport facilities, including Plants B5 and C1 (in the NHOU), to determine the sources and extent of soil and groundwater contamination. The RWQCB issued a CAO in February 2003 to Honeywell International, Inc., for VOC and chromium contamination in groundwater at the former Bendix facility in North Hollywood. This CAO was amended in April 2007 to include investigation and mitigation of emerging contaminants at the former Bendix facility and to address elevated chromium concentrations at NHOU extraction well NHE-2.The land use in the SFV Area 1 Site, including the NHOU, consists of mixed residential, industrial,

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

and commercial use. The SFV is fully developed and land uses in the NHOU are not expected to change significantly in the next 20 years or longer. The SFV groundwater basin is an important source of drinking water for the Los Angeles metropolitan area, including the cities of Los Angeles, Glendale, Burbank, and San Fernando. The SFV is located in the Upper Los Angeles River Area (ULARA), which is under adjudicated water rights regulated by the ULARA Watermaster. Through court action in 1975, the City of Los Angeles was granted rights to all groundwater in the San Fernando Basin that is derived from precipitation within ULARA. There are a number of production well fields in the eastern SFV, including six LADWP well fields located in or near the NHOU. The output from the existing NHOU remedy accounts for approximately 1 to 2 percent of LADWP's total extraction from the SFV groundwater basin. The need for drinking water development in the eastern SFV, including the NHOU, is expected to increase over the next 20 years as restrictions on importing water to Southern California increase and imported water becomes more expensive.An Interim ROD addressing Operable Unit 4 was completed in September 2009.

CERCLIS Assessment History:

Action Code:	001
Action:	DISCOVERY
Date Started:	/ /
Date Completed:	12/01/83
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	HAZARD RANKING SYSTEM PACKAGE
Date Started:	/ /
Date Completed:	04/01/84
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Code:	001
Action:	SITE INSPECTION
Date Started:	/ /
Date Completed:	04/01/84
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PRELIMINARY ASSESSMENT
Date Started:	/ /
Date Completed:	04/01/84
Priority Level:	Higher priority for further assessment
Operable Unit:	SITEWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started:	/ /
Date Completed:	10/15/84
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	09/30/84
Date Completed:	08/15/85
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started:	/ /
Date Completed:	06/10/86
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	08/16/85
Date Completed:	09/24/87
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	State, Fund Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMEDIAL DESIGN
Date Started:	04/01/87
Date Completed:	09/24/87
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	State, Fund Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	RECORD OF DECISION
Date Started:	/ /
Date Completed:	09/24/87
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Anomaly: Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: Notice Letters Issued
Date Started: / /
Date Completed: 08/24/88
Priority Level: Not Reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not Reported
Urgency Indicator: Not Reported
Action Anomaly: Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: Notice Letters Issued
Date Started: / /
Date Completed: 04/13/89
Priority Level: Not Reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not Reported
Urgency Indicator: Not Reported
Action Anomaly: Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 01/15/88
Date Completed: 06/30/89
Priority Level: Not Reported
Operable Unit: BURBANK
Primary Responsibility: State, Fund Financed
Planning Status: Primary
Urgency Indicator: Not Reported
Action Anomaly: Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: Special Notice Issued
Date Started: / /
Date Completed: 06/30/89
Priority Level: Not Reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	RECORD OF DECISION
Date Started:	/ /
Date Completed:	06/30/89
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	Special Notice Issued
Date Started:	/ /
Date Completed:	05/04/90
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMOVAL ASSESSMENT
Date Started:	08/29/90
Date Completed:	08/29/90
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	UNILATERAL ADMIN ORDER
Date Started:	/ /
Date Completed:	08/30/90
Priority Level:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	Notice Letters Issued
Date Started:	/ /
Date Completed:	08/30/90
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	Explanation Of Significant Differences
Date Started:	/ /
Date Completed:	11/12/90
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	Not Reported
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	Special Notice Issued
Date Started:	/ /
Date Completed:	11/20/90
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	05/04/89

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Date Completed:	03/28/91
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMOVAL
Date Started:	08/27/90
Date Completed:	05/23/91
Priority Level:	Cleaned up
Operable Unit:	BURBANK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Time Critical
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	REMOVAL COMMUNITY RELATIONS
Date Started:	09/11/90
Date Completed:	05/23/91
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	REMOVAL ASSESSMENT
Date Started:	06/17/91
Date Completed:	06/17/91
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action:	REMEDIAL ACTION
Date Started:	08/06/87
Date Completed:	09/04/91
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	State, Fund Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	08/16/90
Date Completed:	09/30/91
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	CONSENT DECREE
Date Started:	03/28/91
Date Completed:	03/25/92
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	UNILATERAL ADMIN ORDER
Date Started:	/ /
Date Completed:	03/26/92
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Code:	001
Action:	RISK/HEALTH ASSESSMENT
Date Started:	/ /
Date Completed:	12/15/92
Priority Level:	Not Reported
Operable Unit:	BASINWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	ECOLOGICAL RISK ASSESSMENT
Date Started:	/ /
Date Completed:	12/15/92
Priority Level:	Not Reported
Operable Unit:	BASINWIDE
Primary Responsibility:	State, Fund Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	PREPARATION OF COST DOCUMENT PACKAGE
Date Started:	/ /
Date Completed:	06/17/93
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	09/25/89
Date Completed:	06/30/93
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	FIVE-YEAR REVIEW
Date Started:	07/08/93
Date Completed:	07/08/93
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	03/25/92
Date Completed:	11/22/93
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Phased Completion

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	07/27/92
Date Completed:	11/22/93
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	UNILATERAL ADMIN ORDER
Date Started:	/ /
Date Completed:	02/18/94
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	PREPARATION OF COST DOCUMENT PACKAGE
Date Started:	03/24/94
Date Completed:	06/24/94
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION
Date Started:	02/18/94
Date Completed:	09/09/94
Priority Level:	Not Reported
Operable Unit:	BASINWIDE
Primary Responsibility:	Responsible Party
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	02/18/94
Date Completed:	09/09/94
Priority Level:	Not Reported
Operable Unit:	BASINWIDE
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	PREPARATION OF COST DOCUMENT PACKAGE
Date Started:	09/04/94
Date Completed:	02/13/95
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	PREPARATION OF COST DOCUMENT PACKAGE
Date Started:	10/17/95
Date Completed:	01/26/96
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	02/21/96
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	03/14/96
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	005
Action:	CONSENT DECREE
Date Started:	01/02/96
Date Completed:	07/01/96
Priority Level:	Not Reported
Operable Unit:	SITEWIDE

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	CONSENT DECREE
Date Started:	02/12/96
Date Completed:	08/01/96
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	SECTION 107 LITIGATION
Date Started:	03/19/93
Date Completed:	01/14/97
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	COST RECOVERY NEGOTIATIONS
Date Started:	07/16/93
Date Completed:	01/14/97
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	Explanation Of Significant Differences
Date Started:	/ /
Date Completed:	02/12/97

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	Not Reported
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	02/18/97
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	02/18/97
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	006
Action:	CONSENT DECREE
Date Started:	01/14/97
Date Completed:	05/14/97
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	007
Action:	CONSENT DECREE

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Date Started:	/ /
Date Completed:	05/14/97
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started:	05/04/94
Date Completed:	08/07/97
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	03/25/92
Date Completed:	09/30/97
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Phased Start

For detailed financial records, contact EDR for a Site Report.:

Action Code:	005
Action:	Lodged By DOJ
Date Started:	/ /
Date Completed:	03/17/98
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action:	CONSENT DECREE
Date Started:	08/07/97
Date Completed:	06/22/98
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	06/30/98
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	FIVE-YEAR REVIEW
Date Started:	/ /
Date Completed:	08/17/98
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	12/30/98
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Code:	001
Action:	LONG TERM RESPONSE ACTION
Date Started:	12/01/89
Date Completed:	12/01/99
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	State, Fund Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	FIVE-YEAR REVIEW
Date Started:	06/20/03
Date Completed:	09/30/03
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	005
Action:	FIVE-YEAR REVIEW
Date Started:	04/15/04
Date Completed:	09/30/04
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	UNILATERAL ADMIN ORDER
Date Started:	/ /
Date Completed:	03/29/07
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Code:	001
Action:	Notice of Intent by All Parties
Date Started:	/ /
Date Completed:	03/29/07
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Not Reported
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	09/16/08
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	NEGOTIATION (GENERIC)
Date Started:	/ /
Date Completed:	09/16/08
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	005
Action:	UNILATERAL ADMIN ORDER
Date Started:	/ /
Date Completed:	09/18/08
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	FIVE-YEAR REVIEW
Date Started:	04/24/08
Date Completed:	09/30/08
Priority Level:	Not Reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	FEASIBILITY STUDY
Date Started:	01/23/06
Date Completed:	09/30/09
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	RECORD OF DECISION
Date Started:	/ /
Date Completed:	09/30/09
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	004
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	12/29/09
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Anomaly: Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: CLAIM IN BANKRUPTCY PROCEEDING
Date Started: 07/02/09
Date Completed: 04/23/10
Priority Level: Not Reported
Operable Unit: BURBANK
Primary Responsibility: Federal Enforcement
Planning Status: Not Reported
Urgency Indicator: Not Reported
Action Anomaly: Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: Special Notice Issued
Date Started: / /
Date Completed: 07/01/10
Priority Level: Not Reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: Federal Enforcement
Planning Status: Not Reported
Urgency Indicator: Not Reported
Action Anomaly: Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 004
Action: REMEDIAL DESIGN/REMEDIAL ACTION NEGOTIATIONS
Date Started: 07/01/10
Date Completed: 02/14/11
Priority Level: Not Reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: Federal Enforcement
Planning Status: Not Reported
Urgency Indicator: Not Reported
Action Anomaly: Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: ADMINISTRATIVE ORDER ON CONSENT
Date Started: / /
Date Completed: 02/14/11
Priority Level: Not Reported
Operable Unit: NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility: Federal Enforcement

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	006
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	11/16/11
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	NEGOTIATION (GENERIC)
Date Started:	/ /
Date Completed:	11/16/11
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	007
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	12/06/11
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	NEGOTIATION (GENERIC)
Date Started:	/ /
Date Completed:	12/06/11
Priority Level:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	005
Action:	NATIONAL PRIORITIES LIST RESPONSIBLE PARTY SEARCH
Date Started:	09/08/04
Date Completed:	04/26/12
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Other Completion Anomaly

For detailed financial records, contact EDR for a Site Report.:

Action Code:	008
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	03/01/13
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	009
Action:	ADMINISTRATIVE ORDER ON CONSENT
Date Started:	/ /
Date Completed:	08/06/13
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility:	Federal Enforcement
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	08/16/85
Date Completed:	/ /

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Priority Level:	Not Reported
Operable Unit:	BASINWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	TECHNICAL ASSISTANCE
Date Started:	09/30/85
Date Completed:	/ /
Priority Level:	Not Reported
Operable Unit:	BASINWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	11/22/93
Date Completed:	/ /
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Phased Completion

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	11/22/93
Date Completed:	/ /
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Phased Completion

For detailed financial records, contact EDR for a Site Report.:

Action Code:	003
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL ACTION
Date Started:	09/30/97

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Date Completed:	/ /
Priority Level:	Not Reported
Operable Unit:	BURBANK
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Long Term Action
Action Anomaly:	Phased Start

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	OPERATIONS AND MAINTENANCE
Date Started:	12/01/99
Date Completed:	/ /
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD
Primary Responsibility:	Responsible Party
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	006
Action:	POTENTIALLY RESPONSIBLE PARTY REMEDIAL DESIGN
Date Started:	02/14/11
Date Completed:	/ /
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility:	Responsible Party
Planning Status:	Primary
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	REMEDIAL DESIGN
Date Started:	03/01/13
Date Completed:	/ /
Priority Level:	Not Reported
Operable Unit:	NORTH HOLLYWOOD 2ND REMEDY
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not Reported
Urgency Indicator:	Not Reported
Action Anomaly:	Not Reported

For detailed financial records, contact EDR for a Site Report.:

Federal Register Details:

Fed Register Date:	06/10/86

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Fed Register Volume:	51
Page Number:	21054
Fed Register Date:	10/15/84
Fed Register Volume:	49
Page Number:	40320

The US CERCLIS Financial database contains 3257 additional records for this site. Please contact your EDR Account Executive for more information.

NPL: Federal NPL

EPA ID:	CAD980894893
Cerclis ID:	902251
EPA Region:	9
Federal:	N
Final Date:	1986-06-10 00:00:00
Site Score:	42.240000000000002
Latitude:	34.189999999999998
Longitude:	-118.3514

Category Details:

NPL Status:	Currently on the Final NPL
Category Description:	Depth To Aquifer-<= 10 Feet
Category Value:	1
NPL Status:	Currently on the Final NPL
Category Description:	Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value:	10

Site Details:

Site Name:	SAN FERNANDO VALLEY (AREA 1)
Site Status:	Final
Site Zip:	91601
Site City:	NORTH HOLLYWOOD
Site State:	CA
Federal Site:	No
Site County:	LOS ANGELES
EPA Region:	09
Date Proposed:	10/15/84
Date Deleted:	Not Reported
Date Finalized:	06/10/86

Substance Details:

NPL Status:	Currently on the Final NPL
Substance ID:	Not Reported
Substance:	Not Reported
CAS #:	Not Reported
Pathway:	Not Reported
Scoring:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

NPL Status:	Currently on the Final NPL
Substance ID:	U044
Substance:	CHLOROFORM
CAS #:	67-66-3
Pathway:	GROUND WATER PATHWAY
Scoring:	4
NPL Status:	Currently on the Final NPL
Substance ID:	U210
Substance:	TETRACHLOROETHENE
CAS #:	127-18-4
Pathway:	GROUND WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U211
Substance:	CARBON TETRACHLORIDE
CAS #:	56-23-5
Pathway:	GROUND WATER PATHWAY
Scoring:	4
NPL Status:	Currently on the Final NPL
Substance ID:	U228
Substance:	TRICHLOROETHYLENE (TCE)
CAS #:	79-01-6
Pathway:	GROUND WATER PATHWAY
Scoring:	2

Summary Details:

Conditions at proposal October 15, 1984): San Fernando Valley Area l) is an area of contaminated ground water in the vicinity of the North Hollywood section of the City of Los Angeles, Los Angeles County, California. This area is part of the San Fernando Valley Basin, a natural underground reservoir that represents an important source of drinking water for at least 3 million people in the Los Angeles metropolitan area. The contaminated ground water, which underlies an area of approximately 5,l56 acres, contains trichloroethylene TCE) and perchloroethylene PCE), and to a lesser extent, carbon tetrachloride and chloroform, according to analyses conducted by the California Department of Health Services, as well as numerous local government agencies. The State s recommended drinking water guideline for TCE and PCE 5 and 4 parts per billion respectively) are exceeded in a number of public wells in this area. To alleviate this contamination, wells are eithertaken out of service or blended with water from clean sources to ensure that the public receives water with TCE/PCE concentrations below the State s guidelines. Status June 10, 1986): EPA and the Los Angeles Department

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

of Water and Power are entering into a cooperative agreement for a remedial investigation of the San Fernando Valley Basin and a feasibility study targeted at Area 1, the most contaminated area. The RI is scheduled to begin in early 1986.

Site Status Details:

NPL Status:	Final
Proposed Date:	10/15/1984
Final Date:	06/10/1986
Deleted Date:	Not Reported

Narratives Details:

NPL Name:	SAN FERNANDO VALLEY (AREA 1)
City:	NORTH HOLLYWOOD
State:	CA

ICIS: Other Standard Environmental Records

Enforcement Action ID:	09-2013-2511
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2511
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2511
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Name:	NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2511
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 107L Filing Of Lien
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2511
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 107L Filing Of Lien
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2511
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC FOR RECOVERY OF RESPONSE COSTS
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 107L Filing Of Lien
Facility County:	LOS ANGELES

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 104E5A AO For Access And/Or Info
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 104E5A AO For Access And/Or Info
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 104E5A AO For Access And/Or Info
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 107L Filing Of Lien
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 107L Filing Of Lien
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 107L Filing Of Lien
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Enforcement Action ID:	09-2013-2508
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC FOR HONEYWELL NHE-2 RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2501
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC WITH WASTE MGMT FOR COST RECOVERY AND CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2501
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC WITH WASTE MGMT FOR COST RECOVERY AND CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2501
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC WITH WASTE MGMT FOR COST RECOVERY AND CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2012-2500
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NHOU AOC WITH PICK-YOUR-PART FOR RECOVERY OF RESPONSE COSTS AND PAYMENT OF CIVIL PENALTY
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2011-2509
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NORTH HOLLYWOOD OPERABLE UNIT AOC FOR RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Enforcement Action Type:	CERCLA 122A/104A Agrmt For RI/FS
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2011-2509
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NORTH HOLLYWOOD OPERABLE UNIT AOC FOR RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122A/104A Agrmt For RI/FS
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2011-2509
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NORTH HOLLYWOOD OPERABLE UNIT AOC FOR RD
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122A/104A Agrmt For RI/FS
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2011-2500
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	ACCESS ORDER TO LOS ANGELES BYPRODUCTS CO.
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 104E5A AO For Access And/Or Info
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2011-2500
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	ACCESS ORDER TO LOS ANGELES BYPRODUCTS CO.
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 104E5A AO For Access And/Or Info
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2011-2500
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	ACCESS ORDER TO LOS ANGELES BYPRODUCTS CO.
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 104E5A AO For Access And/Or Info
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2010-2519
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	LYONDELL BANKRUPTCY (NC)
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Bankruptcy
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2010-2519
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	LYONDELL BANKRUPTCY (NC)
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Bankruptcy
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2010-2519
FRS ID:	110009267961

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Program ID:	FRS 110009267961
Action Name:	LYONDELL BANKRUPTCY (NC)
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Bankruptcy
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2010-2505
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NORTH HOLLYWOOD AO FOR RI WITH HONEYWELL INTL INC
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122A/104A Agrmt For RI/FS
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2010-2505
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NORTH HOLLYWOOD AO FOR RI WITH HONEYWELL INTL INC
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122A/104A Agrmt For RI/FS
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2010-2505
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NORTH HOLLYWOOD AO FOR RI WITH HONEYWELL INTL INC
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA
	NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122A/104A Agrmt For RI/FS

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2008-2527
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	NORTH HOLLYWOOD 106A ORDER FOR GROUNDWATER
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2008-2527
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	NORTH HOLLYWOOD 106A ORDER FOR GROUNDWATER
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2008-2527
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	NORTH HOLLYWOOD 106A ORDER FOR GROUNDWATER
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2008-2521
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	SAN FERNANDO AREA 1 122H AOC W/ HONEYWELL, LOCKHEED
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2008-2521
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	SAN FERNANDO AREA 1 122H AOC W/ HONEYWELL, LOCKHEED
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-2008-2521
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	SAN FERNANDO AREA 1 122H AOC W/ HONEYWELL, LOCKHEED
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 122h Agrmt For Cost Recovery
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1997-0172
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	LOCKHEED MARTIN
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1997-0172
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Name:	LOCKHEED MARTIN
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1997-0172
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	LOCKHEED MARTIN
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1997-0015
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	SAN FERNANDO GLENDALE (NORTH AND SOUTH)
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1997-0015
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	SAN FERNANDO GLENDALE (NORTH AND SOUTH)
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

EPA Region #:	9
Enforcement Action ID:	09-1997-0015
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	SAN FERNANDO GLENDALE (NORTH AND SOUTH)
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1997-0014
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	SAN FERNANDO, GLENDALE
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1997-0014
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	SAN FERNANDO, GLENDALE
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1997-0014
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	SAN FERNANDO, GLENDALE
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	CERCLA 106 AO For Resp Action/Imm Haz
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1993-0010
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	ALLIED-SIGNAL INCORPORATED
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1993-0010
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	ALLIED-SIGNAL INCORPORATED
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1993-0010
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	ALLIED-SIGNAL INCORPORATED
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1991-0016
FRS ID:	110009267961
Program ID:	CERCLIS CAD980894893
Action Name:	CITY OF BURBANK

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1991-0016
FRS ID:	110009267961
Program ID:	DTSC-ENVIROSTOR 19990011
Action Name:	CITY OF BURBANK
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Enforcement Action ID:	09-1991-0016
FRS ID:	110009267961
Program ID:	FRS 110009267961
Action Name:	CITY OF BURBANK
Full Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD CA 91601
State:	California
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Facility Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
Enforcement Action Type:	Civil Judicial Action
Facility County:	LOS ANGELES
EPA Region #:	9
Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	DTSC-ENVIROSTOR 19990011

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

SIC Code:	Not Reported
Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported
Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	CERCLIS CAD980894893
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	DTSC-ENVIROSTOR 19990011
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

Program ID:	FRS 110009267961
Facility Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not Reported
SIC Code:	Not Reported

US ENG CONTROLS: Federal institutional controls / engineering controls registries

EPA ID:	CAD980894893
Site ID:	0902251
Name:	SAN FERNANDO VALLEY (AREA 1)
Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
EPA Region:	09
County:	LOS ANGELES
Event Code:	Not Reported
Actual Date:	09/30/2009
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	001
Action Name:	Explanation Of Significant Differences
Action Completion date:	11/12/1990
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Reinjection
Contact Name:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	001
Action Name:	Explanation Of Significant Differences
Action Completion date:	11/12/1990
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Treatment, (N.O.S.)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	002
Action Name:	Explanation Of Significant Differences
Action Completion date:	02/12/1997
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Non-fundamental change (ESD)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	06/30/1989
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Air Stripping
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	06/30/1989
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Extraction
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	06/30/1989
Operable Unit:	03

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Contaminated Media :	Groundwater
Engineering Control:	Reuse as Drinking Water
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	06/30/1989
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Treatment, (N.O.S.)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	003
Action Name:	RECORD OF DECISION
Action Completion date:	09/24/1987
Operable Unit:	02
Contaminated Media :	Groundwater
Engineering Control:	Aeration
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	003
Action Name:	RECORD OF DECISION
Action Completion date:	09/24/1987
Operable Unit:	02
Contaminated Media :	Groundwater
Engineering Control:	Carbon Adsorption
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	003
Action Name:	RECORD OF DECISION
Action Completion date:	09/24/1987
Operable Unit:	02
Contaminated Media :	Groundwater
Engineering Control:	Containment, (N.O.S.)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	003

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Action Name:	RECORD OF DECISION
Action Completion date:	09/24/1987
Operable Unit:	02
Contaminated Media :	Groundwater
Engineering Control:	Discharge
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported

Action ID:	003
Action Name:	RECORD OF DECISION
Action Completion date:	09/24/1987
Operable Unit:	02
Contaminated Media :	Groundwater
Engineering Control:	Extraction
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported

Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	09/30/2009
Operable Unit:	04
Contaminated Media :	Groundwater
Engineering Control:	Air Stripping
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported

Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	09/30/2009
Operable Unit:	04
Contaminated Media :	Groundwater
Engineering Control:	Extraction
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported

Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	09/30/2009
Operable Unit:	04
Contaminated Media :	Groundwater
Engineering Control:	Filtration
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Longitude:	Not Reported
Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	09/30/2009
Operable Unit:	04
Contaminated Media :	Groundwater
Engineering Control:	Ion Exchange
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	09/30/2009
Operable Unit:	04
Contaminated Media :	Groundwater
Engineering Control:	Liquid Phase Carbon Adsorption
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	09/30/2009
Operable Unit:	04
Contaminated Media :	Groundwater
Engineering Control:	Monitoring
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported
Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	09/30/2009
Operable Unit:	04
Contaminated Media :	Groundwater
Engineering Control:	Well Head Treatment
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Latitude:	Not Reported
Longitude:	Not Reported

PRP: Other Standard Environmental Records

PRP name:	2L SCREEN PRINTING CO. A-H PLATING, INC. ACCESSORY PLATING

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

ADLER SCREW PRODUCTS INC.

AEROQUIP CORP.

AEROQUIP CORP.

AIRPORT GROUP INTERNATIONAL, INC.

AIRPORT GROUP INTERNATIONAL, INC.

ALLIED SIGNAL

ALLIED SIGNAL

ANTONINI FAMILY TRUST

B.J. GRINDING

BARRON ANODIZING

BASINGER B TRUST

BASINGER C TRUST

BENDIX CORP.

BENDIX CORP.

CALIFORNIA CAR HIKERS SERVICES, INC.

CALMAT CO.

CALMAT CO.

CALMAT CO.

CALMAT CO.

CEBALLOS, MR. CHUCK

CHASE, STUART

COOKE FAMILY TRUST (AMENDED)

COOKE FAMILY TRUST (AMENDED)

COOKE FAMILY TRUST (AMENDED)

CRANE COMPANY/HYDRO-AIRE DIVISION

CRANE COMPANY/HYDRO-AIRE DIVISION

DE KING SCREW PRODUCTS

DELTRON ENGINEERING

DYNAMIC PLATING, INC.

ELLISON, LEON

ERIK AND ELSE BRUUN-ANDERSEN TRUST

ERIK AND ELSE BRUUN-ANDERSEN TRUST

FLEETWOOD MACHINE PRODUCTS, INC.

FLEETWOOD MACHINE PRODUCTS, INC.

FLEETWOOD MACHINE PRODUCTS, INC.

FRANK GUERRORO

HASKEL, INC.

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

HAWKER PACIFIC CORPORATION

HAWKER PACIFIC CORPORATION

HAWKER PACIFIC CORPORATION

HAYWARD ASSOC, LLC

HONEYWELL INTERNATIONAL, INC.

HONEYWELL INTERNATIONAL, INC.

HONEYWELL INTERNATIONAL, INC.

HONEYWELL INTERNATIONAL, INC.

JANCO CORPORATION

JANCO CORPORATION

JOHNSON, CHAD

KAHR BEARING

KAHR BEARING

LA AGCO SALES

LAWRENCE ENGINEERING AND SUPPLY CO.

LOCKHEED AERONAUTICAL SYSTEMS

LOCKHEED AERONAUTICAL SYSTEMS

LOCKHEED AERONAUTICAL SYSTEMS

LOCKHEED AERONAUTICAL SYSTEMS

LOCKHEED AERONAUTICAL SYSTEMS

The PRP database contains 45 additional records for this site. Please contact your EDR Account Executive for more information.

FINDS: Other Standard Environmental Records

Registry ID: 110009267961

Environmental Interest/Information System:

California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

ECHO: Other Standard Environmental Records

Envid:	1000709322
Registry ID:	110009267961
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110009267961

US INST CONTROL: Federal institutional controls / engineering controls registries

EPA ID:	CAD980894893
Site ID:	0902251
Name:	SAN FERNANDO VALLEY (AREA 1)
Action Name:	RECORD OF DECISION
Address:	NORTH HOLLYWOOD WELLFIELD AREA NORTH HOLLYWOOD, CA 91601
EPA Region:	09
County:	LOS ANGELES
Event Code:	Not Reported
Inst. Control:	Groundwater use/well drilling regulation
Actual Date:	09/30/2009
Complet. Date:	09/30/2009
Operable Unit:	04
Contaminated Media :	Groundwater
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Latitude :	Not Reported
Longitude :	Not Reported

Calsite: State and tribal - equivalent CERCLIS

Region:	GLENDALE
Facility ID:	19990011
Facility Type:	NPJF
Type:	NPL SITE, JOINT STATE/FEDERAL-FUNDED
Branch:	SA
Branch Name:	SO CAL - GLENDALE
File Name:	Not Reported
State Senate District:	05151996
Status:	ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name:	ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency:	ENVIRONMENTAL PROTECTION AGENCY
NPL:	Listed
SIC Code:	99
SIC Name:	NONCLASSIFIABLE ESTABLISHMENTS
Access:	Not Reported
Cortese:	Not Reported
Hazardous Ranking Score:	Not Reported
Date Site Hazard Ranked:	Not Reported
Groundwater Contamination:	Confirmed
Staff Member Responsible for Site:	TYARGEAU
Supervisor Responsible for Site:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Region Water Control Board:	LA
Region Water Control Board Name:	LOS ANGELES
Lat/Long Direction:	Not Reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not Reported
Lat/Long Description:	Not Reported
State Assembly District Code:	43
State Senate District Code:	20
Facility ID:	19990011
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	NH
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	09301987
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	NH
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	09301987
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	NH
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	03311989
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	B
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	06301989
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	B
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	06301989
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	PPP
Activity Name:	PUBLIC PARTICIPATION PLAN
AWP Code:	Not Reported
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	04301990
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	DES
Activity Name:	DESIGN
AWP Code:	B-PH1
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	03311997
Est Person-Yrs to complete:	0.30000
Estimated Size:	X
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	NH1/1
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	09041996
Est Person-Yrs to complete:	0
Estimated Size:	X
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Facility ID:	19990011
Activity:	OM
Activity Name:	OPERATION & MAINTENANCE
AWP Code:	NH OU
Proposed Budget:	0
AWP Completion Date:	06302009
Revised Due Date:	Not Reported
Comments Date:	Not Reported
Est Person-Yrs to complete:	0
Estimated Size:	M
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	NH2/1
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	06201997
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	DES

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Activity Name:	DESIGN
AWP Code:	B-PH2
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	11171997
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CSNH1
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	08011996
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CSNH2

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	05141997
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	CD-B2
Proposed Budget:	0
AWP Completion Date:	Not Reported
Revised Due Date:	Not Reported
Comments Date:	06241997
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	19990011
Activity:	5YEAR
Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	NH OU
Proposed Budget:	0
AWP Completion Date:	Not Reported

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Revised Due Date:	Not Reported
Comments Date:	08171998
Est Person-Yrs to complete:	0
Estimated Size:	Not Reported
Request to Delete Activity:	Not Reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not Reported
Well Decommissioned:	Not Reported
Action Included Fencing:	Not Reported
Removal Action Certification:	Not Reported
Activity Comments:	Not Reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	NORTH HOLLYWOOD AREA
Alternate City,St,Zip:	NORTH HOLLYWOOD, CA 91606
Alternate Address:	NORTH HOLLYWOOD WELLFIELD AREA
Alternate City,St,Zip:	LOS ANGELES, CA 91601
Alternate Address:	BURBANK
Alternate City,St,Zip:	BURBANK, CA 91502
Background Info:	The San Fernando Valley Ground Water Basin (SFVGWB) is located within the Upper Los Angeles River Area, and consists of the eastern portion of the San Fernando Valley and the entire Verdugo Basin. The SFVGWB encompasses approximately 112,000 acres of alluvial valley fill deposits and provides enough water to serve approximately 600,000 residents. The Basin is bounded on the north and the northwest by the Santa Susana Mountains, on the northeast by the San Gabriel Mountains, on the west by the Simi Hills and on the south by the Santa Monica Mountains. The San Fernando Valley Study area includes four National Priorities List (NPL) sites. They are: Area #1 - North Hollywood NPL Site covers 9336 acres in the eastern part of the San Fernando Valley. The site has been divided into the North Hollywood Operable Unit(OU) and the Burbank OU. Area #2 - Crystal Springs NPL Site covers 3975 acres located southeast of the North Hollywood NPL site and is in the cities of Glendale and Los Angeles. Area #3 - Verdugo NPL Site covers 2673 acres in the eastern part of the SF Valley and is located in and adjacent to La

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Crescenta in the Verdugo Mountains.

Area #4 - the Pollock NPL Site covers 1635 acres in the south-eastern part of the San Fernando Valley and is located in and adjacent to the cities of Los Angeles and Glendale.

Groundwater contamination in the SFVGWB is linked to prewar, postwar, and current industrialization in the San Fernando Valley.

The primary contaminants of concern are the volatile organic compounds (VOCs) trichloroethylene (TCE) and tetrachloroethylene (PCE). These compounds have been and/or are being used in many San Fernando Valley industries, such as aeronautical, automotive dry cleaning, and metal plating. These solvents have found their way to the groundwater basin as a result of both past and improper use, storage and disposal practices. The SFVGWB Superfund sites, added to the NPL in 1986, are areas where groundwater from wells have been found to contain VOCs above the state and federal drinking water standards. Groundwater contamination in numerous wells have been so severe with TCE and PCE that these wells have essentially been put out of commission.

Exposure of receptors to contaminants can possibly occur through ingestion of contaminated drinking water, inhalation of VOC vapors released from the contaminated water as in taking showers, and dermal exposure as in washing or bathing. However, with the strict regulatory control over water quality by the State's Department of Health, Office of Drinking Water (ODW), the RWQCB, and other agencies, residents are assured that the water they consume is safe and that no one is drinking water which contains concentrations of contaminants above regulatory standards. Federal, state, and local agencies have been conducting investigations and cleanup of contaminated groundwater in the San Fernando Valley since contamination was discovered in 1979. These activities involve measuring the extent of contamination, developing and implementing cleanup remedies, and identifying responsible parties.

EPA provided oversight of the basinwide Remedial Investigation (RI) of groundwater contamination conducted by the Los Angeles Department of Water and Power (LADWP). The RI

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

objectives were to collect lithological and water quality data and information regarding basin operations for the eastern SF and Verdugo basins; develop a regional characterization of geology, hydrology, hydrogeology and the nature and extent of groundwater contamination within the eastern and Verdugo basins; study fate and transport of compounds in the environment; identify Applicable or Relevant and Appropriate Requirements; (ARAR's) and evaluate the potential risk to human health and the environment.

The Remedial Investigation of the SFVGWB was divided into two phases.

Phase I activities have included vertical profile borings and installation of monitoring wells to obtain preliminary contamination information. Monitoring wells have been installed as follows: 34 in North Hollywood (Area #1); 29 in Crystal Springs (Area #2); 7 in Verdugo (Area #3); and 17 in Pollock (Area #4).

Information obtained from Phase I investigation activities identified the need for several operable units. Operable Unit is a federal term which is similar to the State's definition of a removal action.

Phase II activities consist of a basinwide remedial investigation conducted by the LADWP.

Remedial Actions (RAs):

North Hollywood (Area #1) -- Two RAs were identified for Area #1, the North Hollywood OU and the Burbank OU.

A Record of Decision (ROD) for the North Hollywood RA was signed in September 1987, selecting groundwater extraction and treatment (air stripping) of 2,000 gallons per minute (gpm) of contaminated water as an interim remedy. This RA was constructed with funding from EPA and the State and has been treating contaminated groundwater since March 1989. This facility is located at 11845 Vose Street in the N. Hollywood section of Los Angeles.

A ROD for the Burbank OU was signed in June 1989, again selecting groundwater extraction and treatment of about 12,000 gpm of contaminated water. Phase I of the Burbank OU began operations in January 1996 treating groundwater at a rate

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

	of 6,000 gpm. Phase II began operations in May 1998 adding an additional 3,000 gpm to the Burbank OU's treatment capacity.
	Crystal Springs (Area #2) -- LADWP has completed a focused RI/FS for this proposed RA. The Glendale OU has been separated into a North OU and a South OU based on the amount of contamination and the facilities contributing to the GW contamination. A ROD for each OU was signed on June 18, 1993 designating groundwater extraction and treatment as the interim remeday. The PRPs have formed a group and combined the RA efforts for each OU into one document. The selected alternative is GW extraction and treatment. The Glendale OU began operations in September 2000.
	Verdugo and Pollock (Areas #3 and #4) -- Currently no RAs have been identified for Area #3 or for Area #4. In October 2003 US EPA proposed No Remedial Action for Verdugo Basin (Area #3).
	Another contaminant of concern, hexavalent chromium, has been identified in the San Fernando Valley Groundwater Basin.
	EPA and the RWQCB are currently dentifying potential sources of contamination and pursuing PRPs that may be responsible for contaminating groundwater. As these PRPs are identified, individual site investigations and mitigation activities will be pursued. Enforceable agreements and orders will be implemented at numerous specific potential source sites within the Basin by RWQCB and DTSC
Comments Date:	01011984
Comments:	Groundwater contaminated with TCE and PCE is discovered.
Comments Date:	01011984
Comments:	Site covers approximately 5254 acres.
Comments Date:	04141996
Comments:	Consent Decree between EPA, DTSC and settling PRPs lodged
Comments Date:	04141996
Comments:	with the court. Negotiations with non-settling PRPs
Comments Date:	04141996
Comments:	continue.
Comments Date:	04241994
Comments:	The U.S. EPA is in the process of recovering costs from
Comments Date:	04241994
Comments:	the PRPs. DOJ is pursuing the cost recovery for DTSC.

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Comments Date:	04241994
Comments:	The cooperative PRPs are willing to settle if they are
Comments Date:	04241994
Comments:	guaranteed contribution protection from the non-settling
Comments Date:	04241994
Comments:	PRPs (so that they cannot be named as a party to the
Comments Date:	04241994
Comments:	suit by the non-settling PRPs). DTSC is providing
Comments Date:	04241994
Comments:	documentation to DOJ (i.e. timesheets) to determine
Comments Date:	04241994
Comments:	staff time charged to the project. EPA is pursuing
Comments Date:	04241994
Comments:	legal action against the non-settling PRPs to recover
Comments Date:	04241994
Comments:	costs of past and future oversight.
Comments Date:	05022002
Comments:	EPA issues fine against Lockheed Martin for 1.37 million for
Comments Date:	05022002
Comments:	Force Majeure claim on Burbank Operable Unit.
Comments Date:	05131998
Comments:	11/17/97-The phase 2 design adds an additional well (wp-180)
Comments Date:	05131998
Comments:	and pipeline for extraction and treatment at the Burbank
Comments Date:	05131998
Comments:	operable unit. This adds an additional 3,000 gpm to the treatmen
Comments Date:	05131998
Comments:	system. Additional amendments to the design include changing the
Comments Date:	05131998
Comments:	Liquid Phase Granular Activated Carbon (LPGAC) bed system from an
Comments Date:	05131998
Comments:	upflow to a downflow configuration, and the addition of a LPGAC
Comments Date:	05131998
Comments:	backflush filtration system for continuous backflush to the
Comments Date:	05131998
Comments:	plant's storm drain discharge.
Comments Date:	05141997
Comments:	The second partial consent decree to recover DTSC's past cost is
Comments Date:	05141997
Comments:	signed on May 14, 1997. This also concludes the litigation for
Comments Date:	05141997
Comments:	the interim remedy at the North Hollywood OU.
Comments Date:	06201997
Comments:	DTSC recovers costs in accordance with the Second Partial
Comments Date:	06201997
Comments:	Consent Decree for the interim remedy at the NHOU. Two
Comments Date:	06201997
Comments:	additional payments are due by 5/14/98 and and 5/14/99.
Comments Date:	06241997
Comments:	A second partial Consent Decree, dated June 24, 1997, requires

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Comments Date:	06241997
Comments:	reimbursement to the State by Lockheed-Martin of certain past
Comments Date:	06241997
Comments:	costs and annual billing for future site specific response costs.
Comments Date:	08011996
Comments:	The first partial consent decree is entered by the Federal
Comments Date:	08011996
Comments:	District court on August 1, 1996.
Comments Date:	08171998
Comments:	A second 5-year review of remedial activities is conducted at
Comments Date:	08171998
Comments:	the North Hollywood OU (NHOU) and covers operations from 1993
Comments Date:	08171998
Comments:	thru 1997. The purpose was to evaluate whether the NH Interim
Comments Date:	08171998
Comments:	Remedy achieved the objectives specified in the ROD. The
Comments Date:	08171998
Comments:	findings of the 5-year review are that the objectives of the
Comments Date:	08171998
Comments:	ROD have been met.
Comments Date:	09041996
Comments:	Costs are recovered by DTSC in accordance with the First
Comments Date:	09041996
Comments:	Partial Consent Decree for interim remedial action at the North
Comments Date:	09041996
Comments:	Hollywood OU (NHOU). An additional payment is due by 08/01/97.
Comments Date:	09202001
Comments:	The facility has been operating continuously with six water
Comments Date:	09202001
Comments:	supply wells on line. This past quarter approximately 175
Comments Date:	09202001
Comments:	million gallons of water was treated down to non-detect levels
Comments Date:	09202001
Comments:	of contamination.
Comments Date:	12191999
Comments:	Negotiating new state superfund contract between U.S. EPA, DTSC,
Comments Date:	12191999
Comments:	and the Los Angeles Department of Water and Power to provide for
Comments Date:	12191999
Comments:	continued funding of operation and maintenance of the NHOU.
ID Name:	CALSTARS CODE
ID Value:	300127
ID Name:	CALSTARS CODE
ID Value:	300126
ID Name:	BEP DATABASE PCODE
ID Value:	P31031
Alternate Name:	SAN FERNANDO VALLEY GW BASIN AREA 1NORTH HOLLYWOOD OUFSSAN FERNANDO VALLEY
	(AREA 1)BURBANK OU
Special Programs Code:	MSCA

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Special Programs Name:	MULTI-SITE COOPERATIVE AGREEMENT

CORTESE: Other Standard Environmental Records

Region:	CORTESE
Envirostor Id:	19990011
Site/Facility Type:	FEDERAL SUPERFUND - LISTED
Cleanup Status:	ACTIVE
Status Date:	05/15/1996
Site Code:	300126, 300173, 300287
Latitude:	34.1875
Longitude:	-118.38388
Owner:	Not Reported
Enf Type:	Not Reported
Swat R:	Not Reported
Flag:	envirostor
Order No:	Not Reported
Waste Discharge System No:	Not Reported
Effective Date:	Not Reported
Region 2:	Not Reported
WID Id:	Not Reported
Solid Waste Id No:	Not Reported
Waste Management Uit Name:	Not Reported

ENVIROSTOR: State and tribal - equivalent CERCLIS

Facility ID:	19990011
Status:	Active
Status Date:	05/15/1996
Site Code:	300287
Site Type:	Federal Superfund
Site Type Detailed:	State Response or NPL
Acres:	5254
NPL:	YES
Regulatory Agencies:	SMBRP, RWQCB 4 - Los Angeles, US EPA
Lead Agency:	US EPA
Program Manager:	Tedd Yargeau
Supervisor:	Javier Hinojosa
Division Branch:	Cleanup Chatsworth
Assembly:	39
Senate:	18
Special Program:	Not Reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	34.1875
Longitude:	-118.3838
APN:	NONE SPECIFIED
Past Use:	AEROSPACE MANUFACTURING/MAINTENANCE, MACHINE SHOP, MANUFACTURING - METAL, METAL FINISHING, METAL PLATING - CHROME, METAL PLATING -

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

	OTHER, RESEARCH - AEROSPACE
Potential COC:	Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Chromium III Chromium VI
Confirmed COC:	Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Chromium III Chromium VI
Potential Description:	AQUI, SOIL
Alias Name:	BURBANK OU
Alias Type:	Alternate Name
Alias Name:	NORTH HOLLYWOOD OUFS
Alias Type:	Alternate Name
Alias Name:	SAN FERNANDO VALLEY GW BASIN AREA 1
Alias Type:	Alternate Name
Alias Name:	CAD980894893
Alias Type:	CERCLIS ID
Alias Name:	110009267961
Alias Type:	EPA (FRS #)
Alias Name:	P31031
Alias Type:	PCode
Alias Name:	300126
Alias Type:	Project Code (Site Code)
Alias Name:	300173
Alias Type:	Project Code (Site Code)
Alias Name:	300287
Alias Type:	Project Code (Site Code)
Alias Name:	19990011
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Consent Order
Completed Date:	06/24/1997
Comments:	A second partial Consent Decree, dated June 24, 1997, requires reimbursement to the State by Lockheed-Martin of certain past costs and annual billing for future site specific response costs.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Consent Order
Completed Date:	05/14/1997
Comments:	The second partial consent decree to recover DTSC's past cost is signed on May 14, 1997. This also concludes the litigation for the interim remedy at the North Hollywood OU.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Consent Order
Completed Date:	08/01/1996
Comments:	The first partial consent decree is entered by the Federal District

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

court on August 1, 1996.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: 5 Year Review Reports
Completed Date: 08/17/1998
Comments: A second 5-year review of remedial activities is conducted at the North Hollywood OU (NHOU) and covers operations from 1993 thru 1997. The purpose was to evaluate whether the NH Interim Remedy achieved the objectives specified in the ROD. The findings of the 5-year review are that the objectives of the ROD have been met.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 11/17/1997
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Design/Implementation Workplan
Completed Date: 03/31/1997
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Public Participation Plan / Community Relations Plan
Completed Date: 04/30/1990
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 06/30/1989
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Remedial Action Plan
Completed Date: 06/30/1989
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Removal Action Completion Report
Completed Date: 03/31/1989
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 09/30/1987

SAN FERNANDO VALLEY (AREA 1), NORTH HOLLYWOOD WELLFIELD AREA, NORTH HOLLYWOOD, CA 91601 (Continued)

Comments:	Not Reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Monitoring Report
Completed Date:	07/08/2008
Comments:	Not Reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Feasibility Study Report
Completed Date:	01/08/2009
Comments:	DTSCs letter with comments on Focussed Feasibility Study document for North Hollywood Operable Unit, San Fernando Valley Area 1 was sent out.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Record of Decision - Interim
Completed Date:	09/28/2009
Comments:	Not Reported
Future Area Name:	Not Reported
Future Sub Area Name:	Not Reported
Future Document Type:	Not Reported
Future Due Date:	Not Reported
Schedule Area Name:	Not Reported
Schedule Sub Area Name:	Not Reported
Schedule Document Type:	Not Reported
Schedule Due Date:	Not Reported
Schedule Revised Date:	Not Reported

MAP FINDINGS

CITY OF LOS ANGELES - DPW - BUREAU SANIT 12431 ROSCO BLVD, SUN VALLEY, CA, 91352		S113021421
▲ A1	Target Property 823 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

HAZNET: Other Standard Environmental Records

envid:	S113021421
Year:	2002
GEPAID:	CAH777001410
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported
Mailing Address:	433 S SPRING ST 5TH FLR MS-944
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	CAD981696420
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Recycler
Tons:	7.2
Cat Decode:	Household waste
Method Decode:	Recycler
Facility County:	Los Angeles

envid:	S113021421
Year:	2002
GEPAID:	CAH777001410
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported
Mailing Address:	433 S SPRING ST 5TH FLR MS-944
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	WAD991281767
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Treatment, Incineration
Tons:	2.84
Cat Decode:	Household waste
Method Decode:	Treatment, Incineration
Facility County:	Los Angeles

envid:	S113021421
Year:	2002
GEPAID:	CAH777001410
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported

CITY OF LOS ANGELES - DPW - BUREAU SANIT, 12431 ROSCO BLVD, SUN VALLEY, CA 91352 (Continued)

Mailing Address:	433 S SPRING ST 5TH FLR MS-944
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	WAD991281767
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Treatment, Tank
Tons:	1.35
Cat Decode:	Household waste
Method Decode:	Treatment, Tank
Facility County:	Los Angeles
envid:	S113021421
Year:	2002
GEPAID:	CAH777001410
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported
Mailing Address:	433 S SPRING ST 5TH FLR MS-944
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	WAD991281767
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Recycler
Tons:	17.41
Cat Decode:	Household waste
Method Decode:	Recycler
Facility County:	Los Angeles

MAP FINDINGS

LAUSD--FRANCIS POLYTECHNIC HS 12431 ROSCOE BLVD., SUN VALLEY, CA, 91352		1008310322
▲ A2	Target Property 823 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

FINDS: Other Standard Environmental Records

Registry ID: 110022033084

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

ECHO: Other Standard Environmental Records

Envid: 1008310322
Registry ID: 110022033084
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110022033084

MAP FINDINGS

CITY OF LOS ANGELES - DPW - BUREAU SANIT 12431 ROSCOE BLVD, SUN VALLEY, CA, 913520000		S113021396
▲ A3	Target Property 823 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

HAZNET: Other Standard Environmental Records

envid:	S113021396
Year:	2001
GEPAID:	CAH777001355
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported
Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	CAD981696420
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Not Reported
Tons:	8.32
Cat Decode:	Household waste
Method Decode:	Not Reported
Facility County:	Los Angeles

envid:	S113021396
Year:	2001
GEPAID:	CAH777001355
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported
Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	WAD991281767
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Disposal, Land Fill
Tons:	0
Cat Decode:	Household waste
Method Decode:	Disposal, Land Fill
Facility County:	Los Angeles

envid:	S113021396
Year:	2001
GEPAID:	CAH777001355
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported

CITY OF LOS ANGELES - DPW - BUREAU SANIT, 12431 ROSCOE BLVD, SUN VALLEY, CA 913520000 (Continued)

Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	WAD991281767
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Treatment, Incineration
Tons:	3.48
Cat Decode:	Household waste
Method Decode:	Treatment, Incineration
Facility County:	Los Angeles
envid:	S113021396
Year:	2001
GEPAID:	CAH777001355
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported
Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	WAD991281767
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Treatment, Tank
Tons:	0.33
Cat Decode:	Household waste
Method Decode:	Treatment, Tank
Facility County:	Los Angeles
envid:	S113021396
Year:	2001
GEPAID:	CAH777001355
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported
Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	WAD991281767
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Recycler
Tons:	10.81
Cat Decode:	Household waste
Method Decode:	Recycler
Facility County:	Los Angeles

The CA_HAZNET database contains 0 additional records for this site. Please contact your EDR Account Executive for more information.

MAP FINDINGS

POLYTECHNIC HIGH SCHOOL 12431 ROSCOE BLVD, SUN VALLEY, CA, 91352		1011917615
▲ A4	Target Property 823 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

ECHO: Other Standard Environmental Records

Envid:	1011917615
Registry ID:	110037378619
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110037378619

FINDS: Other Standard Environmental Records

Registry ID:	110037378619

Environmental Interest/Information System:

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

MAP FINDINGS

CITY OF LOS ANGELES-DPW 12431 ROSCOE BLVD, SUN VALLEY, CA, 913520000		S113021169
▲ A5	Target Property 823 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

HAZNET: Other Standard Environmental Records

envid:	S113021169
Year:	1997
GEPAID:	CAH777000957
Contact:	CITY OF LOS ANGELES
Telephone:	2137435086
Mailing Name:	Not Reported
Mailing Address:	419 S SPRING ST STE 800
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	CAD088504881
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Transfer Station
Tons:	.0005
Cat Decode:	Household waste
Method Decode:	Transfer Station
Facility County:	Los Angeles

envid:	S113021169
Year:	1997
GEPAID:	CAH777000957
Contact:	CITY OF LOS ANGELES
Telephone:	2137435086
Mailing Name:	Not Reported
Mailing Address:	419 S SPRING ST STE 800
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	UTD981552177
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Transfer Station
Tons:	6.0646
Cat Decode:	Household waste
Method Decode:	Transfer Station
Facility County:	Los Angeles

envid:	S113021169
Year:	1997
GEPAID:	CAH777000957
Contact:	CITY OF LOS ANGELES
Telephone:	2137435086
Mailing Name:	Not Reported

CITY OF LOS ANGELES-DPW, 12431 ROSCOE BLVD, SUN VALLEY, CA 913520000 (Continued)

Mailing Address:	419 S SPRING ST STE 800
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	CAD080806850
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Transfer Station
Tons:	6.6159
Cat Decode:	Household waste
Method Decode:	Transfer Station
Facility County:	Los Angeles
envid:	S113021169
Year:	1997
GEPAID:	CAH777000957
Contact:	CITY OF LOS ANGELES
Telephone:	2137435086
Mailing Name:	Not Reported
Mailing Address:	419 S SPRING ST STE 800
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	CAD080806850
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Not Reported
Tons:	25.1575
Cat Decode:	Household waste
Method Decode:	Not Reported
Facility County:	Los Angeles
envid:	S113021169
Year:	1997
GEPAID:	CAH777000957
Contact:	CITY OF LOS ANGELES
Telephone:	2137435086
Mailing Name:	Not Reported
Mailing Address:	419 S SPRING ST STE 800
Mailing City,St,Zip:	LOS ANGELES, CA 900130000
Gen County:	Not Reported
TSD EPA ID:	CAD050806850
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Not Reported
Tons:	18.5416
Cat Decode:	Household waste
Method Decode:	Not Reported
Facility County:	Los Angeles

The CA_HAZNET database contains 0 additional records for this site. Please contact your EDR Account Executive for more information.

MAP FINDINGS

LAUSD--FRANCIS POLYTECHNIC HS 12431 ROSCOE BLVD., SUN VALLEY, CA, 91352		1008194416
▲ A6	Target Property 823 ft. Above Sea Level	Federal RCRA generators list

Worksheet:

RCRA-SQG: Federal RCRA generators list

Date form received by agency:	03/31/2004
Facility name:	LAUSD--FRANCIS POLYTECHNIC HS
Facility address:	12431 ROSCOE BLVD. SUN VALLEY, CA 91352
EPA ID:	CAD982039315
Mailing address:	333 S. BEAUDRY AVE. 20TH FL LOS ANGELES, CA 90017
Contact:	SOE AUNG
Contact address:	Not Reported
Contact country:	US
Contact telephone:	(213) 241-3199
Contact email:	SOE.AUNG@LAUSD.NET
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	LAUSD
Owner/operator address:	Not Reported
Owner/operator country:	US
Owner/operator telephone:	Not Reported
Legal status:	State
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/2003
Owner/Op end date:	Not Reported
Owner/operator name:	LAUSD
Owner/operator address:	333 S. BEAUDRY AVE. 20TH FL LOS ANGELES, CA 90017
Owner/operator country:	US
Owner/operator telephone:	Not Reported
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/2003
Owner/Op end date:	Not Reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No

LAUSD--FRANCIS POLYTECHNIC HS, 12431 ROSCOE BLVD., SUN VALLEY, CA 91352 (Continued)

Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	03/31/2004
Site name:	LAUSD--FRANCIS POLYTECHNIC HS
Classification:	Large Quantity Generator
. Waste code:	D008
. Waste name:	LEAD
Violation Status:	No violations found

MAP FINDINGS

POLYTECHNIC HIGH SCHOOL 12431 ROSCOE BLVD, SUN VALLEY, CA, 91352		1011861622
▲ A7	Target Property 823 ft. Above Sea Level	Federal RCRA generators list

Worksheet:

RCRA-LQG: Federal RCRA generators list

Date form received by agency:	08/06/2013
Facility name:	POLYTECHNIC HIGH SCHOOL
Facility address:	12431 ROSCOE BLVD SUN VALLEY, CA 91352
EPA ID:	CAR000195750
Mailing address:	333 S BEAUDRY AVE 20TH FL LOS ANGELES, CA 90017
Contact:	SOE AUNG
Contact address:	333 S BEAUDRY AVE 20TH FL LOS ANGELES, CA 90017
Contact country:	US
Contact telephone:	213-241-3904
Contact email:	SOE.AUNG@LAUSD.NET
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	LOS ANGELES UNIFIED SCHOOL DIST
Owner/operator address:	333 S BEAUDRY AVE 28TH FL LOS ANGELES, CA 90017
Owner/operator country:	US
Owner/operator telephone:	213-241-3199
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	11/10/2008
Owner/Op end date:	Not Reported
Owner/operator name:	POLYTECHNIC HIGH SCHOOL
Owner/operator address:	Not Reported
Owner/operator country:	US
Owner/operator telephone:	Not Reported
Legal status:	District

POLYTECHNIC HIGH SCHOOL, 12431 ROSCOE BLVD, SUN VALLEY, CA 91352 (Continued)

Owner/Operator Type:	Operator
Owner/Op start date:	11/10/2008
Owner/Op end date:	Not Reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	181
. Waste name:	181

. Waste code:	D008
. Waste name:	LEAD

Historical Generators:

Date form received by agency:	10/10/2008
Site name:	NORTH HOLLYWOOD POLY CAS
Classification:	Large Quantity Generator

. Waste code:	D008
. Waste name:	LEAD

Violation Status: No violations found

CITY OF LOS ANGELES - DPW - BUREAU SANIT 12431 ROSCOE BLVD, SUN VALLEY, CA, 91352		S113021439
▲ A8	Target Property 823 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

HAZNET: Other Standard Environmental Records

envid:	S113021439
Year:	2003
GEPAID:	CAH777001440
Contact:	VIJAY DESAI
Telephone:	2134737763
Mailing Name:	Not Reported
Mailing Address:	433 S SPRING ST STE 500
Mailing City,St,Zip:	LOS ANGELES, CA 90013
Gen County:	Not Reported
TSD EPA ID:	CAD981696420
TSD County:	Not Reported
Waste Category:	Household waste
Disposal Method:	Recycler
Tons:	5.62
Cat Decode:	Household waste
Method Decode:	Recycler
Facility County:	Los Angeles

FRANCIS POLYTECHNIC HIGH SCHOOL 12431 ROSCOE BOULEVARD, PANORAMA CITY, CA, 91402		S105628600
▲ A9	Target Property 823 ft. Above Sea Level	State and tribal - equivalent CERCLIS Other Standard Environmental Records

Worksheet:

SCH: Other Standard Environmental Records

Facility ID:	19820072
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	47
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not Reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	300772
Assembly:	39
Senate:	18
Special Program Status:	Not Reported
Status:	No Further Action
Status Date:	05/04/2004
Restricted Use:	NO
Funding:	School District
Latitude:	34.22393
Longitude:	-118.4039
APN:	2634019900
Past Use:	* EDUCATIONAL SERVICES
Potential COC:	Benzene, Lead, Methyl tertbutyl ether (MTBE, Tetrachloroethylene (PCE, 1,1,1-Trichloroethane (TCA, Trichloroethylene (TCE, Vinyl chloride, Bromobenzene, Bromodichloromethane, Bromoform (tribromomethane, Bromomethane (Methyl bromide, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane (methyl chloride, o-Chlorotoluene, 1,4-Dibromobenzene, Dibromochloromethane, 1,2-Dibromo-3-chloropropane (DBCP, 1,2-Dibromoethane (EDB, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane (EDC, 1,1-Dichloroethylene, 1,2-Dichloroethylene (cis, 1,2-Dichloroethylene (trans, 1,2-Dichloropropane, 1,3-Dichloropropane, 1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Methylene

FRANCIS POLYTECHNIC HIGH SCHOOL, 12431 ROSCOE BOULEVARD, PANORAMA CITY, CA 91402 (Continued)

bromide, Methylene chloride, Methyl ethyl ketone (2-Butanone, Methyl isobutyl ketone, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Toluene, 1,2,4-Trichlorobenzene, 1,1,2-Trichloroethane, Trichlorofluoromethane, 1,1,2-Trichloropropane, 1,2,3-Trichloropropane, 1,2,3-Trichloropropene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Xylenes

Confirmed COC: 30003-NO, 30013-NO, 30016-NO, 30564-NO, 30565-NO, 30571-NO, 30572-NO, 30578-NO, 30022-NO, 30026-NO, 30093-NO, 30499-NO, 30312-NO, 30094-NO, 30096-NO, 30104-NO, 30105-NO, 30137-NO, 30179-NO, 30180-NO, 30182-NO, 30185-NO, 30192-NO, 30193-NO, 30195-NO, 30196-NO, 30200-NO, 30202-NO, 30272-NO, 30536-NO, 30383-NO, 30593-NO, 30386-NO, 30384-NO, 30387-NO, 30550-NO, 30116-NO, 30135-NO, 30027-NO, 30095-NO, 30103-NO, 30136-NO, 30181-NO, 30186-NO, 30191-NO, 30194-NO, 30201-NO, 30028-NO, 30127-NO, 30525-NO, 30563-NO, 30570-NO, 30577-NO, 30535-NO, 30146-NO, 30187-NO

Potential Description: SOIL, SV
Alias Name: FRANCIS POLYTECHNIC HIGH SCHOOL
Alias Type: Alternate Name
Alias Name: FRANCIS POLYTECHNIC HIGH SCHOOL
Alias Type: Alternate Name
Alias Name: LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: 2634019900
Alias Type: APN
Alias Name: 300772
Alias Type: Project Code (Site Code)
Alias Name: 19820072
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/19/2000
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/12/2001
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Supplemental Site Investigation Report

FRANCIS POLYTECHNIC HIGH SCHOOL, 12431 ROSCOE BOULEVARD, PANORAMA CITY, CA 91402 (Continued)

Completed Date: 03/25/2004
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 04/23/2001
Comments: Final Supplemental Work Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 10/13/2000
Comments: Final Soil-Gas Monitoring Work Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 07/15/2002
Comments: Soil Gas Sampling Report Event #1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 07/30/2002
Comments: Soil Gas Sampling Report Monitoring Event #2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 03/12/2003
Comments: Soil Gas Sampling Report Monitoring Event #3

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 06/27/2003
Comments: Soil Gas Sampling Report Monitoring Event #4

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report

FRANCIS POLYTECHNIC HIGH SCHOOL, 12431 ROSCOE BOULEVARD, PANORAMA CITY, CA 91402 (Continued)

Completed Date:	11/18/1999
Comments:	Preliminary Air Sampling Investigation Vol 3
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	05/04/2004
Comments:	Not Reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	02/10/2000
Comments:	DTSC entered into a Master Oversight Agreement (Agreement), (Docket Number HSA-A 99/00-051) with the Los Angeles Unified School District (LAUSD) on February 10, 2000. DTSC made a "No Further Action" determination on the site. LAUSD is conducting vapor monitoring pursuant to a PEA recommendation. DTSC concurs with the monitoring, activities, however it is not required. Received soil gas monitoring reports round 3 on 03/26/03.
Future Area Name:	Not Reported
Future Sub Area Name:	Not Reported
Future Document Type:	Not Reported
Future Due Date:	Not Reported
Schedule Area Name:	Not Reported
Schedule Sub Area Name:	Not Reported
Schedule Document Type:	Not Reported
Schedule Due Date:	Not Reported
Schedule Revised Date:	Not Reported

ENVIROSTOR: State and tribal - equivalent CERCLIS

Facility ID:	19820072
Status:	No Further Action
Status Date:	05/04/2004
Site Code:	300772
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	47
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not Reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	39
Senate:	18
Special Program:	Not Reported
Restricted Use:	NO

FRANCIS POLYTECHNIC HIGH SCHOOL, 12431 ROSCOE BOULEVARD, PANORAMA CITY, CA 91402 (Continued)

Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	34.22393
Longitude:	-118.4039
APN:	2634019900
Past Use:	* EDUCATIONAL SERVICES
Potential COC:	Benzene Lead Methyl tertbutyl ether (MTBE Tetrachloroethylene (PCE 1,1,1-Trichloroethane (TCA Trichloroethylene (TCE Vinyl chloride Bromobenzene Bromodichloromethane Bromoform (tribromomethane Bromomethane (Methyl bromide n-Butylbenzene sec-Butylbenzene tert-Butylbenzene Carbon tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane (methyl chloride o-Chlorotoluene 1,4-Dibromobenzene Dibromochloromethane 1,2-Dibromo-3-chloropropane (DBCP 1,2-Dibromoethane (EDB 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane 1,1-Dichloroethane 1,2-Dichloroethane (EDC 1,1-Dichloroethylene 1,2-Dichloroethylene (cis 1,2-Dichloroethylene (trans 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropene Ethylbenzene Hexachlorobutadiene Methylene bromide Methylene chloride Methyl ethyl ketone (2-Butanone Methyl isobutyl ketone n-Propylbenzene Styrene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Toluene 1,2,4-Trichlorobenzene 1,1,2-Trichloroethane Trichlorofluoromethane 1,1,2-Trichloropropane 1,2,3-Trichloropropane 1,2,3-Trichloropropene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes
Confirmed COC:	30003-NO 30013-NO 30016-NO 30564-NO 30565-NO 30571-NO 30572-NO 30578-NO 30022-NO 30026-NO 30093-NO 30499-NO 30312-NO 30094-NO 30096-NO 30104-NO 30105-NO 30137-NO 30179-NO 30180-NO 30182-NO 30185-NO 30192-NO 30193-NO 30195-NO 30196-NO 30200-NO 30202-NO 30272-NO 30536-NO 30383-NO 30593-NO 30386-NO 30384-NO 30387-NO 30550-NO 30116-NO 30135-NO 30027-NO 30095-NO 30103-NO 30136-NO 30181-NO 30186-NO 30191-NO 30194-NO 30201-NO 30028-NO 30127-NO 30525-NO 30563-NO 30570-NO 30577-NO 30535-NO 30146-NO 30187-NO
Potential Description:	SOIL, SV
Alias Name:	FRANCIS POLYTECHNIC HIGH SCHOOL
Alias Type:	Alternate Name
Alias Name:	FRANCIS POLYTECHNIC HIGH SCHOOL
Alias Type:	Alternate Name
Alias Name:	LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	2634019900
Alias Type:	APN
Alias Name:	300772

FRANCIS POLYTECHNIC HIGH SCHOOL, 12431 ROSCOE BOULEVARD, PANORAMA CITY, CA 91402 (Continued)

Alias Type: Project Code (Site Code)
Alias Name: 19820072
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/19/2000
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/12/2001
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 03/25/2004
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 04/23/2001
Comments: Final Supplemental Work Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 10/13/2000
Comments: Final Soil-Gas Monitoring Work Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 07/15/2002
Comments: Soil Gas Sampling Report Event #1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 07/30/2002
Comments: Soil Gas Sampling Report Monitoring Event #2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 03/12/2003
Comments: Soil Gas Sampling Report Monitoring Event #3

Completed Area Name: PROJECT WIDE

FRANCIS POLYTECHNIC HIGH SCHOOL, 12431 ROSCOE BOULEVARD, PANORAMA CITY, CA 91402 (Continued)

Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 06/27/2003
Comments: Soil Gas Sampling Report Monitoring Event #4

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 1

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 11/18/1999
Comments: Preliminary Air Sampling Investigation Vol 3

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 05/04/2004
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 02/10/2000
Comments: DTSC entered into a Master Oversight Agreement (Agreement), (Docket Number HSA-A 99/00-051) with the Los Angeles Unified School District (LAUSD) on February 10, 2000. DTSC made a "No Further Action" determination on the site. LAUSD is conducting vapor monitoring pursuant to a PEA recommendation. DTSC concurs with the monitoring, activities, however it is not required. Received soil gas monitoring reports round 3 on 03/26/03.

Future Area Name: Not Reported
Future Sub Area Name: Not Reported
Future Document Type: Not Reported
Future Due Date: Not Reported
Schedule Area Name: Not Reported
Schedule Sub Area Name: Not Reported
Schedule Document Type: Not Reported
Schedule Due Date: Not Reported
Schedule Revised Date: Not Reported

LAUSD/ FRANCIS POLYTECHNIC HS 12431 ROSCOE BLVD, SUN VALLEY, CA, 913520000		S113013220
▲ A10	Target Property 823 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

HAZNET: Other Standard Environmental Records

envid:	S113013220
Year:	2013
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not Reported
Mailing Address:	333 S BEAUDRY AVE FL 27
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Waste Category:	Not Reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1
Cat Decode:	Not Reported
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Not Reported

envid:	S113013220
Year:	2009
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not Reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not Reported
TSD EPA ID:	CAT080013352
TSD County:	Not Reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	1.71
Cat Decode:	Waste oil and mixed oil
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles

envid:	S113013220
Year:	2009
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not Reported

LAUSD/ FRANCIS POLYTECHNIC HS, 12431 ROSCOE BLVD, SUN VALLEY, CA 913520000 (Continued)

Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not Reported
TSD EPA ID:	CAT080013352
TSD County:	Not Reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	1.71
Cat Decode:	Waste oil and mixed oil
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles
envid:	S113013220
Year:	2009
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not Reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not Reported
TSD EPA ID:	CAD028409019
TSD County:	Not Reported
Waste Category:	Laboratory waste chemicals
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.15
Cat Decode:	Laboratory waste chemicals
Method Decode:	Fuel Blending Prior To Energy Recovery At Another Site
Facility County:	Los Angeles
envid:	S113013220
Year:	2009
GEPAID:	CAD982039315
Contact:	SOE AUNG / ECM
Telephone:	2132413199
Mailing Name:	Not Reported
Mailing Address:	333 S BEAUDRY AVE 20TH FLOOR
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Not Reported
TSD EPA ID:	CAD009007626
TSD County:	Not Reported
Waste Category:	Asbestos containing waste
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.4
Cat Decode:	Asbestos containing waste
Method Decode:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County:	Los Angeles

The CA_HAZNET database contains 58 additional records for this site. Please contact your EDR Account Executive for more information.

MAP FINDINGS

LAUSD-NORTH HOLLYWOOD POLY CAS 12431 ROSCOE BLVD, SUN VALLEY, CA, 913520000		S113178708
▲ A11	Target Property 823 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

HAZNET: Other Standard Environmental Records

envid:	S113178708
Year:	2014
GEPAID:	CAR000195750
Contact:	PAT SCHAENEN
Telephone:	2132413921
Mailing Name:	Not Reported
Mailing Address:	940 S BEAUDRY AVE FL 28
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	NVT330010000
TSD County:	99
Waste Category:	Not Reported
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.22935
Cat Decode:	Not Reported
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles
envid:	S113178708
Year:	2014
GEPAID:	CAR000195750
Contact:	PAT SCHAENEN
Telephone:	2132413921
Mailing Name:	Not Reported
Mailing Address:	940 S BEAUDRY AVE FL 28
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	NVT330010000
TSD County:	99
Waste Category:	Unspecified aqueous solution
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	1.386
Cat Decode:	Unspecified aqueous solution
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Los Angeles
envid:	S113178708
Year:	2013
GEPAID:	CAR000195750
Contact:	SOE AUNG
Telephone:	2132413904
Mailing Name:	Not Reported

LAUSD-NORTH HOLLYWOOD POLY CAS, 12431 ROSCOE BLVD, SUN VALLEY, CA 913520000 (Continued)

Mailing Address:	333 S BEAUNDRY AVE FL 28
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	NVT330010000
TSD County:	99
Waste Category:	Not Reported
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	1.08
Cat Decode:	Not Reported
Method Decode:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Facility County:	Not Reported
envid:	S113178708
Year:	2013
GEPAID:	CAR000195750
Contact:	SOE AUNG
Telephone:	2132413904
Mailing Name:	Not Reported
Mailing Address:	333 S BEAUNDRY AVE FL 28
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	NMD002208627
TSD County:	99
Waste Category:	Not Reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0445
Cat Decode:	Not Reported
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Not Reported
envid:	S113178708
Year:	2013
GEPAID:	CAR000195750
Contact:	SOE AUNG
Telephone:	2132413904
Mailing Name:	Not Reported
Mailing Address:	333 S BEAUNDRY AVE FL 28
Mailing City,St,Zip:	LOS ANGELES, CA 900170000
Gen County:	Los Angeles
TSD EPA ID:	CAD009007626
TSD County:	Los Angeles
Waste Category:	Not Reported
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.8
Cat Decode:	Not Reported
Method Decode:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County:	Not Reported

The CA_HAZNET database contains 3 additional records for this site. Please contact your EDR Account Executive for more information.

EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A 8451 ARLETA AVENUE, SUN VALLEY, CA, 91352-2958			S105628653
▲ B12	NW <1/10	(58 ft. / 0.011 mi.)	State and tribal - equivalent CERCLIS Other Standard Environmental Records
	3 ft. Higher Elevation	826 ft. Above Sea Level	

Worksheet:

SCH: Other Standard Environmental Records

Facility ID:	19940001
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	34
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not Reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	304251
Assembly:	39
Senate:	18
Special Program Status:	Not Reported
Status:	No Further Action
Status Date:	01/28/2002
Restricted Use:	NO
Funding:	School District
Latitude:	34.23032
Longitude:	-118.4136
APN:	NONE SPECIFIED
Past Use:	* ADMINISTRATION OF HUMAN RESOURCES
Potential COC:	Beryllium and compounds, Beryllium and compounds, Antimony and compounds, Chromium VI, Molybdenum, Vanadium and compounds, Cobalt, Mercury (elemental, Selenium, Zinc, Thallium and compounds, Nickel (soluble salts, Copper and compounds, Cadmium and compounds, Silver, Lead
Confirmed COC:	NONE SPECIFIED
Potential Description:	NMA
Alias Name:	EAST VALLEY AREA NEW HIGH SCHOOL #1A
Alias Type:	Alternate Name
Alias Name:	LAUSD-E. VALLEY AREA HS #1A AKA-ANTHONY
Alias Type:	Alternate Name
Alias Name:	LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	304251
Alias Type:	Project Code (Site Code)

EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A, 8451 ARLETA AVENUE, SUN VALLEY, CA 91352-2958 (Continued)

Alias Name: 19940001
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 01/28/2002
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 01/15/2002
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 01/15/2002
Comments: DTSC approved the PEA

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Other Report
Completed Date: 05/30/2006
Comments: Issued a Underground Storage Tank Closure Report approval letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 03/01/2001
Comments: Not Reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not Reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 02/10/2000
Comments: Not Reported

Future Area Name: Not Reported
Future Sub Area Name: Not Reported
Future Document Type: Not Reported
Future Due Date: Not Reported
Schedule Area Name: Not Reported
Schedule Sub Area Name: Not Reported
Schedule Document Type: Not Reported
Schedule Due Date: Not Reported
Schedule Revised Date: Not Reported

ENVIROSTOR: State and tribal - equivalent CERCLIS

Facility ID: 19940001

EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A, 8451 ARLETA AVENUE, SUN VALLEY, CA 91352-2958 (Continued)

Status:	No Further Action
Status Date:	01/28/2002
Site Code:	304251
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	34
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not Reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Assembly:	39
Senate:	18
Special Program:	Not Reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	34.23032
Longitude:	-118.4136
APN:	NONE SPECIFIED
Past Use:	* ADMINISTRATION OF HUMAN RESOURCES
Potential COC:	Beryllium and compounds Antimony and compounds Chromium VI Molybdenum Vanadium and compounds Cobalt Mercury (elemental Selenium Zinc Thallium and compounds Nickel (soluble salts Copper and compounds Cadmium and compounds Silver Lead
Confirmed COC:	NONE SPECIFIED
Potential Description:	NMA
Alias Name:	EAST VALLEY AREA NEW HIGH SCHOOL #1A
Alias Type:	Alternate Name
Alias Name:	LAUSD-E. VALLEY AREA HS #1A AKA-ANTHONY
Alias Type:	Alternate Name
Alias Name:	LOS ANGELES UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	304251
Alias Type:	Project Code (Site Code)
Alias Name:	19940001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	01/28/2002
Comments:	Not Reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Preliminary Endangerment Assessment Report

EAST VALLEY AREA NEW HIGH SCHOOL NO. 1A, 8451 ARLETA AVENUE, SUN VALLEY, CA 91352-2958 (Continued)

Completed Date:	01/15/2002
Comments:	Not Reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	01/15/2002
Comments:	DTSC approved the PEA
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Other Report
Completed Date:	05/30/2006
Comments:	Issued a Underground Storage Tank Closure Report approval letter.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	03/01/2001
Comments:	Not Reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	02/10/2000
Comments:	Not Reported
Future Area Name:	Not Reported
Future Sub Area Name:	Not Reported
Future Document Type:	Not Reported
Future Due Date:	Not Reported
Schedule Area Name:	Not Reported
Schedule Sub Area Name:	Not Reported
Schedule Document Type:	Not Reported
Schedule Due Date:	Not Reported
Schedule Revised Date:	Not Reported

12440 ROSCOE BLVD 12440 ROSCOE BLVD, SUN VALLEY, CA, 91352		1015191745	
▼ A13	SW <1/10	(70 ft. / 0.013 mi.)	Historical Gas Stations
	1 ft. Lower Elevation	822 ft. Above Sea Level	

Worksheet:

EDR Historical Auto Stations: Historical Gas Stations

Name:	AUTO PROS INC
Year:	2006
Address:	12440 ROSCOE BLVD
Name:	AUTO PROS INC
Year:	2007
Address:	12440 ROSCOE BLVD
Name:	AUTO PROS INC
Year:	2008
Address:	12440 ROSCOE BLVD

MOBIL STATION HNG 12450 ROSCOE BLVD, SUN VALLEY, CA, 91352			S103626589
▼ A14	SW <1/10	(71 ft. / 0.013 mi.)	State and tribal leaking storage tank lists Other Standard Environmental Records
	1 ft. Lower Elevation	822 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0603702338
Latitude:	34.221344
Longitude:	-118.404902
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/11/2001
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	UST
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	913522489
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0603702338

Contact:

Global Id:	T0603702338
Contact Type:	Regional Board Caseworker
Contact Name:	UST
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not Reported
City:	BCP 04 UNKNOWN
Email:	Not Reported
Phone Number:	Not Reported

Global Id:	T0603702338
Contact Type:	Local Agency Caseworker
Contact Name:	TBD
Organization Name:	LOS ANGELES, CITY OF
Address:	200 N. MAIN ST. RM. 970
City:	LOS ANGELES
Email:	Not Reported
Phone Number:	2134826528

Status History:

Global Id:	T0603702338
Status:	Completed - Case Closed

MOBIL STATION HNG, 12450 ROSCOE BLVD, SUN VALLEY, CA 91352 (Continued)

Status Date:	04/11/2001
Global Id:	T0603702338
Status:	Open - Case Begin Date
Status Date:	12/10/1999

Regulatory Activities:

Global Id:	T0603702338
Action Type:	Other
Date:	12/10/1999
Action:	Leak Reported

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	913522489

MAP FINDINGS

JED GAS STATION 12450 ROSCOE BLVD, SUN VALLEY, CA, 91352			S104406377
▼ A15	SW <1/10	(71 ft. / 0.013 mi.)	State and tribal leaking storage tank lists State and tribal registered storage tank lists
	1 ft. Lower Elevation	822 ft. Above Sea Level	

Worksheet:

SWEEPS UST: State and tribal registered storage tank lists

Status:	Active
Comp Number:	354
Number:	9
Board Of Equalization:	44-011127
Referral Date:	01-15-93
Action Date:	03-15-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported
SWRCB Tank Id:	19-050-000354-000001
Tank Status:	A
Capacity:	8000
Active Date:	04-20-88
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	5

Status:	Active
Comp Number:	354
Number:	9
Board Of Equalization:	44-011127
Referral Date:	01-15-93
Action Date:	03-15-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported
SWRCB Tank Id:	19-050-000354-000002
Tank Status:	A
Capacity:	6000
Active Date:	04-20-88
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not Reported

Status:	Active
Comp Number:	354
Number:	9
Board Of Equalization:	44-011127
Referral Date:	01-15-93
Action Date:	03-15-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported

JED GAS STATION, 12450 ROSCOE BLVD, SUN VALLEY, CA 91352 (Continued)

SWRCB Tank Id:	19-050-000354-000003
Tank Status:	A
Capacity:	6000
Active Date:	04-20-88
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	354
Number:	9
Board Of Equalization:	44-011127
Referral Date:	01-15-93
Action Date:	03-15-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported
SWRCB Tank Id:	19-050-000354-000004
Tank Status:	A
Capacity:	6000
Active Date:	04-20-88
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	354
Number:	9
Board Of Equalization:	44-011127
Referral Date:	01-15-93
Action Date:	03-15-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported
SWRCB Tank Id:	19-050-000354-000005
Tank Status:	A
Capacity:	6000
Active Date:	04-20-88
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported

LUST REG 4: State and tribal leaking storage tank lists

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	913522489
Status:	Case Closed
Substance:	Gasoline

JED GAS STATION, 12450 ROSCOE BLVD, SUN VALLEY, CA 91352 (Continued)

Substance Quantity:	Not Reported
Local Case No:	Not Reported
Case Type:	Soil
Abatement Method Used at the Site:	Not Reported
Global ID:	T0603702338
W Global ID:	Not Reported
Staff:	TAS
Local Agency:	19050
Cross Street:	Not Reported
Enforcement Type:	Not Reported
Date Leak Discovered:	Not Reported
Date Leak First Reported:	12/10/1999
Date Leak Record Entered:	Not Reported
Date Confirmation Began:	Not Reported
Date Leak Stopped:	Not Reported
Date Case Last Changed on Database:	1/20/2000
Date the Case was Closed:	4/11/2001
How Leak Discovered:	Not Reported
How Leak Stopped:	Not Reported
Cause of Leak:	Not Reported
Leak Source:	Not Reported
Operator:	Not Reported
Water System:	Not Reported
Well Name:	Not Reported
Approx. Dist To Production Well (ft):	1960.2828647552030301278066801
Source of Cleanup Funding:	Not Reported
Preliminary Site Assessment Workplan Submitted:	Not Reported
Preliminary Site Assessment Began:	Not Reported
Pollution Characterization Began:	Not Reported
Remediation Plan Submitted:	Not Reported
Remedial Action Underway:	Not Reported
Post Remedial Action Monitoring Began:	Not Reported
Enforcement Action Date:	Not Reported
Historical Max MTBE Date:	Not Reported
Hist Max MTBE Conc in Groundwater:	Not Reported
Hist Max MTBE Conc in Soil:	96
Significant Interim Remedial Action Taken:	Not Reported
GW Qualifier:	Not Reported
Soil Qualifier:	Not Reported
Organization:	Not Reported
Owner Contact:	Not Reported
Responsible Party:	MOBIL STATION HNG
RP Address:	12450 ROSCOE BLVD., SUN VALLEY, CA 91352
Program:	LUST
Lat/Long:	34.221513 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not Reported

JED GAS STATION, 12450 ROSCOE BLVD, SUN VALLEY, CA 91352 (Continued)

Priority:	Not Reported
Cleanup Fund Id:	Not Reported
Suspended:	Not Reported
Assigned Name:	Not Reported
Summary:	1/20/00 MTBE POLLUTION INVESTIGATION, CASE CLOSED 7/99 LACFD, 5-30' BORINGS ALL ND, SITE EVALUATED FOR MTBE POLLUTION, TUJUNGA WELLFIELD (FILE NO. 99-064)

MAP FINDINGS

12450 ROSCOE BLVD 12450 ROSCOE BLVD, SUN VALLEY, CA, 91352			1015191917
▼ A16	SW <1/10	(71 ft. / 0.013 mi.)	Historical Gas Stations
	1 ft. Lower Elevation	822 ft. Above Sea Level	

Worksheet:

EDR Historical Auto Stations: Historical Gas Stations

Name: JEDS GAS STATION
Year: 1999
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2001
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2002
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2003
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2004
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2006
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2007
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2008
Address: 12450 ROSCOE BLVD

Name: MOBIL GAS STATION
Year: 2009
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2010
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2011
Address: 12450 ROSCOE BLVD

Name: JEDS GAS STATION
Year: 2012
Address: 12450 ROSCOE BLVD

12450 ROSCOE BLVD, 12450 ROSCOE BLVD, SUN VALLEY, CA 91352 (Continued)

CITY OF LADWP 8501 ARLETA AVE, SUN VALLEY, CA, 91352		S104406375	
▲ B17	NW <1/10	(81 ft. / 0.015 mi.)	State and tribal leaking storage tank lists Other Standard Environmental Records
	2 ft. Higher Elevation	825 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0603702336
Latitude:	34.2241269
Longitude:	-118.4072957
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/11/2001
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	UST
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	913522461
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0603702336

Contact:

Global Id:	T0603702336
Contact Type:	Regional Board Caseworker
Contact Name:	UST
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not Reported
City:	BCP 04 UNKNOWN
Email:	Not Reported
Phone Number:	Not Reported

Global Id:	T0603702336
Contact Type:	Local Agency Caseworker
Contact Name:	ELOY LUNA
Organization Name:	LOS ANGELES, CITY OF
Address:	200 North Main Street, Suite 1780
City:	LOS ANGELES
Email:	eloy.luna@lacity.org
Phone Number:	Not Reported

Status History:

Global Id:	T0603702336
Status:	Completed - Case Closed

CITY OF LADWP, 8501 ARLETA AVE, SUN VALLEY, CA 91352 (Continued)

Status Date:	04/11/2001
Global Id:	T0603702336
Status:	Open - Case Begin Date
Status Date:	12/10/1999

Regulatory Activities:

Global Id:	T0603702336
Action Type:	Other
Date:	12/10/1999
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	913522461
Status:	Case Closed
Substance:	Diesel
Substance Quantity:	Not Reported
Local Case No:	Not Reported
Case Type:	Soil
Abatement Method Used at the Site:	Not Reported
Global ID:	T0603702336
W Global ID:	Not Reported
Staff:	TAS
Local Agency:	19050
Cross Street:	Not Reported
Enforcement Type:	Not Reported
Date Leak Discovered:	Not Reported
Date Leak First Reported:	12/10/1999
Date Leak Record Entered:	Not Reported
Date Confirmation Began:	Not Reported
Date Leak Stopped:	Not Reported
Date Case Last Changed on Database:	12/10/1999
Date the Case was Closed:	4/11/2001
How Leak Discovered:	Not Reported
How Leak Stopped:	Not Reported
Cause of Leak:	Not Reported
Leak Source:	Not Reported
Operator:	Not Reported
Water System:	Not Reported
Well Name:	Not Reported
Approx. Dist To Production Well (ft):	2486.2382327051799544707602184
Source of Cleanup Funding:	Not Reported
Preliminary Site Assessment Workplan Submitted:	Not Reported
Preliminary Site Assessment Began:	Not Reported
Pollution Characterization Began:	Not Reported

CITY OF LADWP, 8501 ARLETA AVE, SUN VALLEY, CA 91352 (Continued)

Remediation Plan Submitted:	Not Reported
Remedial Action Underway:	Not Reported
Post Remedial Action Monitoring Began:	Not Reported
Enforcement Action Date:	Not Reported
Historical Max MTBE Date:	Not Reported
Hist Max MTBE Conc in Groundwater:	Not Reported
Hist Max MTBE Conc in Soil:	Not Reported
Significant Interim Remedial Action Taken:	Not Reported
GW Qualifier:	Not Reported
Soil Qualifier:	Not Reported
Organization:	Not Reported
Owner Contact:	Not Reported
Responsible Party:	CITY OF LADWP (ANTHONY OFFICE
RP Address:	111 N. HOPE ST., LOS ANGELES, CA 90051
Program:	LUST
Lat/Long:	34.2241269 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not Reported
Priority:	Not Reported
Cleanup Fund Id:	Not Reported
Suspended:	Not Reported
Assigned Name:	Not Reported
Summary:	SITE EVALUATED FOR MTBE POLLUTION , TUJUNGA WELLFIELD (FILE NO. 99-064)

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	913522461

CHMIRS: Other Standard Environmental Records

OES Incident Number:	7-4307
OES notification:	10/29/1997
OES Date:	Not Reported
OES Time:	Not Reported
Date Completed:	Not Reported
Property Use:	Not Reported
Agency Id Number:	Not Reported
Agency Incident Number:	Not Reported
Time Notified:	Not Reported
Time Completed:	Not Reported
Surrounding Area:	Not Reported
Estimated Temperature:	Not Reported
Property Management:	Not Reported
More Than Two Substances Involved?:	Not Reported
Resp Agncy Personel # Of Decontaminated:	Not Reported

CITY OF LADWP, 8501 ARLETA AVE, SUN VALLEY, CA 91352 (Continued)

Responding Agency Personel # Of Injuries:	Not Reported
Responding Agency Personel # Of Fatalities:	Not Reported
Others Number Of Decontaminated:	Not Reported
Others Number Of Injuries:	Not Reported
Others Number Of Fatalities:	Not Reported
Vehicle Make/year:	Not Reported
Vehicle License Number:	Not Reported
Vehicle State:	Not Reported
Vehicle Id Number:	Not Reported
CA DOT PUC/ICC Number:	Not Reported
Company Name:	Not Reported
Reporting Officer Name/ID:	Not Reported
Report Date:	Not Reported
Facility Telephone:	Not Reported
Waterway Involved:	No
Waterway:	Not Reported
Spill Site:	Not Reported
Cleanup By:	NO
Containment:	Not Reported
What Happened:	Not Reported
Type:	Not Reported
Measure:	Not Reported
Other:	Not Reported
Date/Time:	Not Reported
Year:	1997
Agency:	DEPT OF WATER AND POWER
Incident Date:	10/29/199712:00:00 AM
Admin Agency:	L. A. County Fire Prevention
Amount:	Not Reported
Contained:	No
Site Type:	Other
E Date:	Not Reported
Substance:	CHLORODIFLUOROMETHANE R-22
Gallons:	0.000000
Unknown:	0
Substance #2:	Not Reported
Substance #3:	Not Reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not Reported
#2 Pipeline:	Not Reported
#3 Pipeline:	Not Reported
#1 Vessel >= 300 Tons:	Not Reported
#2 Vessel >= 300 Tons:	Not Reported
#3 Vessel >= 300 Tons:	Not Reported
Evacs:	Not Reported
Injuries:	Not Reported
Fatals:	Not Reported

CITY OF LADWP, 8501 ARLETA AVE, SUN VALLEY, CA 91352 (Continued)

Comments:	Not Reported
Description:	UNSPECIFIED AMOUNT RELEASED FROM AIR CONDITIONING SYSTEM INTO OFFICE BUILDING. BUILDING EVACUATED. BUILDING REOCCUPIED A SHORT TIME LATER.
OES Incident Number:	3-2289
OES notification:	05/02/2003
OES Date:	Not Reported
OES Time:	Not Reported
Date Completed:	Not Reported
Property Use:	Not Reported
Agency Id Number:	Not Reported
Agency Incident Number:	Not Reported
Time Notified:	Not Reported
Time Completed:	Not Reported
Surrounding Area:	Not Reported
Estimated Temperature:	Not Reported
Property Management:	Not Reported
More Than Two Substances Involved?:	Not Reported
Resp Agncy Personel # Of Decontaminated:	Not Reported
Responding Agency Personel # Of Injuries:	Not Reported
Responding Agency Personel # Of Fatalities:	Not Reported
Others Number Of Decontaminated:	Not Reported
Others Number Of Injuries:	Not Reported
Others Number Of Fatalities:	Not Reported
Vehicle Make/year:	Not Reported
Vehicle License Number:	Not Reported
Vehicle State:	Not Reported
Vehicle Id Number:	Not Reported
CA DOT PUC/ICC Number:	Not Reported
Company Name:	Not Reported
Reporting Officer Name/ID:	Not Reported
Report Date:	Not Reported
Facility Telephone:	Not Reported
Waterway Involved:	Yes
Waterway:	Storm Drain
Spill Site:	Not Reported
Cleanup By:	hazardous materials unit
Containment:	Not Reported
What Happened:	Not Reported
Type:	Not Reported
Measure:	Not Reported
Other:	Not Reported
Date/Time:	Not Reported
Year:	2003
Agency:	Dept of Water and Power City of Los Angeles
Incident Date:	5/2/200312:00:00 AM

CITY OF LADWP, 8501 ARLETA AVE, SUN VALLEY, CA 91352 (Continued)

Admin Agency:	L. A. County Fire Prevention
Amount:	Not Reported
Contained:	No
Site Type:	Merchant/Business
E Date:	Not Reported
Substance:	sewage
Gallons:	100
Unknown:	0
Substance #2:	Not Reported
Substance #3:	Not Reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not Reported
#2 Pipeline:	Not Reported
#3 Pipeline:	Not Reported
#1 Vessel >= 300 Tons:	Not Reported
#2 Vessel >= 300 Tons:	Not Reported
#3 Vessel >= 300 Tons:	Not Reported
Evacs:	Not Reported
Injuries:	Not Reported
Fatals:	Not Reported
Comments:	Not Reported
Description:	Mainline stoppage caused a leakage that is flowing 1-5 gallons per minute. Drain flows to LA River, vacuum truck is enroute and should be able to recover all.

NPDES: Other Standard Environmental Records

Npdes Number:	Not Reported
Facility Status:	Not Reported
Agency Id:	Not Reported
Region:	4
Regulatory Measure Id:	332879
Order No:	Not Reported
Regulatory Measure Type:	Construction
Place Id:	Not Reported
WDID:	4 19C349200
Program Type:	Not Reported
Adoption Date Of Regulatory Measure:	Not Reported
Effective Date Of Regulatory Measure:	Not Reported
Expiration Date Of Regulatory Measure:	Not Reported
Termination Date Of Regulatory Measure:	Not Reported
Discharge Name:	Not Reported
Discharge Address:	Not Reported
Discharge City:	Not Reported

CITY OF LADWP, 8501 ARLETA AVE, SUN VALLEY, CA 91352 (Continued)

Discharge State:	Not Reported
Discharge Zip:	Not Reported
RECEIVED DATE:	5/9/2008
PROCESSED DATE:	10/4/2007
STATUS CODE NAME:	Active
STATUS DATE:	10/4/2007
PLACE SIZE:	9.95
PLACE SIZE UNIT:	52
FACILITY CONTACT NAME:	Matt Gerard
FACILITY CONTACT TITLE:	Not Reported
FACILITY CONTACT PHONE:	619-571-4355
FACILITY CONTACT PHONE EXT:	Not Reported
FACILITY CONTACT EMAIL:	matt.gerard@clarkconstruction.com
OPERATOR NAME:	Los Angeles Unified School District
OPERATOR ADDRESS:	333 S Beaudry Ave
OPERATOR CITY:	Los Angeles
OPERATOR STATE:	California
OPERATOR ZIP:	90017
OPERATOR CONTACT NAME:	Dan Holmquist
OPERATOR CONTACT TITLE:	Owners Authorized Representative
OPERATOR CONTACT PHONE:	661-510-7225
OPERATOR CONTACT PHONE EXT:	Not Reported
OPERATOR CONTACT EMAIL:	dan.holmquist@lundgren.net
OPERATOR TYPE:	State Agency
DEVELOPER NAME:	CLARK Construction Group
DEVELOPER ADDRESS:	8509 Arleta
DEVELOPER CITY:	Sun Valley
DEVELOPER STATE:	California
DEVELOPER ZIP:	91351
DEVELOPER CONTACT NAME:	Matt Gerard
DEVELOPER CONTACT TITLE:	Not Reported
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	Not Reported
EMERGENCY PHONE EXT:	Not Reported
CONSTYPE ABOVE GROUND IND:	Not Reported
CONSTYPE BELOW GROUND IND:	Not Reported
CONSTYPE CABLE LINE IND:	Not Reported
CONSTYPE COMM LINE IND:	Not Reported
CONSTYPE COMMERTIAL IND:	Not Reported
CONSTYPE ELECTRICAL LINE IND:	Not Reported
CONSTYPE GAS LINE IND:	Not Reported
CONSTYPE INDUSTRIAL IND:	Not Reported
CONSTYPE OTHER DESRIPTION:	Not Reported
CONSTYPE OTHER IND:	K 12 Educa
CONSTYPE RECONS IND:	Not Reported
CONSTYPE RESIDENTIAL IND:	Not Reported
CONSTYPE TRANSPORT IND:	Not Reported
CONSTYPE UTILITY DESCRIPTION:	Not Reported
CONSTYPE UTILITY IND:	Not Reported

CITY OF LADWP, 8501 ARLETA AVE, SUN VALLEY, CA 91352 (Continued)

CONSTYPE WATER SEWER IND:	Not Reported
DIR DISCHARGE USWATER IND:	Not Reported
RECEIVING WATER NAME:	Pacific Ocean
CERTIFIER NAME:	Jan Ducker
CERTIFIER TITLE:	Not Reported
CERTIFICATION DATE:	10-JUN-10
PRIMARY SIC:	Not Reported
SECONDARY SIC:	Not Reported
TERTIARY SIC:	Not Reported

ROSCOE SITE 12500-12522 W ROSCOE BLVD, PACOIMA, CA, 91331			1018119711
▼ 18	WSW <1/10	(181 ft. / 0.034 mi.)	Other Standard Environmental Records
	1 ft. Lower Elevation	822 ft. Above Sea Level	

Worksheet:

US BROWNFIELDS: Other Standard Environmental Records

Recipient name:	Los Angeles - Dept of Public Works, City of
Grant type:	Assessment
Property name:	ROSCOE SITE
Property #:	2308005017
Parcel size:	.43
Property Description:	The site was a gas station many years ago. It currently has a restaurant on the property which used to be the pay station/mini store for the gas station. The restaurant is not very nice looking. Most of the customers are students from the local High School and Middle School across the street. During the holidays they use part of the parking space as a Christmas Tree Lot. The site has an old "Perry's" sign. This is the name of the restaurant that was closed down a few years ago. The new Mexican restaurant owner has not been very cooperative in providing access to the property owner. This site is an eye sore for the community and can use some serious upgrade. With it being a cleaned property the possibilities would be greater.
Latitude:	34.2213035
Longitude:	-118.40600560000001
HCM label:	Address Matching-House Number
Map scale:	Not Reported
Point of reference:	Entrance Point of a Facility or Station
Datum:	North American Datum of 1983
ACRES property ID:	176504
Start date:	Not Reported
Completed date:	Not Reported
Acres cleaned up:	Not Reported
Cleanup funding:	Not Reported
Cleanup funding source:	Not Reported
Assessment funding:	5000
Assessment funding source:	US EPA - Brownfields Assessment Cooperative Agreement
Redevelopment funding:	Not Reported
Redev. funding source:	Not Reported
Redev. funding entity name:	Not Reported
Redevelopment start date:	Not Reported
Assessment funding entity:	EPA
Cleanup funding entity:	Not Reported
Grant type:	P
Accomplishment type:	Phase I Environmental Assessment

ROSCOE SITE, 12500-12522 W ROSCOE BLVD, PACOIMA, CA 91331 (Continued)

Accomplishment count:	1
Cooperative agreement #:	00T51701
Ownership entity:	Private
Current owner:	Calliopi Ash Trust
Did owner change:	N
Cleanup required:	No
Video available:	No
Photo available:	Yes
Institutional controls required:	N
IC Category proprietary controls:	Not Reported
IC cat. info. devices:	Not Reported
IC cat. gov. controls:	Not Reported
IC cat. enforcement permit tools:	Not Reported
IC in place date:	Not Reported
IC in place:	No
State/tribal program date:	Not Reported
State/tribal program ID:	Not Reported
State/tribal NFA date:	Not Reported
Air contaminated:	Not Reported
Air cleaned:	Not Reported
Asbestos found:	Not Reported
Asbestos cleaned:	Not Reported
Controled substance found:	Not Reported
Controled substance cleaned:	Not Reported
Drinking water affected:	Not Reported
Drinking water cleaned:	Not Reported
Groundwater affected:	Y
Groundwater cleaned:	Not Reported
Lead contaminant found:	Not Reported
Lead cleaned up:	Not Reported
No media affected:	Not Reported
Unknown media affected:	Not Reported
Other cleaned up:	Not Reported
Other metals found:	Not Reported
Other metals cleaned:	Not Reported
Other contaminants found:	Not Reported
Other contams found description:	Not Reported
PAHs found:	Not Reported
PAHs cleaned up:	Not Reported
PCBs found:	Not Reported
PCBs cleaned up:	Not Reported
Petro products found:	Not Reported
Petro products cleaned:	Not Reported
Sediments found:	Not Reported
Sediments cleaned:	Not Reported
Soil affected:	Y
Soil cleaned up:	Not Reported
Surface water cleaned:	Not Reported
VOCs found:	Not Reported
VOCs cleaned:	Not Reported

ROSCOE SITE, 12500-12522 W ROSCOE BLVD, PACOIMA, CA 91331 (Continued)

Cleanup other description:	Not Reported
Num. of cleanup and re-dev. jobs:	Not Reported
Past use greenspace acreage:	Not Reported
Past use residential acreage:	Not Reported
Past use commercial acreage:	.43
Past use industrial acreage:	Not Reported
Future use greenspace acreage:	Not Reported
Future use residential acreage:	Not Reported
Future use commercial acreage:	Not Reported
Future use industrial acreage:	Not Reported
Greenspace acreage and type:	Not Reported
Superfund Fed. landowner flag:	Not Reported
Arsenic cleaned up:	Not Reported
Cadmium cleaned up:	Not Reported
Chromium cleaned up:	Not Reported
Copper cleaned up:	Not Reported
Iron cleaned up:	Not Reported
mercury cleaned up:	Not Reported
nickel cleaned up:	Not Reported
No clean up:	Not Reported
Pesticides cleaned up:	Not Reported
Selenium cleaned up:	Not Reported
SVOCs cleaned up:	Not Reported
Unknown clean up:	Not Reported
Arsenic contaminant found:	Not Reported
Cadmium contaminant found:	Not Reported
Chromium contaminant found:	Not Reported
Copper contaminant found:	Not Reported
Iron contaminant found:	Not Reported
Mercury contaminant found:	Not Reported
Nickel contaminant found:	Not Reported
No contaminant found:	Not Reported
Pesticides contaminant found:	Not Reported
Selenium contaminant found:	Not Reported
SVOCs contaminant found:	Not Reported
Unknown contaminant found:	Not Reported
Future Use: Multistory	Not Reported
Media affected Bluiding Material:	Not Reported
Media affected indoor air:	Not Reported
Building material media cleaned up:	Not Reported
Indoor air media cleaned up:	Not Reported
Unknown media cleaned up:	Not Reported
Past Use: Multistory	Not Reported

ECHO: Other Standard Environmental Records

Envid:	1018119711
Registry ID:	110064566410
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110064566410

12334 BURTON ST 12334 BURTON ST, NORTH HOLLYWOOD, CA, 91605			1015189585
▼ 19	SE <1/10	(509 ft. / 0.096 mi.)	Historical Gas Stations
	3 ft. Lower Elevation	820 ft. Above Sea Level	

Worksheet:

EDR Historical Auto Stations: Historical Gas Stations

Name:	AUTO COLLISION REPAIR CENTER INC
Year:	2005
Address:	12334 BURTON ST
Name:	AUTO COLLISION REPAIR CENTER INC
Year:	2006
Address:	12334 BURTON ST

SHELDON-ARLETA 12455 WICKS ST, SUN VALLEY, CA, 91352			U001567820
▼ C20	NNW 1/10 - 1/3	(752 ft. / 0.143 mi.)	State and tribal landfill / solid waste disposal State and tribal registered storage tank lists Other Standard Environmental Records
	61 ft. Lower Elevation	762 ft. Above Sea Level	

Worksheet:

HIST UST: State and tribal registered storage tank lists

File Number:	000271A2
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000271A2.pdf
Region:	STATE
Facility ID:	00000060960
Facility Type:	Other
Other Type:	CITY LANDFILL
Contact Name:	B.G. EVANS
Telephone:	8188995054
Owner Name:	CITY OF LOS ANGELES
Owner Address:	200 N. SPRING ST
Owner City,St,Zip:	LOS ANGELES, CA 90012
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not Reported
Tank Capacity:	00007000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor
Click here for Geo Tracker PDF:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_HISTUST_PDF&img_id=000271A2

NPDES: Other Standard Environmental Records

Npdes Number:	Not Reported
Facility Status:	Not Reported
Agency Id:	Not Reported
Region:	4
Regulatory Measure Id:	188360
Order No:	Not Reported
Regulatory Measure Type:	Construction
Place Id:	Not Reported
WDID:	4 19C329691
Program Type:	Not Reported
Adoption Date Of Regulatory Measure:	Not Reported
Effective Date Of Regulatory Measure:	Not Reported
Expiration Date Of Regulatory Measure:	Not Reported
Termination Date Of Regulatory Measure:	Not Reported

SHELDON-ARLETA, 12455 WICKS ST, SUN VALLEY, CA 91352 (Continued)

Discharge Name:	Not Reported
Discharge Address:	Not Reported
Discharge City:	Not Reported
Discharge State:	Not Reported
Discharge Zip:	Not Reported
RECEIVED DATE:	5/9/2008
PROCESSED DATE:	9/2/2004
STATUS CODE NAME:	Active
STATUS DATE:	9/2/2004
PLACE SIZE:	45
PLACE SIZE UNIT:	52
FACILITY CONTACT NAME:	James Kurz
FACILITY CONTACT TITLE:	Solid Waste Disposal Supt. II
FACILITY CONTACT PHONE:	818-834-5128
FACILITY CONTACT PHONE EXT:	Not Reported
FACILITY CONTACT EMAIL:	James.Kurz@lacity.org
OPERATOR NAME:	Los Angeles City Bureau of Sanitation SRPCD
OPERATOR ADDRESS:	1149 S Broadway Ste 800
OPERATOR CITY:	Los Angeles
OPERATOR STATE:	California
OPERATOR ZIP:	90015
OPERATOR CONTACT NAME:	Khalil Gharios
OPERATOR CONTACT TITLE:	Solid Resources Manager II
OPERATOR CONTACT PHONE:	213-485-3002
OPERATOR CONTACT PHONE EXT:	Not Reported
OPERATOR CONTACT EMAIL:	khalil.gharios@lacity.org
OPERATOR TYPE:	Other
DEVELOPER NAME:	Los Angeles City Bureau of Sanitation SRPCD
DEVELOPER ADDRESS:	1149 S Broadway Ste 800
DEVELOPER CITY:	Los Angeles
DEVELOPER STATE:	California
DEVELOPER ZIP:	90015
DEVELOPER CONTACT NAME:	Khalil Gharios
DEVELOPER CONTACT TITLE:	Solid Resources Manager II
CONSTYPE LINEAR UTILITY IND:	N
EMERGENCY PHONE NO:	213-216-7458
EMERGENCY PHONE EXT:	Not Reported
CONSTYPE ABOVE GROUND IND:	Not Reported
CONSTYPE BELOW GROUND IND:	Not Reported
CONSTYPE CABLE LINE IND:	Not Reported
CONSTYPE COMM LINE IND:	Not Reported
CONSTYPE COMMERTIAL IND:	Not Reported
CONSTYPE ELECTRICAL LINE IND:	Not Reported
CONSTYPE GAS LINE IND:	Not Reported
CONSTYPE INDUSTRIAL IND:	Not Reported
CONSTYPE OTHER DESRIPTION:	Park
CONSTYPE OTHER IND:	Y
CONSTYPE RECONS IND:	Not Reported
CONSTYPE RESIDENTIAL IND:	Not Reported

SHELDON-ARLETA, 12455 WICKS ST, SUN VALLEY, CA 91352 (Continued)

CONSTYPE TRANSPORT IND:	Not Reported
CONSTYPE UTILITY DESCRIPTION:	Not Reported
CONSTYPE UTILITY IND:	Not Reported
CONSTYPE WATER SEWER IND:	Not Reported
DIR DISCHARGE USWATER IND:	N
RECEIVING WATER NAME:	Los Angeles River
CERTIFIER NAME:	Kosta Kaporis
CERTIFIER TITLE:	Sanitary Engineer
CERTIFICATION DATE:	30-JUN-10
PRIMARY SIC:	Not Reported
SECONDARY SIC:	Not Reported
TERTIARY SIC:	Not Reported
Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	188360
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not Reported
WDID:	4 19C329691
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not Reported
Effective Date Of Regulatory Measure:	09/02/2004
Expiration Date Of Regulatory Measure:	Not Reported
Termination Date Of Regulatory Measure:	Not Reported
Discharge Name:	Los Angeles City Bureau of Sanitation SRPCD
Discharge Address:	1149 S Broadway Ste 800
Discharge City:	Los Angeles
Discharge State:	California
Discharge Zip:	90015
RECEIVED DATE:	Not Reported
PROCESSED DATE:	Not Reported
STATUS CODE NAME:	Not Reported
STATUS DATE:	Not Reported
PLACE SIZE:	Not Reported
PLACE SIZE UNIT:	Not Reported
FACILITY CONTACT NAME:	Not Reported
FACILITY CONTACT TITLE:	Not Reported
FACILITY CONTACT PHONE:	Not Reported
FACILITY CONTACT PHONE EXT:	Not Reported
FACILITY CONTACT EMAIL:	Not Reported
OPERATOR NAME:	Not Reported
OPERATOR ADDRESS:	Not Reported
OPERATOR CITY:	Not Reported
OPERATOR STATE:	Not Reported
OPERATOR ZIP:	Not Reported

SHELDON-ARLETA, 12455 WICKS ST, SUN VALLEY, CA 91352 (Continued)

OPERATOR CONTACT NAME:	Not Reported
OPERATOR CONTACT TITLE:	Not Reported
OPERATOR CONTACT PHONE:	Not Reported
OPERATOR CONTACT PHONE EXT:	Not Reported
OPERATOR CONTACT EMAIL:	Not Reported
OPERATOR TYPE:	Not Reported
DEVELOPER NAME:	Not Reported
DEVELOPER ADDRESS:	Not Reported
DEVELOPER CITY:	Not Reported
DEVELOPER STATE:	Not Reported
DEVELOPER ZIP:	Not Reported
DEVELOPER CONTACT NAME:	Not Reported
DEVELOPER CONTACT TITLE:	Not Reported
CONSTYPE LINEAR UTILITY IND:	Not Reported
EMERGENCY PHONE NO:	Not Reported
EMERGENCY PHONE EXT:	Not Reported
CONSTYPE ABOVE GROUND IND:	Not Reported
CONSTYPE BELOW GROUND IND:	Not Reported
CONSTYPE CABLE LINE IND:	Not Reported
CONSTYPE COMM LINE IND:	Not Reported
CONSTYPE COMMERTIAL IND:	Not Reported
CONSTYPE ELECTRICAL LINE IND:	Not Reported
CONSTYPE GAS LINE IND:	Not Reported
CONSTYPE INDUSTRIAL IND:	Not Reported
CONSTYPE OTHER DESRIPTION:	Not Reported
CONSTYPE OTHER IND:	Not Reported
CONSTYPE RECONS IND:	Not Reported
CONSTYPE RESIDENTIAL IND:	Not Reported
CONSTYPE TRANSPORT IND:	Not Reported
CONSTYPE UTILITY DESCRIPTION:	Not Reported
CONSTYPE UTILITY IND:	Not Reported
CONSTYPE WATER SEWER IND:	Not Reported
DIR DISCHARGE USWATER IND:	Not Reported
RECEIVING WATER NAME:	Not Reported
CERTIFIER NAME:	Not Reported
CERTIFIER TITLE:	Not Reported
CERTIFICATION DATE:	Not Reported
PRIMARY SIC:	Not Reported
SECONDARY SIC:	Not Reported
TERTIARY SIC:	Not Reported

LOS ANGELES CO. LF: State and tribal landfill / solid waste disposal

Site ID:	2020
Alt. Address:	8700 Arleta Avenue, Sun Valley, CA
Site Contact:	Not Reported
Site Contact Phone:	Not Reported
Site Email:	Not Reported
Site Website:	Not Reported
Site Type:	Unknown

SHELDON-ARLETA, 12455 WICKS ST, SUN VALLEY, CA 91352 (Continued)

Site SWIS Number:	19-AR-0835
Beginning Operation Date:	Not Reported
Ending Operation Date:	Not Reported
Local Enforcement Agency:	City of Los Angeles, Building and Safety
Maximun Depth Fill(Ft):	Not Reported
Permitted Capacity:	Not Reported
Present Use:	Sheldon Arieta Park
Remaining Capacity(Million):	Not Reported
Status:	Closed
Waste Accepted:	Not Reported
Hours of Operation:	Not Reported
Disposal Area (Acre):	Not Reported

Detail As Of 01/2014:

Operator Name:	Unknown
Operator Address:	Not Reported
Operator City/State/Zip:	Not Reported
Operator Contact:	Not Reported
Operator Telephone:	Not Reported
Operator Email:	Not Reported
Owner Name:	City of Los Angeles Bureau of Sanitation
Owner Address:	11950 Lopez Canyon Road
Owner City/State/Zip:	Lake View Terrace, CA 91342
Owner Contact:	Not Reported
Owner Telephone:	(213) 485-3002
Owner Email:	Not Reported

MAP FINDINGS

SHELDON-ARLETA LANDFILL 12455 WICKS ST., LOS ANGELES, CA, 91352		S105036243
▼ C21	NNW 1/10 - 1/3 (752 ft. / 0.143 mi.)	State and tribal landfill / solid waste disposal
	61 ft. Lower Elevation 762 ft. Above Sea Level	

Worksheet:

SWF/LF (SWIS): State and tribal landfill / solid waste disposal

Region:	STATE
Facility ID:	19-AR-0835
Lat/Long:	34.226900 / -118.40728
Owner Name:	City Of Los Angeles Bureau Of Sanitation
Owner Telephone:	8007732489
Owner Address:	Not Reported
Owner Address2:	11950 Lopez Canyon Road
Owner City,St,Zip:	Lake View Terrace, CA 91342
Operational Status:	Closed
Operator:	Not Reported
Operator Phone:	Not Reported
Operator Address:	Not Reported
Operator Address2:	Not Reported
Operator City,St,Zip:	Not Reported
Permit Date:	Not Reported
Permit Status:	Not Reported
Permitted Acreage:	$0.00
Activity:	Solid Waste Disposal Site
Regulation Status:	Unpermitted
Landuse Name:	Urban,Recreational
GIS Source:	Map
Category:	Disposal
Unit Number:	01
Inspection Frequency:	Quarterly
Accepted Waste:	Not Reported
Closure Date:	Not Reported
Closure Type:	Not Reported
Disposal Acreage:	$0.00
SWIS Num:	19-AR-0835
Waste Discharge Requirement Num:	Not Reported
Program Type:	Not Reported
Permitted Throughput with Units:	0
Actual Throughput with Units:	Not Reported
Permitted Capacity with Units:	0
Remaining Capacity:	0
Remaining Capacity with Units:	Not Reported
Lat/Long:	34.226900 / -118.40728

CA LA LF:

Region:	LA CITY
Facility Status:	closure work complete and land redevelopment in progress

SHELDON-ARLETA LANDFILL, 12455 WICKS ST., LOS ANGELES, CA 91352 (Continued)

How to get there:	Directions
Year Opened:	1962
Year Closed:	1975
Property Size 1:	50 acres
Property Size 2:	Not Reported
Fill Area:	41 acres
Type of Refuse:	Class III
Total Capacity:	5,500,000 tons
Average Depth of Fill:	130 feet
Additional Expansion Area:	none
Description:	Sheldon-Arleta Landfill closure construction is completed. The landfill gas management system consists of vertical extraction wells feeding a flare station at a capacity of 1,200 ft3/minute. Present landfill gas generation is 400,000 ft3 per day.
Present and Future Use:	Home of the future Cesar Chavez Recreational Complex Conceptual Illustration for Cesar Chavez Recreational Complex

TEMPCO ENGINEERING, INC. 8866 LAUREL CNYN, SUN VALLEY, CA, 91352		S105026812
▲ D22	NNE 1/10 - 1/3 (1418 ft. / 0.269 mi.) 25 ft. Higher Elevation 848 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	913521125A

TEMPCO ENGINEERING, INC 8866 LAUREL CNYN, SUN VALLEY, CA, 91352		S105026811
▲ D23	NNE 1/10 - 1/3 (1418 ft. / 0.269 mi.) 25 ft. Higher Elevation 848 ft. Above Sea Level	Other Standard Environmental Records

Worksheet:

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	913521125

TEMPCO ENGINEERING, INC 8866 LAUREL CYN BLVD, SUN VALLEY, CA, 91352-2920			1000345745
▲ D24	NNE 1/10 - 1/3	(1418 ft. / 0.269 mi.)	Federal RCRA generators list State and tribal leaking storage tank lists State and tribal registered storage tank lists Other Standard Environmental Records
	25 ft. Higher Elevation	848 ft. Above Sea Level	

Worksheet:

RCRA-SQG: Federal RCRA generators list

Date form received by agency:	09/01/1996
Facility name:	TEMPCO ENGINEERING, INC
Facility address:	8866 LAUREL CYN BLVD SUN VALLEY, CA 91352
EPA ID:	CAD982401705
Contact:	Not Reported
Contact address:	Not Reported
Contact country:	US
Contact telephone:	Not Reported
Contact email:	Not Reported
EPA Region:	09
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	TEMPCO ENGINEERING, INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not Reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not Reported
Owner/Op end date:	Not Reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not Reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not Reported
Owner/Op end date:	Not Reported

Handler Activities Summary:

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	12/04/1989
Site name:	TEMPCO ENGINEERING, INC
Classification:	Large Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated:	Not Reported
Area of violation:	Generators - General
Date violation determined:	05/12/2008
Date achieved compliance:	05/12/2008
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/12/2008
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Evaluation Action Summary:

Evaluation date:	05/12/2008
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - General
Date achieved compliance:	05/12/2008
Evaluation lead agency:	State

Evaluation date:	08/10/2005
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	Local

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

FINDS: Other Standard Environmental Records

Registry ID:	110002804476

Environmental Interest/Information System:

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO: Other Standard Environmental Records

Envid:	1000345745
Registry ID:	110002804476
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110002804476

UST: State and tribal registered storage tank lists

Facility ID:	24621
Permitting Agency:	LOS ANGELES, CITY OF
Latitude:	34.2317094
Longitude:	-118.4001231

SWEEPS UST: State and tribal registered storage tank lists

Status:	Active
Comp Number:	5270
Number:	1
Board Of Equalization:	Not Reported
Referral Date:	02-25-93
Action Date:	02-25-93
Created Date:	02-29-88
Owner Tank Id:	Not Reported
SWRCB Tank Id:	Not Reported
Tank Status:	Not Reported
Capacity:	Not Reported
Active Date:	Not Reported
Tank Use:	Not Reported
STG:	Not Reported
Content:	Not Reported
Number Of Tanks:	Not Reported

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0603702314
Latitude:	34.230552
Longitude:	-118.401755

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/18/1996
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	YR
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	913521125
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Aviation
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0603702314

Contact:

Global Id:	T0603702314
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not Reported

Global Id:	T0603702314
Contact Type:	Local Agency Caseworker
Contact Name:	PATRICK KILLIAN
Organization Name:	LOS ANGELES, CITY OF
Address:	221 N FIGUEROA ST STE 1500
City:	LOS ANGELES
Email:	Not Reported
Phone Number:	2134826527

Status History:

Global Id:	T0603702314
Status:	Completed - Case Closed
Status Date:	07/18/1996

Global Id:	T0603702314
Status:	Open - Case Begin Date
Status Date:	01/31/1984

Regulatory Activities:

Global Id:	T0603702314
Action Type:	Other
Date:	01/31/1984
Action:	Leak Reported

Region:	STATE

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

Global Id:	T0603774984
Latitude:	34.230462
Longitude:	-118.401755
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/20/2007
Lead Agency:	LOS ANGELES, CITY OF
Case Worker:	PK
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	Not Reported
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Acetone
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0603774984

Contact:

Global Id:	T0603774984
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not Reported

Global Id:	T0603774984
Contact Type:	Local Agency Caseworker
Contact Name:	PATRICK KILLIAN
Organization Name:	LOS ANGELES, CITY OF
Address:	221 N FIGUEROA ST STE 1500
City:	LOS ANGELES
Email:	Not Reported
Phone Number:	2134826527

Status History:

Global Id:	T0603774984
Status:	Completed - Case Closed
Status Date:	12/20/2007

Global Id:	T0603774984
Status:	Open - Case Begin Date
Status Date:	04/27/2007

Global Id:	T0603774984
Status:	Open - Site Assessment
Status Date:	05/02/2007

Global Id:	T0603774984
Status:	Open - Site Assessment

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

Status Date:	10/20/2007

Regulatory Activities:

Global Id:	T0603774984
Action Type:	Other
Date:	04/27/2007
Action:	Leak Discovery
Global Id:	T0603774984
Action Type:	Other
Date:	04/27/2007
Action:	Leak Reported
Global Id:	T0603774984
Action Type:	REMEDIATION
Date:	11/20/2007
Action:	Excavation
Region:	STATE
Global Id:	T0603702315
Latitude:	34.230552
Longitude:	-118.401755
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/11/2001
Lead Agency:	LOS ANGELES RWQCB (REGION 4)
Case Worker:	UST
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	913521125A
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0603702315

Contact:

Global Id:	T0603702315
Contact Type:	Regional Board Caseworker
Contact Name:	UST
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not Reported
City:	BCP 04 UNKNOWN
Email:	Not Reported
Phone Number:	Not Reported
Global Id:	T0603702315
Contact Type:	Local Agency Caseworker
Contact Name:	PATRICK KILLIAN
Organization Name:	LOS ANGELES, CITY OF

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

Address:	221 N FIGUEROA ST STE 1500
City:	LOS ANGELES
Email:	Not Reported
Phone Number:	2134826527

Status History:

Global Id:	T0603702315
Status:	Completed - Case Closed
Status Date:	04/11/2001
Global Id:	T0603702315
Status:	Open - Case Begin Date
Status Date:	12/10/1999

Regulatory Activities:

Global Id:	T0603702315
Action Type:	Other
Date:	12/10/1999
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	913521125
Status:	Case Closed
Substance:	1
Substance Quantity:	Not Reported
Local Case No:	Not Reported
Case Type:	Soil
Abatement Method Used at the Site:	Not Reported
Global ID:	T0603702314
W Global ID:	Not Reported
Staff:	UNK
Local Agency:	19050
Cross Street:	Not Reported
Enforcement Type:	Not Reported
Date Leak Discovered:	Not Reported
Date Leak First Reported:	1/31/1984
Date Leak Record Entered:	12/31/1986
Date Confirmation Began:	Not Reported
Date Leak Stopped:	Not Reported
Date Case Last Changed on Database:	4/18/1988
Date the Case was Closed:	7/18/1996
How Leak Discovered:	Not Reported
How Leak Stopped:	Not Reported
Cause of Leak:	UNK
Leak Source:	UNK

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

Operator:	Not Reported
Water System:	Not Reported
Well Name:	Not Reported
Approx. Dist To Production Well (ft):	2786.07360184348616642374218 67
Source of Cleanup Funding:	UNK
Preliminary Site Assessment Workplan Submitted:	Not Reported
Preliminary Site Assessment Began:	Not Reported
Pollution Characterization Began:	Not Reported
Remediation Plan Submitted:	Not Reported
Remedial Action Underway:	Not Reported
Post Remedial Action Monitoring Began:	Not Reported
Enforcement Action Date:	Not Reported
Historical Max MTBE Date:	Not Reported
Hist Max MTBE Conc in Groundwater:	Not Reported
Hist Max MTBE Conc in Soil:	Not Reported
Significant Interim Remedial Action Taken:	Not Reported
GW Qualifier:	Not Reported
Soil Qualifier:	Not Reported
Organization:	Not Reported
Owner Contact:	Not Reported
Responsible Party:	TEMPCO ENGINEERING INCORP.
RP Address:	8866 LAUREL CANYON BLVD, SUN VALLEY CA 91352
Program:	LUST
Lat/Long:	34.2302607 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not Reported
Priority:	Not Reported
Cleanup Fund Id:	Not Reported
Suspended:	Not Reported
Assigned Name:	Not Reported
Summary:	*TANKS TESTED TIGHT ACCORDING TO LEAK DETECTION REPORT.
Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	913521125A
Status:	Case Closed
Substance:	Waste Oil
Substance Quantity:	Not Reported
Local Case No:	Not Reported
Case Type:	Soil
Abatement Method Used at the Site:	Not Reported
Global ID:	T0603702315
W Global ID:	Not Reported
Staff:	TAS
Local Agency:	19050
Cross Street:	Not Reported
Enforcement Type:	Not Reported

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

Date Leak Discovered:	Not Reported
Date Leak First Reported:	12/10/1999
Date Leak Record Entered:	Not Reported
Date Confirmation Began:	Not Reported
Date Leak Stopped:	Not Reported
Date Case Last Changed on Database:	1/18/2000
Date the Case was Closed:	4/11/2001
How Leak Discovered:	Not Reported
How Leak Stopped:	Not Reported
Cause of Leak:	Not Reported
Leak Source:	Not Reported
Operator:	Not Reported
Water System:	Not Reported
Well Name:	Not Reported
Approx. Dist To Production Well (ft):	2781.72407834486922825986949 65
Source of Cleanup Funding:	Not Reported
Preliminary Site Assessment Workplan Submitted:	Not Reported
Preliminary Site Assessment Began:	Not Reported
Pollution Characterization Began:	Not Reported
Remediation Plan Submitted:	Not Reported
Remedial Action Underway:	Not Reported
Post Remedial Action Monitoring Began:	Not Reported
Enforcement Action Date:	Not Reported
Historical Max MTBE Date:	Not Reported
Hist Max MTBE Conc in Groundwater:	Not Reported
Hist Max MTBE Conc in Soil:	Not Reported
Significant Interim Remedial Action Taken:	Not Reported
GW Qualifier:	Not Reported
Soil Qualifier:	Not Reported
Organization:	Not Reported
Owner Contact:	Not Reported
Responsible Party:	TEMPCO ENGINEERING, INC.
RP Address:	8866 LAUREL CANYON BLVD, SUN VALLEY, CA 91352
Program:	LUST
Lat/Long:	34.2302737 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not Reported
Priority:	Not Reported
Cleanup Fund Id:	Not Reported
Suspended:	Not Reported
Assigned Name:	Not Reported
Summary:	NO GASOLINE STORAGE AT SITE, UST'S USED FOR WASTE OIL ONLY, SITE EVALUATED FOR MTBE POLLUTION, TUJUNGA WELLFIELD (FILE NO. 99-064)

CA FID UST: State and tribal registered storage tank lists

Facility ID:	19001089
Regulated By:	UTNKA

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

Regulated ID:	Not Reported
Cortese Code:	Not Reported
SIC Code:	Not Reported
Facility Phone:	2130000000
Mail To:	Not Reported
Mailing Address:	8866 LAUREL CANYON BLVD
Mailing Address 2:	Not Reported
Mailing City,St,Zip:	SUN VALLEY 913520000
Contact:	Not Reported
Contact Phone:	Not Reported
DUNs Number:	Not Reported
NPDES Number:	Not Reported
EPA ID:	Not Reported
Comments:	Not Reported
Status:	Active

NPDES: Other Standard Environmental Records

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	457288
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not Reported
WDID:	4 19I025840
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not Reported
Effective Date Of Regulatory Measure:	07/17/2015
Expiration Date Of Regulatory Measure:	Not Reported
Termination Date Of Regulatory Measure:	Not Reported
Discharge Name:	Tempco Engineering
Discharge Address:	8866 Laurel Canyon Boulevard
Discharge City:	Sun Valley
Discharge State:	California
Discharge Zip:	91352
RECEIVED DATE:	Not Reported
PROCESSED DATE:	Not Reported
STATUS CODE NAME:	Not Reported
STATUS DATE:	Not Reported
PLACE SIZE:	Not Reported
PLACE SIZE UNIT:	Not Reported
FACILITY CONTACT NAME:	Not Reported
FACILITY CONTACT TITLE:	Not Reported
FACILITY CONTACT PHONE:	Not Reported
FACILITY CONTACT PHONE EXT:	Not Reported
FACILITY CONTACT EMAIL:	Not Reported

TEMPCO ENGINEERING, INC, 8866 LAUREL CYN BLVD, SUN VALLEY, CA 91352-2920 (Continued)

OPERATOR NAME:	Not Reported
OPERATOR ADDRESS:	Not Reported
OPERATOR CITY:	Not Reported
OPERATOR STATE:	Not Reported
OPERATOR ZIP:	Not Reported
OPERATOR CONTACT NAME:	Not Reported
OPERATOR CONTACT TITLE:	Not Reported
OPERATOR CONTACT PHONE:	Not Reported
OPERATOR CONTACT PHONE EXT:	Not Reported
OPERATOR CONTACT EMAIL:	Not Reported
OPERATOR TYPE:	Not Reported
DEVELOPER NAME:	Not Reported
DEVELOPER ADDRESS:	Not Reported
DEVELOPER CITY:	Not Reported
DEVELOPER STATE:	Not Reported
DEVELOPER ZIP:	Not Reported
DEVELOPER CONTACT NAME:	Not Reported
DEVELOPER CONTACT TITLE:	Not Reported
CONSTYPE LINEAR UTILITY IND:	Not Reported
EMERGENCY PHONE NO:	Not Reported
EMERGENCY PHONE EXT:	Not Reported
CONSTYPE ABOVE GROUND IND:	Not Reported
CONSTYPE BELOW GROUND IND:	Not Reported
CONSTYPE CABLE LINE IND:	Not Reported
CONSTYPE COMM LINE IND:	Not Reported
CONSTYPE COMMERTIAL IND:	Not Reported
CONSTYPE ELECTRICAL LINE IND:	Not Reported
CONSTYPE GAS LINE IND:	Not Reported
CONSTYPE INDUSTRIAL IND:	Not Reported
CONSTYPE OTHER DESRIPTION:	Not Reported
CONSTYPE OTHER IND:	Not Reported
CONSTYPE RECONS IND:	Not Reported
CONSTYPE RESIDENTIAL IND:	Not Reported
CONSTYPE TRANSPORT IND:	Not Reported
CONSTYPE UTILITY DESCRIPTION:	Not Reported
CONSTYPE UTILITY IND:	Not Reported
CONSTYPE WATER SEWER IND:	Not Reported
DIR DISCHARGE USWATER IND:	Not Reported
RECEIVING WATER NAME:	Not Reported
CERTIFIER NAME:	Not Reported
CERTIFIER TITLE:	Not Reported
CERTIFICATION DATE:	Not Reported
PRIMARY SIC:	Not Reported
SECONDARY SIC:	Not Reported
TERTIARY SIC:	Not Reported

ARCO #1959 12050 ROSCOE BLVD, NORTH HOLLYWOOD, CA, 916050000			S101583348
▲ 25	E 1/10 - 1/3	(1672 ft. / 0.317 mi.)	State and tribal leaking storage tank lists State and tribal registered storage tank lists Other Standard Environmental Records
	7 ft. Higher Elevation	830 ft. Above Sea Level	

Worksheet:

SWEEPS UST: State and tribal registered storage tank lists

Status:	Active
Comp Number:	1602
Number:	1
Board Of Equalization:	Not Reported
Referral Date:	07-21-93
Action Date:	03-17-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported
SWRCB Tank Id:	19-050-001602-000001
Tank Status:	A
Capacity:	6000
Active Date:	04-20-88
Tank Use:	CHEMICAL
STG:	P
Content:	UNKNOWN
Number Of Tanks:	5

Status:	Active
Comp Number:	1602
Number:	1
Board Of Equalization:	Not Reported
Referral Date:	07-21-93
Action Date:	03-17-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported
SWRCB Tank Id:	19-050-001602-000002
Tank Status:	A
Capacity:	6000
Active Date:	04-20-88
Tank Use:	CHEMICAL
STG:	P
Content:	UNKNOWN
Number Of Tanks:	Not Reported

Status:	Active
Comp Number:	1602
Number:	1
Board Of Equalization:	Not Reported
Referral Date:	07-21-93
Action Date:	03-17-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported

ARCO #1959, 12050 ROSCOE BLVD, NORTH HOLLYWOOD, CA 916050000 (Continued)

SWRCB Tank Id:	19-050-001602-000003
Tank Status:	A
Capacity:	4000
Active Date:	04-20-88
Tank Use:	CHEMICAL
STG:	P
Content:	UNKNOWN
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	1602
Number:	1
Board Of Equalization:	Not Reported
Referral Date:	07-21-93
Action Date:	03-17-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported
SWRCB Tank Id:	19-050-001602-000004
Tank Status:	A
Capacity:	4000
Active Date:	04-20-88
Tank Use:	CHEMICAL
STG:	P
Content:	UNKNOWN
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	1602
Number:	1
Board Of Equalization:	Not Reported
Referral Date:	07-21-93
Action Date:	03-17-94
Created Date:	02-29-88
Owner Tank Id:	Not Reported
SWRCB Tank Id:	19-050-001602-000005
Tank Status:	A
Capacity:	12000
Active Date:	04-20-88
Tank Use:	CHEMICAL
STG:	P
Content:	UNKNOWN
Number Of Tanks:	Not Reported

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0603702586
Latitude:	34.2213009
Longitude:	-118.396107
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed

ARCO #1959, 12050 ROSCOE BLVD, NORTH HOLLYWOOD, CA 916050000 (Continued)

Status Date:	11/14/1996
Lead Agency:	LOS ANGELES, CITY OF
Case Worker:	AO
Local Agency:	LOS ANGELES, CITY OF
RB Case Number:	916056852
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Aviation
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0603702586

Contact:

Global Id:	T0603702586
Contact Type:	Regional Board Caseworker
Contact Name:	YUE RONG
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	320 W. 4TH ST., SUITE 200
City:	Los Angeles
Email:	yrong@waterboards.ca.gov
Phone Number:	Not Reported

Global Id:	T0603702586
Contact Type:	Local Agency Caseworker
Contact Name:	ANNA OLEKSZYK
Organization Name:	LOS ANGELES, CITY OF
Address:	200 N. MAIN ST. RM. 970
City:	LOS ANGELES
Email:	Not Reported
Phone Number:	2139783686

Status History:

Global Id:	T0603702586
Status:	Completed - Case Closed
Status Date:	11/14/1996

Global Id:	T0603702586
Status:	Open - Case Begin Date
Status Date:	12/13/1991

Global Id:	T0603702586
Status:	Open - Site Assessment
Status Date:	12/19/1991

Regulatory Activities:

Global Id:	T0603702586
Action Type:	Other
Date:	12/13/1991
Action:	Leak Discovery

ARCO #1959, 12050 ROSCOE BLVD, NORTH HOLLYWOOD, CA 916050000 (Continued)

Global Id:	T0603702586
Action Type:	Other
Date:	12/19/1991
Action:	Leak Reported

LUST REG 4:

Region:	4
Regional Board:	04
County:	Los Angeles
Facility Id:	916056852
Status:	Case Closed
Substance:	1
Substance Quantity:	Not Reported
Local Case No:	Not Reported
Case Type:	Soil
Abatement Method Used at the Site:	Not Reported
Global ID:	T0603702586
W Global ID:	Not Reported
Staff:	UNK
Local Agency:	19050
Cross Street:	LAUREL CANYON
Enforcement Type:	Not Reported
Date Leak Discovered:	12/13/1991
Date Leak First Reported:	12/19/1991
Date Leak Record Entered:	4/7/1992
Date Confirmation Began:	Not Reported
Date Leak Stopped:	Not Reported
Date Case Last Changed on Database:	11/14/1996
Date the Case was Closed:	11/14/1996
How Leak Discovered:	OM
How Leak Stopped:	Not Reported
Cause of Leak:	UNK
Leak Source:	UNK
Operator:	NANKIL, HERCULES
Water System:	Not Reported
Well Name:	Not Reported
Approx. Dist To Production Well (ft):	3937.08537458059754919097775
Source of Cleanup Funding:	UNK
Preliminary Site Assessment Workplan Submitted:	Not Reported
Preliminary Site Assessment Began:	12/19/1991
Pollution Characterization Began:	Not Reported
Remediation Plan Submitted:	Not Reported
Remedial Action Underway:	Not Reported
Post Remedial Action Monitoring Began:	Not Reported
Enforcement Action Date:	Not Reported
Historical Max MTBE Date:	Not Reported
Hist Max MTBE Conc in Groundwater:	Not Reported

ARCO #1959, 12050 ROSCOE BLVD, NORTH HOLLYWOOD, CA 916050000 (Continued)

Hist Max MTBE Conc in Soil:	.003
Significant Interim Remedial Action Taken:	Not Reported
GW Qualifier:	Not Reported
Soil Qualifier:	ND
Organization:	Not Reported
Owner Contact:	Not Reported
Responsible Party:	ARCO PRODUCTS CO.
RP Address:	17315 STUDEBAKER RD., CERRITOS, 90701
Program:	LUST
Lat/Long:	34.221509 / -1
Local Agency Staff:	PEJ
Beneficial Use:	Not Reported
Priority:	Not Reported
Cleanup Fund Id:	Not Reported
Suspended:	Not Reported
Assigned Name:	Not Reported
Summary:	DURING A SITE DRILL ASSESSMENT FOR TANK REPLACEMENT BORING HOLE SHOWED NO SIGN OF CONTAMINATED SOIL; HOWEVER, WHEN PULLING OUT THE OLD TANKS CONTAMINATED SOIL WAS FOUND AT DEPTH OF 2' BELOW THE TANKS.

CA FID UST: State and tribal registered storage tank lists

Facility ID:	19003485
Regulated By:	UTNKA
Regulated ID:	00026681
Cortese Code:	Not Reported
SIC Code:	Not Reported
Facility Phone:	8187684738
Mail To:	Not Reported
Mailing Address:	515 S FLOWER ST
Mailing Address 2:	Not Reported
Mailing City,St,Zip:	NORTH HOLLYWOOD 916050000
Contact:	Not Reported
Contact Phone:	Not Reported
DUNs Number:	Not Reported
NPDES Number:	Not Reported
EPA ID:	Not Reported
Comments:	Not Reported
Status:	Active

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	19
Reg By:	LTNKA
Reg Id:	916056852

MAP FINDINGS

RECYCLING INC 8907 LAUREL CANYON BLVD, SUN VALLEY, CA, 91352		S108991910
▲ 26	N 1/10 - 1/3 (1747 ft. / 0.331 mi.)	State and tribal landfill / solid waste disposal
	20 ft. Higher Elevation 843 ft. Above Sea Level	

Worksheet:

SWRCY: State and tribal landfill / solid waste disposal

Reg Id:	227919
Cert Id:	RC227919.001
Mailing Address:	39928 Gorham Ln
Mailing City:	Palmdale
Mailing State:	CA
Mailing Zip Code:	93551
Website:	Not Reported
Email:	Not Reported
Phone Number:	(323) 240-2341
Grand Father:	N
Rural:	N
Operation Begin Date:	07/02/2015
Aluminium:	Y
Glass:	Y
Plastic:	Y
Bimetal:	Y
Agency:	N/A
Monday Hours Of Operation:	9:00 am - 5:00 pm
Tuesday Hours Of Operation:	9:00 am - 5:00 pm
Wednesday Hours Of Operation:	9:00 am - 5:00 pm
Thursday Hours Of Operation:	9:00 am - 5:00 pm
Friday Hours Of Operation:	9:00 am - 5:00 pm
Saturday Hours Of Operation:	9:00 am - 4:00 pm
Sunday Hours Of Operation:	CLOSED
Organization ID:	224828
Organization Name:	Recycling Inc

RECORD SOURCES AND CURRENCY

To maintain currency of the following databases, EDR contacts the appropriate agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

PRP: Potentially Responsible Parties
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Number of Days to Update: 3
Last EDR Contact :05/12/2016

Source: EPA
Telephone: 202-564-6023

RMP: Risk Management Plans
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015
Number of Days to Update: 69
Last EDR Contact :04/25/2016

Source: Environmental Protection Agency
Telephone: 202-564-8600

ALAMEDA CO. UST: Underground Tanks
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Alameda county.

Date of Government Version: 04/06/2016
Number of Days to Update: 48
Last EDR Contact :04/11/2016

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

AST: Aboveground Petroleum Storage Tank Facilities
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Number of Days to Update: 21
Last EDR Contact :06/22/2016

Source: California Environmental Protection Agency
Telephone: 916-327-5092

Alameda County CS: Contaminated Sites
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/12/2016
Number of Days to Update: 48
Last EDR Contact :04/11/2016

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

BROWNFIELDS: Considered Brownfieds Sites Listing

Standard Environmental Record Source: State and tribal Brownfields sites
Search Distance: 0.333 Mile

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 02/29/2016
Number of Days to Update: 58
Last EDR Contact :06/15/2016

Source: State Water Resources Control Board
Telephone: 916-323-7905

CA BOND EXP. PLAN: Bond Expenditure Plan

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Number of Days to Update: 6
Last EDR Contact :05/31/1994

Source: Department of Health Services
Telephone: 916-255-2118

CA FID UST: Facility Inventory Database

Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Number of Days to Update: 24
Last EDR Contact :12/28/1998

Source: California Environmental Protection Agency
Telephone: 916-341-5851

CA LA LF: City of Los Angeles Landfills

Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Number of Days to Update: 56
Last EDR Contact :04/18/2016

Source: Engineering & Construction Division
Telephone: 213-473-7869

CDL: Clandestine Drug Labs

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2015

Source: Department of Toxic Substances Control

Number of Days to Update: 38
Telephone: 916-255-6504
Last EDR Contact :04/21/2016

CHMIRS: California Hazardous Material Incident Report System
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 04/11/2016
Source: Office of Emergency Services
Number of Days to Update: 51
Telephone: 916-845-8400
Last EDR Contact :04/27/2016

CONTRA COSTA CO. SITE LIST: Site List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/24/2016
Source: Contra Costa Health Services Department
Number of Days to Update: 35
Telephone: 925-646-2286
Last EDR Contact :05/02/2016

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/28/2016
Source: CAL EPA/Office of Emergency Information
Number of Days to Update: 40
Telephone: 916-323-3400
Last EDR Contact :03/30/2016

CUPA AMADOR: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility List

Date of Government Version: 06/06/2016
Source: Amador County Environmental Health
Number of Days to Update: 12
Telephone: 209-223-6439
Last EDR Contact :06/02/2016

CUPA BUTTE: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 06/02/2016
Source: Public Health Department
Number of Days to Update: 18
Telephone: 530-538-7149
Last EDR Contact :05/23/2016

CUPA CALVERAS: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility Listing

Date of Government Version: 04/29/2016
Source: Calveras County Environmental Health

Number of Days to Update: 45
Telephone: 209-754-6399
Last EDR Contact :03/28/2016

CUPA COLUSA: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 05/25/2016
Source: Health & Human Services
Number of Days to Update: 22
Telephone: 530-458-0396
Last EDR Contact :05/23/2016

CUPA DEL NORTE: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility list

Date of Government Version: 04/08/2016
Source: Del Norte County Environmental Health Division
Number of Days to Update: 50
Telephone: 707-465-0426
Last EDR Contact :04/29/2016

CUPA EL DORADO: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility list.

Date of Government Version: 02/22/2016
Source: El Dorado County Environmental Management Department
Number of Days to Update: 37
Telephone: 530-621-6623
Last EDR Contact :05/02/2016

CUPA FRESNO: CUPA Resources List
Standard Environmental Record Source: Other Standard Environmental Records
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/04/2016
Source: Dept. of Community Health
Number of Days to Update: 28
Telephone: 559-445-3271
Last EDR Contact :04/04/2016

CUPA HUMBOLDT: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility list.

Date of Government Version: 03/16/2016
Source: Humboldt County Environmental Health
Number of Days to Update: 44
Telephone: Not Reported
Last EDR Contact :05/23/2016

CUPA IMPERIAL: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 04/26/2016
Source: San Diego Border Field Office
Number of Days to Update: 50
Telephone: 760-339-2777
Last EDR Contact :04/21/2016

CUPA INYO: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 09/10/2013
Number of Days to Update: 33
Last EDR Contact :05/23/2016
Source: Inyo County Environmental Health Services
Telephone: 760-878-0238

CUPA KINGS: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/25/2016
Number of Days to Update: 26
Last EDR Contact :05/23/2016
Source: Kings County Department of Public Health
Telephone: 559-584-1411

CUPA LAKE: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list

Date of Government Version: 04/26/2016
Number of Days to Update: 51
Last EDR Contact :04/18/2016
Source: Lake County Environmental Health
Telephone: 707-263-1164

CUPA MADERA: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/02/2016
Number of Days to Update: 58
Last EDR Contact :05/23/2016
Source: Madera County Environmental Health
Telephone: 559-675-7823

CUPA MERCED: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility list.

Date of Government Version: 02/26/2016
Number of Days to Update: 64
Last EDR Contact :06/15/2016
Source: Merced County Environmental Health
Telephone: 209-381-1094

CUPA MONO: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA Facility List

Date of Government Version: 05/25/2016
Number of Days to Update: 21
Last EDR Contact :05/25/2016
Source: Mono County Health Department
Telephone: 760-932-5580

CUPA MONTEREY: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/15/2016
Number of Days to Update: 47
Last EDR Contact :05/23/2016

Source: Monterey County Health Department
Telephone: 831-796-1297

CUPA NEVADA: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility list.

Date of Government Version: 04/18/2016
Number of Days to Update: 42
Last EDR Contact :04/29/2016

Source: Community Development Agency
Telephone: 530-265-1467

CUPA SAN LUIS OBISPO: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility List.

Date of Government Version: 05/23/2016
Number of Days to Update: 28
Last EDR Contact :05/23/2016

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596

CUPA SANTA BARBARA: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Number of Days to Update: 28
Last EDR Contact :05/23/2016

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167

CUPA SANTA CLARA: Cupa Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list

Date of Government Version: 05/25/2016
Number of Days to Update: 27
Last EDR Contact :05/23/2016

Source: Department of Environmental Health
Telephone: 408-918-1973

CUPA SANTA CRUZ: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility listing.

Date of Government Version: 05/31/2016
Number of Days to Update: 19
Last EDR Contact :05/23/2016

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761

CUPA SHASTA: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility List.

Date of Government Version: 03/18/2016
Number of Days to Update: 44
Last EDR Contact :05/23/2016

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789

RECORD SOURCES AND CURRENCY

CUPA SONOMA: Cupa Facility List

Standard Environmental Record Source: Other Standard Environmental Records

Cupa Facility list

Date of Government Version: 04/05/2016
Number of Days to Update: 26
Last EDR Contact :03/28/2016

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174

CUPA TUOLUMNE: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

Cupa facility list

Date of Government Version: 05/03/2016
Number of Days to Update: 38
Last EDR Contact :04/21/2016

Source: Divison of Environmental Health
Telephone: 209-533-5633

CUPA YUBA: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

CUPA facility listing for Yuba County.

Date of Government Version: 04/29/2016
Number of Days to Update: 45
Last EDR Contact :04/29/2016

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523

DEED: Deed Restriction Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/07/2016
Number of Days to Update: 57
Last EDR Contact :06/07/2016

Source: DTSC and SWRCB
Telephone: 916-323-3400

DRYCLEANERS: Cleaner Facilities

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.25 Mile

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 02/08/2016
Number of Days to Update: 37
Last EDR Contact :06/02/2016

Source: Department of Toxic Substance Control
Telephone: 916-327-4498

EL SEGUNDO UST: City of El Segundo Underground Storage Tank

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Number of Days to Update: 11
Last EDR Contact :04/18/2016

Source: City of El Segundo Fire Department
Telephone: 310-524-2236

EMI: Emissions Inventory Data

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2014
Number of Days to Update: 48
Last EDR Contact :06/22/2016

Source: California Air Resources Board
Telephone: 916-322-2990

ENF: Enforcement Action Listing

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/26/2016
Number of Days to Update: 53
Last EDR Contact :05/23/2016

Source: State Water Resoruces Control Board
Telephone: 916-445-9379

ENVIROSTOR: EnviroStor Database

Standard Environmental Record Source: State and tribal - equivalent CERCLIS
Search Distance: 0.333 Mile

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 05/02/2016
Number of Days to Update: 48
Last EDR Contact :05/04/2016

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

HAULERS: Registered Waste Tire Haulers Listing

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of registered waste tire haulers.

Date of Government Version: 04/07/2016
Number of Days to Update: 50
Last EDR Contact :05/13/2016

Source: Integrated Waste Management Board
Telephone: 916-341-6422

HAZNET: Facility and Manifest Data

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2014
Source: California Environmental Protection Agency
Number of Days to Update: 58
Telephone: 916-255-1136
Last EDR Contact :04/15/2016

HIST CAL-SITES: Calsites Database

Standard Environmental Record Source: State and tribal - equivalent CERCLIS
Search Distance: 0.333 Mile

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Source: Department of Toxic Substance Control
Number of Days to Update: 21
Telephone: 916-323-3400
Last EDR Contact :02/23/2009

HIST CORTESE: Hazardous Waste & Substance Site List

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Source: Department of Toxic Substances Control
Number of Days to Update: 76
Telephone: 916-323-3400
Last EDR Contact :01/22/2009

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Source: Santa Clara Valley Water District
Number of Days to Update: 22
Telephone: 408-265-2600
Last EDR Contact :03/23/2009

HIST UST: Hazardous Substance Storage Container Database

Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Source: State Water Resources Control Board
Number of Days to Update: 18
Telephone: 916-341-5851
Last EDR Contact :07/26/2001

HWP: EnviroStor Permitted Facilities Listing

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/22/2016
Number of Days to Update: 37
Last EDR Contact :05/25/2016
Source: Department of Toxic Substances Control
Telephone: 916-323-3400

HWT: Registered Hazardous Waste Transporter Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2016
Number of Days to Update: 50
Last EDR Contact :04/12/2016
Source: Department of Toxic Substances Control
Telephone: 916-440-7145

KERN CO. UST: Underground Storage Tank Sites & Tank Listing

Standard Environmental Record Source: State and tribal registered storage tank lists

Kern County Sites and Tanks Listing.

Date of Government Version: 03/01/2016
Number of Days to Update: 67
Last EDR Contact :05/09/2016
Source: Kern County Environment Health Services Department
Telephone: 661-862-8700

LA Co. Site Mitigation: Site Mitigation List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Number of Days to Update: 68
Last EDR Contact :03/28/2016
Source: Community Health Services
Telephone: 323-890-7806

LDS: Land Disposal Sites Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 03/14/2016
Number of Days to Update: 61
Last EDR Contact :06/14/2016
Source: State Water Qualilty Control Board
Telephone: 866-480-1028

LIENS: Environmental Liens Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/08/2016
Number of Days to Update: 54
Source: Department of Toxic Substances Control
Telephone: 916-323-3400

Last EDR Contact :06/02/2016

LONG BEACH UST: City of Long Beach Underground Storage Tank

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 11/04/2015
Source: City of Long Beach Fire Department
Number of Days to Update: 34
Telephone: 562-570-2563
Last EDR Contact :01/25/2016

LOS ANGELES CO. HMS: HMS: Street Number List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/30/2016
Source: Department of Public Works
Number of Days to Update: 38
Telephone: 626-458-3517
Last EDR Contact :04/01/2016

LOS ANGELES CO. LF: List of Solid Waste Facilities

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/18/2016
Source: La County Department of Public Works
Number of Days to Update: 42
Telephone: 818-458-5185
Last EDR Contact :04/20/2016

LUST: Geotracker's Leaking Underground Fuel Tank Report

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 03/14/2016
Source: State Water Resources Control Board
Number of Days to Update: 61
Telephone: see region list
Last EDR Contact :06/14/2016

LUST REG 1: Active Toxic Site Investigation

Standard Environmental Record Source: State and tribal leaking storage tank lists

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Source: California Regional Water Quality Control Board North Coast (1)
Number of Days to Update: 29
Telephone: 707-570-3769
Last EDR Contact :08/01/2011

LUST REG 2: Fuel Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Number of Days to Update: 30
Telephone: 510-622-2433
Last EDR Contact :09/19/2011

LUST REG 3: Leaking Underground Storage Tank Database

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Source: California Regional Water Quality Control Board Central Coast Region (3)
Number of Days to Update: 14
Telephone: 805-542-4786
Last EDR Contact :07/18/2011

LUST REG 4: Underground Storage Tank Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Number of Days to Update: 35
Telephone: 213-576-6710
Last EDR Contact :09/06/2011

LUST REG 5: Leaking Underground Storage Tank Database

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Source: California Regional Water Quality Control Board Central Valley Region (5)
Number of Days to Update: 9
Telephone: 916-464-4834
Last EDR Contact :07/01/2011

LUST REG 6L: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Source: California Regional Water Quality Control Board Lahontan Region (6)
Number of Days to Update: 27
Telephone: 530-542-5572
Last EDR Contact :09/12/2011

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Number of Days to Update: 22
Telephone: 760-241-7365
Last EDR Contact :09/12/2011

LUST REG 7: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Number of Days to Update: 27
Telephone: 760-776-8943
Last EDR Contact :08/01/2011

LUST REG 8: Leaking Underground Storage Tanks

Standard Environmental Record Source: State and tribal leaking storage tank lists

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Source: California Regional Water Quality Control Board Santa Ana Region (8)
Number of Days to Update: 41
Telephone: 909-782-4496
Last EDR Contact :08/15/2011

LUST REG 9: Leaking Underground Storage Tank Report

Standard Environmental Record Source: State and tribal leaking storage tank lists

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Source: California Regional Water Quality Control Board San Diego Region (9)
Number of Days to Update: 28
Telephone: 858-637-5595
Last EDR Contact :09/26/2011

LUST SANTA CLARA: LOP Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Source: Department of Environmental Health
Number of Days to Update: 13
Telephone: 408-918-3417
Last EDR Contact :05/25/2016

MARIN CO. UST: Underground Storage Tank Sites

Standard Environmental Record Source: State and tribal registered storage tank lists

Currently permitted USTs in Marin County.

Date of Government Version: 04/07/2016
Source: Public Works Department Waste Management
Number of Days to Update: 36
Telephone: 415-499-6647
Last EDR Contact :04/18/2016

MCS: Military Cleanup Sites Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 03/14/2016
Source: State Water Resources Control Board
Number of Days to Update: 61
Telephone: 866-480-1028
Last EDR Contact :06/14/2016

MED WASTE VENTURA: Medical Waste Program List

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/28/2016
Number of Days to Update: 54
Last EDR Contact :04/25/2016
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813

MINES: Mines Site Location Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/15/2016
Number of Days to Update: 54
Last EDR Contact :06/14/2016
Source: Department of Conservation
Telephone: 916-322-1080

MWMP: Medical Waste Management Program Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/29/2016
Number of Days to Update: 57
Last EDR Contact :06/07/2016
Source: Department of Public Health
Telephone: 916-558-1784

NAPA CO. LUST: Sites With Reported Contamination
Standard Environmental Record Source: State and tribal leaking storage tank lists
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Number of Days to Update: 63
Last EDR Contact :05/25/2016
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

NAPA CO. UST: Closed and Operating Underground Storage Tank Sites
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Number of Days to Update: 23
Last EDR Contact :05/25/2016
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

NOTIFY 65: Proposition 65 Records
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/10/2015
Source: State Water Resources Control Board

Number of Days to Update: 38 Telephone: 916-445-3846
Last EDR Contact :06/15/2016

NPDES: NPDES Permits Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/16/2016 Source: State Water Resources Control Board
Number of Days to Update: 36 Telephone: 916-445-9379
Last EDR Contact :05/18/2016

ORANGE CO. LUST: List of Underground Storage Tank Cleanups
Standard Environmental Record Source: State and tribal leaking storage tank lists
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2016 Source: Health Care Agency
Number of Days to Update: 35 Telephone: 714-834-3446
Last EDR Contact :05/09/2016

ORANGE CO. UST: List of Underground Storage Tank Facilities
Standard Environmental Record Source: State and tribal registered storage tank lists
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2016 Source: Health Care Agency
Number of Days to Update: 21 Telephone: 714-834-3446
Last EDR Contact :05/11/2016

Orange Co. Industrial Site: List of Industrial Site Cleanups
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2016 Source: Health Care Agency
Number of Days to Update: 35 Telephone: 714-834-3446
Last EDR Contact :05/09/2016

PEST LIC: Pesticide Regulation Licenses Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/07/2016 Source: Department of Pesticide Regulation
Number of Days to Update: 69 Telephone: 916-445-4038
Last EDR Contact :06/07/2016

PLACER CO. MS: Master List of Facilities
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/07/2016
Number of Days to Update: 56
Last EDR Contact :06/15/2016
Source: Placer County Health and Human Services
Telephone: 530-745-2363

PROC: Certified Processors Database
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

A listing of certified processors.

Date of Government Version: 03/15/2016
Number of Days to Update: 54
Last EDR Contact :06/14/2016
Source: Department of Conservation
Telephone: 916-323-3836

RESPONSE: State Response Sites
Standard Environmental Record Source: State and tribal - equivalent NPL
Search Distance: 0.333 Mile

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/02/2016
Number of Days to Update: 48
Last EDR Contact :05/04/2016
Source: Department of Toxic Substances Control
Telephone: 916-323-3400

RIVERSIDE CO. LUST: Listing of Underground Tank Cleanup Sites
Standard Environmental Record Source: State and tribal leaking storage tank lists
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/13/2016
Number of Days to Update: 24
Last EDR Contact :06/20/2016
Source: Department of Environmental Health
Telephone: 951-358-5055

RIVERSIDE CO. UST: Underground Storage Tank Tank List
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/13/2016
Number of Days to Update: 47
Last EDR Contact :06/20/2016
Source: Department of Environmental Health
Telephone: 951-358-5055

SAN DIEGO CO. HMMD: Hazardous Materials Management Division Database
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Number of Days to Update: 23
Source: Hazardous Materials Management Division
Telephone: 619-338-2268

Last EDR Contact :06/02/2016

SAN DIEGO CO. LF: Solid Waste Facilities

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Number of Days to Update: 58
Last EDR Contact :04/21/2016

Source: Department of Health Services
Telephone: 619-338-2209

SAN DIEGO CO. SAM: Environmental Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Number of Days to Update: 24
Last EDR Contact :06/02/2016

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371

SAN FRANCISCO CO. LUST: Local Oversite Facilities

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Number of Days to Update: 10
Last EDR Contact :05/06/2016

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920

SAN FRANCISCO CO. UST: Underground Storage Tank Information

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Number of Days to Update: 5
Last EDR Contact :05/06/2016

Source: Department of Public Health
Telephone: 415-252-3920

SAN JOSE HAZMAT: Hazardous Material Facilities

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/05/2016
Number of Days to Update: 51
Last EDR Contact :05/23/2016

Source: City of San Jose Fire Department
Telephone: 408-535-7694

SAN MATEO CO. LUST: Fuel Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/14/2016
Number of Days to Update: 55
Last EDR Contact :06/08/2016

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

SCH: School Property Evaluation Program

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 05/02/2016
Source: Department of Toxic Substances Control
Number of Days to Update: 48
Telephone: 916-323-3400
Last EDR Contact :05/04/2016

SLIC: Statewide SLIC Cases

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 03/14/2016
Source: State Water Resources Control Board
Number of Days to Update: 61
Telephone: 866-480-1028
Last EDR Contact :06/14/2016

SLIC REG 1: Active Toxic Site Investigations

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Source: California Regional Water Quality Control Board, North Coast Region (1)
Number of Days to Update: 18
Telephone: 707-576-2220
Last EDR Contact :08/01/2011

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Number of Days to Update: 30
Telephone: 510-286-0457
Last EDR Contact :09/19/2011

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Source: California Regional Water Quality Control Board Central Coast Region (3)
Number of Days to Update: 28
Telephone: 805-549-3147
Last EDR Contact :07/18/2011

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Source: Region Water Quality Control Board Los Angeles Region (4)
Number of Days to Update: 47
Telephone: 213-576-6600
Last EDR Contact :07/01/2011

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Source: Regional Water Quality Control Board Central Valley Region (5)
Number of Days to Update: 16
Telephone: 916-464-3291
Last EDR Contact :09/12/2011

SLIC REG 6L: SLIC Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Source: California Regional Water Quality Control Board, Lahontan Region
Number of Days to Update: 35
Telephone: 530-542-5574
Last EDR Contact :08/15/2011

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Source: Regional Water Quality Control Board, Victorville Branch
Number of Days to Update: 22
Telephone: 619-241-6583
Last EDR Contact :08/15/2011

SLIC REG 7: SLIC List

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Source: California Regional Quality Control Board, Colorado River Basin Region
Number of Days to Update: 36
Telephone: 760-346-7491
Last EDR Contact :08/01/2011

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Source: California Region Water Quality Control Board Santa Ana Region (8)
Number of Days to Update: 11
Telephone: 951-782-3298
Last EDR Contact :09/12/2011

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Source: California Regional Water Quality Control Board San Diego Region (9)
Number of Days to Update: 17
Telephone: 858-467-2980
Last EDR Contact :08/08/2011

SOLANO CO. LUST: Leaking Underground Storage Tanks

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/14/2016
Source: Solano County Department of Environmental Management
Number of Days to Update: 48
Telephone: 707-784-6770
Last EDR Contact :06/08/2016

SOLANO CO. UST: Underground Storage Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in Solano county.

Date of Government Version: 03/14/2016
Source: Solano County Department of Environmental Management
Number of Days to Update: 44
Telephone: 707-784-6770
Last EDR Contact :06/08/2016

SONOMA CO. LUST: Leaking Underground Storage Tank Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/01/2016
Source: Department of Health Services
Number of Days to Update: 34
Telephone: 707-565-6565
Last EDR Contact :03/28/2016

SUTTER CO. UST: Underground Storage Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in Sutter county.

Date of Government Version: 06/02/2016
Source: Sutter County Department of Agriculture
Number of Days to Update: 16
Telephone: 530-822-7500
Last EDR Contact :06/02/2016

SWEEPS UST: SWEEPS UST Listing

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Source: State Water Resources Control Board
Number of Days to Update: 35
Telephone: Not Reported
Last EDR Contact :06/03/2005

SWF/LF (SWIS): Solid Waste Information System

Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Search Distance: 0.333 Mile

Active, Closed and Inactive Landfills.SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills.These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteriafor solid waste landfills or disposal sites.

Date of Government Version: 05/16/2016
Source: Department of Resources Recycling and Recovery
Number of Days to Update: 34
Telephone: 916-341-6320
Last EDR Contact :05/18/2016

SWRCY: Recycler Database
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Search Distance: 0.333 Mile

A listing of recycling facilities in California.

Date of Government Version: 03/15/2016
Source: Department of Conservation
Number of Days to Update: 54
Telephone: 916-323-3836
Last EDR Contact :06/14/2016

Sacramento Co. CS: Toxic Site Clean-Up List
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/02/2016
Source: Sacramento County Environmental Management
Number of Days to Update: 56
Telephone: 916-875-8406
Last EDR Contact :04/06/2016

Sacramento Co. ML: Master Hazardous Materials Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/02/2016
Source: Sacramento County Environmental Management
Number of Days to Update: 56
Telephone: 916-875-8406
Last EDR Contact :04/06/2016

San Bern. Co. Permit: Hazardous Material Permits
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/15/2016
Source: San Bernardino County Fire Department Hazardous Materials Division
Number of Days to Update: 52
Telephone: 909-387-3041
Last EDR Contact :05/09/2016

San Mateo Co. BI: Business Inventory
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/02/2016
Number of Days to Update: 15
Last EDR Contact :05/27/2016
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

TORRANCE UST: City of Torrance Underground Storage Tank
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/05/2016
Number of Days to Update: 36
Last EDR Contact :01/11/2016
Source: City of Torrance Fire Department
Telephone: 310-618-2973

TOXIC PITS: Toxic Pits Cleanup Act Sites
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Number of Days to Update: 27
Last EDR Contact :01/26/2009
Source: State Water Resources Control Board
Telephone: 916-227-4364

UIC: UIC Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 02/12/2016
Number of Days to Update: 89
Last EDR Contact :06/16/2016
Source: Deaprtment of Conservation
Telephone: 916-445-2408

UST: Active UST Facilities
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/14/2016
Number of Days to Update: 49
Last EDR Contact :06/14/2016
Source: SWRCB
Telephone: 916-341-5851

UST MENDOCINO: Mendocino County UST Database
Standard Environmental Record Source: State and tribal registered storage tank lists
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 06/07/2016
Number of Days to Update: 14
Last EDR Contact :06/01/2016
Source: Department of Public Health
Telephone: 707-463-4466

UST SAN JOAQUIN: San Joaquin Co. UST
Standard Environmental Record Source: State and tribal registered storage tank lists

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 04/06/2016
Number of Days to Update: 26
Last EDR Contact :06/15/2016
Source: Environmental Health Department
Telephone: Not Reported

VCP: Voluntary Cleanup Program Properties

Standard Environmental Record Source: State and tribal voluntary cleanup sites
Search Distance: 0.333 Mile

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/02/2016
Number of Days to Update: 48
Last EDR Contact :05/04/2016
Source: Department of Toxic Substances Control
Telephone: 916-323-3400

VENTURA CO. BWT: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/28/2016
Number of Days to Update: 49
Last EDR Contact :04/25/2016
Source: Ventura County Environmental Health Division
Telephone: 805-654-2813

VENTURA CO. LF: Inventory of Illegal Abandoned and Inactive Sites

Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Number of Days to Update: 49
Last EDR Contact :04/04/2016
Source: Environmental Health Division
Telephone: 805-654-2813

VENTURA CO. LUST: Listing of Underground Tank Cleanup Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Number of Days to Update: 37
Last EDR Contact :05/13/2016
Source: Environmental Health Division
Telephone: 805-654-2813

VENTURA CO. UST: Underground Tank Closed Sites List

Standard Environmental Record Source: State and tribal registered storage tank lists
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/26/2016
Number of Days to Update: 48
Last EDR Contact :06/16/2016
Source: Environmental Health Division
Telephone: 805-654-2813

WDS: Waste Discharge System

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Number of Days to Update: 9
Last EDR Contact :05/20/2016

Source: State Water Resources Control Board
Telephone: 916-341-5227

WIP: Well Investigation Program Case List

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Number of Days to Update: 13
Last EDR Contact :03/28/2016

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726

WMUDS/SWAT: Waste Management Unit Database

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Number of Days to Update: 30
Last EDR Contact :05/06/2016

Source: State Water Resources Control Board
Telephone: 916-227-4448

YOLO CO. UST: Underground Storage Tank Comprehensive Facility Report

Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Yolo county.

Date of Government Version: 04/12/2016
Number of Days to Update: 43
Last EDR Contact :04/04/2016

Source: Yolo County Department of Health
Telephone: 530-666-8646

2020 COR ACTION: 2020 Corrective Action Program List

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Number of Days to Update: 6
Last EDR Contact :05/12/2016

Source: Environmental Protection Agency
Telephone: 703-308-4044

COAL ASH DOE: Steam-Electric Plant Operation Data

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Number of Days to Update: 76
Last EDR Contact :06/09/2016
Source: Department of Energy
Telephone: 202-586-8719

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Number of Days to Update: 40
Last EDR Contact :06/10/2016
Source: Environmental Protection Agency
Telephone: Not Reported

CONSENT: Superfund (CERCLA) Consent Decrees
Standard Environmental Record Source: Federal NPL
Search Distance: 0.333 Mile

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014
Number of Days to Update: 46
Last EDR Contact :03/24/2016
Source: Department of Justice, Consent Decree Library
Telephone: Varies

CORRACTS: Corrective Action Report
Standard Environmental Record Source: Federal RCRA CORRACTS facilities list
Search Distance: 0.333 Mile

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/09/2015
Number of Days to Update: 34
Last EDR Contact :03/30/2016
Source: EPA
Telephone: 800-424-9346

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Search Distance: 0.333 Mile

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Number of Days to Update: 137
Last EDR Contact :04/21/2016
Source: EPA, Region 9
Telephone: 415-947-4219

DOT OPS: Incident and Accident Data
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Number of Days to Update: 42
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595

Last EDR Contact :05/04/2016

Delisted NPL: National Priority List Deletions

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016 Source: EPA

Number of Days to Update: 10 Telephone: Not Reported

Last EDR Contact :04/05/2016

ECHO: Enforcement & Compliance History Information

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015 Source: Environmental Protection Agency

Number of Days to Update: 103 Telephone: 202-564-2280

Last EDR Contact :06/22/2016

EPA WATCH LIST: EPA WATCH LIST

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Source: Environmental Protection Agency

Number of Days to Update: 88 Telephone: 617-520-3000

Last EDR Contact :05/09/2016

ERNS: Emergency Response Notification System

Standard Environmental Record Source: Federal ERNS list

Search Distance: Property

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016 Source: National Response Center, United States Coast Guard

Number of Days to Update: 51 Telephone: 202-267-2180

Last EDR Contact :03/30/2016

FEMA UST: Underground Storage Tank Listing

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010 Source: FEMA

Number of Days to Update: 55 Telephone: 202-646-5797

Last EDR Contact :04/11/2016

FINDS: Facility Index System/Facility Registry System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015 Source: EPA

Number of Days to Update: 55 Telephone: Not Reported

Last EDR Contact :06/08/2016

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Number of Days to Update: 25 Telephone: 202-566-1667

Last EDR Contact :05/20/2016

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Standard Environmental Record Source: Other Standard Environmental Records

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Source: EPA

Number of Days to Update: 25 Telephone: 202-566-1667

Last EDR Contact :05/20/2016

FUDS: Formerly Used Defense Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015 Source: U.S. Army Corps of Engineers

Number of Days to Update: 97 Telephone: 202-528-4285

Last EDR Contact :06/10/2016

FUELS PROGRAM: EPA Fuels Program Registered Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2016 Source: EPA

Number of Days to Update: 86 Telephone: 800-385-6164

Last EDR Contact :05/25/2016

FUSRAP: Formerly Utilized Sites Remedial Action Program

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/11/2016
Number of Days to Update: 80
Last EDR Contact :05/09/2016

Source: Department of Energy
Telephone: 202-586-3559

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Number of Days to Update: 40
Last EDR Contact :12/17/2007

Source: Environmental Protection Agency
Telephone: 202-564-2501

HMIRS: Hazardous Materials Information Reporting System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Number of Days to Update: 68
Last EDR Contact :03/30/2016

Source: U.S. Department of Transportation
Telephone: 202-366-4555

ICIS: Integrated Compliance Information System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Number of Days to Update: 31
Last EDR Contact :04/08/2016

Source: Environmental Protection Agency
Telephone: 202-564-5088

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313

Last EDR Contact :04/29/2016

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Number of Days to Update: 41
Last EDR Contact :04/29/2016
Source: EPA Region 10
Telephone: 206-553-2857

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016
Number of Days to Update: 35
Last EDR Contact :04/26/2016
Source: EPA Region 4
Telephone: 404-562-8677

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Number of Days to Update: 37
Last EDR Contact :04/27/2016
Source: EPA, Region 5
Telephone: 312-886-7439

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015
Number of Days to Update: 105
Last EDR Contact :04/29/2016
Source: EPA Region 6
Telephone: 214-665-6597

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015
Number of Days to Update: 112
Last EDR Contact :04/29/2016
Source: EPA Region 7
Telephone: 913-551-7003

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Number of Days to Update: 118
Last EDR Contact :04/27/2016
Source: EPA Region 8
Telephone: 303-312-6271

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016
Number of Days to Update: 37
Last EDR Contact :04/27/2016

Source: Environmental Protection Agency
Telephone: 415-972-3372

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Number of Days to Update: 52
Last EDR Contact :04/27/2016

Source: Environmental Protection Agency
Telephone: 703-308-8245

INDIAN UST R1: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Number of Days to Update: 67
Last EDR Contact :04/29/2016

Source: EPA, Region 1
Telephone: 617-918-1313

INDIAN UST R10: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Number of Days to Update: 41
Last EDR Contact :04/29/2016

Source: EPA Region 10
Telephone: 206-553-2857

INDIAN UST R4: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016
Number of Days to Update: 35
Last EDR Contact :04/26/2016

Source: EPA Region 4
Telephone: 404-562-9424

INDIAN UST R5: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Number of Days to Update: 52
Last EDR Contact :04/27/2016

Source: EPA Region 5
Telephone: 312-886-6136

INDIAN UST R6: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015
Number of Days to Update: 120
Last EDR Contact :04/29/2016
Source: EPA Region 6
Telephone: 214-665-7591

INDIAN UST R7: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Number of Days to Update: 65
Last EDR Contact :04/29/2016
Source: EPA Region 7
Telephone: 913-551-7003

INDIAN UST R8: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016
Number of Days to Update: 119
Last EDR Contact :04/29/2016
Source: EPA Region 8
Telephone: 303-312-6137

INDIAN UST R9: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016
Number of Days to Update: 37
Last EDR Contact :04/27/2016
Source: EPA Region 9
Telephone: 415-972-3368

INDIAN VCP R1: Voluntary Cleanup Priority Listing

Standard Environmental Record Source: State and tribal voluntary cleanup sites

Search Distance: Property

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Number of Days to Update: 142
Last EDR Contact :04/01/2016
Source: EPA, Region 1
Telephone: 617-918-1102

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

Standard Environmental Record Source: State and tribal voluntary cleanup sites

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Number of Days to Update: 27
Last EDR Contact :04/20/2009
Source: EPA, Region 7
Telephone: 913-551-7365

LEAD SMELTER 1: Lead Smelter Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Number of Days to Update: 64
Last EDR Contact :04/07/2016
Source: Environmental Protection Agency
Telephone: 703-603-8787

LEAD SMELTER 2: Lead Smelter Sites

Standard Environmental Record Source: Other Standard Environmental Records

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Number of Days to Update: 36
Last EDR Contact :12/02/2009
Source: American Journal of Public Health
Telephone: 703-305-6451

LIENS 2: CERCLA Lien Information

Standard Environmental Record Source: Federal CERCLIS

Search Distance: Property

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Number of Days to Update: 37
Last EDR Contact :04/26/2016
Source: Environmental Protection Agency
Telephone: 202-564-6023

LUCIS: Land Use Control Information System

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: 0.333 Mile

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Number of Days to Update: 13
Last EDR Contact :05/16/2016
Source: Department of the Navy
Telephone: 843-820-7326

MLTS: Material Licensing Tracking System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016
Number of Days to Update: 28
Last EDR Contact :05/06/2016
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169

NPL: National Priority List

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016
Source: EPA
Number of Days to Update: 10
Telephone: Not Reported
Last EDR Contact :04/05/2016

NPL Site Boundaries

Sources:

EPA"s Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-566-0690

EPA Region 1
Telephone: 617-918-1102

EPA Region 2
Telephone: 212-637-4293

EPA Region 3
Telephone: 215-814-5418

EPA Region 4
Telephone: 404-562-8681

EPA Region 5
Telephone: 312-353-1063

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6118

EPA Region 9
Telephone: 415-947-4579

EPA Region 10
Telephone: 206-553-4479

NPL LIENS: Federal Superfund Liens

Standard Environmental Record Source: Federal NPL

Search Distance: Property

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Source: EPA
Number of Days to Update: 56
Telephone: 202-564-4267
Last EDR Contact :08/15/2011

ODI: Open Dump Inventory

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Source: Environmental Protection Agency
Number of Days to Update: 39
Telephone: 800-424-9346

Last EDR Contact :06/09/2004

PADS: PCB Activity Database System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014 Source: EPA

Number of Days to Update: 33 Telephone: 202-566-0500

Last EDR Contact :04/12/2016

PCB TRANSFORMER: PCB Transformer Registration Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011 Source: Environmental Protection Agency

Number of Days to Update: 83 Telephone: 202-566-0517

Last EDR Contact :04/26/2016

Proposed NPL: Proposed National Priority List Sites

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

A site that has been proposed for listing on the NationalPriorities List through the issuance of a proposed rule in the Federal Register.EPA then accepts public comments on the site, responds to the comments,and places on the NPL those sites that continue to meet therequirements for listing.

Date of Government Version: 03/07/2016 Source: EPA

Number of Days to Update: 10 Telephone: Not Reported

Last EDR Contact :04/05/2016

RAATS: RCRA Administrative Action Tracking System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Source: EPA

Number of Days to Update: 35 Telephone: 202-564-4104

Last EDR Contact :06/02/2008

RADINFO: Radiation Information Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015 Source: Environmental Protection Agency

Number of Days to Update: 69 Telephone: 202-343-9775

Last EDR Contact :04/08/2016

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/09/2015 Source: Environmental Protection Agency

Number of Days to Update: 34 Telephone: 703-308-8895

Last EDR Contact :03/30/2016

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015 Source: Environmental Protection Agency

Number of Days to Update: 34 Telephone: 703-308-8895

Last EDR Contact :03/30/2016

RCRA-LQG: RCRA - Large Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/09/2015 Source: Environmental Protection Agency

Number of Days to Update: 34 Telephone: 703-308-8895

Last EDR Contact :03/30/2016

RCRA-SQG: RCRA - Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/09/2015 Source: Environmental Protection Agency

Number of Days to Update: 34 Telephone: 703-308-8895

Last EDR Contact :03/30/2016

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

Standard Environmental Record Source: Federal RCRA TSD facilities list

Search Distance: 0.333 Mile

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/09/2015
Number of Days to Update: 34
Last EDR Contact :03/30/2016

Source: Environmental Protection Agency
Telephone: 703-308-8895

ROD: Records Of Decision

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Number of Days to Update: 74
Last EDR Contact :06/07/2016

Source: EPA
Telephone: 703-416-0223

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Number of Days to Update: 54
Last EDR Contact :05/20/2016

Source: Environmental Protection Agency
Telephone: 615-532-8599

SEMS: Superfund Enterprise Management System

Standard Environmental Record Source: Federal CERCLIS

Search Distance: 0.333 Mile

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016
Number of Days to Update: 10
Last EDR Contact :04/05/2016

Source: EPA
Telephone: 800-424-9346

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016 Source: EPA
Number of Days to Update: 10 Telephone: 800-424-9346
Last EDR Contact :04/05/2016

SSTS: Section 7 Tracking Systems

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Source: EPA
Number of Days to Update: 77 Telephone: 202-564-4203
Last EDR Contact :04/25/2016

TRIS: Toxic Chemical Release Inventory System

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014 Source: EPA
Number of Days to Update: 133 Telephone: 202-566-0250
Last EDR Contact :05/24/2016

TSCA: Toxic Substances Control Act

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012 Source: EPA
Number of Days to Update: 14 Telephone: 202-260-5521
Last EDR Contact :03/24/2016

UMTRA: Uranium Mill Tailings Sites

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Source: Department of Energy
Number of Days to Update: 146 Telephone: 505-845-0011

Last EDR Contact :05/23/2016

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015 Source: EPA

Number of Days to Update: 69 Telephone: 202-564-2496

Last EDR Contact :06/22/2016

US AIRS MINOR: Air Facility System Data

Standard Environmental Record Source: Other Standard Environmental Records

A listing of minor source facilities.

Date of Government Version: 10/20/2015 Source: EPA

Number of Days to Update: 69 Telephone: 202-564-2496

Last EDR Contact :06/22/2016

US BROWNFIELDS: A Listing of Brownfields Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/22/2015 Source: Environmental Protection Agency

Number of Days to Update: 57 Telephone: 202-566-2777

Last EDR Contact :06/22/2016

US CDL: Clandestine Drug Labs

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/18/2016 Source: Drug Enforcement Administration

Number of Days to Update: 88 Telephone: 202-307-1000

Last EDR Contact :05/31/2016

US ENG CONTROLS: Engineering Controls Sites List

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: Property

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015
Number of Days to Update: 53
Last EDR Contact :05/25/2016
Source: Environmental Protection Agency
Telephone: 703-603-0695

US FIN ASSUR: Financial Assurance Information

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015
Number of Days to Update: 61
Last EDR Contact :05/18/2016
Source: Environmental Protection Agency
Telephone: 202-566-1917

US HIST CDL: National Clandestine Laboratory Register

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/18/2016
Number of Days to Update: 88
Last EDR Contact :03/01/2016
Source: Drug Enforcement Administration
Telephone: 202-307-1000

US INST CONTROL: Sites with Institutional Controls

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: Property

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015
Number of Days to Update: 53
Last EDR Contact :05/25/2016
Source: Environmental Protection Agency
Telephone: 703-603-0695

US MINES: Mines Master Index File

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2016
Number of Days to Update: 44
Last EDR Contact :06/02/2016
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

AOCONCERN: San Gabriel Valley Areas of Concern

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Number of Days to Update: 206
Last EDR Contact :06/15/2016

Source: EPA Region 9
Telephone: 415-972-3178

DOD: Department of Defense Sites

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Number of Days to Update: 62
Last EDR Contact :04/15/2016

Source: USGS
Telephone: 888-275-8747

INDIAN RESERV: Indian Reservations

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Number of Days to Update: 34
Last EDR Contact :04/15/2016

Source: USGS
Telephone: 202-208-3710

PWS: Public Water System Data

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

This Safe Drinking Water Information System (SDWIS) file contains public water systems name and address, population served and the primary source of water

Date of Government Version: 12/17/2013
Number of Days to Update: 279
Last EDR Contact :05/31/2016

Source: EPA
Telephone: Not Reported

RECORD SOURCES AND CURRENCY

HISTORICAL USE RECORDS

RGA LF: Recovered Government Archive Solid Waste Facilities List

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: Not Reported
Number of Days to Update: 196
Last EDR Contact :06/01/2012

Source: Department of Resources Recycling and Recovery
Telephone: Not Reported

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: Not Reported
Number of Days to Update: 182
Last EDR Contact :06/01/2012

Source: State Water Resources Control Board
Telephone: Not Reported

EDR Hist Auto: EDR Exclusive Historic Gas Stations

Standard Environmental Record Source: Historical Gas Stations

Search Distance: 0.125 Mile

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007
Number of Days to Update: 42
Last EDR Contact :02/21/2007

Source: EDR, Inc.
Telephone: Not Reported

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

Standard Environmental Record Source: Historical Dry Cleaners

Search Distance: 0.125 Mile

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007
Number of Days to Update: 42
Last EDR Contact :02/21/2007

Source: EDR, Inc.
Telephone: Not Reported

EDR MGP: EDR Proprietary Manufactured Gas Plants

Standard Environmental Record Source: Former manufactured Gas Plants

Search Distance: 0.333 Mile

RECORD SOURCES AND CURRENCY

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: 08/28/2009
Number of Days to Update: 55
Last EDR Contact :11/30/2012

Source: EDR, Inc.
Telephone: Not Reported

RECORD SOURCES AND CURRENCY

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5' minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW® Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW® Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services. The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

STREET AND ADDRESS INFORMATION

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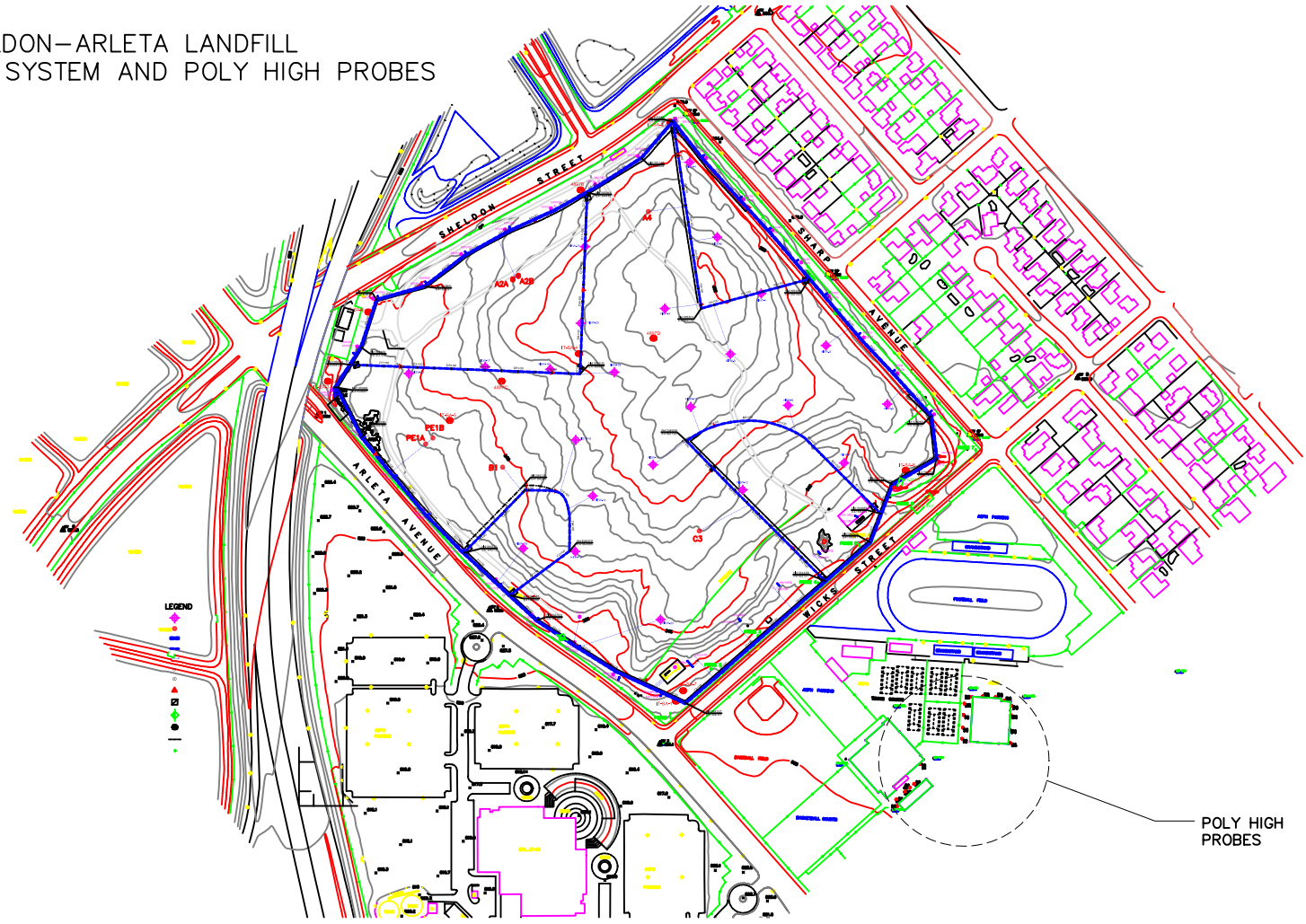
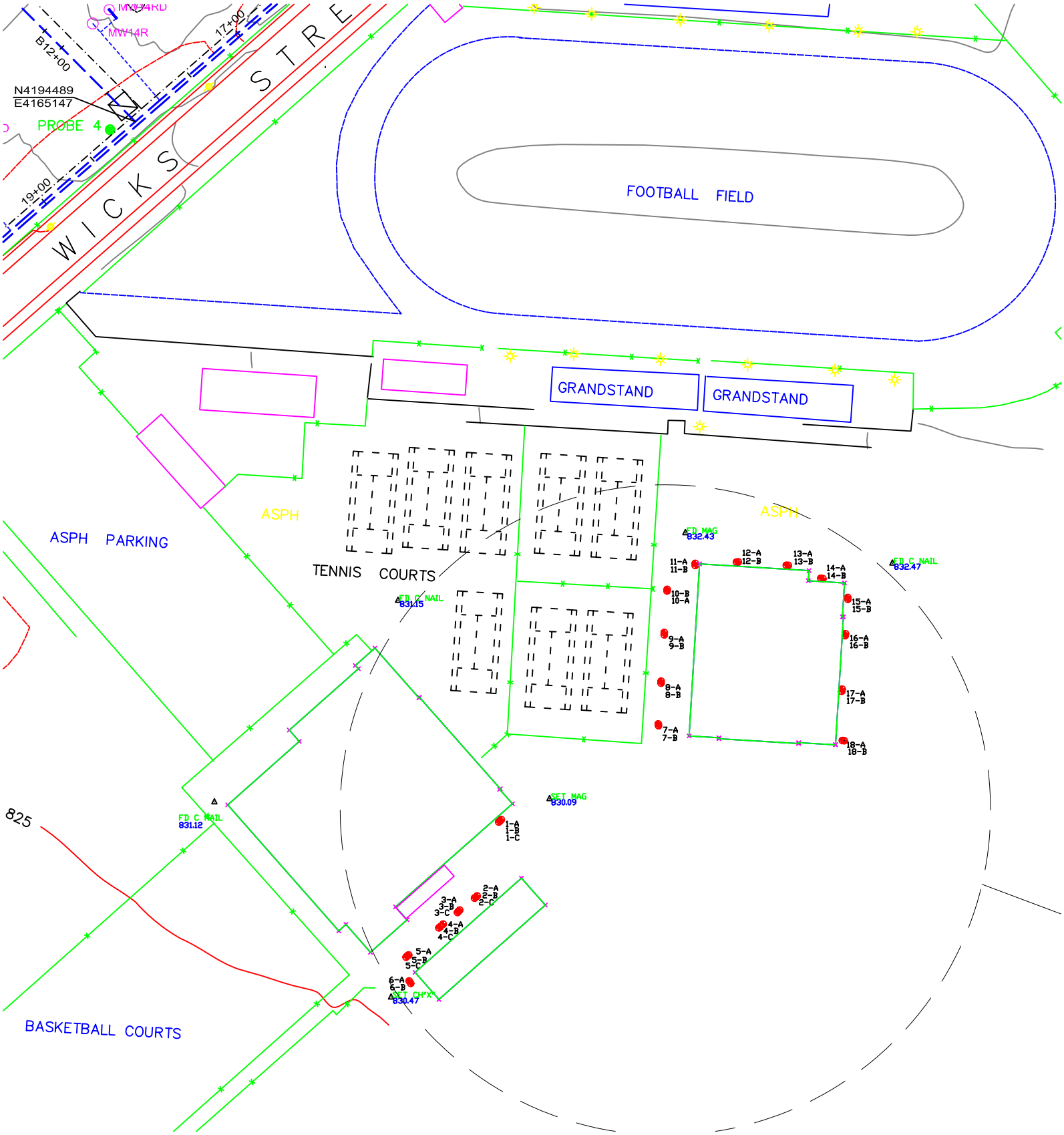
Aerial View of Site & Vicinity



SHELDON–ARLETA LANDFILL
GAS SYSTEM AND POLY HIGH PROBES

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BASKETBALL COURTS

Appendix G:

Qualifications

State of California Department of Consumer Affairs

BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS

This Is To Certify That Pursuant
To The Provisions of Chapter 7, Division 3 of The Business and Professions Code

Skye Michelle Green

IS DULY LICENSED AS A

PROFESSIONAL ENGINEER

IN

CIVIL ENGINEERING

In The State of California, and Is Entitled To All The Rights and Privileges Conferred In Said Code

DEPARTMENT OF CONSUMER AFFAIRS · BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS · STATE OF CALIFORNIA

WITNESS OUR HAND AND SEAL

Certificate No C 63756

This 14th day of June, 2002, at Sacramento, California.

BOARD FOR PROFESSIONAL
ENGINEERS AND LAND SURVEYORS

Cindi Christenson
Executive Officer

Vincent A. DiTomaso
President

EPRENG 5/31/99

THIS CERTIFICATE IS THE PROPERTY OF THE STATE OF CALIFORNIA AND IN THE EVENT OF ITS SUSPENSION, REVOCATION OR INVALIDATION FOR ANY REASON IT MUST UPON DEMAND BE RETURNED TO THE BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS

Education

M.S. ,Civil Engineering, University of California, Los Angeles, CA,1998

B.S., Environmental Engineering, University of California, Irvine, 1997

B.A., English, University of California, Irvine, 1997

Registrations and Training

Licensed Professional Engineer- Calif. No. C63756

Licensed Contractor – Calif HAZ. A.

40-hr OSHA 29 CFR

Relevant Highlights

- ☑ Project Manager for multiple remediation and assessment projects.
- ☑ Designed and implemented remediation projects at more than 200 sites.
- ☑ Over 15 years of experience working with cities and counties throughout Southern California and regulatory agencies including DTSC, RWQCB, CUPA, and AQMD.
- ☑ Principal Engineer for Orange County Waste & Recyling project.
- ☑ Program Manager for LAUSD multiple award contract.
- ☑ Program Manager for Major Oil Company multi-site remediation/assessment project.

Skye Green, P.E
Principal Engineer
Civil-Environmental-Survey Group

Ms. Green, as Principal Engineer and Project Manager, oversees a staff that includes Senior Engineers, Senior Geologists, Engineers, Health and Safety Professionals and Field Staff. Ms. Green is responsible for the design, selection, construction, and operation of a wide range of remediation technologies at sites throughout Southern California. She is responsible for the project management of remediation and assessment projects, oversees the daily operation and maintenance of those projects, and coordinates with clients and overseeing agencies to ensure that systems run smoothly with optimal results. Ms. Green is responsible for the management of technical, field, engineering, design and construction personnel. She has worked on projects for both public and private-sector clients including tank fund projects, dry-cleaning facilities, Superfund and commercial and manufacturing sites.

WORK EXPERIENCE:

October 2006 to Present
CES Group, Inc., Corona, CA
CEO/Principal Engineer/Project Manager
Ms. Green has acted as Project Manager for monitoring, assessment, and remediation projects and has designed and installed various remediation projects using a wide range of technologies. Ms. Green works with DTSC and RWQCB to provide quality reports that meet their standards, including PEA workplans and reports, sampling reports, SPCC plans, CUPA reports, aquifer reports, Phase I and II Assessments, HSPs, Navy QA/QC documents, tank fund documentation, and many other documents including reports to OCHCA. Her responsibilities have included technical oversight, project management, personnel management, budget control, scheduling, cost estimating, and project coordination.

September 1998 to October 1996
Terra Vac Corp., Anaheim, CA
Senior Engineer
Ms. Green's responsibilities at Terra Vac included project management, system design and installation, permitting, report writing, and data management. Ms. Green managed projects using technologies including ERH, SVE, DVE, ISCO, air sparge, and pump and treat. Ms. Green worked with regulatory agencies for many different counties and cities and provided high quality reports meeting their standards. Her responsibilities have included technical oversight, project management, personnel management, budget control, scheduling, cost estimating, and project coordination.

September 1996 to September 1998
University of California, Irvine
Microbiology Laboratory Associate
Ms. Green's responsibilities at UCI included running microbiology experiments on biofouling and biological growth including project for Orange County Sanitation District.

Representative Project Experience:

Project Manager for Carson Plaza Project in Carson, CA under DTSC oversight. Ms. Green designed a remediation system to treat subsurface VOCs due to dry cleaning operations using in-situ chemical oxidation and vapor extraction with WDR permitting from RWQCB.

Project Manager for groundwater treatment system installation system in Beverly Hills, CA. Ms. Green designed and implemented two groundwater treatment systems with metals, chlorine, MBAS, and oil and grease contaminants for parking structures with discharge under NPDES permits.

Program Manager for LAUSD multiple award contract for site assessment and remediation. Projects include soil vapor probe installation and sampling, soil excavation and disposal, Phase I and II assessments, oversight of soil removal projects.

Principal Engineer for Orange County Waste & Recycling multiple year contract. Ms. Green provides engineering support including design calculations for pump systems for water transfer systems.

Project Manager for Electronics Manufacturing Facility in Santa Ana, CA. Ms. Green worked with DTSC to assess the site and bring the site to closure using land use restrictions.

Project Manager for Hyatt Die Cast Facility in Cypress, CA. Ms. Green designed and implemented a remediation project that included the installation of 30 wells, dual-phase extraction and treatment of VOC-impacted soil and groundwater using ISCO under the oversight of RWQCB.

Project Manager for ERH project in Carson, CA. Ms. Green designed and implemented an ERH system including 15 electrodes and vapor capture for a VOC-impacted site.

Provided engineering support to ERH remediation team at ERH project in Santa Monica, California. Project required extensive permitting end engineering services.

Provided engineering support to ERH remediation project in Sorrento Valley, California. Project required extensive permitting and regulatory interface, CUPA compliance, electrode installation and surveying.

Provided engineering support ERH remediation project in Newark, California. Project required extensive permitting and regulatory interface and CUPA compliance.

Senior Project Manager County of Merced Site Assessment and Remediation County Corporate yard, Merced CA. Worked with city and county officials to create remedial action plan and design.

Senior Engineer at Bakersfield Refinery, CA. Completed site assessment and remediation of impacted soil and groundwater due to refinery leaks. Free product removal and ISCO were conducted along with dual-phase extraction.

Project Manager for Jaco Oil, Shannon's Market - Site Assessment and Remediation Merced, CA. Managed project including dual-phase vapor extraction, ISCO treatment, soil vapor assessment, treatment of soil vapor, regulatory sampling and reporting.

Project Manager for County of Merced Site Assessment and Selection of Remediation Options for Spring Fairgrounds, Los Banos, CA. Completed site assessment and remediation of impacted soil and groundwater due to UST.

Education

Associate of Science, Electronics Technology, Honolulu Community College, Honolulu, Hawaii

Undergraduate College Courses in Chemistry, Physics, Computer Programming and Math, University of Hawaii, Honolulu, Hawaii.

Courses in Calculus and CADD, El Camino College, Torrance, California.

Select Environmental Extension Courses, University of California, Irvine, California.

Navy Quality Assurance School, San Diego, California.

Relevant Highlights

- ☑ Field Supervisor and SSHO for ERH Remediation Project in Santa Monica, CA
- ☑ Field Supervisor and Alternate SSHO for ERH Remediation at Pemaco Superfund Site, Maywood, CA.
- ☑ Field Supervisor and SSHO for ERH DNAPL Remediation Project in Carson, CA
- ☑ Field Support for ERH Remediation Projects in Hawthorne, Venice, El Centro, and Sorrento Valley, CA
- ☑ Field Supervisor for installation and operation of more than 325 remediation and site assessment projects.

Daniel G. Baysa

Mr. Baysa has more than 20 years of experience working as a Field Supervisor on environmental site assessment and remediation projects and more than 30 years in field operations. After working in operations at a major oil refinery, then clean rooms at a major defense contractor, Mr. Baysa started in the environmental industry as a Chemical Technician, then Remediation Specialist and Field Supervisor. Mr. Baysa has participated in the design, installation, and operation of more than 325 remediation and site assessment projects including eight Electrical Resistance Heating (ERH) projects in California. Mr. Baysa also has performed as the SSHO on numerous remediation projects. Mr. Baysa has heavy equipment operating experience with Front End Loaders, Skip Loaders, Water Trucks, Boom Lifts, and Forklifts.

WORK EXPERIENCE:

October 2006 to Present
CES Group, Inc., Corona, CA
Executive Vice President / Field Supervisor
As Field Supervisor and SSHO, Mr. Baysa's responsibilities include supervision of field personnel in conducting soil excavation, remediation system construction, operation, monitoring and maintenance of remediation projects. Responsibilities also include developing and implementing operational procedures applicable to ERH, vacuum extraction remediation systems, vapor sampling, ground water sampling, soil sampling and profiling, analytical monitoring of remedial projects, and enforcing system compliance with all permit requirements relating to the operations and emissions of the remediation units. Other activities include oversight of removal and installation of USTs and ASTs, drilling oversight for soil sampling and classification, installation of wells, piping, cabling, probes, and electrodes for ERH systems.

September 1991 to October 2006
Terra Vac Corp., Anaheim, CA
Remediation Specialist / Field Supervisor
Mr. Baysa's responsibilities include supervision of field personnel in remediation system construction, operation, monitoring and maintenance of remediation projects, analytical monitoring of remedial projects from start-up to completion, and enforcing system compliance with all permit requirements relating to the operations and emissions of the remediation units. Mr. Baysa maintained and operated a mobile gas chromatograph laboratory, as well as a variety of other analytical and monitoring instruments. Mr. Baysa maintained and operated a mobile gas chromatograph laboratory, as well as a variety of other analytical and monitoring instruments.

April 1989 to September 1991
TRW inc., Redondo Beach, CA
Electronic Technician
As an Electronics Technician at TRW in the Surface Acoustic Wave (SAW) Laboratories, Mr. Baysa's responsibilities included assembly and testing of SAW devices and maintenance of lab equipment and supplies.

April 1985 to March 1989

Chevron Corp. Hawaiian Refinery, Kapolei, HI

Refinery Plant Operator

As a plant operator for Chevron USA Hawaiian Refinery, Mr. Baysa's responsibilities included testing and analyses of military jet and commercial fuels, gasoline's, bunker fuels, and asphalts as well as maintenance of refinery equipment essential to the refining process.

Representative Project Experience:

Field Support, Electrical Resistance Heating remediation project – Sorrento Valley, CA. – Provided assistance with construction, installation, operations and sampling of this ERH remediation project. The site was the location of a former electronics manufacturer.

Field Supervisor / SSHO, Electrical Resistance Heating remediation project – Santa Monica, CA. – Provided supervision and assistance for the construction, installation, and operation, and served as SSHO for this ERH remediation project. Project included the installation of over 400 electrodes and system operation for this large ERH remediation site.

Field Support, Electrical Resistance Heating remediation project – El Centro, CA. – Provided assistance with construction, installation, operations and sampling of this ERH remediation project. The site was the location of a former dry cleaner.

Field Supervisor, Electrical Resistance Heating remediation project – Maywood, CA. – Responsible for the construction, installation, and operation, and served as alternate SSHO of an ERH remediation system for the cleanup of TCE DNAPL at 95 feet below ground surface (bgs). Project included the installation of electrodes and system operation for a large ERH remediation at this superfund site.

Field Support, Electrical Resistance Heating remediation project – Hawthorne, CA. – Provided assistance for construction, installation, and operation, and served as the alternate SSHO of this ERH remediation project for the cleanup of TCE DNAPL at 130 feet below ground surface (bgs).

Field Supervisor for Electrical Resistance Heating remediation project – Carson, CA. – Responsible for the construction, installation, and operation, and served as the SSHO of this ERH remediation project. Project included the installation of electrodes within an operating dry cleaner. Indoor electrode installation required hand augering a 5-inch diameter boring to 30 feet bgs and installing a 28 ft electrode with less than 12 feet clearance from floor to ceiling.

Field Supervisor for Oil Refinery vapor extraction project – Bakersfield, CA – Provided assistance and supervision for the operation of a 21,000 SCFM vapor extraction system which utilized three 250Hp positive displacement blowers and three 10,000lb automatic steam regenerated GAC vessels. Mr. Baysa was responsible for the installation of 2500+ feet of 8 inch HDPE pipe for the expansion of the VE system.

Field Supervisor for extended Landfill water contract – Irvine, CA – Responsible for the operation, maintenance, and repairs of potable and non-potable water systems at an operating landfill. Provide emergency response for alarms and trouble calls. Provide engineering and cost estimates for water system upgrades, repairs, and installations.

Field Supervisor for Alameda Corridor Transportation Authority project – Provided on-call soil sampling and profiling. He provided oversight for UST excavation and removal and he scheduled equipment and trucks for removal and disposal of contaminated soils. He also operated front-end loaders and dust suppression equipment.

Assistant Project Manager for a large locomotive maintenance facility - Los Angeles, CA – Mr. Baysa performed excavation and removal of all USTs and associated piping, profiling and removal of diesel and lead contaminated soils,

installation of oil skimmers, oily water drain lines and main lines which included the installation of 120 feet of 48" diameter pipe, 12 feet below live main locomotive tracks utilizing "jack and bore" methods. He also provided oversight during the installation of 10,000 and 20,000 gallon ASTs, decommission, repair, and re-commissioning of waste water-settling ponds, excavating and grading for the installation of new railroad tracks.

Project Superintendent for a state university - Pomona, CA – Mr. Baysa managed project construction activities for a motor pool and emergency power renovation project. The project included the removal of seven USTs ranging from 50 gallon to 10,000-gallon tanks, installation of ASTs for diesel fuel and waste oil, installation of a 10,000-gallon UST and fueling stations, and resurfacing of all traffic areas within the motor pool.

Project Manager and Supervisor for a construction firm - Irvine, CA – Mr. Baysa performed as a cost estimator and construction manager during construction, installation, and equipment procurement for methane capture systems beneath buildings on former landfill sites in Carson, CA and City of Industry, CA.

Project Superintendent for an engineering firm - Malibu, CA – He provided construction management and oversight for the installation of a storm water run-off treatment system. This project included installation of a transformer and 400 feet of 480 Volt sub-surface transmission lines, excavation and installation of 18 ft deep settling tank, and installation of an ozone treatment system.

Appendix H:

Additional Documentation

Preliminary Environmental Screening of Proposed Project at Existing School Site

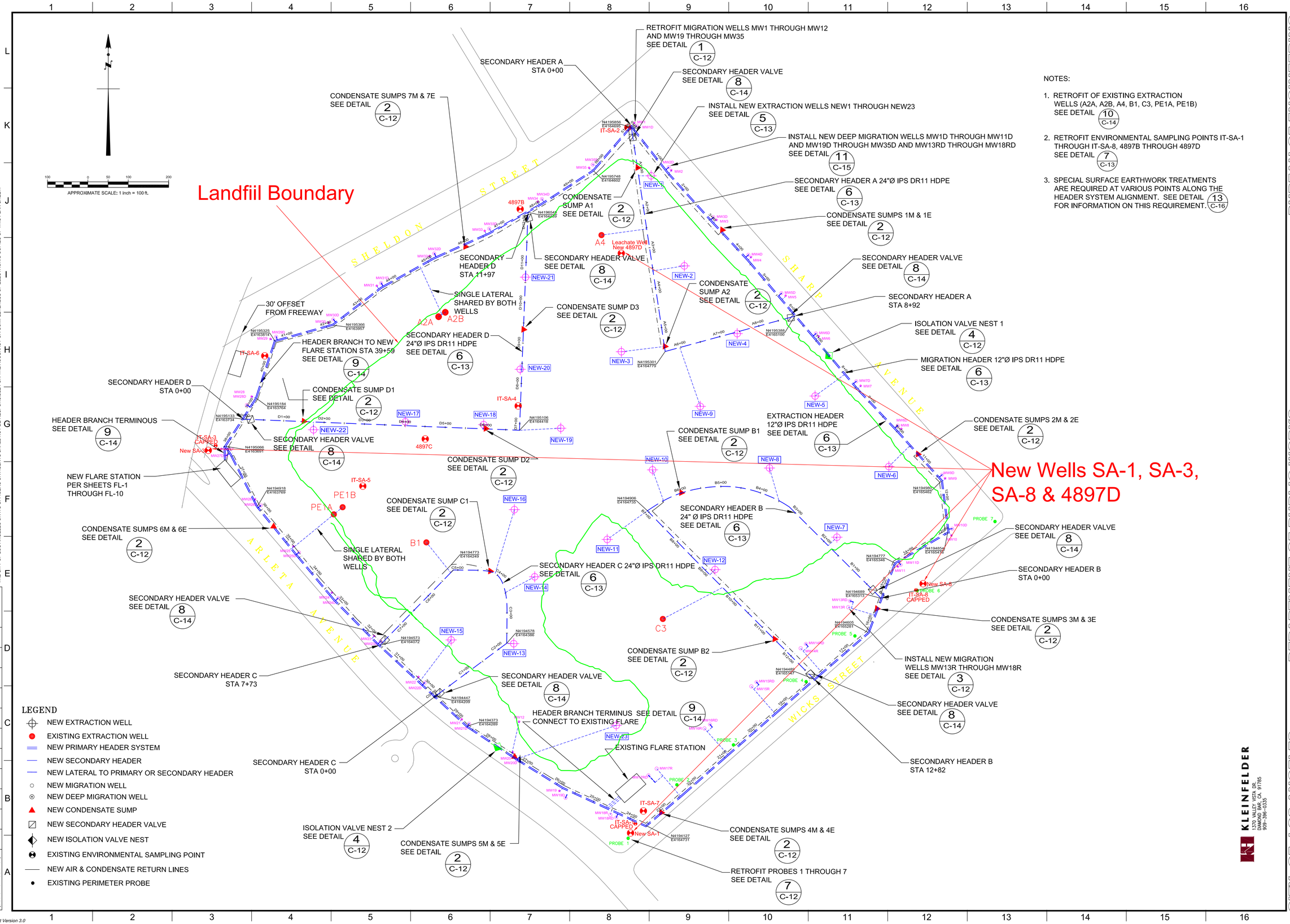
Project: Francis Polytechnic HS.

Selection Criteria	Yes	No	Comments
Powerlines/Electromagnetic Fields [CCR, Title 5, 14010(c)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from 50-133 kV powerlines/electromagnetic fields within 100 feet of the site?		x	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from 220-230 kV powerlines/electromagnetic fields within 150 feet of the site?		x	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from 500-550 kV powerlines/electromagnetic fields within 350 feet of the site?		x	
Railroads [CCR, Title 5, 14010(d)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from railroads within 1,500 feet of the site?		x	
Traffic Noise [CCR, Title 5, 14010(e)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from adjacent roads or freeways that will adversely affect the educational program?		x	
Faults [CCR, Title 5, 14010(f)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from an active earthquake fault or fault trace which may be onsite?		x	
Flood or Inundation Area [CCR, Title 5, 14010(g)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from flooding or dam inundation?		x	
Pipelines and Above Ground Tanks [CCR, Title 5, 14010(h)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from nearby above-ground water or fuel storage tanks?		x	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from above-ground or underground pipelines located within 1,500 feet of the site?		x	
Liquefaction and Landslides [CCR, Title 5, 14010(i)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from liquefaction or landslides?		x	
Traffic and Pedestrian Safety [CCR, Title 5, 14010(l)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from an adjacent major arterial street?		x	

Preliminary Environmental Screening of Proposed Project at Existing School Site

Project: Francis Polytechnic HS.

Selection Criteria	Yes	No	Comments
Compatible Zoning [CCR, Title 5, 14010(m)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from the zoning surrounding the site?		x	
Light, Wind, Air Pollution [CCR, Title 5, 14010(q)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from light, wind or air pollution?		x	
Easements [CCR, Title 5, 14010(r)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from easements on or adjacent to the site which may restrict access or building placement?		x	
Border Zone Property [CCR, Title 5, 14010(t)]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a significant disposal of hazardous waste within 2,000 ft. of the site?		x	
Cellular Phone Towers [LAUSD Board Resolution]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a cellular phone tower on or adjacent to the site?		x	
Air Pollution [LAUSD Board Resolution]			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a major transportation corridor (freeway, major rail line) within 500 feet?		x	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a major stationary source of emissions within 500 feet?		x	
Is the school on the Priority List of Schools Most at Risk from Air Pollution?		x	
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a high-risk facility previously identified by OEHS?		x	
Methane Zone			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from a known methane zone or oil field?		x	Possible exposure to landfill gas
Oil Wells			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from an onsite oil well?		x	
Airports			
Will the project create any new significant safety hazards or exacerbate any existing safety hazards to students from an airport within two nautical miles of the site?		x	



NOTES:

1. RETROFIT OF EXISTING EXTRACTION WELLS (A2A, A2B, A4, B1, C3, PE1A, PE1B) SEE DETAIL 10 C-14
2. RETROFIT ENVIRONMENTAL SAMPLING POINTS IT-SA-1 THROUGH IT-SA-8, 4897B THROUGH 4897D SEE DETAIL 7 C-13
3. SPECIAL SURFACE EARTHWORK TREATMENTS ARE REQUIRED AT VARIOUS POINTS ALONG THE HEADER SYSTEM ALIGNMENT. SEE DETAIL 13 C-16 FOR INFORMATION ON THIS REQUIREMENT.

LEGEND

- NEW EXTRACTION WELL
- EXISTING EXTRACTION WELL
- NEW PRIMARY HEADER SYSTEM
- NEW SECONDARY HEADER
- NEW LATERAL TO PRIMARY OR SECONDARY HEADER
- NEW MIGRATION WELL
- NEW DEEP MIGRATION WELL
- NEW CONDENSATE SUMP
- NEW SECONDARY HEADER VALVE
- NEW ISOLATION VALVE NEST
- EXISTING ENVIRONMENTAL SAMPLING POINT
- NEW AIR & CONDENSATE RETURN LINES
- EXISTING PERIMETER PROBE

KLEINFELDER
17542 E. 17TH ST. #100
TUSTIN, CA 92780
909-396-0335

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
LA DPW ENGINEERING Serving the Present | Designing the Future

NO.	REVISIONS:	DATE:	BY:
	FINAL	8/28/06	DER

STRUCTURE NO.

INDEX NO.

ENGINEER: TIMOTHY CRANDALL LIC. NO. C45599
DESIGN GROUP
DESIGNED BY: DAVID WAITE
DRAWN BY: DOYLE ROSS
CHECKED BY: TIMOTHY CRANDALL
APPROVED BY: TIMOTHY CRANDALL
GARY LEE MOORE P.E. CITY ENGINEER DATE:

VERTICAL CONTROL: 1960 ADJ.(09-29200) SSM ON C/L ROSCOE BL. WHITSETT AV.
HORIZONTAL CONTROL: NAD 83 REGION 5

SHEET TITLE: GAS EXTRACTION SYSTEM PLAN VIEW
PROJECT: SHELDON-ARLETA LANDFILL: GAS EXTRACTION SYSTEM RETROFIT (RE-BID)
ADDRESS: 12455 WICKS ST. SUN VALLEY, CA. 91352

WORK ORDER NO. E1700500
DRAWING NO. C-3
SHEET OF 29 SHEETS

REVISION DATES (DESIGN STAGE ONLY)

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

Sheet Version 3.0

John H Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

Inquiry Number: 4660230.8
June 28, 2016

EDR Building Permit Report

Target Property and Adjoining Properties

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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SECTION

About This Report

Executive Summary

Findings

Glossary

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.

EDR® Environmental Data Resources Inc

BUILDFAX® PROPERTY HISTORY

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Civil-Environmental-survey Group on Jun 28, 2016.

TARGET PROPERTY

12431 Roscoe Blvd
Sun Valley, CA 91352

SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

RESEARCH SUMMARY

Building permits identified: **YES**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Los Angeles

Year	*Source*	*TP*	*Adjoining*
2016	City of Los Angeles, Department of Building and Safety		
2015	City of Los Angeles, Department of Building and Safety		X
2014	City of Los Angeles, Department of Building and Safety		
2013	City of Los Angeles, Department of Building and Safety		
2012	City of Los Angeles, Department of Building and Safety		
2011	City of Los Angeles, Department of Building and Safety		
2010	City of Los Angeles, Department of Building and Safety		
2009	City of Los Angeles, Department of Building and Safety		
2008	City of Los Angeles, Department of Building and Safety		
2007	City of Los Angeles, Department of Building and Safety		
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1998	City of Los Angeles, Department of Building and Safety		
1997	City of Los Angeles, Department of Building and Safety		
1996	City of Los Angeles, Department of Building and Safety		X
1995	City of Los Angeles, Department of Building and Safety		
1994	City of Los Angeles, Department of Building and Safety		
1993	City of Los Angeles, Department of Building and Safety		
1992	City of Los Angeles, Department of Building and Safety		
1991	City of Los Angeles, Department of Building and Safety		
1990	City of Los Angeles, Department of Building and Safety		
1989	City of Los Angeles, Department of Building and Safety		

EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

Year	Source	TP	Adjoining
1988	City of Los Angeles, Department of Building and Safety		

BUILDING DEPARTMENT RECORDS SEARCHED

Name: Los Angeles
Years: 1988-2016
Source: City of Los Angeles, Department of Building and Safety, NORTH HOLLYWOOD, CA
Phone: (213) 482-6800

Name: Los Angeles County
Years: 1994-2016
Source: Los Angeles County, Building and Safety, GARDENA, CA
Phone: (626) 458-6368

Name: San Bernardino County
Years: 2002-2016
Source: San Bernardino County, Land Use, Building & Safety, SAN BERNARDINO, CA
Phone: (909) 387-8311

TARGET PROPERTY FINDINGS

TARGET PROPERTY DETAIL

12431 Roscoe Blvd
Sun Valley, CA 91352

No Permits Found

ADJOINING PROPERTY FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

BURTON ST

12343 BURTON ST

Date:	**12/18/1996**
Permit Type:	
Description:	**MASTER BEDROOM & BATHROOM ADDITION W/FULL BATH 24 FT. X 18 FT. iNCLUDE**
Permit Description:	**Bldg-Addition**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	960142000001450
Status:	
Valuation:	$30,000.00
Contractor Company:	
Contractor Name:	

RHODES AVE

8219 RHODES AVE

Date:	**3/2/2015**
Permit Type:	
Description:	**No Plan Check**
Permit Description:	**Plumbing**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	150429000004236
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	ARNDT & TRAINA INC

ADJOINING PROPERTY FINDINGS

WHITSETT AVE

8241 WHITSETT AVE

Date:	**11/8/1996**
Permit Type:	
Description:	**T/O & REROOF W/COMP SHINGLES (70 SQS) CLALSS B MIN 3 LAYERS MAX.**
Permit Description:	**Bldg-Alter/Repair**
Work Class:	
Proposed Use:	Apartment
Permit Number:	960162000004256
Status:	
Valuation:	$7,000.00
Contractor Company:	
Contractor Name:	

WILKINSON AVE

8224 WILKINSON AVE

Date:	**8/17/2015**
Permit Type:	
Description:	**No Plan Check**
Permit Description:	**HVAC**
Work Class:	
Proposed Use:	1 or 2 Family Dwelling
Permit Number:	150449000008324
Status:	
Valuation:	$0.00
Contractor Company:	
Contractor Name:	LIU NORMAN SERVICE CORPORATION

GLOSSARY

General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeymen:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

GLOSSARY

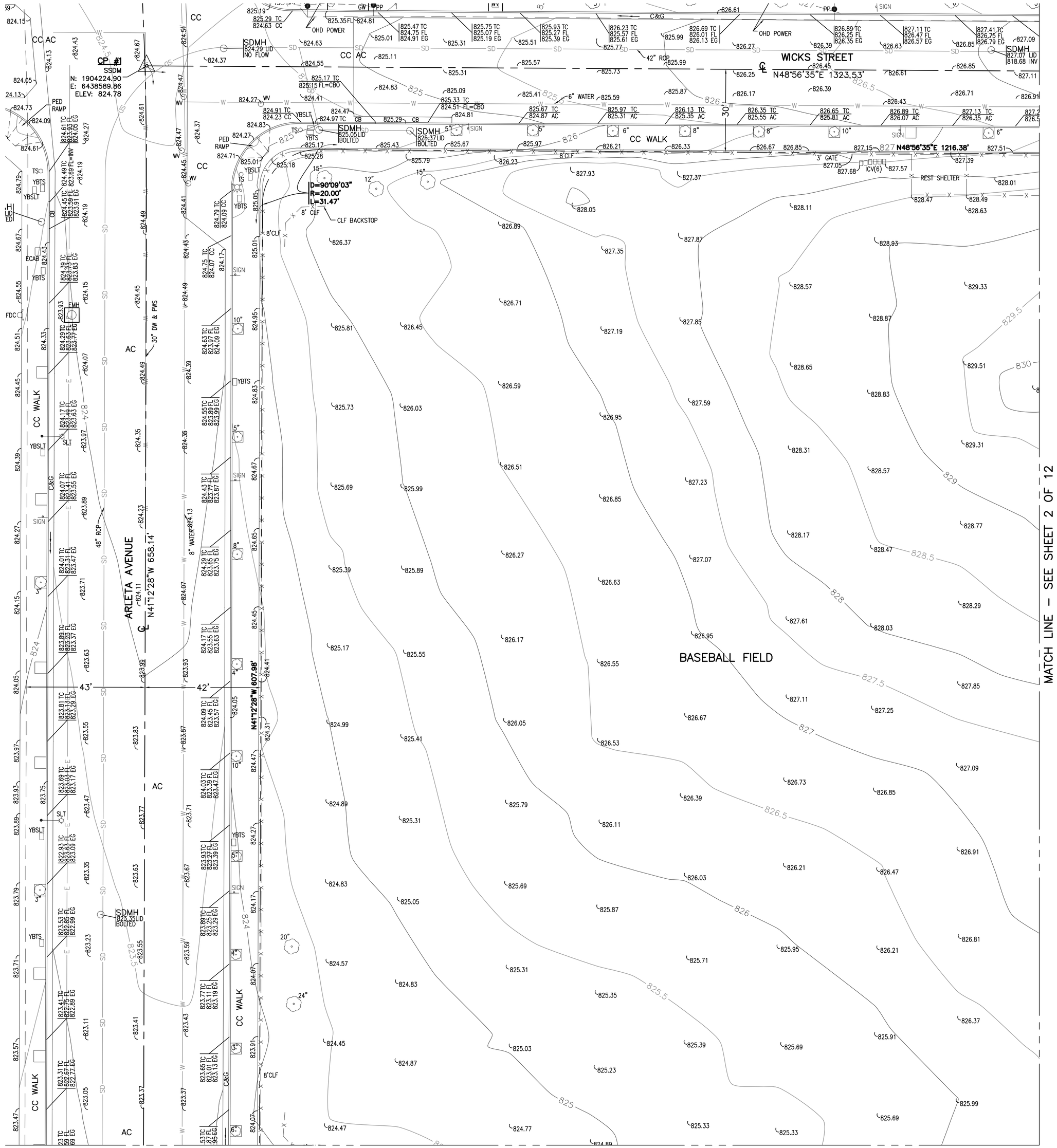
Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

Sample Building Permit Data

Date: Nov 09, 2000
Permit Type: Bldg -
New Permit Number: 101000000405
Status: Valuation: $1,000,000.00
Contractor Company: OWNER-BUILDER
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

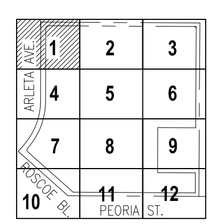


LEGEND

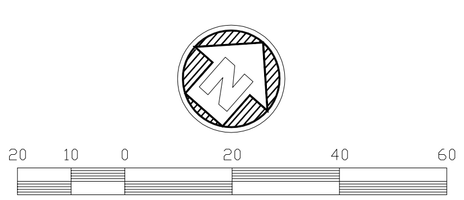
- PROPERTY LINE
- CENTER LINE
- 114.5 CONTOUR LINE
- CURB UNLESS OTHERWISE NOTED
- WALL
- CHAIN LINK FENCE
- STEEL HANDRAIL
- TREE WITH TRUNK DIAMETER
- FIRE HYDRANT
- YARD LIGHT
- STREET LIGHT
- SIGN
- COLUMN
- GUARD POST
- YLT ON 2.5"ø CC BASE
- UNDERGROUND UTILITY PER PLAN
- UNDERGROUND UTILITY PER PLAN LOCATED BY ELECTROMAGNETIC OR GROUND PENETRATING RADAR (GPR) METHODS.
- UNDERGROUND COMMUNICATION LINE
- UNDERGROUND ELECTRICAL LINE
- UNDERGROUND GAS LINE
- UNDERGROUND SEWER LINE
- UNDERGROUND STORM DRAIN LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND UNKNOWN LINE
- UNDERGROUND WATER LINE

ABBREVIATIONS

A/C	AIR CONDITION
AC	ASPHALT CONCRETE
AW	AIR WAY
BDO	BOX DRAIN OUTLET
BK	BRICK
BLDG	BUILDING
BKW	BRICK WALL
BRET	BLOCK RETAINING WALL
BSW	BACK OF SIDEWALK
BWL	BLOCK WALL
C&G	CURB & GUTTER
CB	CATCH BASIN
CBO	CATCH BASIN OUTLET
CC	CEMENT CONCRETE
CLF	CHAIN LINK FENCE
CNTNR	CONTAINER
CO	CLEAN OUT
COL	COLUMN
COMM	COMMUNICATION
CP	CONTROL POINT
DB	DRAIN BOX
DI	DRAIN INLET
DP	DRAIN PIPE
DS	DOWN SPOUT
DSIG	DOWN SPOUT IN GROUND
DWF	DRINKING WATER FOUNTAIN
DWY	DRIVEWAY
E BOXES	ELECTRICAL BOXES
ECAB	ELECTRICAL CABINET
EG	EDGE OF GUTTER
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVING
EPIG	ELECTRICAL PIPE IN GROUND
ER	EARTH
FA	FIRE ALARM
FD	FIRE DEPARTMENT
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISH FLOOR
FL	FLOW LINE
FNTN	FOUNTAIN
FP	FLAG POLE
FRD	FRENCH DRAIN
FSCV	FIRE SPRINKLER CONTROL VALVE
GM	GAS METER
GP	GUARD POST
GPIG	GAS PIPE IN GROUND
GPT	GUY POST
GV	GAS VALVE
GW	GUY WIRE
ICV	IRRIGATION CONTROL VALVE
INF	IRON FENCE
INV	INVERT
LAN	LANDING
MNW	MONITORING WELL
MP	METAL POST
MWV	MAIN WATER VALVE
OHD	OVERHEAD
OHG	OVERHANG
PA	PLANTING AREA
PED	PEDESTRIAN
PP	POWER POLE
PWR	POWER
RET	RETAINING
S. GATE	SLIDING GATE
SCO	SEWER CLEAN OUT
SCOL	STEEL COLUMN
SDMH	STORM DRAIN MANHOLE
SHR	STEEL HANDRAIL
SIG	SIGNAL
SLT	STREET LIGHT
SMH	SEWER MANHOLE
STRG	STORAGE
TBS	TOP OF BOTTOM STEP
TC	TOP OF CURB
TCB	TOP OF CATCH BASIN
TEL	TELEPHONE
TMH	TELEPHONE MANHOLE
TS	TRAFFIC SIGNAL
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
VENT	VENTILATION
VERT	VERTICAL
W/	WITH
WD	WOOD
WM	WATER METER
WPIG	WATER PIPE IN GROUND
WV	WATER VALVE
YB	YARD BOX
YBE	YARD BOX ELECTRICAL
YBG	YARD BOX GAS
YBS	YARD BOX SEWER
YBSLT	YARD BOX STREET LIGHT
YBTS	YARD BOX TRAFFIC SIGNAL
YBW	YARD BOX WATER
YLT	YARD LIGHT



INDEX MAP



SCALE: 1" : 20'

NOTES

1. REFERENCE DOCUMENT FOR LEGAL DESCRIPTION AND EASEMENTS: CHICAGO TITLE COMPANY PRELIMINARY REPORT ORDER NUMBER 00035624–994–X59, DATED APRIL 6, 2015.
2. ASSESSOR'S PARCEL NUMBER: 2634–019–900
3. LAND AREA: 1,618,592 SQ. FT. 37.158 ACRES

BRIEF LEGAL DESCRIPTION

LOT 1 OF TRACT NO. 19166, M.B. 593/97–98

EASEMENT NOTE

(1) AN INSTRUMENT ENTITLED "WAIVER OF DAMAGES AND INDEMNIFICATION AGREEMENT AND RIGHT OF INGRESS AND EGRESS – COVENANT TO RUN WITH THE LAND" FOR PERMISSION TO MAINTAIN AN EXISTING WROUGHT IRON FENCE AND ELECTRIC VAULT ENCROACHING 1'–2" INTO THE PUBLIC RIGHT OF WAY ALONG ROSCOE BLVD. WITHIN A 12'–0" BORDER, AFTER A 7'–0" DEDICATION, EXECUTTED BY LA UNIFIED SCHOOL DISTRICT IN FAVOR OF THE CITY OF LOS ANGELES, RECORDED SEPTEMBER 24, 2008 IN INSTRUMENT NO. 20081721402, OFFICIAL RECORDS. PLOTTED.

BASIS OF BEARINGS

THE BEARING OF N48D56'35" E OF THE CENTERLINE OF WICKS STREET DERIVED FROM STATE PLANE COORDINATES NAD 83 BETWEEN THE INTERSECTIONS OF ARLETA AVENUE (N: 1904224.90, E: 6438589.86) AND SHARP AVENUE (N: 1905094.21, E:6439587.88)

SCHOOL BENCH MARK

CHISEL "X" ON SOUTH EDGE ARCADE SOUTH SIDE BUILDING "R" (CAFETERIA) AT EAST SIDE OF SOUTHWEST PILLAR.
ELEV = 829.45'

Ofer Shapira 6–15–16
OFER SHAPIRA DATE
LICENCE NO.: L.S. 7123
EXPIRES: 12/31/2016

LICENSED LAND SURVEYOR · OFER SHAPIRA · NO. 7123 · Exp. 12–31–16 · STATE OF CALIFORNIA

LOS ANGELES UNIFIED SCHOOL DISTRICT · FACILITIES SERVICES DIVISION

EXISTING FACILITIES DESIGN

FACILITIES SERVICES DIVISION
333 SOUTH BEAUDRY AVENUE, 21ST FLOOR
LOS ANGELES, CALIFORNIA 90017

TITLE: TOPOGRAPHIC SURVEY

PROJECT: GROUND TOPOGRAPHIC SURVEY

SCHOOL: FRANCIS POLYTECHNIC H.S.
12431 ROSCOE BLVD.
SUN VALLEY, CA 91352

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REVISIONS

JOB NUMBER	
DRAWN BY	A.S., V.L.
CHECKED BY	O.S.
DATE	6-15-16
DRAWING NO.	1
INDEX NO.	1/12

MATCH LINE – SEE SHEET 1 OF 12

MATCH LINE – SEE SHEET 5 OF 12

MATCH LINE – SEE SHEET 3 OF 12

SCALE: 1" : 20'

LEGEND

- PROPERTY LINE
- CENTER LINE
- 114.5 CONTOUR LINE
- CURB UNLESS OTHERWISE NOTED
- WALL
- X X X CHAIN LINK FENCE
- O O O STEEL HANDRAIL
- TREE WITH TRUNK DIAMETER
- FIRE HYDRANT
- YARD LIGHT
- STREET LIGHT
- SIGN
- COLUMN
- GUARD POST
- YLT ON 2.5% CC BASE
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- SD SD UNDERGROUND STORM DRAIN LINE
- T T T UNDERGROUND TELEPHONE LINE
- UN UN UNDERGROUND UNKNOWN LINE
- W W W UNDERGROUND WATER LINE

ABBREVIATIONS

A/C AIR CONDITION
AC ASPHALT CONCRETE
AW AIR WAY
BDD BOX DRAIN OUTLET
BK BRICK
BLDG BUILDING
BKW BRICK WALL
BRET BLOCK RETAINING WALL
BSW BACK OF SIDEWALK
BWL BLOCK WALL
C&G CURB & GUTTER
CB CATCH BASIN
CBD CATCH BASIN OUTLET
CC CEMENT CONCRETE
CLF CHAIN LINK FENCE
CNTNR CONTAINER
CO CLEAN OUT
COL COLUMN
COMM COMMUNICATION
CP CONTROL POINT
DB DRAIN BOX
DI DRAIN INLET
DP DRAIN PIPE
DSP DOWN SPOUT
DSIG DOWN SPOUT IN GROUND
DWF DRINKING WATER FOUNTAIN
DWY DRIVEWAY
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ECAB ELECTRICAL CABINET
EG EDGE OF GUTTER
EOC EDGE OF CONCRETE
EOP EDGE OF PAVING
EPIG ELECTRICAL PIPE IN GROUND
ER EARTH
FA FIRE ALARM
FD FIRE DEPARTMENT
FDC FIRE DEPARTMENT CONNECTION
FF FINISH FLOOR
FL FLOW LINE
FNTN FOUNTAIN
FPD FLAG POLE
FRD FRENCH DRAIN
FSCV FIRE SPRINKLER CONTROL VALVE
GM GAS METER
GP GUARD POST
GPIG GAS PIPE IN GROUND
GPT GUY POST
GV GAS VALVE
GW GUY WIRE
ICV IRRIGATION CONTROL VALVE
INF IRON FENCE
INV INVERT
LAN LANDING
MNW MONITORING WELL
MP METAL POST
MWV MAIN WATER VALVE
OHD OVERHEAD
OHG OVERHANG
PA PLANTING AREA
PED PEDESTRIAN
PP POWER POLE
PWR POWER
RET RETAINING
S. GATE SLIDING GATE
SCD SEWER CLEAN OUT
SCOL STEEL COLUMN
SDMH STORM DRAIN MANHOLE
SHR STEEL HANDRAIL
SIG SIGNAL
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STRG STORAGE
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TC TOP OF CURB
TCB TOP OF CATCH BASIN
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TMH TELEPHONE MANHOLE
TS TRAFFIC SIGNAL
TW TOP OF WALL
TYP TYPICAL
UG UNDERGROUND
VENT VENTILATION
VERT VERTICAL
W/ WITH
WD WOOD
WM WATER METER
WPIG WATER PIPE IN GROUND
WV WATER VALVE
YB YARD BOX
YBE YARD BOX ELECTRICAL
YBG YARD BOX GAS
YBS YARD BOX SEWER
YBSLT YARD BOX STREET LIGHT
YBTS YARD BOX TRAFFIC SIGNAL
YBW YARD BOX WATER
YLT YARD LIGHT

INDEX MAP

	ARLETA AVE.		
ROSCOE BL.	4	1	
	5	2	3
10	7	8	6
11 PEORIA ST.		9	
		12	

TITLE
TOPOGRAPHIC SURVEY

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PROJECT
GROUND TOPOGRAPHIC SURVEY

SCHOOL
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SUN VALLEY, CA 91352

REVISIONS

JOB NUMBER

DRAWN BY **A.S., V.L.**

CHECKED BY **O.S.**

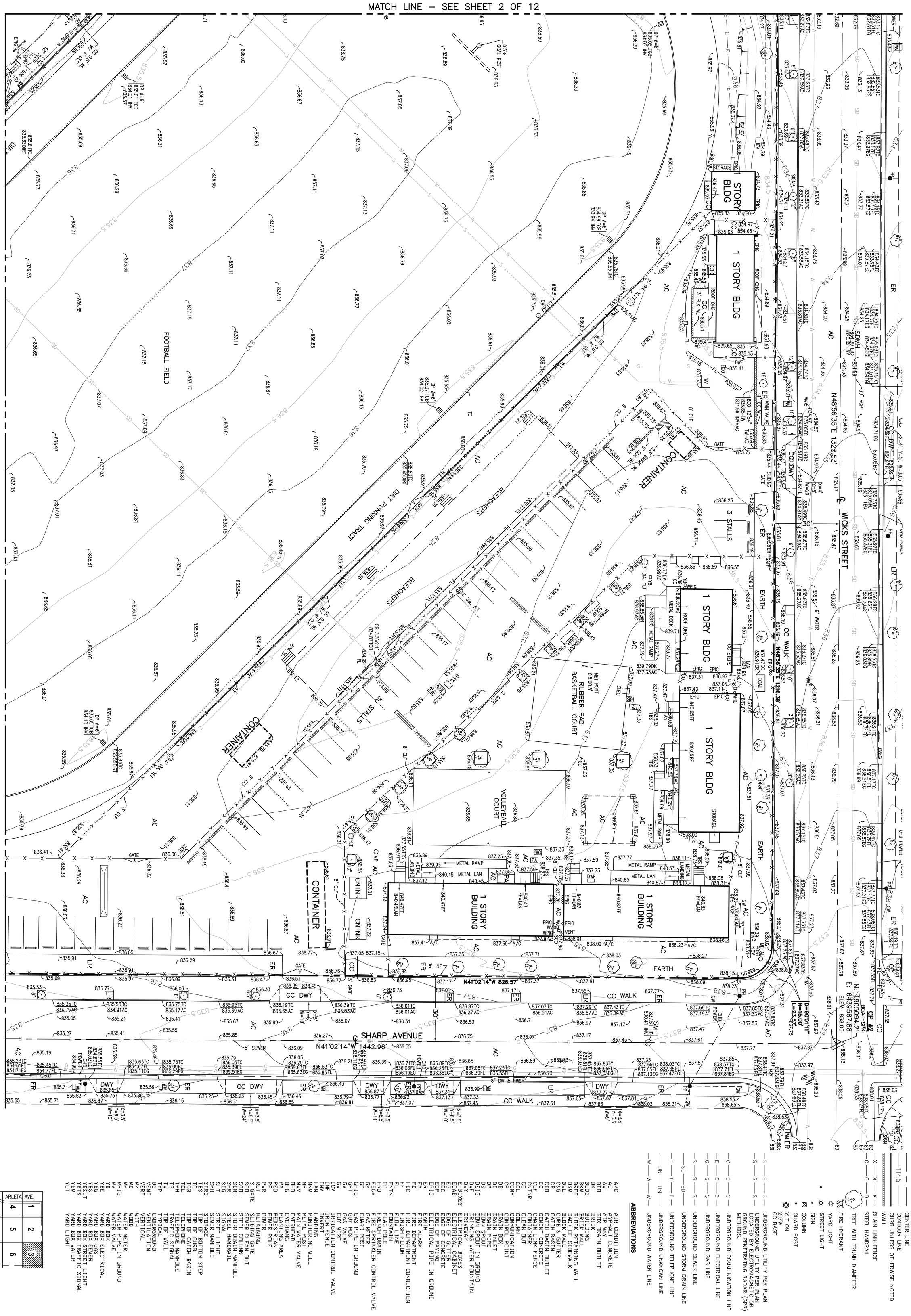
DATE **6-15-16**

DRAWING NO. **2**

INDEX NO. **2/12**

LOS ANGELES UNIFIED SCHOOL DISTRICT · BOARD OF EDUCATION

EXISTING FACILITIES DESIGN
FACILITIES SERVICES DIVISION
333 SOUTH BEAUDRY AVENUE, 22ND FLOOR
LOS ANGELES, CALIFORNIA 90017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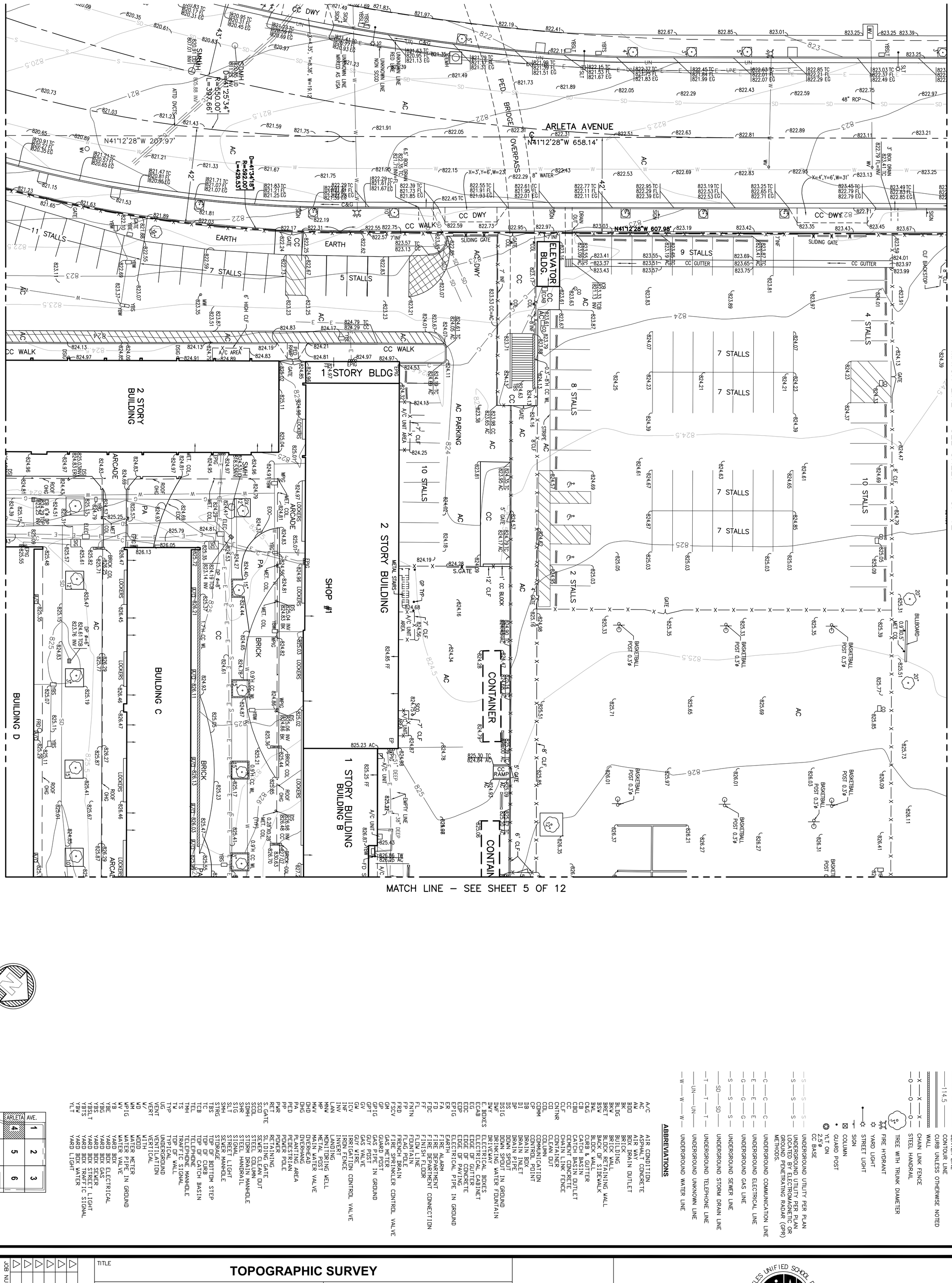
MATCH LINE – SEE SHEET 6 OF 12
1 STORY BLDG
1 STORY BLDG
1 STORY BLDG
1 STORY BUILDING
1 STORY BUILDING
CONTAINER
CONTAINER
CONTAINER
STORAGE
3 STALLS
30 STALLS
BLEACHERS
BLEACHERS
DIRT RUNNING TRACT
FOOTBALL FIELD
VOLLEYBALL COURT
BASKETBALL COURT
RUBBER PAD
SHARP AVENUE
N41°02'14"W 1442.96'
N41°02'14"W 826.57'
N48°56'35"E 1323.53'
N48°56'35"E 1216.38'
WICKS STREET
EARTH
CC WALK
CC DWY
DWY
ER
AC
CC
CC STEPS
ROOF OHG
METAL RAMP
METAL LAN
METAL LANDING
TBS
STORAGE
MAIN VALVE
SIGN
GATE
SLIDING GATE
ICV
WP
WPIG
YB
YBPIG
YBW
YBS
YBSLT
YBTS
YLT
SDMH
CNTNR
CNTNR
CNTNR
CP #2
N: 1905094.21
E: 6439587.88
ELEV: 838.05
BOAT SPK
D=90°01'11"
R=15.00'
L=23.57'
DP ø=6"
835.01 TCB
834.01 INV
DP ø=6"
835.05 TCB
834.05 INV
DP ø=6"
834.99 TCB
833.94 INV
DP ø=6"
835.07 TCB
834.02 INV
DP ø=6"
835.05 TCB
834.10 INV
0.5'ø GOAL POST
WET POST 0.5'X0.5'
12" DIA YLT
4' DIA YLT
4 DIA YLT
CB 3.3'x2.1'
834.87 TCB
834.99 FL
8" SEWER
8" DW & PWS
30" RCP
39" RCP
12" ø
6" ø
8" ø
10" ø
18" ø
24" ø
36" ø
42" ø
5' ø
3' DIA
4' DIA
4'x4'
5'x5'
3'x3'
C6 0.5 W
C6 0.5 4 DF
C6 0.5 W 4 DF
W/ 4 DF
W/ 4 DFHS
W/ 4 DFHS-W
18" DCDP
EPIG
ROOF OHG
3' BLK WL
2.5' BRICK WL
8' CLF
8' CLF
8' CLF



SCALE: 1" : 20'

20 10 0 20 40 60

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REVISIONS

JOB NUMBER

DRAWN BY **A.S., V.L.**

CHECKED BY **O.S.**

DATE **6-15-16**

DRAWING NO. **4**

INDEX NO. **4/12**

TITLE

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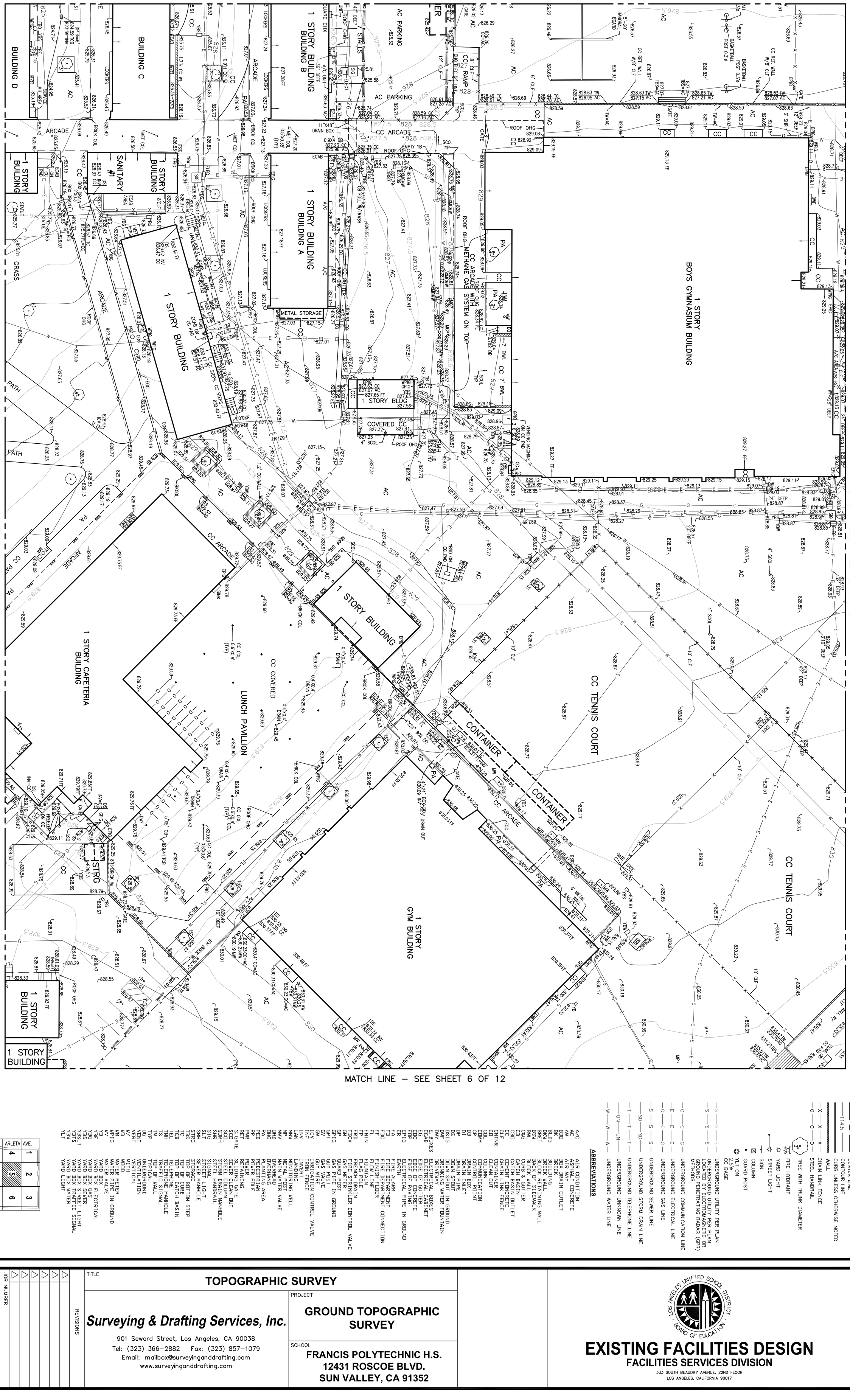
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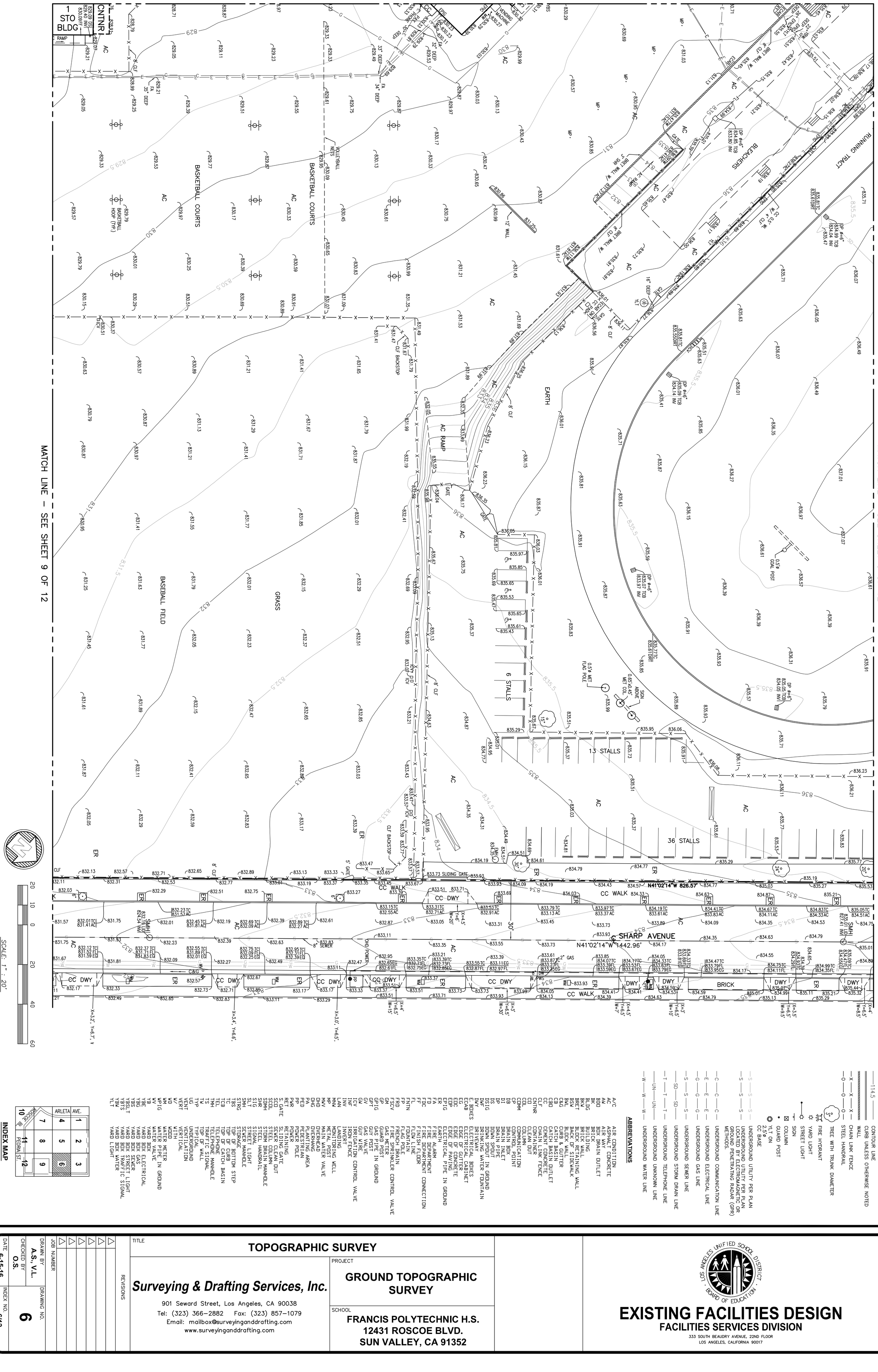
BUILDING B
1 STORY BUILDING
BUILDING C
1 STORY BUILDING
BUILDING D
1 STORY BOYS GYMNASIUM BUILDING
1 STORY GYM BUILDING
1 STORY CAFETERIA BUILDING
LUNCH PAVILLION
CC TENNIS COURT
CC TENNIS COURT
CC COVERED
CC ARCADE
CC ARCADE METHANE GAS SYSTEM ON TOP
ARCADE
ARCADE
ARCADE
CONTAINER
CONTAINER
METAL STORAGE
1 STORY BLDG
COVERED CC
SANITARY #1
AC PARKING
AC PARKING
8' CLF
12' CLF
CC RET. WALL W/8' CLF
BASKETBALL POST 0.3ø
5'-20' HANDRAIL BOARD
BASKETBALL POST 0.3ø
CC RET. WALL W/8' CLF
8' CLF
7 STALLS
CC RAMP
11"X48" DRAIN BOX
0.9X4 DB
ROOF OHG
EMPTY YB
ROOF OHG
ROOF OHG
ROOF OHG



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SCHOOL

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REVISIONS

JOB NUMBER

DRAWN BY **A.S., V.L.**

CHECKED BY **O.S.**

DRAWING NO. **6**

DATE **6-15-16**

INDEX NO. **6/12**

LOS ANGELES UNIFIED SCHOOL DISTRICT · BOARD OF EDUCATION

EXISTING FACILITIES DESIGN

FACILITIES SERVICES DIVISION

333 SOUTH BEAUDRY AVENUE, 22ND FLOOR
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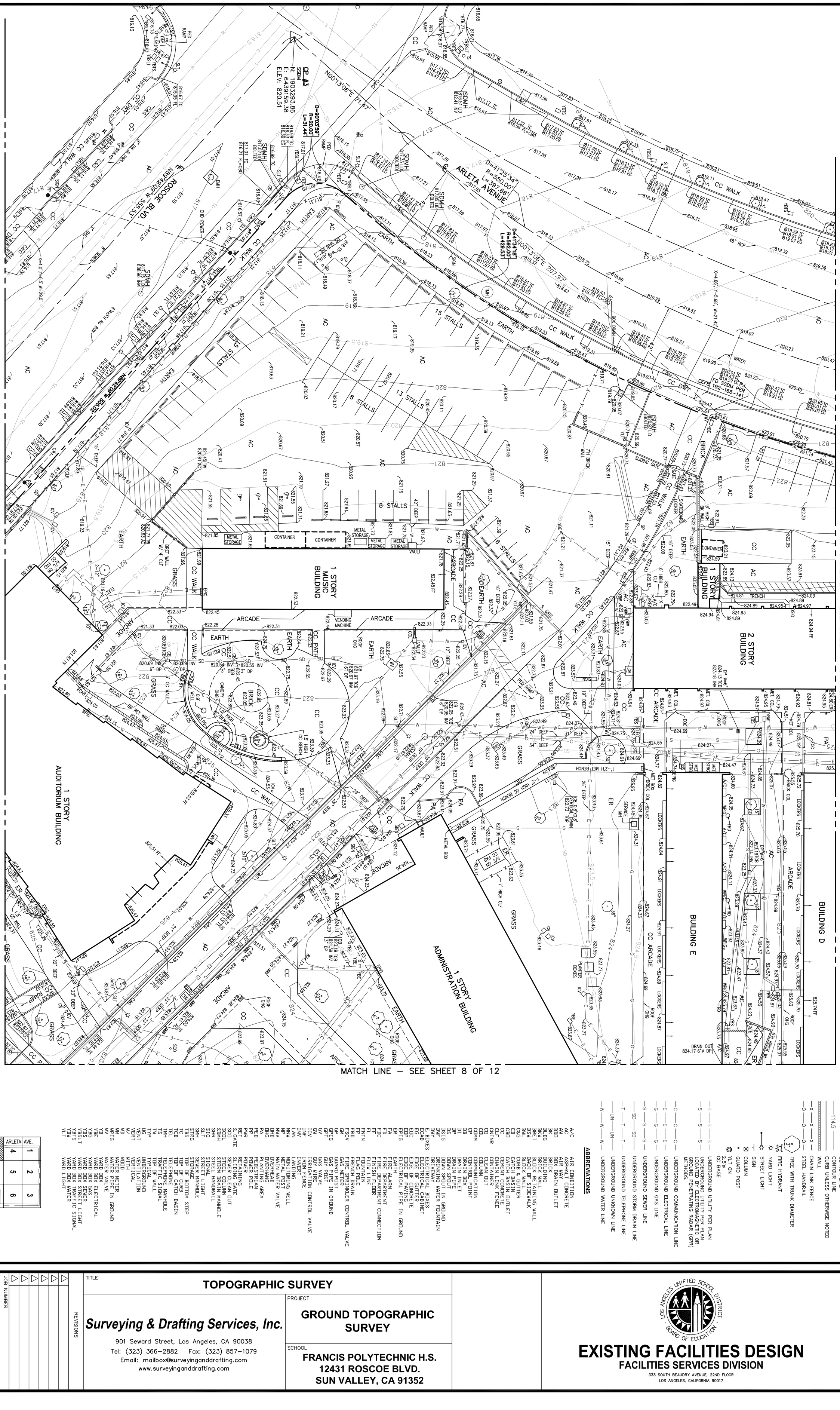

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YBSLT	YARD BOX STREET LIGHT
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YBW	YARD BOX WATER
YLT	YARD LIGHT

INDEX MAP

TITLE

TOPOGRAPHIC SURVEY

Surveying & Drafting Services, Inc.
901 Seward Street, Los Angeles, CA 90038
Tel: (323) 366-2882 Fax: (323) 857-1079
Email: mailbox@surveyinganddrafting.com
www.surveyinganddrafting.com

PROJECT

GROUND TOPOGRAPHIC SURVEY

SCHOOL

FRANCIS POLYTECHNIC H.S.
12431 ROSCOE BLVD.
SUN VALLEY, CA 91352

REVISIONS

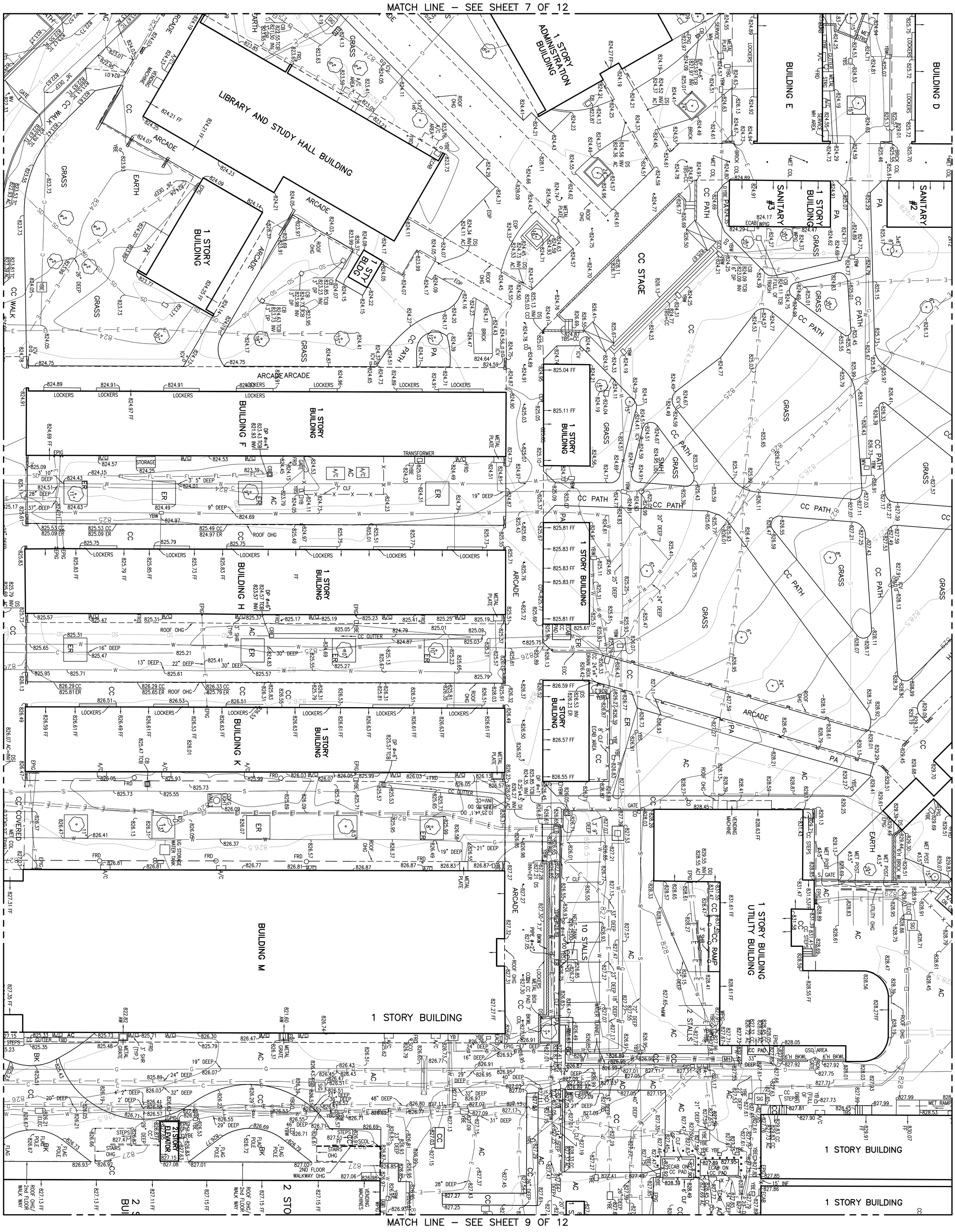
JOB NUMBER	
DRAWN BY	A.S., V.L.
CHECKED BY	O.S.
DATE	6-15-16
DRAWING NO.	7
INDEX NO.	7/12

LOS ANGELES UNIFIED SCHOOL DISTRICT · BOARD OF EDUCATION ·

EXISTING FACILITIES DESIGN

FACILITIES SERVICES DIVISION

333 SOUTH BEAUDRY AVENUE, 22ND FLOOR
LOS ANGELES, CALIFORNIA 90017



LEGEND

- PROPERTY LINE
- CENTER LINE
- 114.5 CONTOUR LINE
- CURB UNLESS OTHERWISE NOTED
- WALL
- X X X CHAIN LINK FENCE
- O O O STEEL HANDRAIL
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ABBREVIATIONS

A/C AIR CONDITION
AC ASPHALT CONCRETE
AW AIR WAY
BDD BOX DRAIN OUTLET
BK BRICK
BLDG BUILDING
BKW BRICK WALL
BRET BLOCK RETAINING WALL
BSW BACK OF SIDEWALK
BWL BLOCK WALL
C&G CURB & GUTTER
CB CATCH BASIN
CBD CATCH BASIN OUTLET
CC CEMENT CONCRETE
CLF CHAIN LINK FENCE
CNTNR CONTAINER
CO CLEAN OUT
COL COLUMN
COMM COMMUNICATION
CP CONTROL POINT
DB DRAIN BOX
DI DRAIN INLET
DP DRAIN PIPE
DS DOWN SPOUT
DSIG DOWN SPOUT IN GROUND
DWF DRINKING WATER FOUNTAIN
DWY DRIVEWAY
E. BOXES ELECTRICAL BOXES
ECAB ELECTRICAL CABINET
EG EDGE OF GUTTER
EDC EDGE OF CONCRETE
EDP EDGE OF PAVING
EPIG ELECTRICAL PIPE IN GROUND
ER EARTH
FA FIRE ALARM
FD FIRE DEPARTMENT
FDC FIRE DEPARTMENT CONNECTION
FF FINISH FLOOR
FL FLOW LINE
FNTN FOUNTAIN
FP FLAG POLE
FRD FRENCH DRAIN
FSCV FIRE SPRINKLER CONTROL VALVE
GM GAS METER
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GPIG GAS PIPE IN GROUND
GPT GUY POST
GV GAS VALVE
GW GUY WIRE
ICV IRRIGATION CONTROL VALVE
INF IRON FENCE
INV INVERT
LAN LANDING
MNW MONITORING WELL
MP METAL POST
MWV MAIN WATER VALVE
OHD OVERHEAD
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PED PEDESTRIAN
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PWR POWER
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TCB TOP OF CATCH BASIN
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TMH TELEPHONE MANHOLE
TS TRAFFIC SIGNAL
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VERT VERTICAL
W/ WITH
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EXISTING FACILITIES DESIGN

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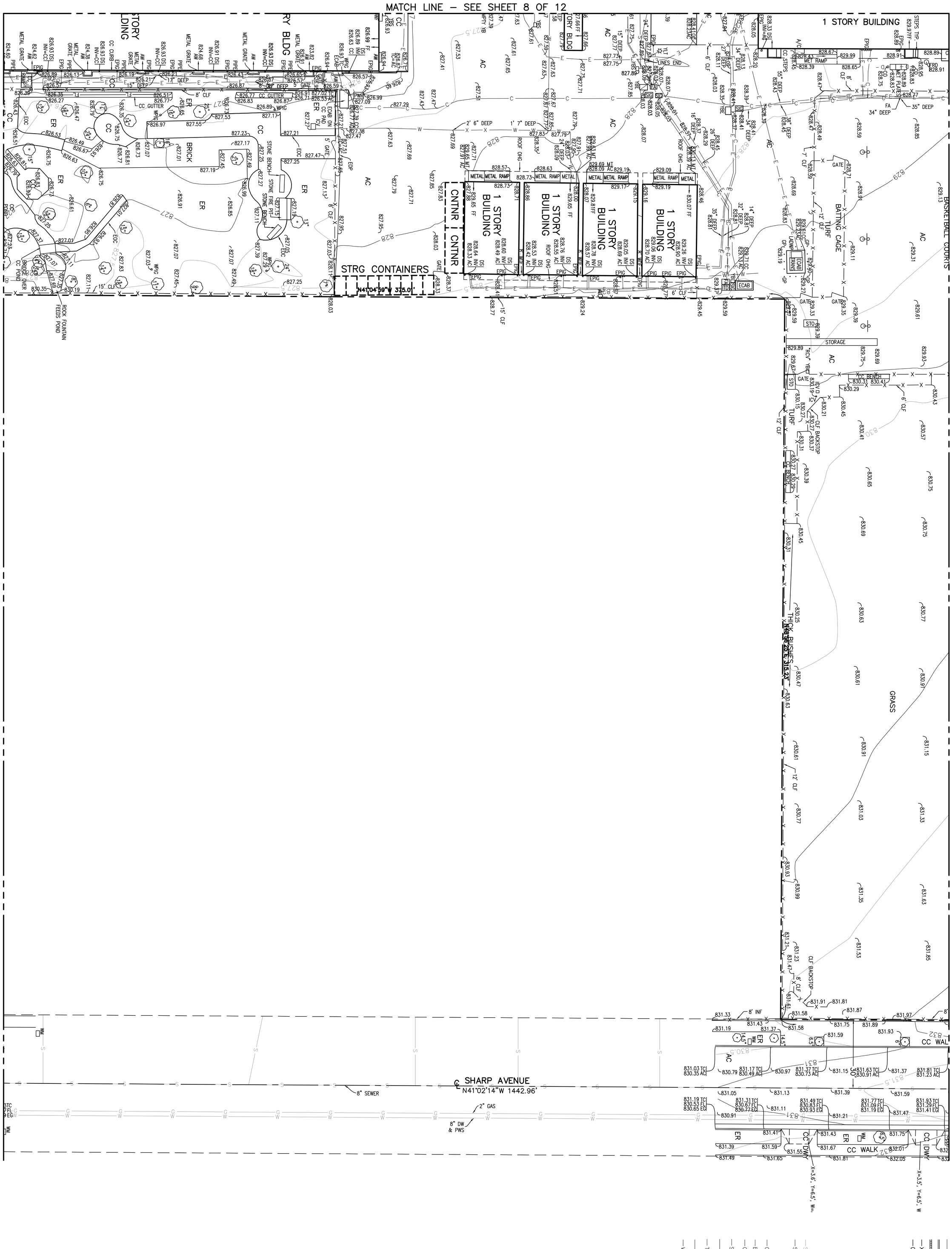
333 SOUTH BEAUDRY AVENUE, 22ND FLOOR
LOS ANGELES, CALIFORNIA 90017

MATCH LINE – SEE SHEET 8 OF 12



MATCH LINE – SEE SHEET 6 OF 12

MATCH LINE – SEE SHEET 12 OF 12

LEGEND

- PROPERTY LINE
- CENTER LINE
- 114.5 CONTOUR LINE
- CURB UNLESS OTHERWSE NOTED
- WALL
- X X X CHAIN LINK FENCE
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ABBREVIATIONS

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AC	ASPHALT CONCRETE
AW	AIR WAY
BDD	BOX DRAIN OUTLET
BK	BRICK
BLDG	BUILDING
BKW	BRICK WALL
BRET	BLOCK RETAINING WALL
BSW	BACK OF SIDEWALK
BWL	BLOCK WALL
C&G	CURB & GUTTER
CB	CATCH BASIN
CBD	CATCH BASIN OUTLET
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CLF	CHAIN LINK FENCE
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FF	FINISH FLOOR
FL	FLOW LINE
FNTN	FOUNTAIN
FP	FLAG POLE
FRD	FRENCH DRAIN
FSCV	FIRE SPRINKLER CONTROL VALVE
GM	GAS METER
GP	GUARD POST
GPIG	GAS PIPE IN GROUND
GPT	GUY POST
GV	GAS VALVE
GW	GUY WIRE
ICV	IRRIGATION CONTROL VALVE
IRDN	IRON FENCE
INF	INVERT
INV	LANDING
LAN	MONITORING WELL
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TEL	TRAFFIC SIGNAL
TMH	TOP OF WALL
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TW	UNDERGROUND
TYP	VENTILATION
UG	VERTICAL
VENT	WITH
VERT	WOOD
W/	WATER METER
WD	WATER PIPE IN GROUND
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YBW	
YLT	

INDEX MAP

1	2	3	ARLETA AVE.
4	5	6	
7	8	9	ROSCOE BL.
10	11	12	PEORIA ST.

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JOB NUMBER

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DATE **6-15-16**

DRAWING NO. **9**

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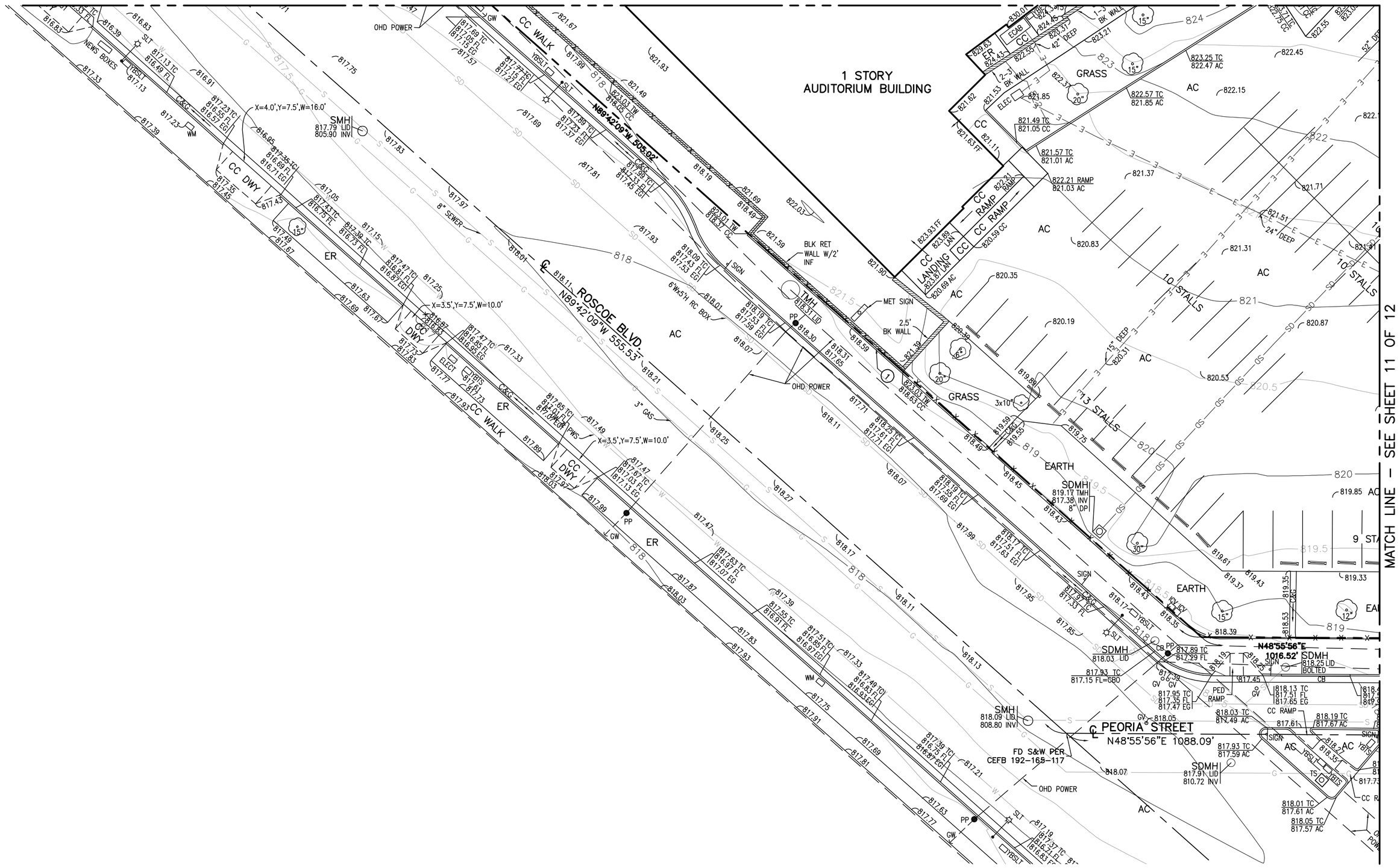
MATCH LINE – SEE SHEET 7 OF 12
MATCH LINE – SEE SHEET 11 OF 12
1 STORY
AUDITORIUM BUILDING
℄ ROSCOE BLVD.
N89°42'09"W 555.53'
℄ PEORIA STREET
N48°55'56"E 1088.09'
N48°55'56"E
1016.52'
FD S&W PER
CEFB 192-168-117
SMH
817.79 LID
805.90 INV
SDMH
819.11 TMH
817.68 INV
8" DP
SDMH
819.1Y TMH
817.38 INV
8" DP
SDMH
818.03 LID
817.93 TC
817.15 FL-CBO
SDMH
818.09 LID
808.80 INV
SDMH
817.91 LID
810.72 INV
SDMH
818.25 LID
808.11 INV
BLK RET
WALL W/2'
INF
2.5'
BK WALL
MET SIGN
6'W5'H RC BOX
OHD POWER
GRASS
EARTH
AC
CC WALK
CC DWY
CC RAMP
CC LANDING
CC RAMP
ER
CB
PP
SIGN
PED RAMP
10 STALLS
13 STALLS
9 STALLS
X=4.0',Y=7.5',W=16.0'
X=3.5',Y=7.5',W=10.0'
X=3.5',Y=7.5',W=10.0'
6" SEWER
3" GAS
WM
GV
SLT
CBO
CC
DWY
CONC
PIPE
SIGN
817.75
817.83
817.89
817.93
818.03
818.07
818.11
818.17
818.21
818.25
818.27
818.33
818.37
818.43
818.49
818.53
818.61
818.75
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819.37
819.43
819.61
819.85
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820.35
820.53
820.83
820.87
821.31
821.37
821.51
821.71
821.83
821.85
822.03
822.15
822.45
822.55
822.57 TC
821.85 AC
823.25 TC
822.47 AC
822.21 RAMP
821.03 AC
821.49 TC
821.05 CC
821.57 TC
821.01 AC
823.31 FF
823.09 TW
821.59 LAN
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820.69 AC
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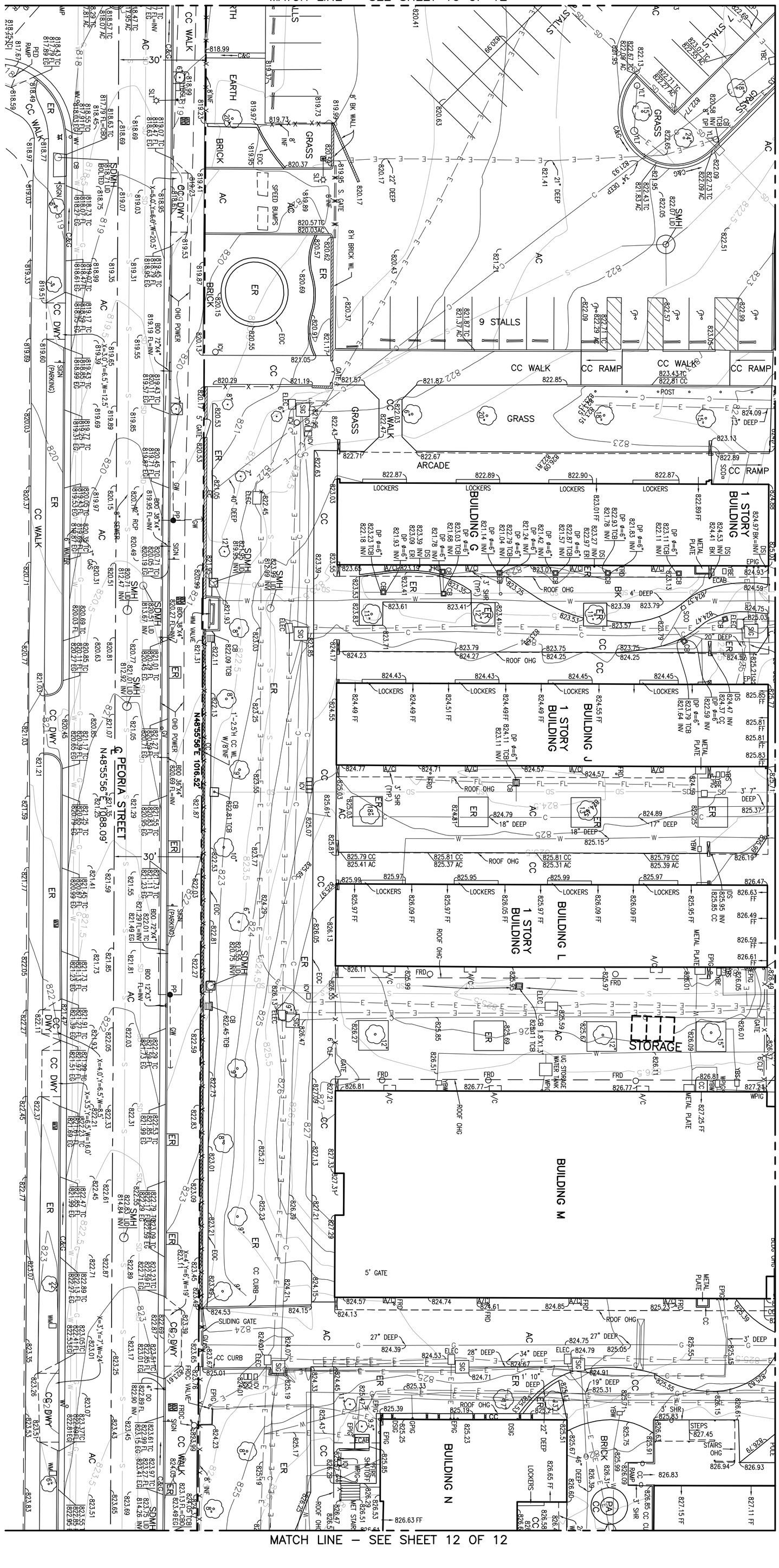
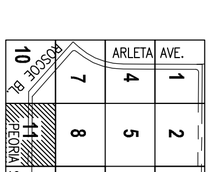


INDEX MAP



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INDEX NO. **11/12**

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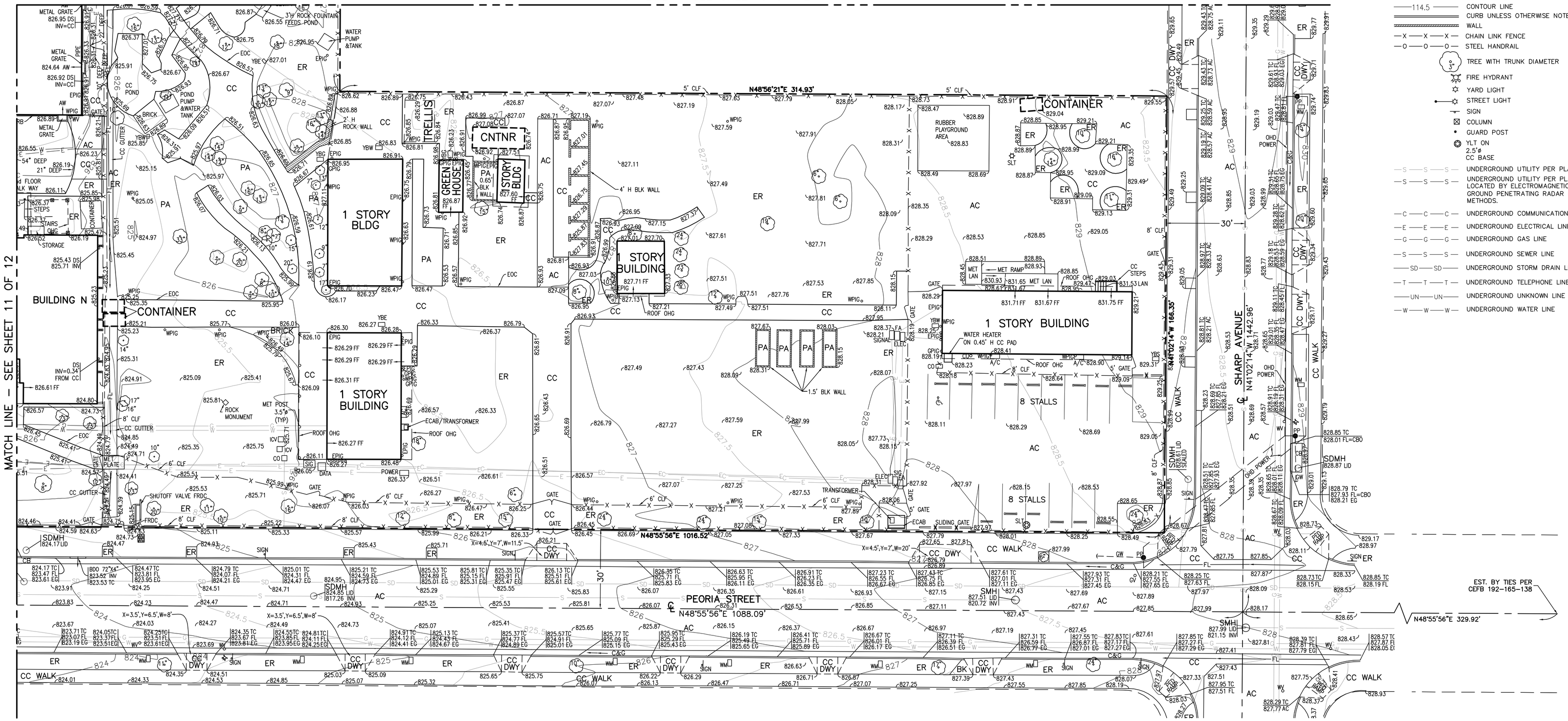

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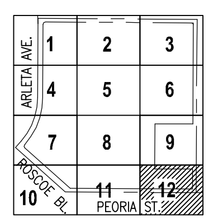

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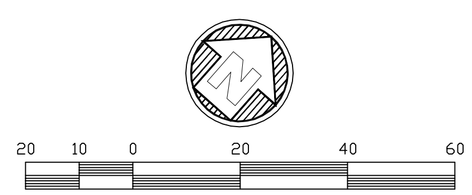

SCALE: 1" : 20'

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EXISTING FACILITIES DESIGN

FACILITIES SERVICES DIVISION

333 SOUTH BEAUDRY AVENUE 23RD FLOOR
LOS ANGELES, CALIFORNIA 90017

TITLE: TOPOGRAPHIC SURVEY

PROJECT: GROUND TOPOGRAPHIC SURVEY

SCHOOL: FRANCIS POLYTECHNIC H.S.
12431 ROSCOE BLVD.
SUN VALLEY, CA 91352

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REVISIONS

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JOB NUMBER

DRAWN BY: A.S., V.L.	DRAWING NO.: 12
CHECKED BY: O.S.	
DATE: 6-15-16	INDEX NO.: 12/12

PHASE I ENVIRONMENTAL QUESTIONNAIRE

SITE NAME: Fancis Polytechnic HS

ADDRESS: 12431 Roscoe Blvd
Sun Valley, CA

Preparer: Ray Parreras - Plant Manager (By interview)

Note: Preparer must be Applicant, Seller, or Occupant

Please check or circle the appropriate response, and comment/ explain any "Yes" answers on the last page following Question #25

1. What is the current use of the property?
   - ( ) Residential- Single Family
   - ( ) Residential- Multi-Family
   - ( ) Commercial
   - ( ) Industrial/ Manufacturing
   - ( ) Unimproved/ Raw Land
   - ( ) Agriculture
   - (x) Other

2. What is the age of the structure?
   - ( ) Built in or before 1980
   - ( ) Built after 1980

If Q2 is answered "built prior to 1980," and Q1 answered "Residential":

2a. Do you believe asbestos may be present in the structure?
   - (x) Yes
   - ( ) No
   - ( ) Unknown

2b. Is it possible that lead-based paint has been used on the structure?
   - (x) Yes
   - ( ) No
   - ( ) Unknown

If Q2b is answered "yes":

2c. Are any of the painted surfaces flaked or chipped?
   - ( ) Yes
   - ( ) No
   - ( ) Unknown

*- per ASTM 1528-96, Transaction Screen Questionnaire

If Q2 is answered "built prior to 1980" and Q1 is answered "Commercial":

2d. Has an asbestos survey ever been conducted?
- (X) Yes
- ( ) No
- ( ) Unknown

If Q2d is answered "Yes":

What were the results of this survey?
- ( ) Asbestos present and removed
- (X) Asbestos present and being managed
- ( ) Asbestos present and nothing being done
- ( ) Asbestos not present

2e. Does the building have fluorescent light fixtures?
- (X) Yes
- ( ) No

If Q2e is answered "Yes":

2f. Is it possible these fixtures have ballasts containing PCBs?
- ( ) Yes
- ( ) No
- ( ) Unknown

3. What is the intended use of the property?
- ( ) Residential-Single Family
- ( ) Residential- Multi-Family
- ( ) Commercial
- ( ) Industrial/ Manufacturing
- ( ) Unimproved/ Raw Land
- ( ) Agriculture
- ( ) Other

4.* Is the property currently used, or has it previously been used, as any other the following: an industrial or manufacturing operation, a gasoline station, a motor repair facility, a commercial printing facility, a dry cleaners, a photo-developing laboratory, a junkyard or a landfill, or as a waste treatment, storage, disposal, processing or recycling facility?
- ( ) Yes
- ( ) No
- ( ) Unknown

5* Are any adjoining properties currently used, or have they previously been used as any of the following: an industrial or manufacturing operation, a gas station, a motor repair facility, a commercial printing facility, a dry cleaners, a photo developing laboratory, a junk yard or a landfill, or as a waste treatment storage, disposal processing, or recycling facility?

( ) Yes
( ) No
( ) Unknown

6.* Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, pesticides, paints or other chemicals in individual containers of greater than five gallons in volume or fifty gallons in aggregate, stored on or used at the property?

( ) Yes
( ) No
( ) Unknown

7.* Are there currently, or have there been previously, any industrial drums (typically 55 gallons) or sacks of chemicals located on the property?

( ) Yes
( ) No
( ) Unknown

8.* Has fill material been brought to the site?

( ) Yes
( ) No
( ) Unknown

If Q8 is answered "Yes":

8a. What type of fill material?

( ) Construction debris
( ) Trash
( ) Clean soil
( ) Potentially contaminated soil
( ) Unknown origin

9.* Are there currently, or have there been previously, any pits, ponds or lagoons on the property connected with waste treatment or waste disposal?

( ) Yes
( ) No
( ) Unknown

10* Are there currently, or have there been previously, any underground storage tanks on the property?

( ) Yes
( ) No

( ) Unknown

If Q10 is answered "Yes":

10a. Were any tanks installed post-1988?
( ) Yes
(X) No

If Q10a is answered "Yes":

10b. Has leak detection equipment been installed with the tank?
( ) Yes
( ) No

10c. Did any tanks replace an old tank?
( ) Yes
( ) No

If Q10c is answered "Yes":

10d. Was contamination found when the old tank was removed?
( ) Yes
( ) No

If Q10d is answered "Yes:

10e. Was the contamination cleaned up?
( ) Yes
( ) No

If Q10e is answered "Yes":

10f. Did regulatory authorities approve the cleanup?
( ) Yes
( ) No

If Q10a is answered "No":

10g. Has the tank been tested for leaks?
( ) Yes
( ) No

If Q10b is answered "Yes":

10h. Did the tank fail the tightness test?
( ) Yes
( ) No

10i. Are on-site personnel aware of any leaks or spills?

( ) Yes
( ) No

If Q10i is answered "Yes":

10j. Was the leak or spill cleaned?
( ) Yes
( ) No

10k. Did regulatory authorities approve the cleanup?
( ) Yes
( ) No

11.* Are there currently, or have there been previously, any above ground storage tanks on the property?
( ) Yes
( ) No
( ) Unknown

If Qll is answered "Yes":

11a. Has the tank ever leaked or has there ever been a spill?
( ) Yes
( ) No
( ) Unknown

If Qlla is answered "Yes";

11b. Was the leak or spill cleaned?
( ) Yes
( ) No

11c. Were regulatory authorities notified?
( ) Yes
( ) No

12.* Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are, or have been, stained by substances other than water or which are emanating foul orders?
( ) Yes
( ) No
( ) Unknown

13.* Is there currently, or has there been previously, any stained soil on the property?
( ) Yes
( ) No
( ) Unknown

14. Has groundwater under the property been tested?
( ) Yes
( ) No

If Q14 is answered "Yes":

14a. Have any contaminants been identified which exceed State or Federal standards?
( ) Yes
( ) No

14b. Has the water been designated as contaminated by any governmental agency?
( ) Yes
( ) No

15. Is the property served, or has the property been served, by a private well?
( ) Yes
( ) No

16. Are there any groundwater monitoring wells on the property?
( ) Yes
( ) No

17.* Are you aware of any environmental liens or governmental notification relating to past or current violations of environmental laws with respect to the property, to any facility located on the property, or on any properties in the vicinity?
( ) Yes
( ) No

18.* Has an environmental assessment ever been performed on the property?
( ) Yes
( ) No

If Q18 is answered "Yes":

18a. Did the environmental assessment indicate the presence of any potential contamination?
( ) Yes
( ) No

If 18a is answered "Yes":

18b. Was the contamination cleaned up?
( ) Yes
( ) No

19.* Are you aware of any environmental litigation or administrative action related to a release or threatened release of any hazardous substance or petroleum product involving the property or an abutting property?
( ) Yes
( ) No
( ) Unknown

20.* Other than storm water or water discharged into a sanitary sewer system, does the property discharge waste water onto the subject property or onto any adjacent Property?
( ) Yes
( ) No
( ) Unknown

21. Are there any septic systems, dry wells or leach fields on the property?
( ) Yes
(X) No
( ) Unknown

If Q21 is answered "Yes":

21a. Have hazardous substances or petroleum products ever been discharged to these systems?
( ) Yes
( ) No

22.* Have any demolition debris, hazardous substances, petroleum products, unidentified waste materials, automotive or industrial batteries, tires, trash or refuse been dumped, buried and/or burned on the property?
( ) Yes
(X) No
( ) Unknown

23.* Is there a transformer, capacitor or any hydraulic equipment on the property?
(X) Yes
( ) No

If Q23 is answered "Yes":

23a. Do records indicate the presence of PCBs?
( ) Yes
( ) No
( ) Unknown

If Ql was answered "Residential:

24. Has the presence of radon been reported on the property?
( ) Yes
( ) No
( ) Unknown

If Q24 is answered "Yes":

24a. Has a radon-in-air test been conducted?
( ) Yes
( ) No

24b. Was the radon at an acceptable level (less than 4 picocuries per liter)?
( ) Yes
( ) No

If Q24b is answered "No":

24c. Was a system installed to reduce radon levels?
( ) Yes
( ) No

If Ql was answered "Unimproved":

25. Are there wetlands on the property?
( ) Yes
( ) No

26.* Are there currently or have there ever been drinking water wells on the property?
( ) Yes
( ) No

If Q26 is answered Yes:

26a. Have contaminants been identified that exceed state or federal drinking water guidelines?
( ) Yes
( ) No

27.* Is the property listed on any state or federal government record systems (e.g., CERCLIS, RCRIS, NPL, State List, LUST, Spills, Landfills)?

( ) Yes
( ) No

COMMENTS/ EXPLANATIONS SECTION

The undersigned acknowledges and agrees that the client may rely upon the forgoing information and statements, that such reliance is reasonable and that such information and statements are a material inducement to the client to enter into or deny a credit facility with the undersigned. If said information and statements later prove to be false, misleading or inaccurate in any material respect, the parties under-stand that the client may declare a default of any obligations with the undersigned to take other action as the client, in its sole discretion, deems appropriate.

Signature: By interview Date: 7/21/16

Appendices

E-2.

Preliminary Environmental Assessment Equivalent

Appendices

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PEA EQUIVALENT REPORT

John H. Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA 91352

CES Group
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Temecula, CA 92592
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May 9, 2017

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APPENDICES

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LIST OF ABBREVIATIONS/ACRONYMS

ACM - asbestos containing material

AIN - Assessor's ID Number

APN – Assessor's parcel number

amsl - above mean sea level

bgs - below ground surface

Cal/EPA - California Environmental Protection Agency

CHHSL – California Human Health Screening Level

COPC - Chemical of potential concern

District - Los Angeles Unified School District

DTSC - Department of Toxic Substances Control

EPA – Environmental Protection Agency

ESA - Environmental Site Assessment

HASP - Site-specific health and safety plan

LAUSD - Los Angeles Unified School District

LBP - lead-based paint

OCPs - Organochlorine Pesticides

OEHS - Office of Environmental Health and Safety

PCBs - Polychlorinated Biphenyls

PEA - Preliminary Environmental Assessment Equivalent Document

PPE - Personal protective equipment

STLC – soluble threshold limit concentration

REC - Recognized environmental condition

TPH – Total petroleum hydrocarbons

ZIMAS – Zone Information Map Access System

1.0 EXECUTIVE SUMMARY

This Preliminary Environmental Assessment (PEA) Equivalent Document summarizes historical site land use and outlines the approach utilized and data collected as part of the recently concluded assessment conducted for John H. Francis Polytechnic High School, located at 12431 Roscoe Blvd, Sun Valley, California (Site).

The Subject Property consists of approximately 47 acres and is developed with multiple structures that comprise Francis Polytechnic High School. The Site consists of a main office building, a school library, an auditorium, two gymnasiums, a cafeteria, maintenance building, athletic fields, and classroom buildings. The property is a mixture of paved and unpaved areas, small planters, and athletic field space. Byrd Middle School is located to the west of the property, Sheldon Arleta Park and former landfill is located to the northwest, and residential areas are located northeast, east and south. Commercial businesses are also located to the south of the Site.

The former Sheldon-Arleta Landfill is located to the north of the Site. Because of the former landfill, there is currently a monitoring and mitigation system in place at the Site. The main component of this mitigation system is an active positive pressure methane suppression system connected to wells near the gymnasiums.

The primary objectives of this PEA were to assess shallow soil for potential environmental concerns identified in CES Group's Phase I Environmental Site Assessment (ESA) conducted in September 2016, and to evaluate the overall Site health risk based on soil analytical screening results for chemicals of potential concern (COPCs), including lead, arsenic, organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH), and volatile organic compounds (VOCs).

Between December 29, 2016 and February 11, 2017, soil samples were analyzed from a total of 109 locations advanced to a maximum depth of 2.5 feet below ground surface (bgs) using hand auger methods. Boring locations are shown on Figures 3 through 12. Soil samples were collected from 0.5, 1.5 and 2.5 feet and select samples were analyzed for COPCs. The soil matrix analytical results (Tables 2-5) indicate that elevated levels of lead were detected at one location during initial screening. Additional step-out borings were advanced to define this area of impact.

Evaluation of the analytical results presented in this report show the data to be of acceptable quality. CES Group recommends removal of impacted soil to bring health risk to acceptable levels.

2.0 INTRODUCTION

This Preliminary Environmental Assessment (PEA) Equivalent Document summarizes historical site land use and outlines the approach utilized and data collected during site assessment activities at the John H. Francis Polytechnic High School, located at 12431 Roscoe Blvd, Sun Valley, California (Site). The purpose of the assessment was to

determine if the Site's surficial soils were impacted with contaminants of potential concern.

This report was prepared by CES Group on behalf of the Los Angeles Unified School District (LAUSD). The data provided in this report is based on information obtained during CES Group's Phase I investigation of the site. The site location is shown on Figures 1 and 2.

2.1 Site Description

The Site is known as the John H. Francis Polytechnic High School and is located at 12431 Roscoe Blvd, Sun Valley, California. The Property is located at the northeast intersection of Arleta Avenue and Roscoe Boulevard. It is comprised of assessor parcel number (APN) 2634-019-900 and is 47 acres.

The Site is improved with a high school including a main office building, a school library, an auditorium, two gymnasiums, a cafeteria, maintenance building, athletic fields, and classroom buildings. The property is a mixture of paved and unpaved areas, small planters, and athletic field space. The property is located within a largely residential and commercial area and is zoned Z1 for Public Facilities.

According to the City of Los Angeles Department of Building and Safety, the first construction at the Property was completed in 1956 with subsequent additions and renovations. This information is confirmed by historic aerial photographs of the Site. There is currently Byrd Middle School to the west, Sheldon Arleta Park and former landfill to the northwest, and residential areas to the northeast, east and south.

Demolition is planned for the following buildings:

- Administration
- Boys' Gymnasium
- Girls' Gymnasium
- Cafeteria & Lunch Shelter
- Music
- Auditorium
- Library & Study Hall
- Math & Science
- Student Store & Concessions
- Utility
- Restrooms/Sanitary

Approximately 16 classrooms located in relocatable and modular buildings

2.2 Background

John H. Francis Polytechnic High School is an active high school. The school was opened in 1956 and has operated continuously since that date. The former Sheldon-Arleta Landfill is located to the north of the site. This landfill operated from 1962 until 1974 and is located in a former gravel pit used to mine construction materials prior to the conversion to a landfill. The former landfill had an active methane

collection system in operation that was connected to a cogeneration plant which generated electrical power using the landfill methane gas. The former landfill had an extensive monitoring system in place that included vapor monitoring points along Wicks Street, which is the northwest border of the school site and an active positive pressure methane suppression system connected to wells near the gymnasiums. As of 2012, the landfill gas collection system was placed underground to allow reclamation of the landfill for use as a recreational park. There is currently an extensive monitoring and mitigation system in place at the landfill and at the Site. The landfill gas collection system is permitted by SCAQMD and overseen by the Bureau of Sanitation. City staff continues to monitor and tune the well field on a regular basis. Construction activities at the landfill are ongoing.

2.3 Regional Geology and Hydrogeology

The Site is located within the eastern portion of the San Fernando Valley. The San Fernando Valley is an elliptical-shaped alluvium-filled basin, approximately 23 miles wide and 12 miles long, formed by deposition from streams and rivers that have transported sediments from the surrounding upland areas. The alluvium is mainly derived from the Santa Monica Mountains to the south, the Santa Susana Mountains to the northwest, the Simi Hills to the west, the San Gabriel Mountains to the northeast, and the Verdugo Mountains to the east.

Regionally, the Site is located within the Transverse Ranges geomorphic province. This province is characterized by east-west trending geologic structures that include the east-west trending Santa Monica Mountains and the east-west trending active San Fernando fault zone. The trend of the San Fernando Valley reflects the overall trend of the Transverse Ranges, where major structural features exhibit an east-west orientation in contrast to the northwest-southeast trend that dominates in the rest of California. The San Fernando Valley is an area of compression between the San Gabriel Mountains on the northeast and the Santa Monica Mountains on the south. The east-west trend is reflected by the nearby San Fernando fault zone located approximately 4.4 miles to the north-northeast. The closest active fault is the Verdugo fault, located approximately 1.2 mile northeast of the site.

The Site is located within the San Fernando Valley Groundwater Basin of the South Coast Hydrologic Region according to the California Department of Water Resources (DWR, 2003). According to the California Geological Survey, the historic-high groundwater level in the area is approximately 140 feet bgs (California Division of Mines and Geology, 1997). Water level measurements for Los Angeles County Well No. 4897 located 0.1 mile northwest of the site, indicate the most recent measured depth to groundwater was 328.8 feet bgs on December 3, 2009 (County of Los Angeles, 2015). This depth corresponds to a water surface elevation of 488.2 feet above mean sea level (MSL). The shallowest water recorded in this well was measured on August 3, 1993 with a depth of 186.9 and corresponding water surface elevation of 630.1 feet above MSL. This well has recorded groundwater from 1958 to 2009.

Geologic materials are reported to be fill to a depth of 4 feet underlain by Holocene-

and Pleistocene-age alluvial deposits. The alluvial deposits in the upper 4 to 6 feet consist of silty sand. Below a depth of 4 to 6 feet, the deposits generally consist of sand with gravel and cobbles.

According to the City of Los Angeles Zone Information Map Access System (ZIMAS), the Site is located nearest the Verdugo Fault in the Transverse Ranges and Los Angeles Basin. Shallow soil types in the area are classified as fine sandy loam, gravelly loam, sand, and silty clay. Deeper soil types are classified as stratified, clay loam, silty clay loam, gravelly sandy loam, coarse sand, sand, weathered bedrock, and very fine sandy loam.

Based on 2016 reports from the former landfill, hydraulic conductivity is estimated to be approximately 10 ft/day (silty sands). Depth to groundwater is approximately 360-470 feet bgs. No VOCs or SVOCs were detected in groundwater. Flow gradient occurs from Landfill Well 8 toward SA-1A and SA-3A. Based on maps that were located, there are at least 2 wells that could be considered Well 8. There is a MW-8 and also a NEW-8. Flow from either of these wells towards SA-1A and SA-3A would be in the west or southwest direction. The exact flow direction cannot be determined with current data, however a southerly flow direction would be consistent with the topography of the area.

2.4 Environmental Setting

A Phase I ESA was completed for the School property on September 22, 2016 by CES Group. The purpose of the Phase I ESA is to identify recognized environmental conditions (RECs) in order to assist in the evaluation of historical land use, assess potential environmental impacts on- and off-Site, and determine if any potential environmental impacts may pose a threat to on-Site occupants, off-Site individuals and the environment. No other environmental investigations for the School property were located during the Phase I ESA. Information pertaining to the Site as determined by the Phase I ESA is summarized below.

2.4.1 School Property

The Site is an active high school. The school was opened in 1956 and has operated continuously since that date. The former Sheldon-Arleta Landfill is located to the north of the Site. This landfill operated from 1962 until 1974 and is located in a former gravel pit used to mine construction materials prior to the conversion to a landfill. The former landfill had an active methane collection system in operation that was connected to a cogeneration plant which generated electrical power using the landfill methane gas. The former landfill had an extensive monitoring system in place that included vapor monitoring points along Wicks Street, which is the northwest border of the school site and an active positive pressure methane suppression system connected to wells near the gymnasiums. As of 2012, the landfill gas collection system was placed underground to allow reclamation of the landfill for use as a recreational park. There is currently an extensive monitoring and mitigation system in place at the landfill and at the Site. The landfill gas collection system is permitted by SCAQMD and overseen by the Bureau of Sanitation. City staff continues to monitor and tune the well field on a regular basis. Construction activities at the landfill are

ongoing.

2.4.2 Site

The purpose of the Assessment was to identify if there are any environmental issues that will need to be mitigated either prior to or during the proposed modernization project at John H. Francis Polytechnic High School. The proposed modernization project would consist of the demolition of 11 buildings and approximately 16 classrooms, and the construction of site upgrades including 41 classrooms and 6 buildings.

2.5 Discussion of Phase I ESA Items

The following RECs were identified during this assessment:

- The adjacent former landfill
- Arsenic. It was formerly common practice for the LAUSD to apply an arsenic-based herbicide to soil prior to paving. Due to this practice, it is possible that elevated arsenic concentrations could be present in the soils directly beneath the paved portions of the Site.

An environmental issue refers to environmental concerns identified by CES Group, which do not qualify as RECs; however, warrant further discussion. The following environmental issues were identified during the Phase I assessment:

- Lead-based paint. It is considered likely that the paint on the buildings contains or formerly contained elevated lead concentrations. Due to its slow deterioration with time, the paint typically flakes off and accumulates in the adjoining soils. This can result in elevated lead concentrations in the soil adjoining older buildings. Note that the on-site buildings have been mostly adjoined by pavement since 1956. As such, the potential that the soils underlying this pavement have been impacted with lead is considered relatively low. Relatively high lead concentrations, however, are anticipated in the planters that contain trees between the buildings, or any other unpaved areas adjoining the buildings.
- Fuel Bunker. Drums of gasoline, diesel, and contaminated gasoline were observed in a flammable materials storage room at the Site. Indications of releases from these fuel containers were not evident at the time of the assessment.
- Clarifiers. A clarifier was observed adjacent to the chemistry room and another clarifier was observed in the ceramics class.
- Pesticides**.** It is considered possible that persistent pesticides were formerly used within the Site, and may have impacted the surficial soils. Due to the lack of orchards and row crops, which are relatively heavy users of pesticides, elevated pesticide concentrations (greater than regulatory levels) are not anticipated at the Site.

3.0 SAMPLING ACTIVITIES

The PEA field sampling activities presented herein were conducted on December 29, 2016 and January 3, 4, 5, and 6, 2017. Step out samples were collected on February 11, 2017. The sampling objective was to assess chemicals of potential concern (COPCs) identified for shallow soil and soil vapor at the Site. The COPCs include lead, arsenic, organochlorine pesticides (OCPs), petroleum hydrocarbons, volatile organic compounds (VOCs), and Polychlorinated biphenyls (PCBs). The sampling consisted of the collection of select at-depth soil and soil vapor samples to screen shallow soil for COPCs. Field observations of the soil samples did not provide any indications of staining and/or odors.

3.1 Objectives

The objectives of the assessment were to:

- Assess shallow soil for potential environmental concerns identified in the Phase I ESA for the Site,
- Evaluate the presence of lead-based paint in planned construction areas by sampling exposed soil,
- Evaluate the presence of arsenic beneath asphalt in planned construction areas by sampling beneath the asphalt,
- Evaluate the presence of chlorinated pesticides across the Site,
- Evaluate the presence of PCBs across the Site, and
- Evaluate the overall Site health risk based on soil analytical screening results.

3.2 Utility Clearance

Prior to conducing intrusive Site activities, Spectrum Geophysical conducted a geophysical survey of the Site to locate detectable utilities and subsurface anomalies. The locations of the utilities were marked and boring locations were adjusted based on these results.

3.3 Health and Safety Plan

A Site-specific health and safety plan (HASP) was prepared for the field activities. The HASP addressed issues regarding chemical exposure, personal protective equipment (PPE), physical and biological hazards that might be expected at the Site, emergency response plan, and route to the nearest hospital. Site personnel engaged in field activities were required to conduct daily tailgate safety meetings acknowledging the potential health concerns in this plan. Subcontractors were responsible for their own HASP during field activities.

3.4 Field Procedures

Collection of environmental samples of high integrity is important to the quality of chemical data to be generated. To this end, strict field procedures have been

developed. General descriptions of field methods that were employed at various locations during various phases of the field investigation are described below.

3.4.1 Sample Collection and Analysis

Soil borings were advanced by CES Group personnel using hand-auger tools. Asphalt or concrete pavement was cored by Excell Excavating prior to advancing the borings. Shallow borings were advanced to a maximum total depth of 2.5 feet below ground surface (bgs). Soil samples were collected at 0.5 feet, 1.5 feet, and 2.5 feet bgs. All field work was overseen by a California Professional Engineer.

Specific soil sampling approaches are outlined below:

- Discrete soil samples were obtained from 0.5 feet, 1.5 feet, and 2.5 feet bgs depths from each boring. The shallow soil samples were initially analyzed by the laboratory and the remaining samples were held pending the analytical results. Deeper samples were analyzed if warranted based on shallow results. Soil samples were collected in laboratory supplied 8-ounce glass jars or other appropriate containers for the analysis.
- Select samples were analyzed for lead, arsenic, PCBs, OCPs, TPH, or VOCs based on the location of the boring. Table 1 below shows the sample IDs and the analysis that was performed on each sample. Analytical results are shown in Tables 2 through 5.
- Step Out Samples were collected in areas where the sampling results exceeded the screening levels. Step Out Samples were collected in the area of boring S12 for lead due to the concentration exceeding 80 mg/kg. Step Out Samples were collected at distances of 5 and 10 feet from the preliminary sample. The 5-foot step out samples were analyzed first and then the 10-foot samples were analyzed if needed. Additional step outs were not necessary based on the results obtained.
- Field duplicate samples were collected during the PEA sampling activities at an approximate ratio of 1 duplicate sample for every 10 original samples. The duplicate sample was collected immediately after the original sample. Due to the heterogeneity of the soil matrix the results for duplicate samples may vary from the results of the original sample. The duplicate samples were analyzed for the same parameters as the original samples collected from the same boring and similar interval.

Soil gas samples were collected from 8 boring locations at 2 select depths. One sample was collected from the clarifier area and one sample was collected from the fuel bunker and 6 samples were collected along the border between school buildings and the space between the Site and the landfill. The following sampling procedures were utilized:

- The soil vapor sampling strategy for VOCs and methane followed the guidance outlined in the Department of Toxic Substances Control (DTSC) and Regional Water Quality Control Board (RWQCB) (2015) Advisory – Active Soil Gas Investigations guidance document.

- Soil vapor samples were collected using a 1 to 2-inch diameter sample probe equipped with an expendable steel drive point to a depth of 5 and 10 feet below ground surface (bgs). Once at depth, the probe was extracted slightly, opening the sampling tip and exposing the sampling ports. A ¼ or ⅛-inch diameter nylon tube was run through the center of this probe to ground surface where it attached to the collection device. Hydrated bentonite was placed around the probe at ground surface to inhibit surface air infiltration. The system was allowed to equilibrate for 20 to 30 minutes. Three purge volumes were used. Tracer gas procedures were then applied for potential leak detection. A soil vapor sample was collected at a nominal 0.2 liter/min rate through a flow restrictor into a 0.40-liter Summa Cylinder.
- During soil gas sampling, a tracer gas was used on sampling equipment connections and at ground surface where sample tubes enter. The tracer substance was soaked into a paper towel and placed in a small dish. The dish was placed under a plastic sheet that covered the soil gas sampling point, all tubing connections, and the sample collection cylinder. A minimum vacuum in the sample collection cylinder of 5 inches of mercury was maintained after sampling.

Table 1: Sample Locations, Sample Depths, and Chemical Analyses

Sampling Locations	Boring IDs	Soil Sampling Depths (bgs)	Chemical Analysis
Lead (Soil):			
Exposed Soil Adjacent to Existing Buildings in the Planned Construction Area where demolition may occur	S1 through S26, S79	0.5’	Lead (6010B)
		1.5’, 2.5’	Archive
Arsenic (Soil):			
Soil Beneath Asphaltic Pavement Adjacent to Existing Buildings in Planned Construction Area	S27 through S76 and S83 through S112 (S32, S49 not sampled)	0.5’	Arsenic (6020)
		1.5’, 2.5’	Archive
Pesticides (Soil):			
Entire Site	S78, S79, S80	0.5’	Organochlorine Pesticides (8081B)
		1.5’, 2.5’	Archive
PCBs (Soil)			
10% of Samples	S10, S20, S30, S40, S50, S60, S70, S80, S90, S100, S110	0.5’	PCBs

VOCs and Metals (Soil and vapor)			
Clarifier	S81	1', 2.5', **5'**, **10'**	VOCs (5035/8260B) Metals (6010B) pH
		Soil vapor probes at 5' and 10'	VOCs (8260B/TO-15) Methane (ASTM 1946)
Fuels (soil and vapor):			
In Fuel Bunker	S82	1', 2.5', **5**', **10'**	TPH (8015cc)
		Soil vapor probes at 5' and 10'	VOCs (8260B/TO-15) Methane (ASTM 1946)
VOCs and Methane (vapor):			
Along a line between former landfill and all of the buildings	S55, S56, S65, S66, S70, S72	Soil vapor probes at **5'** and **10'**	VOCs (8260B/TO-15) Methane (ASTM 1946)

All samples were sent to a State of California certified environmental laboratory. Soil samples were analyzed for the following compounds:

- Arsenic by EPA Method 6010B,
- Lead by EPA Method 6010B,
- OCPs by EPA Method 8081A,
- PCBs by EPA Method 8082,
- VOCs by EPA Method 8260B,
- TPH by EPA Method 8015M,
- Mercury by EPA Method 7471A

Soil vapor samples were analyzed for the following compounds:

- VOCs by EPA Method 8260B/TO-15
- Methane by ASTM 1946

3.4.2 Sample Handling and Storage

In the field, each sample container was marked with their unique sampling location number, date and time of sample collection. Each of the sample containers were wiped with clean paper towels, sealed in a plastic bag, and securely packed in a cooler on ice, in preparation for delivery to the laboratory.

3.4.3 Sample Custody

An entry was made on a chain-of-custody form supplied by the laboratory for each sample that was submitted to the laboratory for analysis. The information recorded included the sampling date and time, sample identification number, matrix type, requested analyses and methods, preservatives, and the sampler's name. Sampling team members maintained custody of the samples until they were relinquished to

laboratory personnel. The cooler was appropriately sealed before it was relinquished to laboratory personnel. The chain-of-custody form accompanied the samples from the time of collection until received by the laboratory. Each party in possession of the samples signed the chain-of-custody form signifying receipt.

Collected soil samples were transported using standard chain-of-custody protocol to Enthalpy Analytical Inc. in Orange, California, a State of California Certified laboratory. Upon receipt, the laboratory inspected the condition of the sample containers and reported the information on chain-of-custody or similar form.

A copy of the original completed chain-of-custody form was provided by the laboratory along with the report of results. Appendix A contains copies of the laboratory analytical reports.

3.4.4 Equipment Decontamination

Any equipment that came into contact with potentially contaminated soil or water was decontaminated consistently to assure the quality of samples collected. Disposable equipment intended for one-time use was not decontaminated, but was packaged for appropriate disposal. Decontamination occurred prior to and after each use of a reusable piece of equipment. The sampling devices used (e.g., hand auger) were decontaminated using the following procedures:

- Non-phosphate detergent and tap water scrub, using a brush if necessary;
- Tap water rinse; and
- Final deionized/distilled water rinse.

3.5 Laboratory Quality Control

The laboratory data package provided includes quality control sample results for blanks, matrix spike/matrix spike duplicates, surrogate recoveries, and laboratory control samples/laboratory control sample duplicates, as specified by the method. The laboratory also provided narrative stating whether quality control guidelines were met and listed discrepancies and laboratory data qualifiers. The laboratory reports containing the quality control results are included in Appendix A.

3.6 Abandonment of Soil Borings

Upon completion of sampling, all soil borings were backfilled with clean soil and compacted. Boring locations were resurfaced with concrete dyed black or cold patch asphalt to match existing asphalt hardscape, as applicable.

3.7 Investigation Derived Waste Management

In the process of collecting environmental samples during the PEA activities, different types of potentially contaminated Investigation Derived Waste (IDW) were generated that included used PPE, disposable sampling equipment, excess soil cuttings, and decontamination fluids.

Listed below are the procedures that were followed for handling the IDW:

- Used PPE and disposable equipment were double bagged and placed in a municipal refuse dumpster. These wastes are not considered hazardous and could be sent to a municipal landfill.
- Remaining soil cuttings (not used as backfill) and decontamination wastewater were placed in US Department of Transportation (DOT)-approved 55-gallon drums. The drums were labeled and sealed, pending receipt of analytical results, waste profiling and off-Site disposal.

Four 55-gallon drums containing IDW were generated during the PEA. Three 55-gallon drums contained excess soil cuttings from the hand-auger borings while the fourth drum contained sample equipment decontamination water. Grab samples were collected directly from the 55-gallon drums containing IDW after the completion of the soil borings. IDW samples were analyzed for the following compounds:

- California Code of Regulations (CCR) Title 22 Code of Administrative Manual (CAM) 17 metals (CAM 17 metals) by EPA Method 6010B/7471A,
- OCPs by EPA Method 8081A, and
- Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and Oil Range Organics (ORO) by EPA Method 8015B.
- VOCs by EPA Method 8260B

The PEA and IDW sample results indicate that the IDW is classified as nonhazardous waste. The four drums were transported to Soil Safe in Adelanto, California for disposal. Appendix B provides waste disposal documentation.

4.0 RESULTS

The observed soil was generally poorly graded sand and silty sand. The soil was observed to be brown in color with no chemical odor and no visible signs of staining. Groundwater was not encountered in any of the boreholes during the sampling activities. Duplicate samples showed similar results to the original samples. Field procedures were conducted in compliance with the above procedures. Laboratory procedures were in compliance with the method requirements, including acceptable reporting limits, laboratory selection, and laboratory reporting of quality control information. All borings were installed as planned. Borings S32, S49, and S77 were not sampled due to physical restrictions. Acceptable sensitivity was achieved by selecting analytical methods with reporting limits suitable for comparison with action levels. Overall, the dataset is considered to be of acceptable quality. As such, the data set is considered acceptable for use in accessing human health risk at the Site. The following section provides the sample analytical results. Tables showing screening values that were used as points of comparison for the analytical results are also included.

Soil samples were collected from a total of 109 boring locations during the initial soil sampling. Three samples were identified as having elevated concentrations above the trigger level value of 50 mg/kg for lead. Only one of these borings (S12) exceeded the LAUSD guideline for additional sampling of 80 mg/kg with a value of 176 mg/kg. The

deeper sample in each of these boring locations was below screening levels. None of the arsenic concentrations exceeded screening levels.

Step out borings were collected from the area of boring S12 in the north and south direction. The results of the step out borings indicated that concentrations exceeded the trigger level value of 50 mg/kg but were below the step out criteria of 80 mg/kg.

4.1 Soil Analytical Results

In summary, the soil matrix analytical results indicate the following:

- OCPs were detected in low levels in all 7 of the samples that were analyzed. The sample from boring S78 showed the highest concentration of OCPs at 330 ug/kg 4,4'-DDE from the duplicate sample. All OCP concentrations were below the EPA Region 9 Regional Screening Levels (RSLs).
- Lead was detected at concentrations below the EPA Region 9 Regional Screening Level (RSL) of 400 mg/kg (RSL for soil considering residential land use) (EPA, 2015) and below the DTSC-modified screening level of 80 mg/kg (screening level for use in human health risk assessments) (DTSC, 2016) in all soil samples analyzed except S12-0.5ft. The soluble threshold limit concentration (STLC) for this sample was 11.0 mg/L, which is above California-regulated hazardous levels. The STLC concentration for sample S4-0.5ft is 5.16 mg/L, which is also above California-hazardous levels.
    - Step out results in the north and south direction at S12 indicated that lead concentrations were below the EPA Region 9 RSL of 400 mg/kg and below the DTSC-modified screening level of 80 m/kg.
- Arsenic concentrations did not exceed the DTSC-adopted background arsenic concentration of 12 mg/kg (DTSC, 2008) in any of the samples that were analyzed.
- PCB concentrations were not detected in any of the samples that were analyzed.
- Total petroleum hydrocarbons were detected in low levels in the sample collected from the fuel bunker. The maximum concentration was 36 m/kg TPH C10-C28 from sample S82-5.0ft.
- VOCs were detected in low levels in the sample collected from the clarifier area. The maximum benzene concentration was 1.3 ug/kg.

Soil analytical results are shown in Tables 2 through 5.

4.2 Soil Vapor Analytical Results

In summary, the soil matrix analytical results indicate the following:

- Soil vapor concentrations indicated low level VOCs in each of the 8 boring locations and 18 samples analyzed. All sample results were below the California Human Health Screening Levels (CHHSLs)for shallow soil gas in

residential scenarios except for the result from S70-10ft which showed a PCE concentration of 183 ug/m3 compared to the CHHSL value of 180 ug/m3. A resample was collected from this probe to confirm the results and the concentration was non-detect above the reporting limits. Methane was detected in 2 sample locations during the resample event only on February 11, 2017. The maximum concentration was 5.12 ppmv, which is well below the DTSC recommended action level of 1000 ppmv.

Soil vapor analytical results are shown in Table 6.

4.2.1 Johnson and Ettinger Model

The DTSC's version of the Johnson and Ettinger (J&E) Model for soil vapor intrusion was used to calculate the potential risks of vapor intrusion based on the measured soil vapor concentrations. The model was run using S70-10ft, where there was an exceedance of the CHHSLs screening levels. The site was modeled as a residential site using the default parameters of Version 3.1 of the model. A soil type of SI was used in the calculations after a consultation with the technician that installed the borings. According to the DTSC Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, further studies are necessary if the cumulative risk is greater than 10^{-6} or the hazard index is greater than one. A cumulative risk of 10^{-5} is typically considered acceptable for an industrial site. The cumulative risk for the site was calculated to be 5.09E-07, which is less than the residential limit. The hazard index was calculated to be 0.0083, which is less than the limit of 1. A table showing the calculation results in included as Table 7.

5.0 HUMAN HEALTH SCREENING EVALUATION

Soil

The low concentrations of OCPs detected were below published regulatory screening levels. Lead was detected above 80 mg/kg in only one soil sample (S12-0.5ft) at a concentration of 176 mg/kg. The STLC value for this sample along with the sample from S4-0.5ft indicate that the soil in this area is designated as California-regulated hazardous waste soil. The results of the step out samples in the area of boring S12 indicated that all soil was below California-hazardous levels. Arsenic was not detected above the DTSC-adopted background arsenic concentration for Southern California of 12 mg/kg (DTSC, 2008). PCBs were not detected in any of the samples that were analyzed. Petroleum hydrocarbons and VOCs were detected in low concentrations. Soil vapor concentrations indicated low level VOCs but no methane.

The school site has been defined for both arsenic and lead. Upon the removal of the lead-impacted soil, the remaining soil represents soil that is below detection or regulatory screening levels. The human health risk after soil removal will be typical of a similar school Site operation in the State of California for these constituents.

Soil Vapor

The soil vapor analytical results indicated that all sample results were below the CHHSL value for shallow soil gas in residential scenarios except for the result from S70-10ft which was just slightly above the CHHSL value. A resample from this probe showed

non-detectable results. Methane concentrations were below the DTSC recommended action level in that same resample and was not detected in the initial sample. The results of the J&E Model indicate that the cumulative risk for the site is considered acceptable for a residential use scenario.

6.0 COMMUNITY PROFILE

6.1 Community Demographics

A summary of the community demographics for the zip code 91352 in Los Angeles County according to the 2010 US Census (factfinder.census.gov) is as follows:

Total population: 47,807

Male: 23,980

Female: 23,827

Median Age: 31.3

Population 18 years and over: 34,708

Total housing units: 11,985

Average household size: 3.95

Population by race: White: 24,825

Hispanic or Latino: 35,314

Asian: 3,034

Black of African American: 861

6.2 Local Participation and Involvement

A fact sheet, in the form of a flyer, was produced in English and Spanish (double-sided flyer) to provide members of the community with details regarding the PEA investigation including who would perform the work, project schedule, when and where the results of the investigation would be posted, and who to contact regarding additional information. This work notice flyer was handed out to all high school staff, mailed to all parents of students, was distributed to all residences within 500 feet of the school site, and was handed out to all line-of-sight properties, and posted along the boundary fence of the School property.

No specific environmental concerns or issues have been brought to the District's attention regarding the onsite activities at this time. In terms of project visibility, the onsite work took place during a School shut down (weekends and holiday break) to minimize any interference with school activities. Line-of-site neighbors, School staff, parents and interested community members were given copies of the work notice flyer. At this time, CES Group is unaware of environmental concerns or issues with relation to neighboring sites.

7.0 OPINION OF ENVIRONMENTAL PROFESSIONAL

Based on the PEA sampling results, all areas of impact have been identified and adequately characterized and defined both laterally and vertically. Removal of impacted soil will bring the School site to a level where no further action can be warranted.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The primary objectives of this PEA were to assess shallow soil and soil vapor for potential environmental concerns identified in the Phase I ESA for the Site; and to evaluate the overall Site health risk based on soil analytical screening results for COPCs (lead, arsenic, OCPs, PCBs, TPH, and VOCs).

The soil analytical results indicate that OCPs were detected in all 7 of the soil samples that were analyzed and were below Regional Screening Levels. Lead was detected above the DTSC-modified screening level of 80 mg/kg in one soil sample at a depth of 6 inches. The STLC for this and one other sample where the concentration exceeded 50 mg/kg indicated that the soil in the vicinity of borings S12 and S4 is California-regulated hazardous waste. Step-out samples completed adjacent to boring S12 indicate that the area was delineated and that all results are below California-hazardous levels. Arsenic did not exceed the DTSC-adopted background arsenic concentration of 12 mg/kg in any of the samples that were analyzed. PCBs were not detected in any of the samples that were analyzed. Low-level petroleum hydrocarbons (diesel range) were detected in the samples collected at the fuel bunker. The concentrations were low and consistent at all depths. Low-level VOCs, below Regional Screening Levels, were identified in the samples collected from the clarifier area. All VOC concentrations were below Regional Screening Levels.

Soil vapor concentrations indicated low level VOCs in each of the 8 locations and 18 samples analyzed. All sample results were below the California Human Health Screening Levels for shallow soil gas in residential scenarios were below CHHSLs in all but one sample for PCE (S70). A resample from boring S70 indicated non-detectable results for PCE. Methane concentrations were well below the DTSC recommended action level of 1000 ppmv. The DTSC's Johnson & Ettinger model was used to calculate the cumulative risk based on the results obtained from boring S70 at a depth of 10 feet. The results of this analysis indicated that the hazard index is less than one and the cumulative risk is 5.09E-7, which is less than the DTSC's guideline for additional study.

Based on the analytical results and comparisons with the screening levels, CES Group concludes that soil removal is necessary in the vicinity of borings S12 and S4 to remove the lead-impacted soil from the School site. The soil in this area will be characterized as California hazardous soil and will need to be transported to an appropriate facility.

9.0 LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. Opinions, conclusions, and recommendations contained in this report apply to conditions existing when the services were performed and are intended only for the

client, purposes, locations, time frames, and project parameters indicated. Where subsurface exploratory work, monitoring, and/or testing was performed, our professional opinions and conclusions are based in part on interpretation of data from discrete sampling or measurement locations that may not represent actual conditions at un-sampled or un-measured locations. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of the services. We assume no responsibility for conditions we were not authorized to evaluate, or conditions not generally recognized as predictable when the services were performed. We do not warranty the accuracy of information supplied by others, or the use of segregated portions of this report.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. CES Group should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

CES Group's professional opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analyses data. Further assessment of potential adverse environmental impacts from past on-Site and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between and beyond the sampling locations. Variations in soil conditions likely exist beyond the points explored in this assessment and related excavation.

10.0 REFERENCES

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Department of Toxic Substances Control, 2004, *Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*, 2004

LAUSD, Section 01 4524 Environmental Import/Export Materials Testing, 2011.

USEPA, 2005, *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties*, January 2005.

USEPA, 2010, Regional Screening Level Summary Table

Table 2
Soil Analytical Results
Francis Polytechnic High School

SAMPLE LOCATION	Date	6010B Lead (mg/kg)	6010B Lead STLC (mg/L)	6010B Lead TCLP (mg/L)	SAMPLE LOCATION	Date	6020 Arsenic (mg/kg)	SAMPLE LOCATION	Date	6020 Arsenic (mg/kg)
S1-0.5'	1/5/2017	34.2	NA	NA	S27-0.5'	1/6/2017	1.353J	S69-0.5'	1/3/2017	1.478J
S1D-0.5'	1/5/2017	16.5	NA	NA	S28-0.5'	1/6/2017	1.462J	S70-0.5'	12/29/2016	1.895J
S2-0.5'	1/5/2017	40.7	NA	NA	S29-0.5'	1/5/2017	1.631J	S71-0.5'	1/3/2017	2.36J
S3-0.5'	1/5/2017	19.9	NA	NA	S30-0.5'	1/5/2017	1.733J	S72-0.5'	12/29/2016	1.160J
S4-0.5'	1/5/2017	63.5	5.16	0.051	S31-0.5'	1/5/2017	1.651J	S73-0.5'	1/3/2017	1.927J
S4-1.5'	1/5/2017	5.24	NA	NA	S33-0.5'	1/5/2017	1.301J	S74-0.5'	1/3/2017	2.70J
S5-0.5'	1/5/2017	9.08	NA	NA	S34-0.5'	1/5/2017	1.410J	S75-0.5'	1/3/2017	1.935J
S6-0.5'	1/5/2017	18.5	NA	NA	S35-0.5'	1/5/2017	1.553J	S76-0.5'	1/3/2017	1.639J
S7-0.5'	1/5/2017	7.38	NA	NA	S36-0.5'	1/5/2017	2.27J	S78-0.5'	1/5/2017	NA
S8-0.5'	1/5/2017	4.50	NA	NA	S37-0.5'	1/6/2017	0.701J	S78D-0.5'	1/5/2017	NA
S9-0.5'	1/5/2017	65.1	3.03	NA	S38-0.5'	1/6/2017	0.881J	S80-0.5'	1/4/2017	NA
S9-1.5'	1/5/2017	9.14	NA	NA	S39-0.5'	1/6/2017	0.966J	S81-0.5'	12/29/2016	1.663J
S10-0.5'	1/5/2017	78.8	3.29	NA	S40-0.5'	1/5/2017	1.114J	S83-0.5'	1/6/2017	1.073J
S10-1.5'	1/5/2017	1.67	NA	NA	S41-0.5'	1/4/2017	1.958J	S83D-0.5'	1/6/2017	2.63J
S11-0.5'	1/5/2017	23.9	NA	NA	S42-0.5'	1/4/2017	5.00	S84-0.5'	1/6/2017	2.95J
S12-0.5'	1/5/2017	176	11.0	ND	S42D-0.5'	1/4/2017	1.047J	S85-0.5'	1/6/2017	3.01
S12-1.5'	1/5/2017	2.56	NA	NA	S43-0.5'	1/4/2017	1.855J	S86-0.5'	1/5/2017	2.90J
S13-0.5'	1/5/2017	12.2	NA	NA	S44-0.5'	1/4/2017	1.580J	S87-0.5'	1/5/2017	2.29J
S14-0.5'	1/5/2017	47.6	NA	NA	S45-0.5'	1/4/2017	0.837J	S88-0.5'	1/5/2017	1.596J
S15-0.5'	1/5/2017	25.6	NA	NA	S46-0.5'	1/4/2017	0.959J	S89-0.5'	1/5/2017	3.81
S16-0.5'	1/5/2017	15.6	NA	NA	S47-0.5'	1/4/2017	1.099J	S90-0.5'	1/5/2017	3.31
S17-0.5'	1/5/2017	22.3	NA	NA	S48-0.5'	1/4/2017	3.53	S91-0.5'	1/4/2017	2.69J
S18-0.5'	1/5/2017	6.53	NA	NA	S50-0.5'	1/4/2017	1.725J	S92-0.5'	1/4/2017	2.90J
S19-0.5'	1/5/2017	15.8	NA	NA	S50D-0.5'	1/4/2017	1.155J	S93-0.5'	1/4/2017	3.75
S20-0.5'	1/4/2017	3.44	NA	NA	S51-0.5'	1/4/2017	2.04J	S94-0.5'	1/4/2017	1.825J
S21-0.5'	1/4/2017	11.7	NA	NA	S52-0.5'	1/4/2017	1.039J	S94D-0.5'	1/4/2017	1.508J
S22-0.5'	1/3/2016	0.43J	NA	NA	S53-0.5'	1/4/2017	2.37J	S95-0.5'	1/3/2017	1.091J
S22D-0.5'	1/3/2017	2.45	NA	NA	S53D-0.5'	1/4/2017	1.918J	S96-0.5'	1/3/2017	1.326J
S23-0.5'	1/4/2017	6.66	NA	NA	S54-0.5'	1/4/2017	3.29	S97-0.5'	1/3/2017	1.532J
S24-0.5'	1/4/2017	5.28	NA	NA	S55-0.5'	12/29/2016	1.942J	S98-0.5'	1/3/2017	1.360J
S24D-0.5'	1/4/2017	2.50	NA	NA	S56-0.5'	12/29/2016	3.00	S99-0.5'	1/3/2017	1.310J
S25-0.5'	1/4/2017	8.07	NA	NA	S57-0.5'	1/3/2017	0.904J	S100-0.5'	1/3/2017	1.112J
S26-0.5'	1/4/2017	1.47	NA	NA	S58-0.5'	1/3/2017	0.745J	S101-0.5'	1/3/2017	1.205J
S79-0.5'	1/5/2017	13.5	NA	NA	S59-0.5'	1/3/2017	1.126J	S102-0.5'	1/3/2017	1.440J
S79D-0.5'	1/5/2017	16.3	NA	NA	S60-0.5'	1/3/2017	2.63J	S103-0.5'	1/3/2017	1.424J

Table 2
Soil Analytical Results
Francis Polytechnic High School

SAMPLE LOCATION	Date	6010B Lead (mg/kg)	6010B Lead STLC (mg/L)	6010B Lead TCLP (mg/L)	SAMPLE LOCATION	Date	6020 Arsenic (mg/kg)	SAMPLE LOCATION	Date	6020 Arsenic (mg/kg)
Step Outs:					S61-0.5'	1/4/2017	1.555J	S104-0.5'	1/4/2017	2.76J
S12-5N-0.5'	2/11/2017	79.7	3.47	NA	S62-0.5'	1/4/2017	1.921J	S105-0.5'	1/4/2017	3.74
S12-5N-1.5'	2/11/2017	26.5	NA	NA	S63-0.5'	1/3/2017	1.322J	S106-0.5'	1/3/2017	1.993J
S12-10N-0.5'	2/11/2017	55.7	3.14	NA	S64-0.5'	1/3/2017	1.365J	S107-0.5'	1/3/2017	1.363J
S12-5S-0.5'	2/11/2017	47.2	NA	NA	S64D-0.5'	1/3/2017	1.408J	S108 -0.5'	1/3/2017	1.785J
					S65-0.5'	12/29/2016	1.760J	S109-0.5'	1/3/2017	1.518J
					S66-0.5'	12/29/2016	1.158J	S110-0.5'	1/3/2017	2.11J
					S67-0.5'	1/3/2017	2.67J	S111-0.5'	1/3/2017	1.830J
					S68-0.5'	1/4/2017	1.127J	S112-0.5'	1/3/2017	1.965J
TTLC Hazardous Levels		1,000	--	--	--	--	500	--	--	500
Trigger Value (10xSTLC)		50	--	--	--	--	50	--	--	50
CHHSLs Residential Soil		150	--	--	--	--	0.07	--	--	0.07
CHHSLs Industrial Soil		3,500	--	--	--	--	0.24	--	--	0.24

Notes:
mg/kg = milligrams per kilogram
CHHSLs = California Human Health Screening Levels
NA = not analyzed
STLC = soluble threshold limit concentration (Cal Regulated Haz Waste if greater than 5mg/L for lead)
TCLP = toxicity characteristic leaching potential (RCRA Haz Waste if greater than 5mg/L for lead)

Table 3
Soil Analytical Results
Francis Polytechnic High School

SAMPLE LOCATION	Date	VOCs 8260B							
		Benzene (ug/kg)	Dichloro-diflouro-methane (ug/kg)	1,2,4-Trimethy-lbenzene (ug/kg)	1,3,5-Trimethyl-benzene (ug/kg)	toluene (ug/kg)	Xylenes (ug/kg)	pH	Temp (deg C)
S81-1.0'	12/29/2016	0.80J	6.0	ND	ND	0.56J	ND	7.37	25
S81-2.5'	12/29/2016	0.84J	4.3J	ND	ND	0.30J	ND	7.88	25
S81-5.0'	12/29/2016	1.3J	ND	0.45J	1.1J	1.6J	1.8J	8.40	25
S81-10.0'	12/29/2016	0.30J	ND	ND	ND	0.26J	ND	8.31	25

SAMPLE LOCATION	Date	Title 22 Metals Method 6010B																7471A
		Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Molyb-denum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	Mercury (mg/kg)
S81-1.0'	12/29/2016	ND	1.47	63.1	ND	ND	9.32	6.87	8.95	0.38J	ND	5.65	ND	ND	ND	29.2	27.5	0.03J
S81-2.5'	12/29/2016	ND	2.15	90.3	ND	ND	12.3	8.20	11.6	0.49J	ND	7.70	ND	ND	ND	30.6	34.8	ND
S81-5.0'	12/29/2016	ND	1.1	53.4	ND	ND	12.3	4.62	7.04	ND	0.68J	3.70	ND	ND	ND	20.0	19.3	ND
S81-10.0'	12/29/2016	ND	1.55	40.1	ND	ND	4.67	3.85	5.13	ND	ND	2.77	ND	ND	ND	15.7	16.6	ND

SAMPLE LOCATION	Date	8015M	8015M	8015M
		TPH C8-C10 (mg/kg)	TPH C10-C28 (mg/kg)	TPH C28-C40 (mg/kg)
S82-1.0'	12/29/2016	ND	31	ND
S82-2.5'	12/29/2016	ND	33	ND
S82-5.0'	12/29/2016	ND	36	ND
S82-10.0'	12/29/2016	ND	32	ND

Notes:
mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram
NA = not analyzed

Table 4
Soil Analytical Results
Francis Polytechnic High School

SAMPLE LOCATION	Date	8082								
		PCB-1016 (mg/kg)	PCB-1221 (mg/kg)	PCB-1232 (mg/kg)	PCB-1242 (mg/kg)	PCB-1248 (mg/kg)	PCB-1254 (mg/kg)	PCB-1260 (mg/kg)	PCB-1262 (mg/kg)	PCB-1268 (mg/kg)
S10-0.5'	1/5/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S20-0.5'	1/4/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S30-0.5'	1/5/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S40-0.5'	1/5/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S50-0.5'	1/4/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S50D-0.5'	1/4/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S60-0.5'	1/3/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S70-0.5'	12/29/2016	ND	ND	ND	ND	ND	ND	ND	ND	ND
S80-0.5'	1/4/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S90-0.5'	1/5/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S100-0.5'	1/3/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
S110-0.5'	1/3/2017	ND	ND	ND	ND	ND	ND	ND	ND	ND
EPA Regional Screening Level - Residential Soil		3.9	0.14	0.14	0.22	0.22	0.22	0.22	NA	NA

Notes:
mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram
NA = not analyzed
PCB = polychlorinated biphenyls
ND = not detected

Table 5
Soil Analytical Results
Francis Polytechnic High School

SAMPLE LOCATION	Date	8081A					
		4,4'-DDD (ug/kg)	4,4'-DDE (ug/kg)	4,4'-DDT (ug/kg)	Chlordane (ug/kg)	Dieldrin (ug/kg)	Endrin (ug/kg)
S3-0.5'	1/5/2017	ND	39	7.8	ND	ND	ND
S10-0.5'	1/5/2017	ND	39	19	ND	ND	ND
S78-0.5'	1/5/2017	12	280	61	ND	13	ND
S78D-0.5'	1/5/2017	47	330	64	230	37	12
S79-0.5'	1/5/2017	ND	100	26	ND	ND	ND
S79D-0.5'	1/5/2017	ND	160	25	ND	ND	ND
S80-0.5'	1/4/2017	ND	12.1	5.1	ND	ND	ND
EPA Regional Screening Level - Residential Soil		2000	1400	1700	1600	30	18000

Notes:
mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram
NA = not analyzed

Table 6
Soil Vapor Analytical Results
Francis Polytechnic HS

		EPA Method 8260B on 1/3/17 and 1/4/17, EPA TO-15 on 2/11/17																				8015M/ ASTM D1946*
SAMPLE LOCATION	Date	1,2,4-Trimethylbenzene (ug/m3)	1,3-Dichlorobenzene (ug/m3)	1,4-Dichlorobenzene (ug/m3)	1,4-Dioxane (ug/m3)	2-Butanone (MEK) (ug/m3)	2-Hexanone (ug/m3)	4-Ethyltoluene (ug/m3)	Acetone (ug/m3)	Benzene (ug/m3)	Chloromethane (ug/m3)	Dichlorodifluoromethane (ug/m3)	Ethanol (ug/m3)	Ethylbenzene (ug/m3)	xylenes (ug/m3)	Methylene chloride (ug/m3)	MTBE (ug/m3)	Styrene (ug/m3)	Tetrachloroethene (ug/m3)	toluene (ug/m3)	Trichlorofluoromethane (ug/m3)	Methane ppmv
S55-5'	1/4/2017	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9J	ND	ND
S55-10'	1/4/2017	ND	ND	ND	ND	ND	ND	2.9J	NA	ND	ND	ND	ND	3.0J	7.8	ND	ND	4.3	ND	3.0J	ND	ND
S56-5'	1/4/2017	ND	ND	ND	ND	ND	ND	5.9	NA	ND	ND	ND	ND	ND	6.1	ND	ND	3.4J	ND	2.3J	ND	ND
S56-10'	1/4/2017	ND	ND	ND	ND	ND	ND	3.9J	NA	ND	ND	ND	ND	3.5J	6.1	ND	ND	16.2	ND	4.9	2.8J	ND
S65-5'	1/3/2017	ND	ND	ND	ND	ND	ND	ND	NA	1.3J	ND	ND	ND	ND	3.5J	ND	ND	5.5	ND	4.5	ND	ND
S65-10'	1/3/2017	ND	ND	ND	ND	ND	ND	ND	NA	14.0	ND	ND	ND	ND	3.5J	ND	ND	9.4	ND	5.3J	ND	ND
S66-5'	1/3/2017	ND	12.0	ND	ND	ND	ND	ND	NA	3.8	ND	ND	ND	ND	5.2	ND	ND	5.1	ND	7.9	ND	ND
S66-10'	1/3/2017	ND	15.0	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	3.9J	ND	ND	4.7	ND	6.4	ND	ND
S70-5'	1/3/2017	ND	11.4	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	3.9J	ND	ND	6.8	ND	4.9	2.2J	ND
ǂ S70-5'	2/11/2017	6.4	13.8	13.8	1.1J	8.0	5.3	9.8	25.8	4.5	0.8J	2.0J	41.4	1.7J	8.2	2.8J	1.1J	4.7	ND	1.9J	1.7J	2.67
S70-10'	1/3/2017	19.6	ND	ND	ND	ND	ND	6.4	NA	1.3J	ND	ND	ND	ND	6.50	ND	ND	ND	183	3.8	2.2J	ND
ǂ S70-10'	2/11/2017	ND	ND	ND	ND	21.5	2.5J	2.0J	38.4	2.9J	1.6J	1.5J	32.9	ND	2.2J	3.1J	1.1J	2.1J	ND	1.5J	1.7J	5.12
S72-5'	1/3/2017	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	3.5J	ND	ND	8.1	ND	4.9	ND	ND
S72-10'	1/3/2017	ND	12.0	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	7.8J	ND	ND	5.1J	ND	6.0J	ND	ND
S81-5'	1/4/2017	ND	ND	ND	ND	ND	ND	3.4J	NA	ND	ND	4.0J	ND	ND	3.9J	ND	ND	7.2	3.4J	3.0J	2.2J	ND
S81-10'	1/4/2017	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	4.4J	ND	3.9J	26.5	ND	ND	14.1	5.4J	5.70	2.2J	ND
S82-5'	1/3/2017	2.9J	8.4	ND	ND	ND	ND	7.4	NA	6.7	ND	3.5J	ND	8.2	45.1	ND	ND	7.7	4.7J	34.3	2.2J	ND
S82-10'	1/3/2017	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	3.0J	ND	ND	ND	ND	ND	ND	ND	ND	2.2J	ND
CHHSLs Shallow Soil Gas Human Health Screening Levels (ug/m3)		NA	NA	NA	NA	NA	NA	NA	NA	36.2	NA	NA	NA	NA	3.15E+05	NA	4.00E+03	NA	180	1.35E+05	NA	NA

Notes:
ug/m3 = micrograms per cubic meter
NA = not analyzed
Resampled vapor probes on 2/11/17
Additional constituents detected for S70-5ft on 2/11/17
DTSC Recommended Actional Level for Methane: Additional investigation is recommended if greater than 1000ppmv.
ǂ Resample event
*Method ASTM D1946 was used for Methane on 2/11/17 resample. EPA Method 8015 was used on 1/3/17 and 1/4/17.

Table 7
J&E Model Input and Results
Francis Polytechnic High School

			Residential	
Compound	CAS No.	Francis Poly Max Soil gas concentration (ug/m^3) S70-10ft	Incremental Risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
Benzene	71432	1.3	1.90E-08	5.10E-05
4-Ethyltoluene	622968	6.4	NA	NA
m,p,o-xylenes	108383	3.0	NA	3.10E-05
Styrene	100425	0.5	NA	5.80E-07
Tetrachloroethene	127184	183	4.90E-07	5.50E-03
Toluene	108883	3.8	NA	1.50E-05
Trichlorofluoromethane	75694	2.2	NA	3.70E-06
1,2,4-Trimethylbenzene	95636	19.6	NA	2.70E-03
			Cumulative Risk:	Hazard Index
			5.09E-07	0.0083

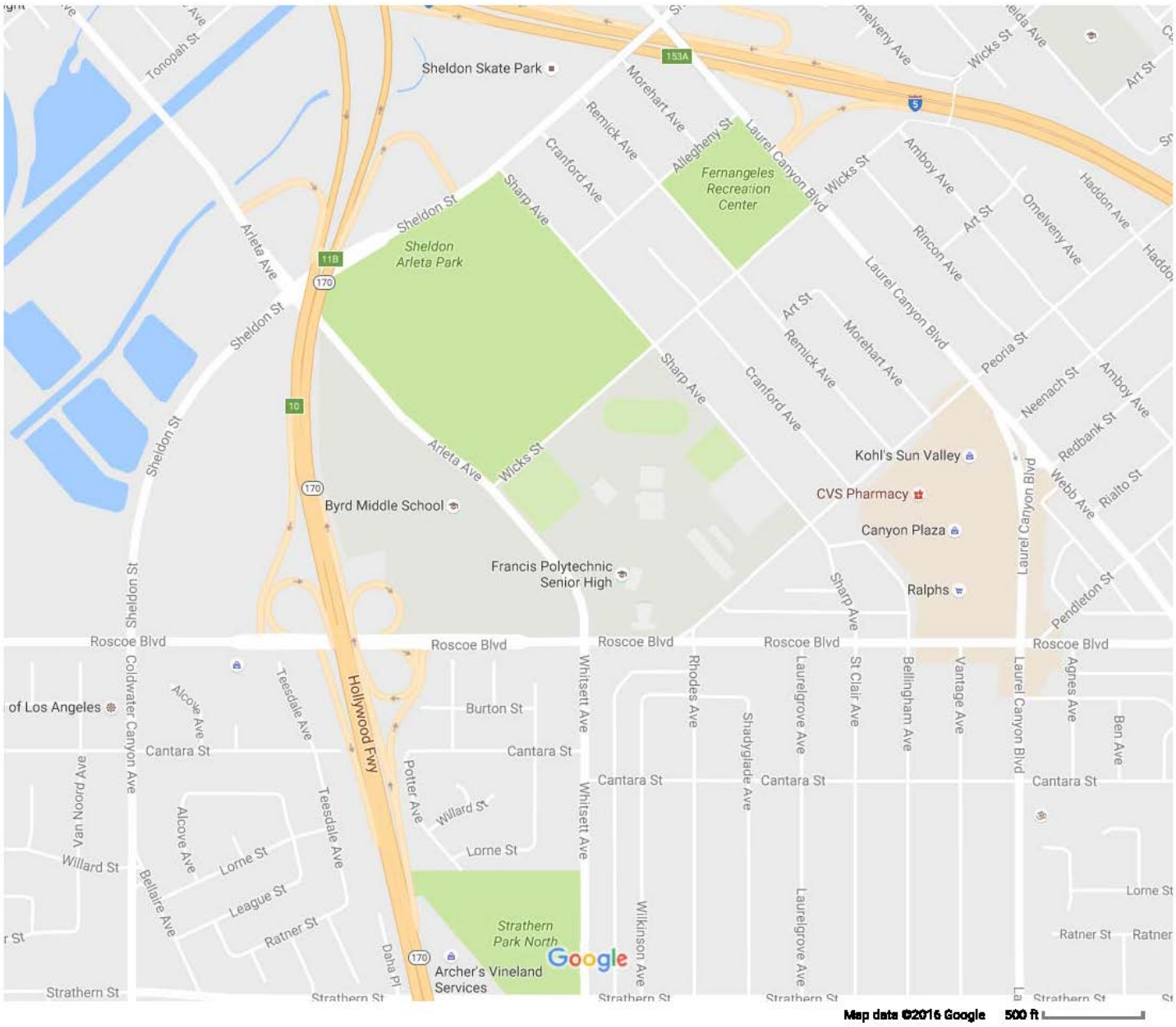
Notes:

ug/m3 = micrograms per cubic meter
NA = not available

Model Input Parameters:

L_F	15	
L_s	304.8	
T_s	24	
SCS Soil Type	SI	Silt
Dry bulk density	1.35	
soil porosity	0.489	
water-filled porosity	0.05	
Avg vapor flow rate into bldg, Q_{soil}	5	
Avg time for carcinogens, A_{Tc}	70	
Avg time for noncarcinogens, A_{TNC}	30	
Exposure Duration, ED	30	
Exposure Frequency, EF	350	residential

*Further studies are necessary of cumulative risk is greater than 10^{-6} or the hazard index is greater than one. (10^{-5} is considered acceptable for industrial sites).



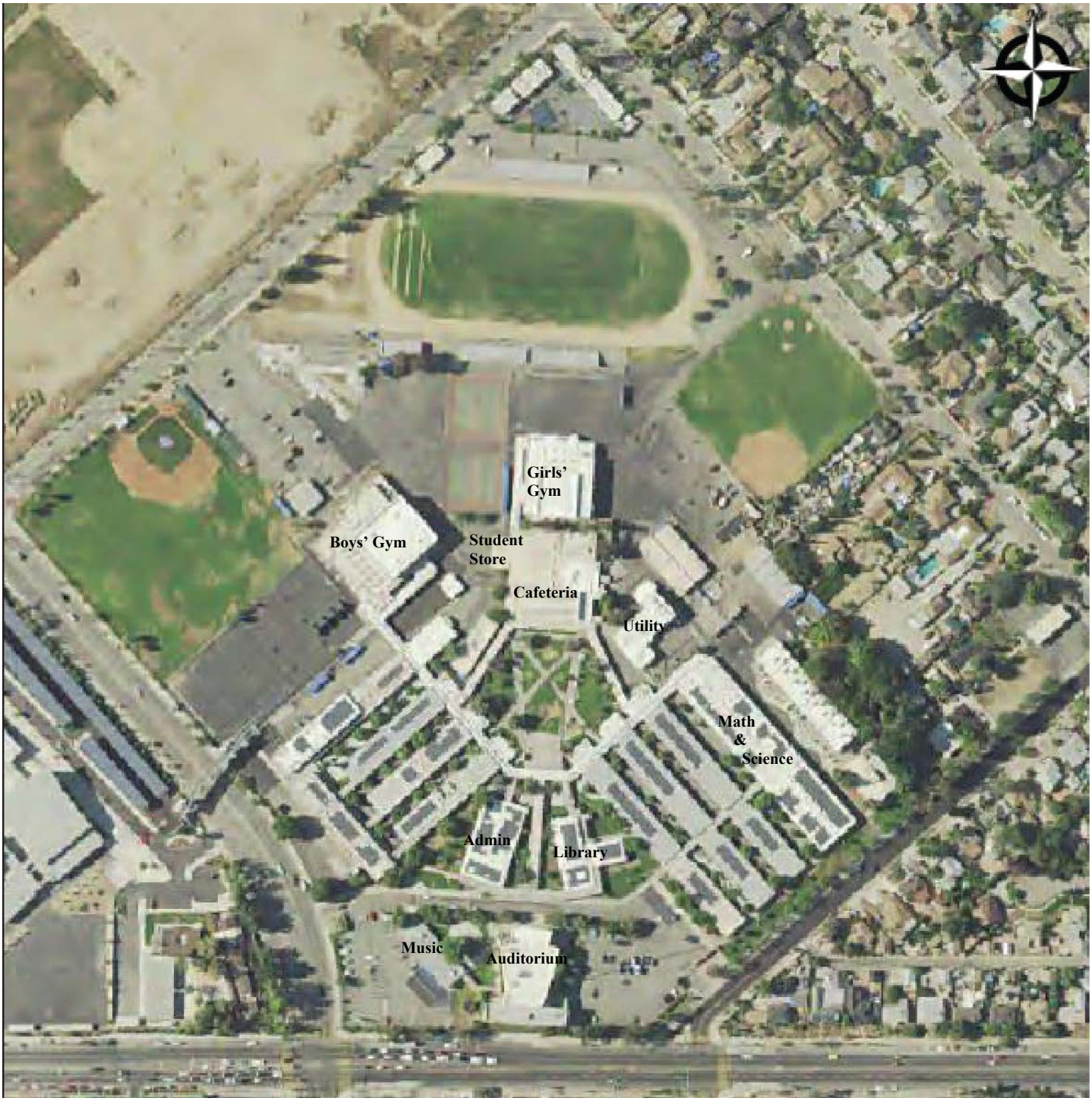
N

REV	DATE	DESCRIPTION

CES Civil-Environmental-Survey Group

Street Map
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY:	CHECKED BY:	PROJECT NO:	FIGURE 1
SMG			
APPROVED BY:	DATE: 9/22/16	SCALE: AS SHOWN	

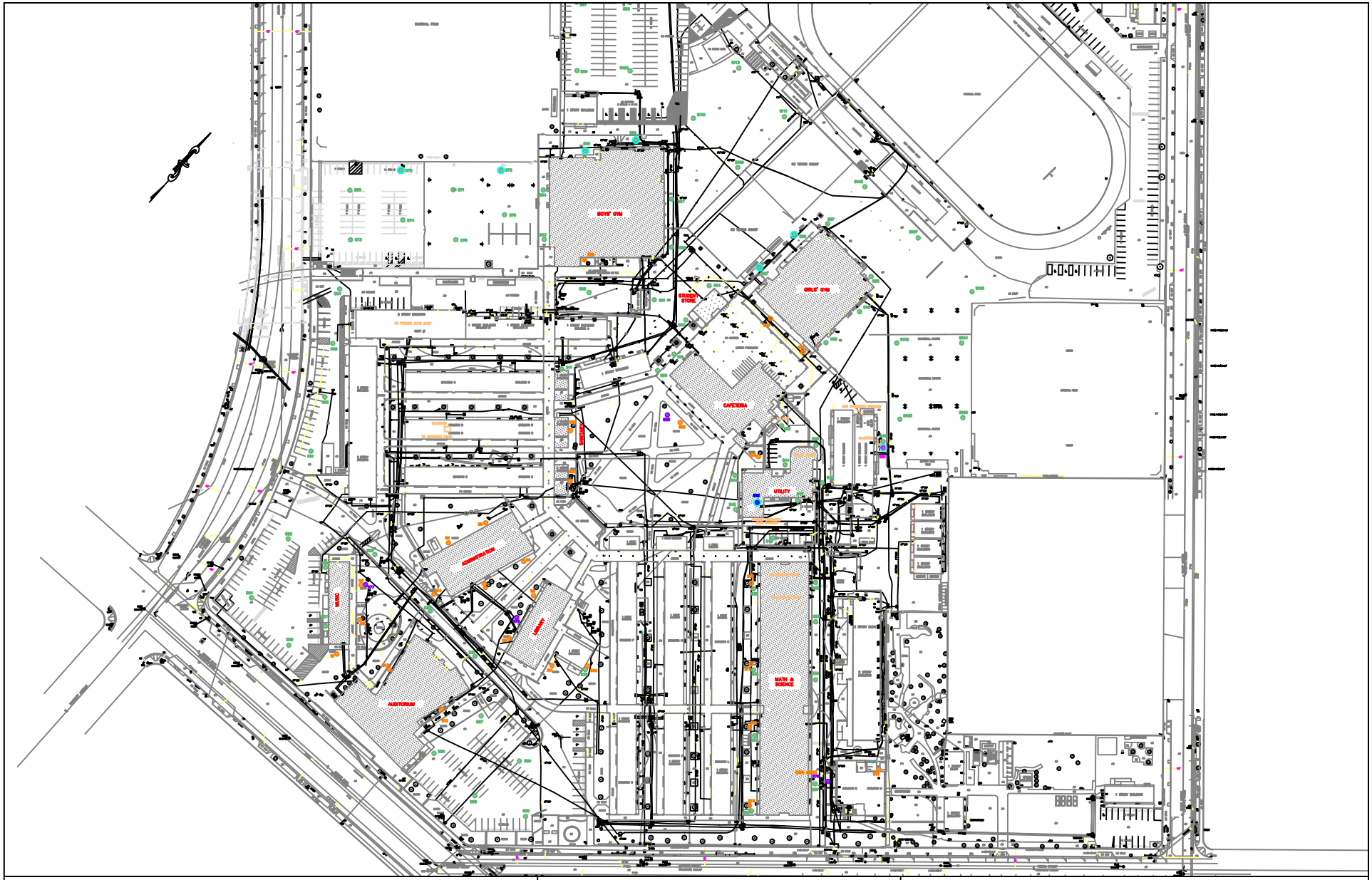


REV	DATE	DESCRIPTION

CES Civil-Environmental-Survey Group

Site Map
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY:	CHECKED BY:	PROJECT NO:	
SMG			FIGURE 2
APPROVED BY:	DATE:	SCALE:	
	9/15/16	AS SHOWN	



Graphic Scale

200 0 100 200 400

(In Feet)

1 inch = 200 ft.

CES

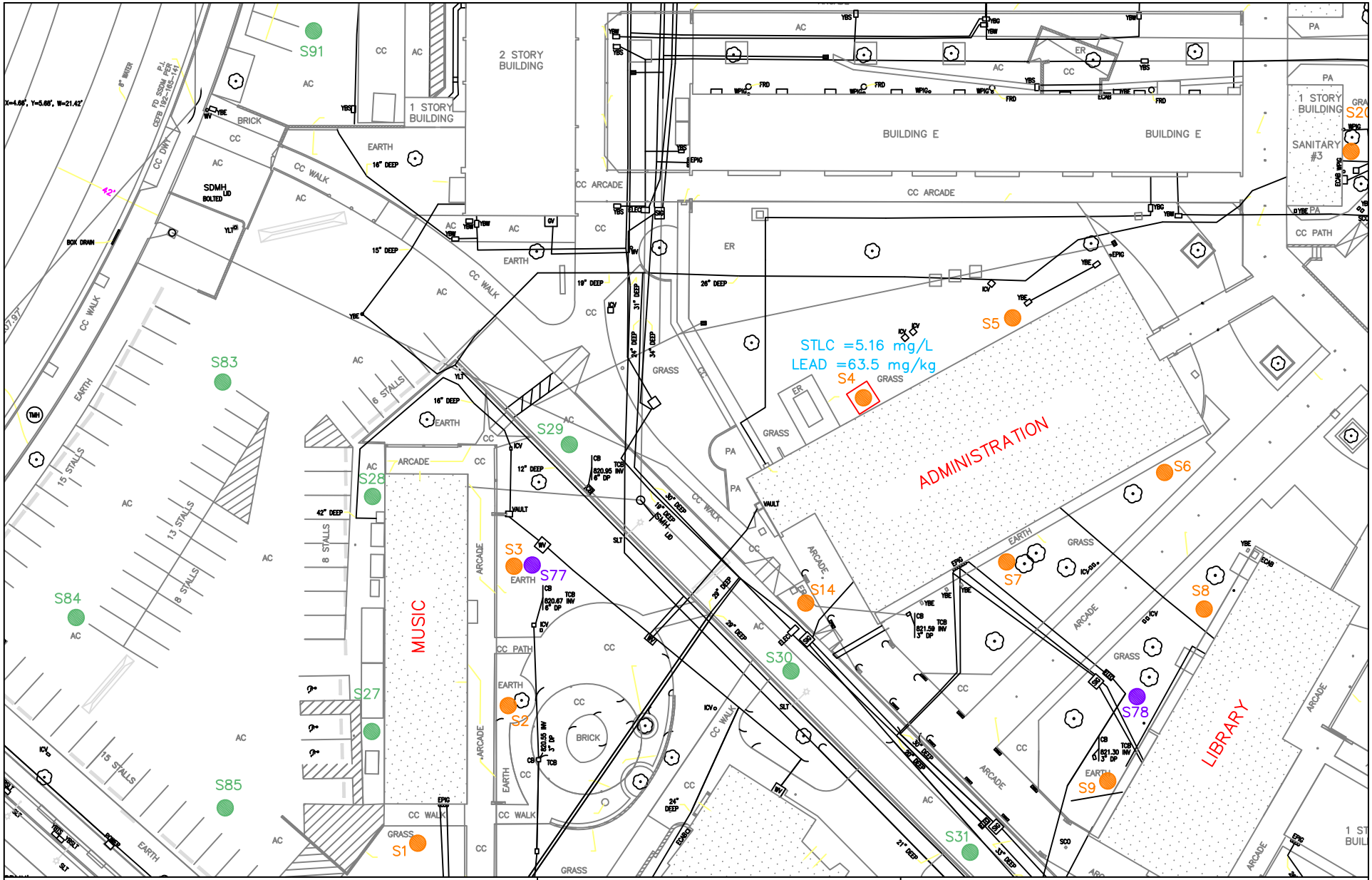
Civil-Environmental-Survey Group

PHONE: (951) 808-8585/(951) 848-9812 (FAX)

Sample Locations
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY: S. GREEN	CHECKED BY:	PROJECT NO:
APPROVED BY:	DATE: 12/22/16	SCALE: AS SHOWN

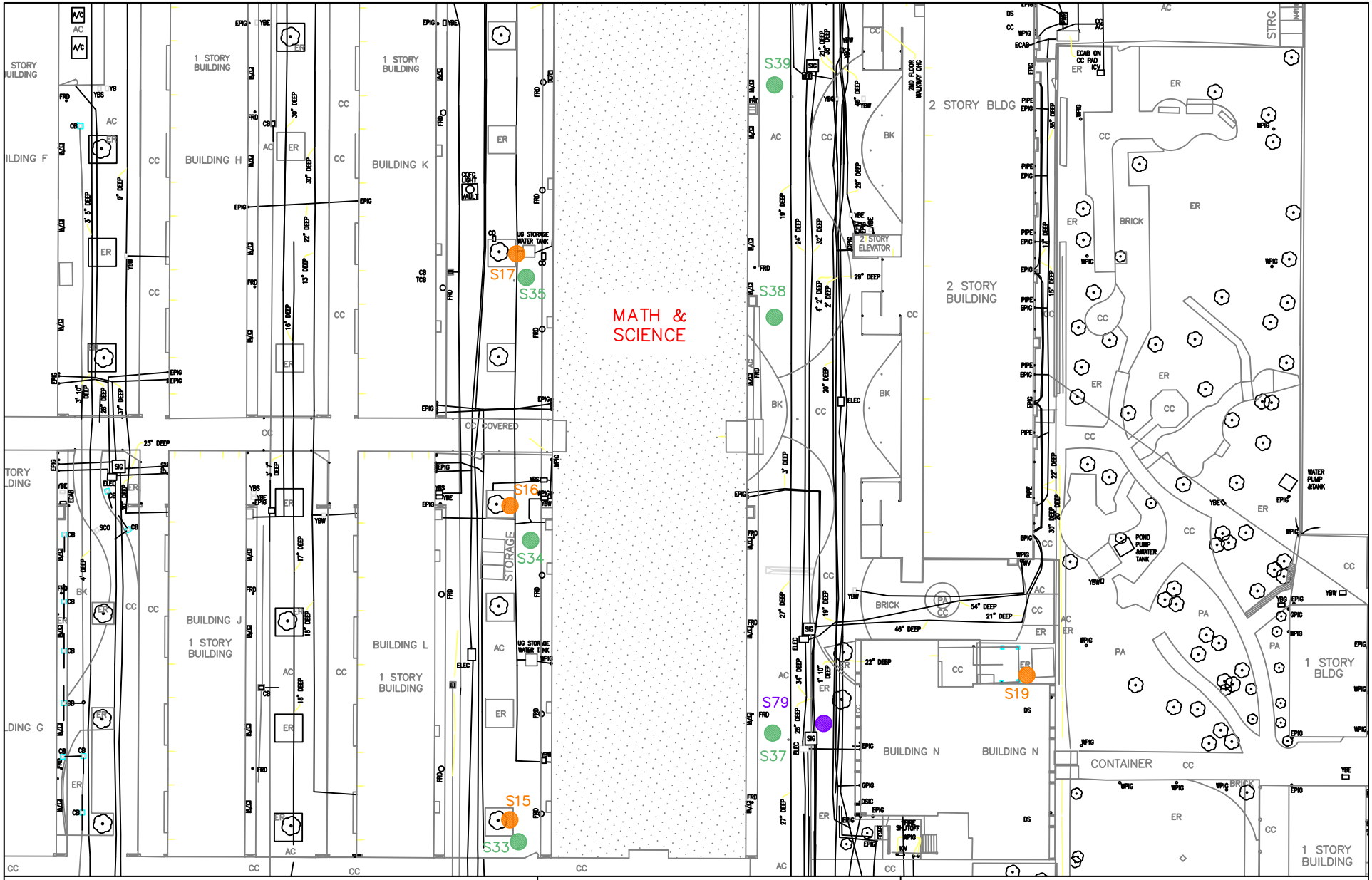
Figure 3



CES
Civil-Environmental-Survey Group
PHONE: (951) 808-8585/(951) 848-9812 (FAX)

Sample Locations – Administration Area
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY:	CHECKED BY:	PROJECT NO:	
S. GREEN			Figure 4
APPROVED BY:	DATE: 5/1/17	SCALE: NO SCALE	



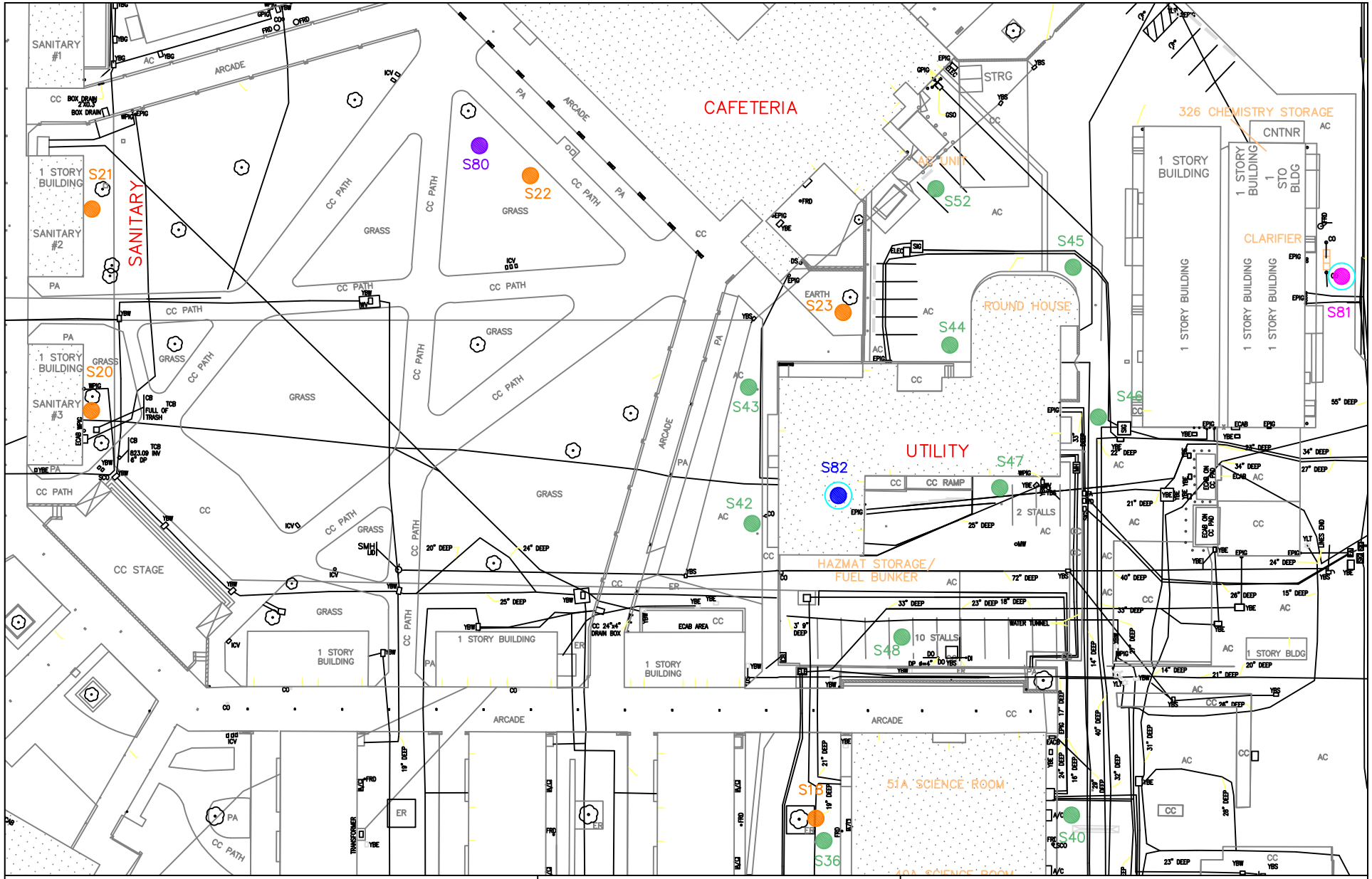
- ARSENIC SOIL SAMPLE LOCATIONS
- LEAD SOIL SAMPLE LOCATIONS
- HYDROCARBON SOIL SAMPLE LOCATIONS
- PESTICIDE SOIL SAMPLE LOCATIONS
- VOC SOIL SAMPLE LOCATIONS
- SOIL VAPOR PROBE LOCATIONS

Graphic Scale
0 25 50
(In Feet)
1 inch = 50 ft.

CES
Civil-Environmental-Survey Group
PHONE: (951) 808-8585/(951) 848-9812 (FAX)

Sample Locations – Math & Science Area
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY: S. GREEN	CHECKED BY:	PROJECT NO:	Figure 5
APPROVED BY:	DATE: 12/11/16	SCALE: NO SCALE	



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Civil-Environmental-Survey Group
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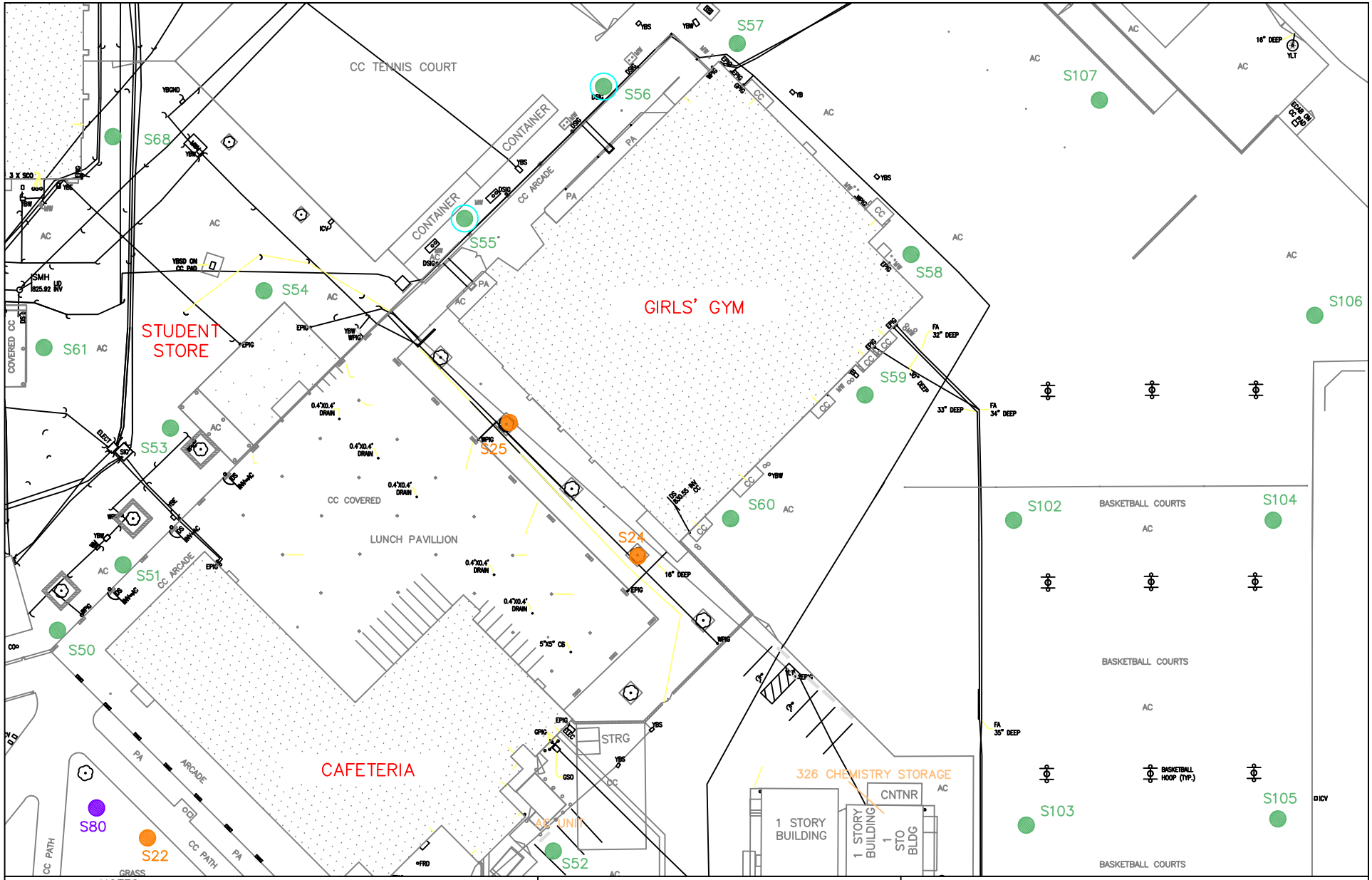
Sample Locations – Utility Building Area
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY: S. GREEN	CHECKED BY:	PROJECT NO:	Figure 6
APPROVED BY:	DATE: 12/11/16	SCALE: NO SCALE	



NOTES:

- ARSENIC SOIL SAMPLE LOCATIONS
- LEAD SOIL SAMPLE LOCATIONS
- HYDROCARBON SOIL SAMPLE LOCATIONS
- PESTICIDE SOIL SAMPLE LOCATIONS
- VOC SOIL SAMPLE LOCATIONS
- SOIL VAPOR PROBE LOCATIONS

Graphic Scale

0 25 50

(In Feet)

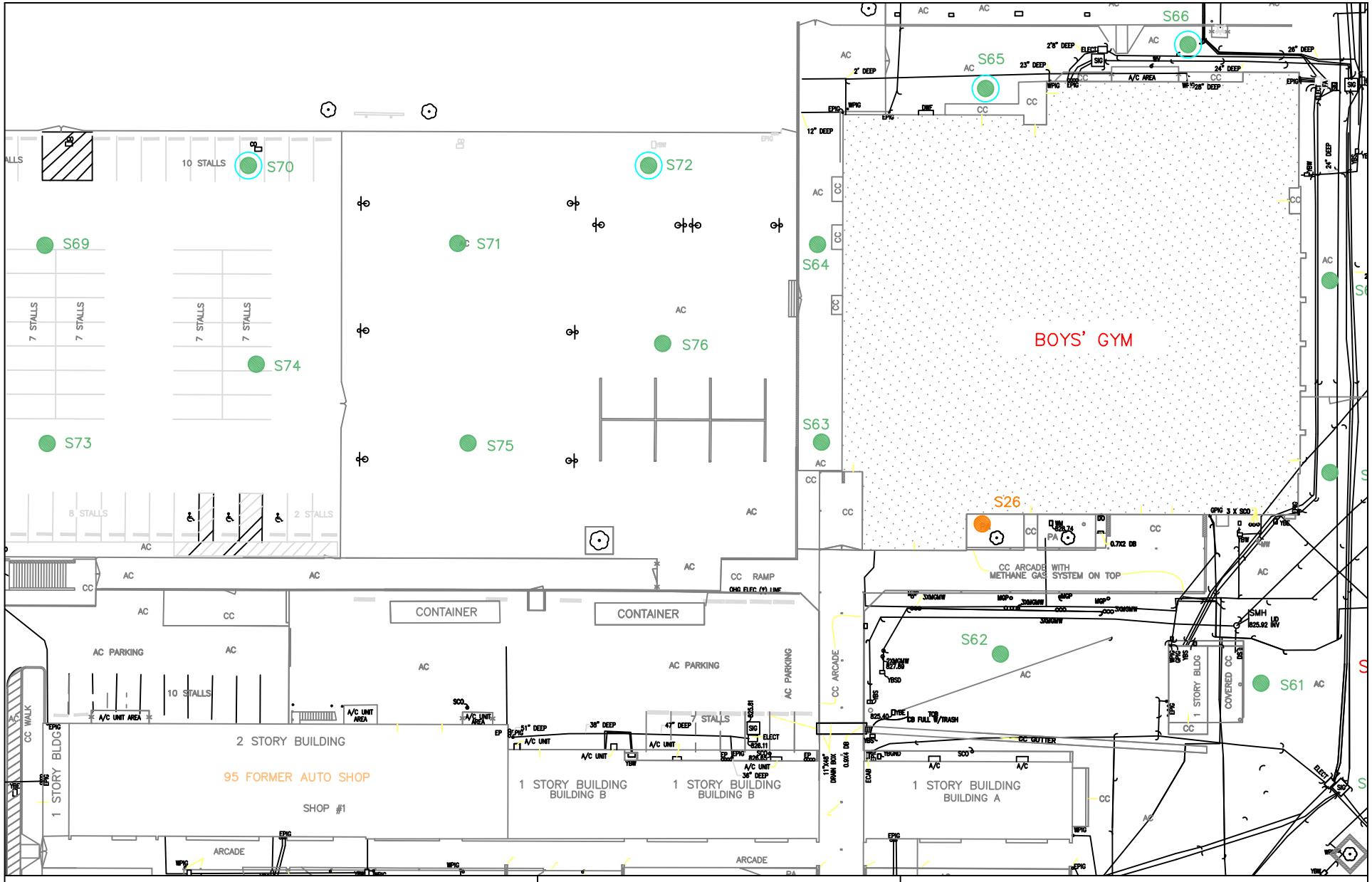
1 inch = 50 ft.

CES Civil-Environmental-Survey Group

PHONE: (951) 808-8585/(951) 848-9812 (FAX)

Sample Locations – Girls' Gym Area
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY: S. GREEN	CHECKED BY:	PROJECT NO:	Figure 7
APPROVED BY:	DATE: 12/16/16	SCALE: NO SCALE	



- ARSENIC SOIL SAMPLE LOCATIONS
- LEAD SOIL SAMPLE LOCATIONS
- HYDROCARBON SOIL SAMPLE LOCATIONS
- PESTICIDE SOIL SAMPLE LOCATIONS
- VOC SOIL SAMPLE LOCATIONS
- SOIL VAPOR PROBE LOCATIONS

Graphic Scale

0 25 50

(In Feet)

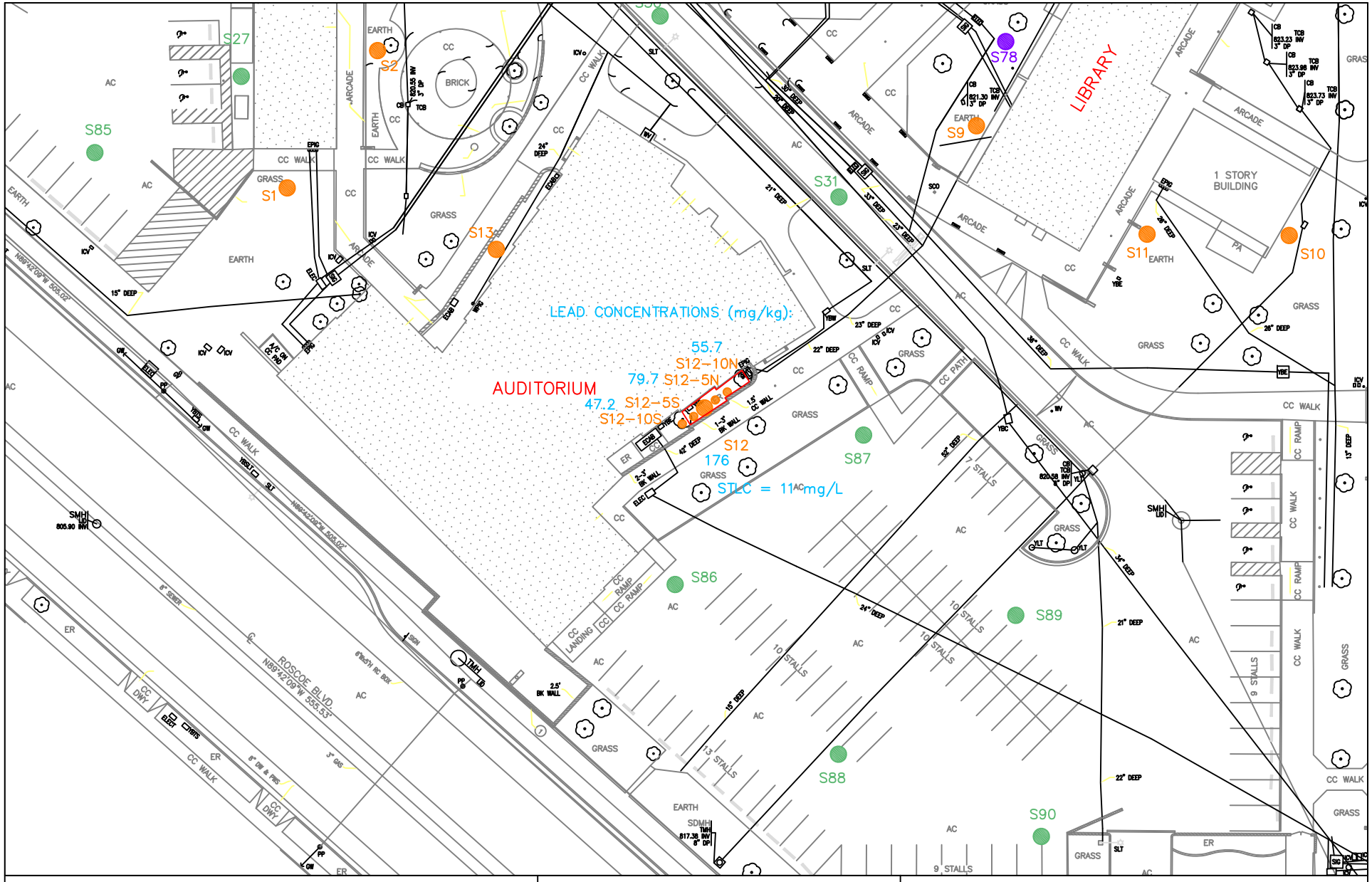
1 inch = 50 ft.

CES Civil-Environmental-Survey Group

PHONE: (951) 808-8585/(951) 848-9812 (FAX)

Sample Locations – Boys' Gym Area
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY: S. GREEN	CHECKED BY:	PROJECT NO:	Figure 8
APPROVED BY:	DATE: 12/11/16	SCALE: NO SCALE	



CES
Civil-Environmental-Survey Group
PHONE: (951) 808-8585/(951) 848-9812 (FAX)

Sample Locations – Front Parking Area
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY:	CHECKED BY:	PROJECT NO:	
S. GREEN			Figure 9
APPROVED BY:	DATE: 5/1/17	SCALE: NO SCALE	



- ARSENIC SOIL SAMPLE LOCATIONS
- LEAD SOIL SAMPLE LOCATIONS
- HYDROCARBON SOIL SAMPLE LOCATIONS
- PESTICIDE SOIL SAMPLE LOCATIONS
- VOC SOIL SAMPLE LOCATIONS
- SOIL VAPOR PROBE LOCATIONS

Graphic Scale

0 25 50

(In Feet)

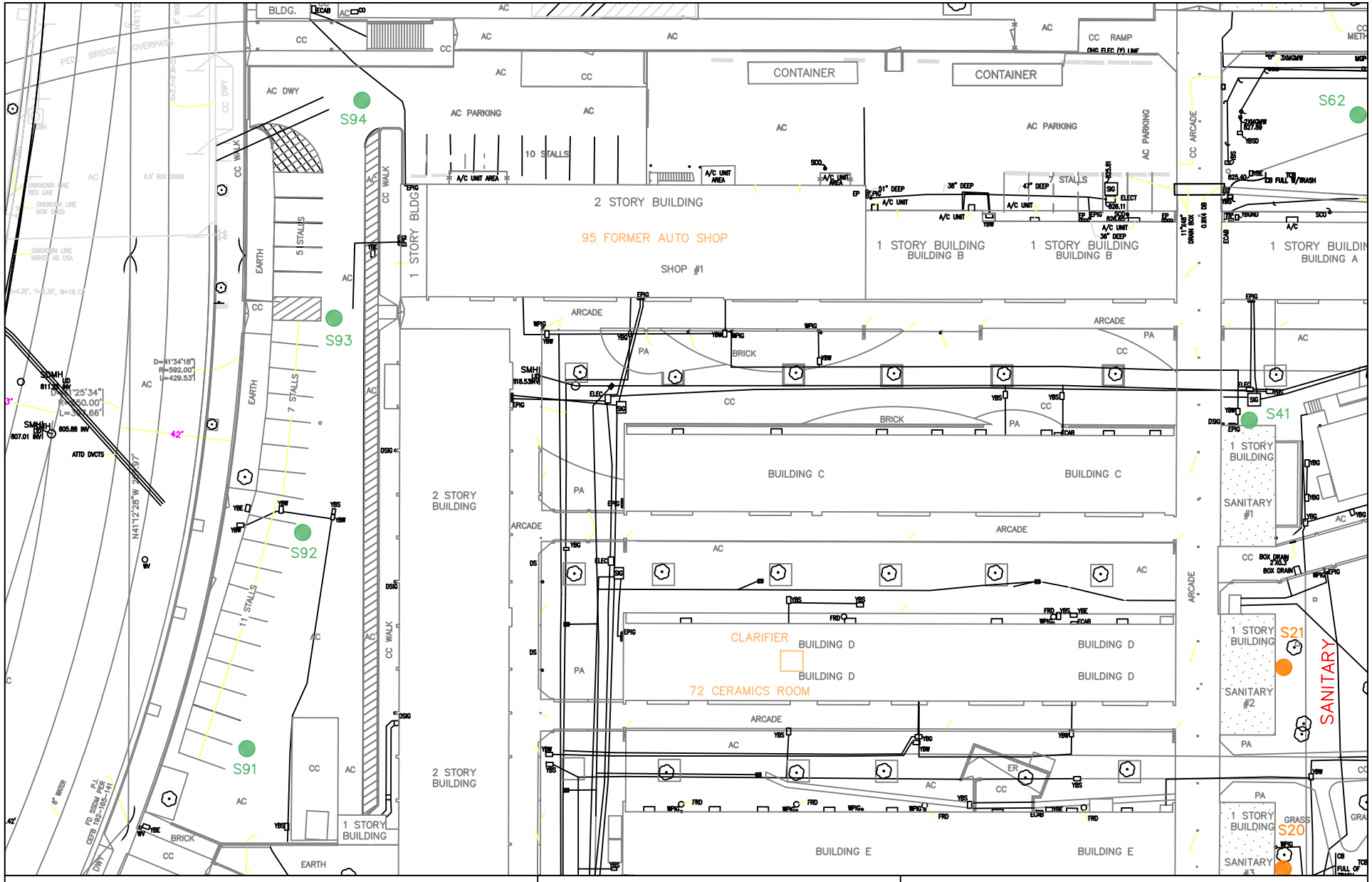
1 inch = 50 ft.

CES
Civil-Environmental-Survey Group

PHONE: (951) 808-8585/(951) 848-9812 (FAX)

Sample Locations – Back Parking Area
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY:	CHECKED BY:	PROJECT NO:	
S. GREEN			Figure 10
APPROVED BY:	DATE: 12/16/16	SCALE: NO SCALE	



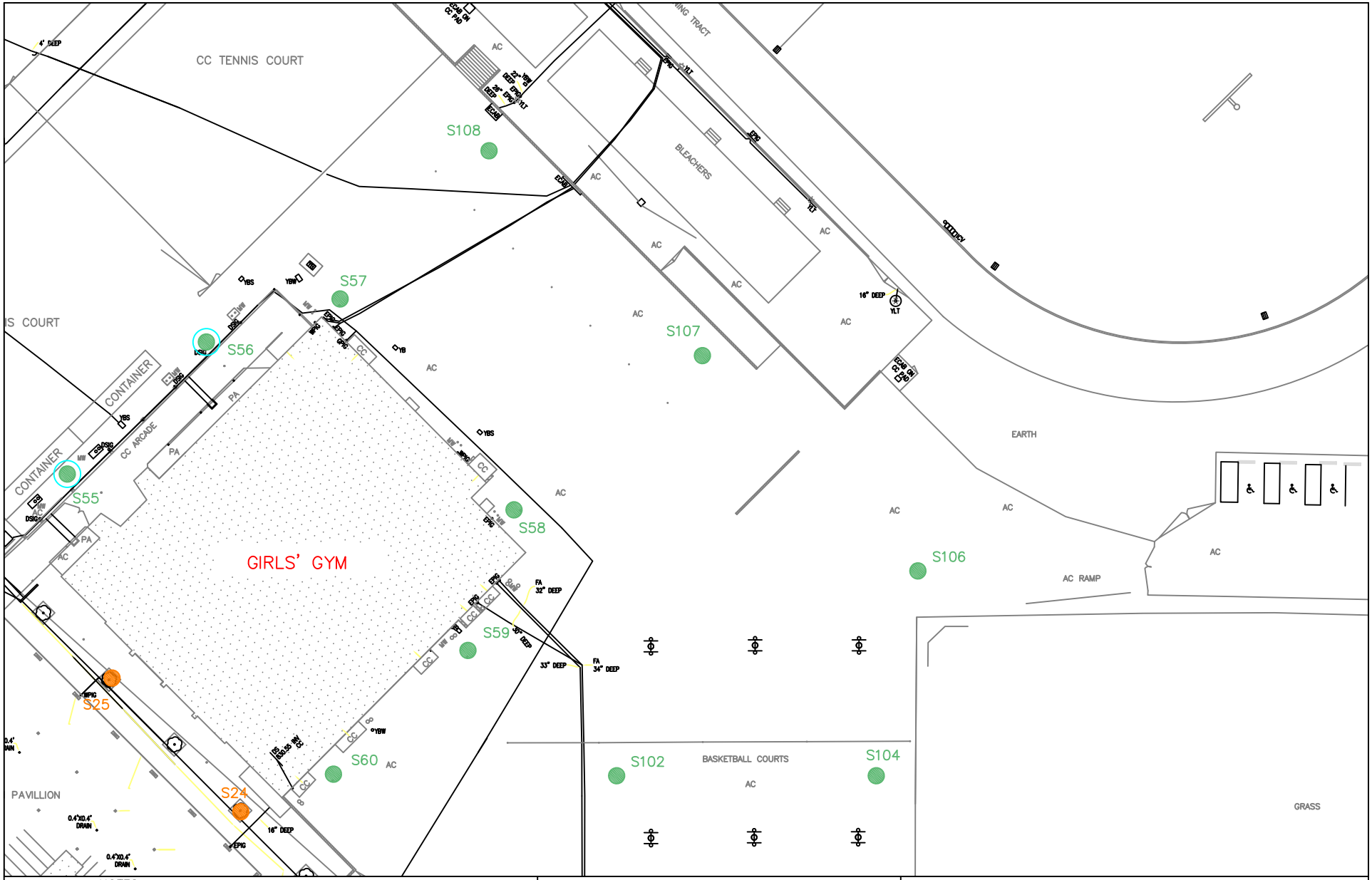
- ARSENIC SOIL SAMPLE LOCATIONS
- LEAD SOIL SAMPLE LOCATIONS
- HYDROCARBON SOIL SAMPLE LOCATIONS
- PESTICIDE SOIL SAMPLE LOCATIONS
- VOC SOIL SAMPLE LOCATIONS
- SOIL VAPOR PROBE LOCATIONS

Graphic Scale
0 25 50
(In Feet)
1 inch = 50 ft.

CES
Civil-Environmental-Survey Group
PHONE: (951) 808-8585/(951) 848-9812 (FAX)

Sample Locations – West Parking Area
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY: S. GREEN	CHECKED BY:	PROJECT NO:	Figure 11
APPROVED BY:	DATE: 12/16/16	SCALE: NO SCALE	



NOTES:

- ARSENIC SOIL SAMPLE LOCATIONS
- LEAD SOIL SAMPLE LOCATIONS
- HYDROCARBON SOIL SAMPLE LOCATIONS
- PESTICIDE SOIL SAMPLE LOCATIONS
- VOC SOIL SAMPLE LOCATIONS
- SOIL VAPOR PROBE LOCATIONS

Graphic Scale

0 25 50

(In Feet)

1 inch = 50 ft.

CES Civil-Environmental-Survey Group

PHONE: (951) 808-8585/(951) 848-9812 (FAX)

Sample Locations – East Hard Court Area
Francis Polytechnic High School
12431 Roscoe Blvd
Sun Valley, CA

DRAWN BY:	CHECKED BY:	PROJECT NO:	
S. GREEN			Figure 12
APPROVED BY:	DATE: 12/16/16	SCALE: NO SCALE	

Appendix A

Enthalpy Analytical, Inc.
Formerly Associated Labs
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MONTROSE ENVIRONMENTAL

Client: CES Group, Inc.
Address: 33353 Temecula Pkwy.
Suite 104 #333
Temecula, CA 92592
Attn: Skye Green

Lab Request: 386001
Report Date: 01/13/2017
Date Received: 12/30/2016
Client ID: 15581

Comments: Francis Poly HS
PO# 27116
12431 Roscoe Blvd., Sun Valley, CA

Revised Report - Results are now reported down to the MDL. Sample "S66-0.5ft" was accidentally dropped prior to digestion. The jar broke, but a sufficient aliqout was recovered for analysis.

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID
386001-001	S55-0.5ft	386001-025	S70-10.0ft
386001-002	S55-1.5ft	386001-026	S72-0.5ft
386001-003	S55-2.5ft	386001-027	S72-1.5ft
386001-004	S55-5.0ft	386001-028	S72-2.5ft
386001-005	S55-10.0ft	386001-029	S72-5.0ft
386001-006	S56-0.5ft	386001-030	S72-10.0ft
386001-007	S56-1.5ft	386001-031	S81-0.5ft
386001-008	S56-2.5ft	386001-032	S81-1.0ft
386001-009	S56-5.0ft	386001-033	S81-1.5ft
386001-010	S56-10.0ft	386001-034	S81-2.5ft
386001-011	S65-0.5ft	386001-035	S81-5.0ft
386001-012	S65-1.5ft	386001-036	S81-10.0ft
386001-013	S65-2.5ft	386001-037	S82-1.0ft
386001-014	S65-5.0ft	386001-038	S82-2.5ft
386001-015	S65-10.0ft	386001-039	S82-5.0ft
386001-016	S66-0.5ft	386001-040	S82-10.0ft
386001-017	S66-1.5ft		
386001-018	S66-2.5ft		
386001-019	S66-5.0ft		
386001-020	S66-10.0ft		
386001-021	S70-0.5ft		
386001-022	S70-1.5ft		
386001-023	S70-2.5ft		
386001-024	S70-5.0ft		

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:00 **Site:**
Sample #: **386001-001** **Client Sample #:** S55-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174023		
Arsenic	**1.942 J**	10	0.2	3	mg/Kg	01/04/17	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:05 **Site:**
Sample #: **386001-002** **Client Sample #:** S55-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:05 **Site:**
Sample #: **386001-003** **Client Sample #:** S55-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:05 **Site:**
Sample #: **386001-004** **Client Sample #:** S55-5.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:10 **Site:**
Sample #: **386001-005** **Client Sample #:** S55-10.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:35 **Site:**
Sample #: **386001-006** **Client Sample #:** S56-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174023		
Arsenic	**3.00**	10	0.2	3	mg/Kg	01/04/17	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:50 **Site:**
Sample #: **386001-007** **Client Sample #:** S56-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:50 **Site:**
Sample #: **386001-008** **Client Sample #:** S56-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:55 **Site:**
Sample #: **386001-009** **Client Sample #:** S56-5.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 08:55 **Site:**
Sample #: **386001-010** **Client Sample #:** S56-10.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 13:30 **Site:**
Sample #: **386001-011** **Client Sample #:** S65-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:		QC1174023
Arsenic	**1.760 J**	10	0.2	3	mg/Kg	01/04/17	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 13:30 **Site:**
Sample #: **386001-012** **Client Sample #:** S65-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 13:30 **Site:**
Sample #: **386001-013** **Client Sample #:** S65-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 13:30 **Site:**
Sample #: **386001-014** **Client Sample #:** S65-5.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 13:35 **Site:**
Sample #: **386001-015** **Client Sample #:** S65-10.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 12:50 **Site:**
Sample #: **386001-016** **Client Sample #:** S66-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:		QC1174023
Arsenic	**1.158 J**	10	0.2	3	mg/Kg	01/04/17	01/09/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 12:50 **Site:**
Sample #: **386001-017** **Client Sample #:** S66-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 12:50 **Site:**
Sample #: **386001-018** **Client Sample #:** S66-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 12:50 **Site:**
Sample #: **386001-019** **Client Sample #:** S66-5.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 13:00 **Site:**
Sample #: **386001-020** **Client Sample #:** S66-10.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 15:00 **Site:**
Sample #: **386001-021** **Client Sample #:** S70-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:		QC1174023
Arsenic	**1.895 J**	10	0.2	3	mg/Kg	01/04/17	01/06/17	KLN	
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID:		QC1173997
PCB-1016	ND	1	0.018	0.05	mg/Kg	01/04/16	01/04/17	LW	
PCB-1221	ND	1	0.014	0.05	mg/Kg	01/04/16	01/04/17	LW	
PCB-1232	ND	1	0.018	0.05	mg/Kg	01/04/16	01/04/17	LW	
PCB-1242	ND	1	0.0073	0.05	mg/Kg	01/04/16	01/04/17	LW	
PCB-1248	ND	1	0.0066	0.05	mg/Kg	01/04/16	01/04/17	LW	
PCB-1254	ND	1	0.01	0.05	mg/Kg	01/04/16	01/04/17	LW	
PCB-1260	ND	1	0.018	0.05	mg/Kg	01/04/16	01/04/17	LW	
PCB-1262	ND	1	0.02	0.05	mg/Kg	01/04/16	01/04/17	LW	
PCB-1268	ND	1	0.011	0.05	mg/Kg	01/04/16	01/04/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*54*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 15:00 **Site:**
Sample #: **386001-022** **Client Sample #:** S70-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 15:00 **Site:**
Sample #: **386001-023** **Client Sample #:** S70-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 15:00 **Site:**
Sample #: **386001-024** **Client Sample #:** S70-5.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 15:05 **Site:**
Sample #: **386001-025** **Client Sample #:** S70-10.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 14:20 **Site:**
Sample #: **386001-026** **Client Sample #:** S72-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174023		
Arsenic	**1.160 J**	10	0.2	3	mg/Kg	01/04/17	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 14:20 **Site:**
Sample #: **386001-027** **Client Sample #:** S72-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 14:20 **Site:**
Sample #: **386001-028** **Client Sample #:** S72-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 14:20 **Site:**
Sample #: **386001-029** **Client Sample #:** S72-5.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/29/2016 14:25 **Site:**
Sample #: **386001-030** **Client Sample #:** S72-10.0ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:45	**Site:**			
Sample #:	**386001-031**	**Client Sample #:**	S81-0.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174023		
Arsenic	**1.663 J**	10	0.2	3	mg/Kg	01/04/17	01/06/17	KLN	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:45	**Site:**			
Sample #:	**386001-032**	**Client Sample #:**	S81-1.0ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174024		
Antimony	ND	1	0.37	3	mg/Kg	01/04/16	01/05/17	JN	
Arsenic	**1.47**	1	0.36	1	mg/Kg	01/04/16	01/05/17	JN	
Barium	**63.1**	1	0.23	1	mg/Kg	01/04/16	01/05/17	JN	
Beryllium	ND	1	0.17	0.5	mg/Kg	01/04/16	01/05/17	JN	
Cadmium	ND	1	0.21	0.5	mg/Kg	01/04/16	01/05/17	JN	
Chromium	**9.32**	1	0.13	1	mg/Kg	01/04/16	01/05/17	JN	
Cobalt	**6.87**	1	0.19	0.5	mg/Kg	01/04/16	01/05/17	JN	
Copper	**8.95**	1	0.31	1	mg/Kg	01/04/16	01/06/17	JN	
Lead	**0.38 J**	1	0.32	0.5	mg/Kg	01/04/16	01/05/17	JN	
Molybdenum	ND	1	0.13	1	mg/Kg	01/04/16	01/05/17	JN	
Nickel	**5.65**	1	0.2	1.5	mg/Kg	01/04/16	01/05/17	JN	
Selenium	ND	1	0.72	1	mg/Kg	01/04/16	01/06/17	JN	
Silver	ND	1	0.13	0.5	mg/Kg	01/04/16	01/06/17	JN	
Thallium	ND	1	0.42	1	mg/Kg	01/04/16	01/05/17	JN	
Vanadium	**29.2**	1	0.37	0.5	mg/Kg	01/04/16	01/05/17	JN	
Zinc	**27.5**	1	0.28	5	mg/Kg	01/04/16	01/05/17	JN	
Method: EPA 7471A *NELAC*	Prep Method: EPA 7471A						QCBatchID: QC1174089		
Mercury	**0.03 J**	1	0.02	0.14	mg/Kg	01/06/17	01/06/17	JP	
Method: EPA 8260B *NELAC*	Prep Method: EPA 5035A						QCBatchID: QC1174022		
1,1,1,2-Tetrachloroethane	ND	1.06	0.2544	5.3	ug/Kg		01/05/17	ZZ	
1,1,1-Trichloroethane	ND	1.06	0.159	5.3	ug/Kg		01/05/17	ZZ	
1,1,2,2-Tetrachloroethane	ND	1.06	0.3074	5.3	ug/Kg		01/05/17	ZZ	
1,1,2-Trichloroethane	ND	1.06	0.2332	5.3	ug/Kg		01/05/17	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1.06	0.7844	5.3	ug/Kg		01/05/17	ZZ	
1,1-Dichloroethane	ND	1.06	0.2438	5.3	ug/Kg		01/05/17	ZZ	
1,1-Dichloroethene	ND	1.06	0.1908	5.3	ug/Kg		01/05/17	ZZ	
1,1-Dichloropropene	ND	1.06	0.2226	5.3	ug/Kg		01/05/17	ZZ	
1,2,3-Trichlorobenzene	ND	1.06	0.1908	5.3	ug/Kg		01/05/17	ZZ	
1,2,3-Trichloropropane	ND	1.06	0.212	5.3	ug/Kg		01/05/17	ZZ	
1,2,4-Trichlorobenzene	ND	1.06	0.3498	5.3	ug/Kg		01/05/17	ZZ	
1,2,4-Trimethylbenzene	ND	1.06	0.2968	5.3	ug/Kg		01/05/17	ZZ	
1,2-Dibromo-3-chloropropane	ND	1.06	0.212	5.3	ug/Kg		01/05/17	ZZ	
1,2-Dibromoethane	ND	1.06	0.1272	5.3	ug/Kg		01/05/17	ZZ	
1,2-Dichlorobenzene	ND	1.06	0.1908	5.3	ug/Kg		01/05/17	ZZ	
1,2-Dichloroethane	ND	1.06	0.1484	5.3	ug/Kg		01/05/17	ZZ	
1,2-Dichloropropane	ND	1.06	0.3604	5.3	ug/Kg		01/05/17	ZZ	
1,3,5-Trimethylbenzene	ND	1.06	0.2438	5.3	ug/Kg		01/05/17	ZZ	
1,3-Dichlorobenzene	ND	1.06	0.2226	5.3	ug/Kg		01/05/17	ZZ	
1,3-Dichloropropane	ND	1.06	0.2014	5.3	ug/Kg		01/05/17	ZZ	
1,4-Dichlorobenzene	ND	1.06	0.2544	5.3	ug/Kg		01/05/17	ZZ	
2,2-Dichloropropane	ND	1.06	0.2014	5.3	ug/Kg		01/05/17	ZZ	
2-Butanone (MEK)	ND	1.06	0.7632	106	ug/Kg		01/05/17	ZZ	
2-Chloroethyl Vinyl Ether	ND	1.06	0.318	5.3	ug/Kg		01/05/17	ZZ	
2-Chlorotoluene	ND	1.06	0.265	5.3	ug/Kg		01/05/17	ZZ	
4-Chlorotoluene	ND	1.06	0.2332	5.3	ug/Kg		01/05/17	ZZ	
4-Isopropyltoluene	ND	1.06	0.2862	5.3	ug/Kg		01/05/17	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	1.06	0.1802	5.3	ug/Kg		01/05/17	ZZ	
Acetone	ND	1.06	10.6	106	ug/Kg		01/05/17	ZZ	
Allyl Chloride	ND	1.06	0.1484	5.3	ug/Kg		01/05/17	ZZ	
Benzene	**0.80 J**	1.06	0.1908	5.3	ug/Kg		01/05/17	ZZ	
Bromobenzene	ND	1.06	0.318	5.3	ug/Kg		01/05/17	ZZ	
Bromochloromethane	ND	1.06	0.1908	5.3	ug/Kg		01/05/17	ZZ	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:45	**Site:**			
Sample #:	**386001-032**	**Client Sample #:**	S81-1.0ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Bromodichloromethane	ND	1.06	0.212	5.3	ug/Kg		01/05/17	ZZ	
Bromoform	ND	1.06	0.2014	5.3	ug/Kg		01/05/17	ZZ	
Bromomethane	ND	1.06	0.2332	5.3	ug/Kg		01/05/17	ZZ	
Carbon Tetrachloride	ND	1.06	0.1908	5.3	ug/Kg		01/05/17	ZZ	
Chlorobenzene	ND	1.06	0.1908	5.3	ug/Kg		01/05/17	ZZ	
Chlorodibromomethane	ND	1.06	0.2014	5.3	ug/Kg		01/05/17	ZZ	
Chloroethane	ND	1.06	0.212	5.3	ug/Kg		01/05/17	ZZ	
Chloroform	ND	1.06	0.1802	5.3	ug/Kg		01/05/17	ZZ	
Chloromethane	ND	1.06	0.2226	5.3	ug/Kg		01/05/17	ZZ	
cis-1,2-Dichloroethene	ND	1.06	0.212	5.3	ug/Kg		01/05/17	ZZ	
cis-1,3-dichloropropene	ND	1.06	0.212	5.3	ug/Kg		01/05/17	ZZ	
cis-1,4-dichloro-2-butene	ND	1.06	0.212	5.3	ug/Kg		01/05/17	ZZ	
Dibromomethane	ND	1.06	0.2226	5.3	ug/Kg		01/05/17	ZZ	
Dichlorodifluoromethane	**6.0**	1.06	0.2438	5.3	ug/Kg		01/05/17	ZZ	
Di-isopropyl ether (DIPE)	ND	1.06	0.2226	5.3	ug/Kg		01/05/17	ZZ	
Ethylbenzene	ND	1.06	0.2438	5.3	ug/Kg		01/05/17	ZZ	
Ethyl-tertbutylether (ETBE)	ND	1.06	0.4452	5.3	ug/Kg		01/05/17	ZZ	
Hexachlorobutadiene	ND	1.06	0.4452	5.3	ug/Kg		01/05/17	ZZ	
Isopropylbenzene	ND	1.06	0.265	5.3	ug/Kg		01/05/17	ZZ	
m and p-Xylene	ND	1.06	0.4028	5.3	ug/Kg		01/05/17	ZZ	
Methylene chloride	ND	1.06	0.2226	5.3	ug/Kg		01/05/17	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1.06	0.1802	5.3	ug/Kg		01/05/17	ZZ	
Naphthalene	ND	1.06	0.1696	5.3	ug/Kg		01/05/17	ZZ	
N-butylbenzene	ND	1.06	0.265	5.3	ug/Kg		01/05/17	ZZ	
N-propylbenzene	ND	1.06	0.2332	5.3	ug/Kg		01/05/17	ZZ	
o-Xylene	ND	1.06	0.2014	5.3	ug/Kg		01/05/17	ZZ	
Sec-butylbenzene	ND	1.06	0.2968	5.3	ug/Kg		01/05/17	ZZ	
Styrene	ND	1.06	0.1378	5.3	ug/Kg		01/05/17	ZZ	
t-Butyl alcohol (TBA)	ND	1.06	9.328	10.6	ug/Kg		01/05/17	ZZ	
Tert-amylmethylether (TAME)	ND	1.06	0.2014	5.3	ug/Kg		01/05/17	ZZ	
Tert-butylbenzene	ND	1.06	0.3604	5.3	ug/Kg		01/05/17	ZZ	
Tetrachloroethene	ND	1.06	0.2438	5.3	ug/Kg		01/05/17	ZZ	
Toluene	**0.56 J**	1.06	0.1802	5.3	ug/Kg		01/05/17	ZZ	
trans-1,2-dichloroethene	ND	1.06	0.2014	5.3	ug/Kg		01/05/17	ZZ	
trans-1,3-dichloropropene	ND	1.06	0.1908	5.3	ug/Kg		01/05/17	ZZ	
trans-1,4-dichloro-2-butene	ND	1.06	0.212	5.3	ug/Kg		01/05/17	ZZ	
Trichloroethene	ND	1.06	0.2438	5.3	ug/Kg		01/05/17	ZZ	
Trichlorofluoromethane	ND	1.06	0.2438	5.3	ug/Kg		01/05/17	ZZ	
Vinyl Chloride	ND	1.06	0.1484	5.3	ug/Kg		01/05/17	ZZ	
Xylenes (Total)	ND	1.06	0.4028	5.3	ug/Kg		01/05/17	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*137*	*70-145*	
4-Bromofluorobenzene (SUR)	*104*	*70-145*	
Dibromodifluoromethane (SUR)	*105*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Method: EPA 9045C *NELAC* Prep Method: Method QCBatchID: QC1174013

pH	**7.37**	1	pH Units	01/04/17 08:35	WW
Temperature (°C)	**25**	1	°C	01/04/17 08:35	WW

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:45	**Site:**			
Sample #:	**386001-033**	**Client Sample #:**	S81-1.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:45	**Site:**			
Sample #:	**386001-034**	**Client Sample #:**	S81-2.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174024		
Antimony	ND	1	0.37	3	mg/Kg	01/04/16	01/05/17	JN	
Arsenic	**2.15**	1	0.36	1	mg/Kg	01/04/16	01/05/17	JN	
Barium	**90.3**	1	0.23	1	mg/Kg	01/04/16	01/05/17	JN	
Beryllium	ND	1	0.17	0.5	mg/Kg	01/04/16	01/05/17	JN	
Cadmium	ND	1	0.21	0.5	mg/Kg	01/04/16	01/05/17	JN	
Chromium	**12.3**	1	0.13	1	mg/Kg	01/04/16	01/05/17	JN	
Cobalt	**8.20**	1	0.19	0.5	mg/Kg	01/04/16	01/05/17	JN	
Copper	**11.6**	1	0.31	1	mg/Kg	01/04/16	01/06/17	JN	
Lead	**0.49 J**	1	0.32	0.5	mg/Kg	01/04/16	01/05/17	JN	
Molybdenum	ND	1	0.13	1	mg/Kg	01/04/16	01/05/17	JN	
Nickel	**7.70**	1	0.2	1.5	mg/Kg	01/04/16	01/05/17	JN	
Selenium	ND	1	0.72	1	mg/Kg	01/04/16	01/06/17	JN	
Silver	ND	1	0.13	0.5	mg/Kg	01/04/16	01/06/17	JN	
Thallium	ND	1	0.42	1	mg/Kg	01/04/16	01/05/17	JN	
Vanadium	**30.6**	1	0.37	0.5	mg/Kg	01/04/16	01/05/17	JN	
Zinc	**34.8**	1	0.28	5	mg/Kg	01/04/16	01/05/17	JN	
Method: EPA 7471A *NELAC*	Prep Method: EPA 7471A						QCBatchID: QC1174089		
Mercury	ND	1	0.02	0.14	mg/Kg	01/06/17	01/06/17	JP	
Method: EPA 8260B *NELAC*	Prep Method: EPA 5035A						QCBatchID: QC1174022		
1,1,1,2-Tetrachloroethane	ND	0.96	0.2304	4.8	ug/Kg		01/05/17	ZZ	
1,1,1-Trichloroethane	ND	0.96	0.144	4.8	ug/Kg		01/05/17	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.96	0.2784	4.8	ug/Kg		01/05/17	ZZ	
1,1,2-Trichloroethane	ND	0.96	0.2112	4.8	ug/Kg		01/05/17	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.96	0.7104	4.8	ug/Kg		01/05/17	ZZ	
1,1-Dichloroethane	ND	0.96	0.2208	4.8	ug/Kg		01/05/17	ZZ	
1,1-Dichloroethene	ND	0.96	0.1728	4.8	ug/Kg		01/05/17	ZZ	
1,1-Dichloropropene	ND	0.96	0.2016	4.8	ug/Kg		01/05/17	ZZ	
1,2,3-Trichlorobenzene	ND	0.96	0.1728	4.8	ug/Kg		01/05/17	ZZ	
1,2,3-Trichloropropane	ND	0.96	0.192	4.8	ug/Kg		01/05/17	ZZ	
1,2,4-Trichlorobenzene	ND	0.96	0.3168	4.8	ug/Kg		01/05/17	ZZ	
1,2,4-Trimethylbenzene	ND	0.96	0.2688	4.8	ug/Kg		01/05/17	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.96	0.192	4.8	ug/Kg		01/05/17	ZZ	
1,2-Dibromoethane	ND	0.96	0.1152	4.8	ug/Kg		01/05/17	ZZ	
1,2-Dichlorobenzene	ND	0.96	0.1728	4.8	ug/Kg		01/05/17	ZZ	
1,2-Dichloroethane	ND	0.96	0.1344	4.8	ug/Kg		01/05/17	ZZ	
1,2-Dichloropropane	ND	0.96	0.3264	4.8	ug/Kg		01/05/17	ZZ	
1,3,5-Trimethylbenzene	ND	0.96	0.2208	4.8	ug/Kg		01/05/17	ZZ	
1,3-Dichlorobenzene	ND	0.96	0.2016	4.8	ug/Kg		01/05/17	ZZ	
1,3-Dichloropropane	ND	0.96	0.1824	4.8	ug/Kg		01/05/17	ZZ	
1,4-Dichlorobenzene	ND	0.96	0.2304	4.8	ug/Kg		01/05/17	ZZ	
2,2-Dichloropropane	ND	0.96	0.1824	4.8	ug/Kg		01/05/17	ZZ	
2-Butanone (MEK)	ND	0.96	0.6912	96	ug/Kg		01/05/17	ZZ	
2-Chloroethyl Vinyl Ether	ND	0.96	0.288	4.8	ug/Kg		01/05/17	ZZ	
2-Chlorotoluene	ND	0.96	0.24	4.8	ug/Kg		01/05/17	ZZ	
4-Chlorotoluene	ND	0.96	0.2112	4.8	ug/Kg		01/05/17	ZZ	
4-Isopropyltoluene	ND	0.96	0.2592	4.8	ug/Kg		01/05/17	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.96	0.1632	4.8	ug/Kg		01/05/17	ZZ	
Acetone	ND	0.96	9.6	96	ug/Kg		01/05/17	ZZ	
Allyl Chloride	ND	0.96	0.1344	4.8	ug/Kg		01/05/17	ZZ	
Benzene	**0.84 J**	0.96	0.1728	4.8	ug/Kg		01/05/17	ZZ	
Bromobenzene	ND	0.96	0.288	4.8	ug/Kg		01/05/17	ZZ	
Bromochloromethane	ND	0.96	0.1728	4.8	ug/Kg		01/05/17	ZZ	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:45	**Site:**			
Sample #:	**386001-034**	**Client Sample #:**	S81-2.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Bromodichloromethane	ND	0.96	0.192	4.8	ug/Kg		01/05/17	ZZ	
Bromoform	ND	0.96	0.1824	4.8	ug/Kg		01/05/17	ZZ	
Bromomethane	ND	0.96	0.2112	4.8	ug/Kg		01/05/17	ZZ	
Carbon Tetrachloride	ND	0.96	0.1728	4.8	ug/Kg		01/05/17	ZZ	
Chlorobenzene	ND	0.96	0.1728	4.8	ug/Kg		01/05/17	ZZ	
Chlorodibromomethane	ND	0.96	0.1824	4.8	ug/Kg		01/05/17	ZZ	
Chloroethane	ND	0.96	0.192	4.8	ug/Kg		01/05/17	ZZ	
Chloroform	ND	0.96	0.1632	4.8	ug/Kg		01/05/17	ZZ	
Chloromethane	ND	0.96	0.2016	4.8	ug/Kg		01/05/17	ZZ	
cis-1,2-Dichloroethene	ND	0.96	0.192	4.8	ug/Kg		01/05/17	ZZ	
cis-1,3-dichloropropene	ND	0.96	0.192	4.8	ug/Kg		01/05/17	ZZ	
cis-1,4-dichloro-2-butene	ND	0.96	0.192	4.8	ug/Kg		01/05/17	ZZ	
Dibromomethane	ND	0.96	0.2016	4.8	ug/Kg		01/05/17	ZZ	
Dichlorodifluoromethane	**4.3 J**	0.96	0.2208	4.8	ug/Kg		01/05/17	ZZ	
Di-isopropyl ether (DIPE)	ND	0.96	0.2016	4.8	ug/Kg		01/05/17	ZZ	
Ethylbenzene	ND	0.96	0.2208	4.8	ug/Kg		01/05/17	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.96	0.4032	4.8	ug/Kg		01/05/17	ZZ	
Hexachlorobutadiene	ND	0.96	0.4032	4.8	ug/Kg		01/05/17	ZZ	
Isopropylbenzene	ND	0.96	0.24	4.8	ug/Kg		01/05/17	ZZ	
m and p-Xylene	ND	0.96	0.3648	4.8	ug/Kg		01/05/17	ZZ	
Methylene chloride	ND	0.96	0.2016	4.8	ug/Kg		01/05/17	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.96	0.1632	4.8	ug/Kg		01/05/17	ZZ	
Naphthalene	ND	0.96	0.1536	4.8	ug/Kg		01/05/17	ZZ	
N-butylbenzene	ND	0.96	0.24	4.8	ug/Kg		01/05/17	ZZ	
N-propylbenzene	ND	0.96	0.2112	4.8	ug/Kg		01/05/17	ZZ	
o-Xylene	ND	0.96	0.1824	4.8	ug/Kg		01/05/17	ZZ	
Sec-butylbenzene	ND	0.96	0.2688	4.8	ug/Kg		01/05/17	ZZ	
Styrene	ND	0.96	0.1248	4.8	ug/Kg		01/05/17	ZZ	
t-Butyl alcohol (TBA)	ND	0.96	8.448	9.6	ug/Kg		01/05/17	ZZ	
Tert-amylmethylether (TAME)	ND	0.96	0.1824	4.8	ug/Kg		01/05/17	ZZ	
Tert-butylbenzene	ND	0.96	0.3264	4.8	ug/Kg		01/05/17	ZZ	
Tetrachloroethene	ND	0.96	0.2208	4.8	ug/Kg		01/05/17	ZZ	
Toluene	**0.30 J**	0.96	0.1632	4.8	ug/Kg		01/05/17	ZZ	
trans-1,2-dichloroethene	ND	0.96	0.1824	4.8	ug/Kg		01/05/17	ZZ	
trans-1,3-dichloropropene	ND	0.96	0.1728	4.8	ug/Kg		01/05/17	ZZ	
trans-1,4-dichloro-2-butene	ND	0.96	0.192	4.8	ug/Kg		01/05/17	ZZ	
Trichloroethene	ND	0.96	0.2208	4.8	ug/Kg		01/05/17	ZZ	
Trichlorofluoromethane	ND	0.96	0.2208	4.8	ug/Kg		01/05/17	ZZ	
Vinyl Chloride	ND	0.96	0.1344	4.8	ug/Kg		01/05/17	ZZ	
Xylenes (Total)	ND	0.96	0.3648	4.8	ug/Kg		01/05/17	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*132*	*70-145*	
4-Bromofluorobenzene (SUR)	*105*	*70-145*	
Dibromodifluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*99*	*70-145*	

Method: EPA 9045C *NELAC* Prep Method: Method QCBatchID: QC1174013

pH	**7.88**	1	pH Units	01/04/17 08:35	WW
Temperature (°C)	**25**	1	°C	01/04/17 08:35	WW

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:45	**Site:**			
Sample #:	**386001-035**	**Client Sample #:**	S81-5.0ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1174024		
Antimony	ND	1	0.37	3	mg/Kg	01/04/16	01/05/17	JN	
Arsenic	**1.10**	1	0.36	1	mg/Kg	01/04/16	01/05/17	JN	
Barium	**53.4**	1	0.23	1	mg/Kg	01/04/16	01/05/17	JN	
Beryllium	ND	1	0.17	0.5	mg/Kg	01/04/16	01/05/17	JN	
Cadmium	ND	1	0.21	0.5	mg/Kg	01/04/16	01/05/17	JN	
Chromium	**12.3**	1	0.13	1	mg/Kg	01/04/16	01/05/17	JN	
Cobalt	**4.62**	1	0.19	0.5	mg/Kg	01/04/16	01/05/17	JN	
Copper	**7.04**	1	0.31	1	mg/Kg	01/04/16	01/06/17	JN	
Lead	ND	1	0.32	0.5	mg/Kg	01/04/16	01/05/17	JN	
Molybdenum	**0.68 J**	1	0.13	1	mg/Kg	01/04/16	01/05/17	JN	
Nickel	**3.70**	1	0.2	1.5	mg/Kg	01/04/16	01/05/17	JN	
Selenium	ND	1	0.72	1	mg/Kg	01/04/16	01/06/17	JN	
Silver	ND	1	0.13	0.5	mg/Kg	01/04/16	01/06/17	JN	
Thallium	ND	1	0.42	1	mg/Kg	01/04/16	01/05/17	JN	
Vanadium	**20.0**	1	0.37	0.5	mg/Kg	01/04/16	01/05/17	JN	
Zinc	**19.3**	1	0.28	5	mg/Kg	01/04/16	01/05/17	JN	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID: QC1174089		
Mercury	ND	1	0.02	0.14	mg/Kg	01/06/17	01/06/17	JP	
Method: EPA 8260B *NELAC* Prep Method: EPA 5035A							QCBatchID: QC1174022		
1,1,1,2-Tetrachloroethane	ND	1.02	0.2448	5.1	ug/Kg		01/05/17	ZZ	
1,1,1-Trichloroethane	ND	1.02	0.153	5.1	ug/Kg		01/05/17	ZZ	
1,1,2,2-Tetrachloroethane	ND	1.02	0.2958	5.1	ug/Kg		01/05/17	ZZ	
1,1,2-Trichloroethane	ND	1.02	0.2244	5.1	ug/Kg		01/05/17	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1.02	0.7548	5.1	ug/Kg		01/05/17	ZZ	
1,1-Dichloroethane	ND	1.02	0.2346	5.1	ug/Kg		01/05/17	ZZ	
1,1-Dichloroethene	ND	1.02	0.1836	5.1	ug/Kg		01/05/17	ZZ	
1,1-Dichloropropene	ND	1.02	0.2142	5.1	ug/Kg		01/05/17	ZZ	
1,2,3-Trichlorobenzene	ND	1.02	0.1836	5.1	ug/Kg		01/05/17	ZZ	
1,2,3-Trichloropropane	ND	1.02	0.204	5.1	ug/Kg		01/05/17	ZZ	
1,2,4-Trichlorobenzene	ND	1.02	0.3366	5.1	ug/Kg		01/05/17	ZZ	
1,2,4-Trimethylbenzene	**0.45 J**	1.02	0.2856	5.1	ug/Kg		01/05/17	ZZ	
1,2-Dibromo-3-chloropropane	ND	1.02	0.204	5.1	ug/Kg		01/05/17	ZZ	
1,2-Dibromoethane	ND	1.02	0.1224	5.1	ug/Kg		01/05/17	ZZ	
1,2-Dichlorobenzene	ND	1.02	0.1836	5.1	ug/Kg		01/05/17	ZZ	
1,2-Dichloroethane	ND	1.02	0.1428	5.1	ug/Kg		01/05/17	ZZ	
1,2-Dichloropropane	ND	1.02	0.3468	5.1	ug/Kg		01/05/17	ZZ	
1,3,5-Trimethylbenzene	**1.1 J**	1.02	0.2346	5.1	ug/Kg		01/05/17	ZZ	
1,3-Dichlorobenzene	ND	1.02	0.2142	5.1	ug/Kg		01/05/17	ZZ	
1,3-Dichloropropane	ND	1.02	0.1938	5.1	ug/Kg		01/05/17	ZZ	
1,4-Dichlorobenzene	ND	1.02	0.2448	5.1	ug/Kg		01/05/17	ZZ	
2,2-Dichloropropane	ND	1.02	0.1938	5.1	ug/Kg		01/05/17	ZZ	
2-Butanone (MEK)	ND	1.02	0.7344	102	ug/Kg		01/05/17	ZZ	
2-Chloroethyl Vinyl Ether	ND	1.02	0.306	5.1	ug/Kg		01/05/17	ZZ	
2-Chlorotoluene	ND	1.02	0.255	5.1	ug/Kg		01/05/17	ZZ	
4-Chlorotoluene	ND	1.02	0.2244	5.1	ug/Kg		01/05/17	ZZ	
4-Isopropyltoluene	ND	1.02	0.2754	5.1	ug/Kg		01/05/17	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	1.02	0.1734	5.1	ug/Kg		01/05/17	ZZ	
Acetone	ND	1.02	10.2	102	ug/Kg		01/05/17	ZZ	
Allyl Chloride	ND	1.02	0.1428	5.1	ug/Kg		01/05/17	ZZ	
Benzene	**1.3 J**	1.02	0.1836	5.1	ug/Kg		01/05/17	ZZ	
Bromobenzene	ND	1.02	0.306	5.1	ug/Kg		01/05/17	ZZ	
Bromochloromethane	ND	1.02	0.1836	5.1	ug/Kg		01/05/17	ZZ	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:45	**Site:**			
Sample #:	**386001-035**	**Client Sample #:**	S81-5.0ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Bromodichloromethane	ND	1.02	0.204	5.1	ug/Kg		01/05/17	ZZ	
Bromoform	ND	1.02	0.1938	5.1	ug/Kg		01/05/17	ZZ	
Bromomethane	ND	1.02	0.2244	5.1	ug/Kg		01/05/17	ZZ	
Carbon Tetrachloride	ND	1.02	0.1836	5.1	ug/Kg		01/05/17	ZZ	
Chlorobenzene	ND	1.02	0.1836	5.1	ug/Kg		01/05/17	ZZ	
Chlorodibromomethane	ND	1.02	0.1938	5.1	ug/Kg		01/05/17	ZZ	
Chloroethane	ND	1.02	0.204	5.1	ug/Kg		01/05/17	ZZ	
Chloroform	ND	1.02	0.1734	5.1	ug/Kg		01/05/17	ZZ	
Chloromethane	ND	1.02	0.2142	5.1	ug/Kg		01/05/17	ZZ	
cis-1,2-Dichloroethene	ND	1.02	0.204	5.1	ug/Kg		01/05/17	ZZ	
cis-1,3-dichloropropene	ND	1.02	0.204	5.1	ug/Kg		01/05/17	ZZ	
cis-1,4-dichloro-2-butene	ND	1.02	0.204	5.1	ug/Kg		01/05/17	ZZ	
Dibromomethane	ND	1.02	0.2142	5.1	ug/Kg		01/05/17	ZZ	
Dichlorodifluoromethane	ND	1.02	0.2346	5.1	ug/Kg		01/05/17	ZZ	
Di-isopropyl ether (DIPE)	ND	1.02	0.2142	5.1	ug/Kg		01/05/17	ZZ	
Ethylbenzene	ND	1.02	0.2346	5.1	ug/Kg		01/05/17	ZZ	
Ethyl-tertbutylether (ETBE)	ND	1.02	0.4284	5.1	ug/Kg		01/05/17	ZZ	
Hexachlorobutadiene	ND	1.02	0.4284	5.1	ug/Kg		01/05/17	ZZ	
Isopropylbenzene	ND	1.02	0.255	5.1	ug/Kg		01/05/17	ZZ	
m and p-Xylene	**1.5 J**	1.02	0.3876	5.1	ug/Kg		01/05/17	ZZ	
Methylene chloride	ND	1.02	0.2142	5.1	ug/Kg		01/05/17	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1.02	0.1734	5.1	ug/Kg		01/05/17	ZZ	
Naphthalene	ND	1.02	0.1632	5.1	ug/Kg		01/05/17	ZZ	
N-butylbenzene	ND	1.02	0.255	5.1	ug/Kg		01/05/17	ZZ	
N-propylbenzene	ND	1.02	0.2244	5.1	ug/Kg		01/05/17	ZZ	
o-Xylene	**0.29 J**	1.02	0.1938	5.1	ug/Kg		01/05/17	ZZ	
Sec-butylbenzene	ND	1.02	0.2856	5.1	ug/Kg		01/05/17	ZZ	
Styrene	ND	1.02	0.1326	5.1	ug/Kg		01/05/17	ZZ	
t-Butyl alcohol (TBA)	ND	1.02	8.976	10.2	ug/Kg		01/05/17	ZZ	
Tert-amylmethylether (TAME)	ND	1.02	0.1938	5.1	ug/Kg		01/05/17	ZZ	
Tert-butylbenzene	ND	1.02	0.3468	5.1	ug/Kg		01/05/17	ZZ	
Tetrachloroethene	ND	1.02	0.2346	5.1	ug/Kg		01/05/17	ZZ	
Toluene	**1.6 J**	1.02	0.1734	5.1	ug/Kg		01/05/17	ZZ	
trans-1,2-dichloroethene	ND	1.02	0.1938	5.1	ug/Kg		01/05/17	ZZ	
trans-1,3-dichloropropene	ND	1.02	0.1836	5.1	ug/Kg		01/05/17	ZZ	
trans-1,4-dichloro-2-butene	ND	1.02	0.204	5.1	ug/Kg		01/05/17	ZZ	
Trichloroethene	ND	1.02	0.2346	5.1	ug/Kg		01/05/17	ZZ	
Trichlorofluoromethane	ND	1.02	0.2346	5.1	ug/Kg		01/05/17	ZZ	
Vinyl Chloride	ND	1.02	0.1428	5.1	ug/Kg		01/05/17	ZZ	
Xylenes (Total)	**1.8 J**	1.02	0.3876	5.1	ug/Kg		01/05/17	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*143*	*70-145*	
4-Bromofluorobenzene (SUR)	*104*	*70-145*	
Dibromodifluoromethane (SUR)	*107*	*70-145*	
Toluene-d8 (SUR)	*101*	*70-145*	

Method: EPA 9045C *NELAC* Prep Method: Method QCBatchID: QC1174013

pH	**8.40**	1	pH Units	01/04/17 08:35	WW
Temperature (°C)	**25**	1	°C	01/04/17 08:35	WW

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:50	**Site:**			
Sample #:	**386001-036**	**Client Sample #:**	S81-10.0ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174024		
Antimony	ND	1	0.37	3	mg/Kg	01/04/16	01/05/17	JN	
Arsenic	**1.55**	1	0.36	1	mg/Kg	01/04/16	01/05/17	JN	
Barium	**40.1**	1	0.23	1	mg/Kg	01/04/16	01/05/17	JN	
Beryllium	ND	1	0.17	0.5	mg/Kg	01/04/16	01/05/17	JN	
Cadmium	ND	1	0.21	0.5	mg/Kg	01/04/16	01/05/17	JN	
Chromium	**4.67**	1	0.13	1	mg/Kg	01/04/16	01/05/17	JN	
Cobalt	**3.85**	1	0.19	0.5	mg/Kg	01/04/16	01/05/17	JN	
Copper	**5.13**	1	0.31	1	mg/Kg	01/04/16	01/06/17	JN	
Lead	ND	1	0.32	0.5	mg/Kg	01/04/16	01/05/17	JN	
Molybdenum	ND	1	0.13	1	mg/Kg	01/04/16	01/05/17	JN	
Nickel	**2.77**	1	0.2	1.5	mg/Kg	01/04/16	01/05/17	JN	
Selenium	ND	1	0.72	1	mg/Kg	01/04/16	01/06/17	JN	
Silver	ND	1	0.13	0.5	mg/Kg	01/04/16	01/06/17	JN	
Thallium	ND	1	0.42	1	mg/Kg	01/04/16	01/05/17	JN	
Vanadium	**15.7**	1	0.37	0.5	mg/Kg	01/04/16	01/05/17	JN	
Zinc	**16.6**	1	0.28	5	mg/Kg	01/04/16	01/05/17	JN	
Method: EPA 7471A *NELAC*	Prep Method: EPA 7471A						QCBatchID: QC1174089		
Mercury	ND	1	0.02	0.14	mg/Kg	01/06/17	01/06/17	JP	
Method: EPA 8260B *NELAC*	Prep Method: EPA 5035A						QCBatchID: QC1174022		
1,1,1,2-Tetrachloroethane	ND	0.94	0.2256	4.7	ug/Kg		01/05/17	ZZ	
1,1,1-Trichloroethane	ND	0.94	0.141	4.7	ug/Kg		01/05/17	ZZ	
1,1,2,2-Tetrachloroethane	ND	0.94	0.2726	4.7	ug/Kg		01/05/17	ZZ	
1,1,2-Trichloroethane	ND	0.94	0.2068	4.7	ug/Kg		01/05/17	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	0.94	0.6956	4.7	ug/Kg		01/05/17	ZZ	
1,1-Dichloroethane	ND	0.94	0.2162	4.7	ug/Kg		01/05/17	ZZ	
1,1-Dichloroethene	ND	0.94	0.1692	4.7	ug/Kg		01/05/17	ZZ	
1,1-Dichloropropene	ND	0.94	0.1974	4.7	ug/Kg		01/05/17	ZZ	
1,2,3-Trichlorobenzene	ND	0.94	0.1692	4.7	ug/Kg		01/05/17	ZZ	
1,2,3-Trichloropropane	ND	0.94	0.188	4.7	ug/Kg		01/05/17	ZZ	
1,2,4-Trichlorobenzene	ND	0.94	0.3102	4.7	ug/Kg		01/05/17	ZZ	
1,2,4-Trimethylbenzene	ND	0.94	0.2632	4.7	ug/Kg		01/05/17	ZZ	
1,2-Dibromo-3-chloropropane	ND	0.94	0.188	4.7	ug/Kg		01/05/17	ZZ	
1,2-Dibromoethane	ND	0.94	0.1128	4.7	ug/Kg		01/05/17	ZZ	
1,2-Dichlorobenzene	ND	0.94	0.1692	4.7	ug/Kg		01/05/17	ZZ	
1,2-Dichloroethane	ND	0.94	0.1316	4.7	ug/Kg		01/05/17	ZZ	
1,2-Dichloropropane	ND	0.94	0.3196	4.7	ug/Kg		01/05/17	ZZ	
1,3,5-Trimethylbenzene	ND	0.94	0.2162	4.7	ug/Kg		01/05/17	ZZ	
1,3-Dichlorobenzene	ND	0.94	0.1974	4.7	ug/Kg		01/05/17	ZZ	
1,3-Dichloropropane	ND	0.94	0.1786	4.7	ug/Kg		01/05/17	ZZ	
1,4-Dichlorobenzene	ND	0.94	0.2256	4.7	ug/Kg		01/05/17	ZZ	
2,2-Dichloropropane	ND	0.94	0.1786	4.7	ug/Kg		01/05/17	ZZ	
2-Butanone (MEK)	ND	0.94	0.6768	94	ug/Kg		01/05/17	ZZ	
2-Chloroethyl Vinyl Ether	ND	0.94	0.282	4.7	ug/Kg		01/05/17	ZZ	
2-Chlorotoluene	ND	0.94	0.235	4.7	ug/Kg		01/05/17	ZZ	
4-Chlorotoluene	ND	0.94	0.2068	4.7	ug/Kg		01/05/17	ZZ	
4-Isopropyltoluene	ND	0.94	0.2538	4.7	ug/Kg		01/05/17	ZZ	
4-Methyl-2-pentanone (MIBK)	ND	0.94	0.1598	4.7	ug/Kg		01/05/17	ZZ	
Acetone	ND	0.94	9.4	94	ug/Kg		01/05/17	ZZ	
Allyl Chloride	ND	0.94	0.1316	4.7	ug/Kg		01/05/17	ZZ	
Benzene	**0.30 J**	0.94	0.1692	4.7	ug/Kg		01/05/17	ZZ	
Bromobenzene	ND	0.94	0.282	4.7	ug/Kg		01/05/17	ZZ	
Bromochloromethane	ND	0.94	0.1692	4.7	ug/Kg		01/05/17	ZZ	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 11:50	**Site:**			
Sample #:	**386001-036**	**Client Sample #:**	S81-10.0ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Bromodichloromethane	ND	0.94	0.188	4.7	ug/Kg		01/05/17	ZZ	
Bromoform	ND	0.94	0.1786	4.7	ug/Kg		01/05/17	ZZ	
Bromomethane	ND	0.94	0.2068	4.7	ug/Kg		01/05/17	ZZ	
Carbon Tetrachloride	ND	0.94	0.1692	4.7	ug/Kg		01/05/17	ZZ	
Chlorobenzene	ND	0.94	0.1692	4.7	ug/Kg		01/05/17	ZZ	
Chlorodibromomethane	ND	0.94	0.1786	4.7	ug/Kg		01/05/17	ZZ	
Chloroethane	ND	0.94	0.188	4.7	ug/Kg		01/05/17	ZZ	
Chloroform	ND	0.94	0.1598	4.7	ug/Kg		01/05/17	ZZ	
Chloromethane	ND	0.94	0.1974	4.7	ug/Kg		01/05/17	ZZ	
cis-1,2-Dichloroethene	ND	0.94	0.188	4.7	ug/Kg		01/05/17	ZZ	
cis-1,3-dichloropropene	ND	0.94	0.188	4.7	ug/Kg		01/05/17	ZZ	
cis-1,4-dichloro-2-butene	ND	0.94	0.188	4.7	ug/Kg		01/05/17	ZZ	
Dibromomethane	ND	0.94	0.1974	4.7	ug/Kg		01/05/17	ZZ	
Dichlorodifluoromethane	ND	0.94	0.2162	4.7	ug/Kg		01/05/17	ZZ	
Di-isopropyl ether (DIPE)	ND	0.94	0.1974	4.7	ug/Kg		01/05/17	ZZ	
Ethylbenzene	ND	0.94	0.2162	4.7	ug/Kg		01/05/17	ZZ	
Ethyl-tertbutylether (ETBE)	ND	0.94	0.3948	4.7	ug/Kg		01/05/17	ZZ	
Hexachlorobutadiene	ND	0.94	0.3948	4.7	ug/Kg		01/05/17	ZZ	
Isopropylbenzene	ND	0.94	0.235	4.7	ug/Kg		01/05/17	ZZ	
m and p-Xylene	ND	0.94	0.3572	4.7	ug/Kg		01/05/17	ZZ	
Methylene chloride	ND	0.94	0.1974	4.7	ug/Kg		01/05/17	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	0.94	0.1598	4.7	ug/Kg		01/05/17	ZZ	
Naphthalene	ND	0.94	0.1504	4.7	ug/Kg		01/05/17	ZZ	
N-butylbenzene	ND	0.94	0.235	4.7	ug/Kg		01/05/17	ZZ	
N-propylbenzene	ND	0.94	0.2068	4.7	ug/Kg		01/05/17	ZZ	
o-Xylene	ND	0.94	0.1786	4.7	ug/Kg		01/05/17	ZZ	
Sec-butylbenzene	ND	0.94	0.2632	4.7	ug/Kg		01/05/17	ZZ	
Styrene	ND	0.94	0.1222	4.7	ug/Kg		01/05/17	ZZ	
t-Butyl alcohol (TBA)	ND	0.94	8.272	9.4	ug/Kg		01/05/17	ZZ	
Tert-amylmethylether (TAME)	ND	0.94	0.1786	4.7	ug/Kg		01/05/17	ZZ	
Tert-butylbenzene	ND	0.94	0.3196	4.7	ug/Kg		01/05/17	ZZ	
Tetrachloroethene	ND	0.94	0.2162	4.7	ug/Kg		01/05/17	ZZ	
Toluene	**0.26 J**	0.94	0.1598	4.7	ug/Kg		01/05/17	ZZ	
trans-1,2-dichloroethene	ND	0.94	0.1786	4.7	ug/Kg		01/05/17	ZZ	
trans-1,3-dichloropropene	ND	0.94	0.1692	4.7	ug/Kg		01/05/17	ZZ	
trans-1,4-dichloro-2-butene	ND	0.94	0.188	4.7	ug/Kg		01/05/17	ZZ	
Trichloroethene	ND	0.94	0.2162	4.7	ug/Kg		01/05/17	ZZ	
Trichlorofluoromethane	ND	0.94	0.2162	4.7	ug/Kg		01/05/17	ZZ	
Vinyl Chloride	ND	0.94	0.1316	4.7	ug/Kg		01/05/17	ZZ	
Xylenes (Total)	ND	0.94	0.3572	4.7	ug/Kg		01/05/17	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*132*	*70-145*	
4-Bromofluorobenzene (SUR)	*103*	*70-145*	
Dibromodifluoromethane (SUR)	*104*	*70-145*	
Toluene-d8 (SUR)	*95*	*70-145*	

Method: EPA 9045C *NELAC* Prep Method: Method QCBatchID: QC1174013

pH	**8.31**	1	pH Units	01/04/17 08:35	WW
Temperature (°C)	**25**	1	°C	01/04/17 08:35	WW

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 10:20	**Site:**			
Sample #:	**386001-037**	**Client Sample #:**	S82-1.0ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M	Prep Method:						QCBatchID: QC1173958		
TPH (C10 to C28)	**31**	1		10	mg/Kg	01/03/17	01/06/17	LT	
TPH (C28 to C40)	ND	1		10	mg/Kg	01/03/17	01/06/17	LT	
TPH (C8 to C10)	ND	1		10	mg/Kg	01/03/17	01/06/17	LT	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 10:20	**Site:**			
Sample #:	**386001-038**	**Client Sample #:**	S82-2.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M	Prep Method:						QCBatchID: QC1173958		
TPH (C10 to C28)	**33**	1		10	mg/Kg	01/03/17	01/06/17	LT	
TPH (C28 to C40)	ND	1		10	mg/Kg	01/03/17	01/06/17	LT	
TPH (C8 to C10)	ND	1		10	mg/Kg	01/03/17	01/06/17	LT	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 10:20	**Site:**			
Sample #:	**386001-039**	**Client Sample #:**	S82-5.0ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M	Prep Method:						QCBatchID: QC1173958		
TPH (C10 to C28)	**36**	1		10	mg/Kg	01/03/17	01/06/17	LT	
TPH (C28 to C40)	ND	1		10	mg/Kg	01/03/17	01/06/17	LT	
TPH (C8 to C10)	ND	1		10	mg/Kg	01/03/17	01/06/17	LT	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/29/2016 10:25	**Site:**			
Sample #:	**386001-040**	**Client Sample #:**	S82-10.0ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015M	Prep Method:						QCBatchID: QC1173958		
TPH (C10 to C28)	**32**	1		10	mg/Kg	01/03/17	01/06/17	LT	
TPH (C28 to C40)	ND	1		10	mg/Kg	01/03/17	01/06/17	LT	
TPH (C8 to C10)	ND	1		10	mg/Kg	01/03/17	01/06/17	LT	

QCBatchID:	**QC1173958**	**Analyst:**	lytagas	**Method:**	EPA 8015M
Matrix:	Solid	**Analyzed:**	01/03/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1173958MB1					
TPH (C10 to C28)	ND	mg/Kg		10	
TPH (C28 to C40)	ND	mg/Kg		20	
TPH (C8 to C10)	ND	mg/Kg		10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1173958LCS1											
TPH (C10 to C28)	250		290		mg/Kg	116			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1173958MS1, QC1173958MSD1												**Source: 385950-009**
TPH (C10 to C28)	ND	250	250	300	340	mg/Kg	120	136	12.5	70-130	20	M

QCBatchID:	**QC1173997**	**Analyst:**	nhernandez	**Method:**	EPA 8082
Matrix:	Solid	**Analyzed:**	01/04/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1173997MB1					
PCB-1016	ND	mg/Kg	3	50	
PCB-1221	ND	mg/Kg	14	50	
PCB-1232	ND	mg/Kg	9.5	50	
PCB-1242	ND	mg/Kg	14	50	
PCB-1248	ND	mg/Kg	19	50	
PCB-1254	ND	mg/Kg	20	50	
PCB-1260	ND	mg/Kg	6.9	50	
PCB-1262	ND	mg/Kg	17	50	
PCB-1268	ND	mg/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1173997LCS1											
PCB-1016	0.05		0.042		mg/Kg	84			70-130		
PCB-1260	0.05		0.047		mg/Kg	94			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1173997MS1, QC1173997MSD1												**Source: 386001-021**
PCB-1016	ND	0.05	0.05	0.043	0.040	mg/Kg	86	80	7.2	70-130	20	
PCB-1221	ND	0.5	0.5			mg/Kg				70-130	20	
PCB-1232	ND	0.5	0.5			mg/Kg				70-130	20	
PCB-1242	ND	0.5	0.5			mg/Kg				70-130	20	
PCB-1248	ND	0.5	0.5			mg/Kg				70-130	20	
PCB-1254	ND	0.5	0.5			mg/Kg				70-130	20	
PCB-1260	ND	0.05	0.05	0.034	0.032	mg/Kg	68	64	6.1	70-130	20	
PCB-1262	ND	0.5	0.5			mg/Kg				70-130	20	
PCB-1268	ND	0.5	0.5			mg/Kg				70-130	20	

QCBatchID:	**QC1174013**	**Analyst:**	wei	**Method:**	EPA 9045C
Matrix:	Solid	**Analyzed:**	01/04/2017	**Instrument:**	CHEM (group)

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1174013DUP1						**Source: 386001-032**
pH	7.37	7.40	pH Units	0.4	20	
Temperature (°C)	25	25	°C	0.0	20	

QCBatchID: QC1174022	**Analyst:** nicollez		**Method:** EPA 8260B		
Matrix: Solid	**Analyzed:** 01/04/2017		**Instrument:** VOA-MS (group)		

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174022MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chloroethyl Vinyl Ether	ND	ug/Kg	0.3	5	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	10	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.23	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.25	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.38	5	

QCBatchID: QC1174022	**Analyst:** nicollez	**Method:** EPA 8260B	
Matrix: Solid	**Analyzed:** 01/04/2017	**Instrument:** VOA-MS (group)	

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174022MB1					
Isopropylbenzene	ND	ug/Kg	0.17	5	
m and p-Xylene	ND	ug/Kg	0.21	5	
Methylene chloride	ND	ug/Kg	0.22	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.25	5	
Naphthalene	ND	ug/Kg	0.28	5	
N-butylbenzene	ND	ug/Kg	0.16	5	
N-propylbenzene	ND	ug/Kg	0.19	5	
o-Xylene	ND	ug/Kg	0.13	5	
Sec-butylbenzene	ND	ug/Kg	0.34	5	
Styrene	ND	ug/Kg	0.23	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.18	5	
Tetrachloroethene	ND	ug/Kg	0.2	5	
Toluene	ND	ug/Kg	0.23	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.23	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.14	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.38	5	
Trichloroethene	ND	ug/Kg	0.39	5	
Trichlorofluoromethane	ND	ug/Kg	0.25	5	
Vinyl Chloride	ND	ug/Kg	0.18	5	
Xylenes (Total)	ND	ug/Kg	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174022LCS1											
1,1-Dichloroethene	50		48		ug/Kg	96			59-172		
Benzene	50		48		ug/Kg	96			62-137		
Chlorobenzene	50		50		ug/Kg	100			60-133		
Methyl-t-butyl Ether (MTBE)	50		60		ug/Kg	120			62-137		
Toluene	50		48		ug/Kg	96			59-139		
Trichloroethene	50		48		ug/Kg	96			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174022MS1, QC1174022MSD1												**Source: 386015-002**
1,1-Dichloroethene	ND	50	50	42	39	ug/Kg	84	78	7.4	59-172	22	
Benzene	ND	50	50	40	41	ug/Kg	80	82	2.5	62-137	24	
Chlorobenzene	ND	50	50	42	43	ug/Kg	84	86	2.4	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	55	56	ug/Kg	110	112	1.8	62-137	21	
Toluene	ND	50	50	42	40	ug/Kg	84	80	4.9	59-139	21	
Trichloroethene	ND	50	50	44	43	ug/Kg	88	86	2.3	66-142	21	

QCBatchID:	**QC1174023**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	01/04/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174023MB1					
Arsenic	ND	mg/Kg	0.02	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1174023LCS1											
Arsenic	50		53.8		mg/Kg	108			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1174023MS1, QC1174023MSD1											**Source:**	**386001-001**
Arsenic	1.942	50	50	39.6	47.8	mg/Kg	75	92	21.3	75-125	20	M

QCBatchID: QC1174024	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 01/04/2017	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174024MB1					
Antimony	**0.50 J**	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	**0.14 J**	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	**0.83 J**	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	0.5	
Molybdenum	**0.31 J**	mg/Kg	0.13	1	
Nickel	**0.60 J**	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	1	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	1	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174024LCS1											
Antimony	100		93.5		mg/Kg	94			80-120		
Arsenic	100		81.6		mg/Kg	82			80-120		
Barium	100		97.3		mg/Kg	97			80-120		
Beryllium	100		83.2		mg/Kg	83			80-120		
Cadmium	100		92.4		mg/Kg	92			80-120		
Chromium	100		95.4		mg/Kg	95			80-120		
Cobalt	100		96.8		mg/Kg	97			80-120		
Copper	100		92.4		mg/Kg	92			80-120		
Lead	100		96.7		mg/Kg	97			80-120		
Molybdenum	100		93.6		mg/Kg	94			80-120		
Nickel	100		93.5		mg/Kg	94			80-120		
Selenium	100		89.0		mg/Kg	89			80-120		
Silver	100		88.2		mg/Kg	88			80-120		
Thallium	100		87.3		mg/Kg	87			80-120		
Vanadium	100		91.8		mg/Kg	92			80-120		
Zinc	100		85.3		mg/Kg	85			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174024MS1, QC1174024MSD1												**Source: 386001-032**
Antimony	ND	50	50	18.8	18.7	mg/Kg	38	37	0.5	75-125	20	M
Arsenic	1.47	50	50	44.9	43.3	mg/Kg	87	84	3.6	75-125	20	
Barium	63.1	50	50	108	122	mg/Kg	90	118	12.2	75-125	20	
Beryllium	ND	50	50	42.4	43.0	mg/Kg	85	86	1.4	75-125	20	
Cadmium	ND	50	50	44.7	45.5	mg/Kg	89	91	1.8	75-125	20	
Chromium	9.32	50	50	54.6	55.7	mg/Kg	91	93	2.0	75-125	20	
Cobalt	6.87	50	50	52.2	52.9	mg/Kg	91	92	1.3	75-125	20	
Copper	8.95	50	50	59.8	57.4	mg/Kg	102	97	4.1	75-125	20	
Lead	0.38	50	50	46.6	45.1	mg/Kg	92	89	3.3	75-125	20	

QCBatchID: QC1174024	**Analyst:** dswafford	**Method:** EPA 6010B	
Matrix: Solid	**Analyzed:** 01/04/2017	**Instrument:** AAICP (group)	

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174024MS1, QC1174024MSD1											**Source:**	**386001-032**
Molybdenum	ND	50	50	44.0	41.7	mg/Kg	88	83	5.4	75-125	20	
Nickel	5.65	50	50	54.6	52.0	mg/Kg	98	93	4.9	75-125	20	
Selenium	ND	50	50	42.7	43.7	mg/Kg	85	87	2.3	75-125	20	
Silver	ND	50	50	42.8	40.8	mg/Kg	86	82	4.8	75-125	20	
Thallium	ND	50	50	34.1	34.8	mg/Kg	68	70	2.0	75-125	20	M
Vanadium	29.2	50	50	73.7	77.3	mg/Kg	89	96	4.8	75-125	20	
Zinc	27.5	50	50	65.4	70.5	mg/Kg	76	86	7.5	75-125	20	

QCBatchID:	**QC1174089**	**Analyst:**	dswafford	**Method:**	EPA 7471A
Matrix:	Solid	**Analyzed:**	01/06/2017	**Instrument:**	AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174089MB1					
Mercury	ND	mg/Kg	0.02	0.14	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174089LCS1											
Mercury	0.83		0.86		mg/Kg	104			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174089MS1, QC1174089MSD1												**Source: 386001-032**
Mercury	0.03	0.83	0.83	0.76	0.77	mg/Kg	88	89	1.3	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386001				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page: 1	of	4		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S55-0.5ft	12/29/16	8:00 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S55-1.5ft	12/29/16	8:05 AM	S	1/Sleeve											x	
3	S55-2.5ft	12/29/16	8:05 AM	S	1/Sleeve											x	
4	S55-5.0ft	12/29/16	8:05 AM	S	1/Sleeve											x	
5	S55-10.0ft	12/29/16	8:10 AM	S	1/Sleeve											x	
6	S56-0.5ft	12/29/16	8:35 AM	S	1/8oz			x									
7	S56-1.5ft	12/29/16	8:50 AM	S	1/Sleeve											x	
8	S56-2.5ft	12/29/16	8:50 AM	S	1/Sleeve											x	
9	S56-5.0ft	12/29/16	8:55 AM	S	1/Sleeve											x	
10	S56-10.0ft	12/29/16	8:55 AM	S	1/Sleeve											x	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	12/30/16 1140
[1] Received By:		Fernando Castaneda	EA	12/30/16 @11:45
[2] Relinquished By:				
[2] Received By:				
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386001				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	2	of	4	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S65-0.5ft	12/29/16	1:30 PM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S65-1.5ft	12/29/16	1:30 PM	S	1/Sleeve											x	
3	S65-2.5ft	12/29/16	1:30 PM	S	1/Sleeve											x	
4	S65-5.0ft	12/29/16	1:30 PM	S	1/Sleeve											x	
5	S65-10.0ft	12/29/16	1:35 PM	S	1/Sleeve											x	
6	S66-0.5ft	12/29/16	12:50 PM	S	1/8oz			x									
7	S66-1.5ft	12/29/16	12:50 PM	S	1/Sleeve											x	
8	S66-2.5ft	12/29/16	12:50 PM	S	1/Sleeve											x	
9	S66-5.0ft	12/29/16	12:05 PM	S	1/Sleeve											x	
10	S66-10.0ft	12/29/16	1:00 PM	S	1/Sleeve											x	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	12/30/16 1140
[1] Received By:		Fernando Castaneda	EH	12/30/16 @ 11:40
[2] Relinquished By:				
[2] Received By:				
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No: 386001	Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 3 of 4	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

Analysis Request

Test Instructions / Comments

Analyze 0.5' samples. Hold deeper samples.

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold
1	S70-0.5ft	12/29/16	3:00 PM	S	1/8oz			x				x				
2	S70-1.5ft	12/29/16	3:00 PM	S	1/Sleeve											x
3	S70-2.5ft	12/29/16	3:00 PM	S	1/Sleeve											x
4	S70-5.0ft	12/29/16	3:00 PM	S	1/Sleeve											x
5	S70-10.0ft	12/29/16	3:05 PM	S	1/Sleeve											x
6	S72-0.5ft	12/29/16	2:20 PM	S	1/8oz			x								
7	S72-1.5ft	12/29/16	2:20 PM	S	1/Sleeve											x
8	S72-2.5ft	12/29/16	2:20 PM	S	1/Sleeve											x
9	S72-5.0ft	12/29/16	2:20 PM	S	1/Sleeve											x
10	S72-10.0ft	12/29/16	2:25 PM	S	1/Sleeve											x

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	[signature]	Danny Baysa	CES Group/ Field Supervisor	12/30/16 1140
1 Received By:	[signature]	Fernando Castaneda	EA	12/30/16 @11:40
2 Relinquished By:				
2 Received By:				
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386001	Standard: x 4 Day: 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 4 of 4	2 Day: 1 Day: Same Day:
Billing: Enthalpy - SoCal	Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other
c/o Montrose Environmental Group		
1 Park Plaza, Suite 1000, Irvine, CA 92614		

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)	pH		Hold	Test Instructions / Comments
1	S81-0.5ft	12/29/16	11:45 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples unless analysis noted.
2	S81-1.0ft	12/29/16	11:45 AM	S	6/VOA Sleeve						x		x	x			
3	S81-1.5ft	12/29/16	11:45 AM	S	6/VOA Sleeve											x	
4	S81-2.5ft	12/29/16	11:45 AM	S	6/VOA Sleeve						x		x	x		x	Hold balance of sample
5	S81-5.0ft	12/29/16	11:45 AM	S	6/VOA Sleeve						x		x	x			
6	S81-10.0ft	12/29/16	11:50 AM	S	6/VOA Sleeve						x		x	x			
7	S82-1.0ft	12/29/16	10:20 AM	S	6/VOA Sleeve					x							
8	S82-2.5ft	12/29/16	10:20 AM	S	6/VOA Sleeve					x							
9	S82-5.0ft	12/29/16	10:20 AM	S	6/VOA Sleeve					x							
10	S82-10.0ft	12/29/16	10:25 AM	S	6/VOA Sleeve					x							

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	12/30/16 1140
[1] Received By:		Fernando Gutierrez	EH	12/30/16 @ 11:40
[2] Relinquished By:				
[2] Received By:				
[3] Relinquished By:				
[3] Received By:				

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: ~~Grant HS~~ CES Group (CC) Project: ~~Grant H.S~~ Francis Poly HS

Date Received: 12/30/16 (FC) Sampler's Name Present: (Yes) No

Sample(s) received in a cooler? (Yes) How many? 2 No (skip section 2) Sample Temp (°C): _____

Sample Temp (°C) from each cooler: #1: 10.9 #2: 15.0 #3: _____ #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: _____

Section 2

Was the cooler packed with: ✓ Ice ____ Ice Packs ____ Bubble Wrap ____ Styrofoam

____ Paper ____ None ____ Other _____

Cooler Temp (°C): #1: 3.7 #2: 3.6 #3: _____ #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relinquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were custody seals present?		✓	
If Yes – were they intact?			✓
Were all samples sealed in plastic bags?		✓	
Did all samples arrive intact? If no, indicate below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of sample sent for tests indicated?	✓		
Was there headspace in VOA vials?		✓	FC
Were the containers labeled with correct preservatives?			✓

Section 4

Explanations/Comments: Sample S66-0.5ft broke. The contents were recovered and placed in a new jar. (FC) 01/05/17

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response:

_____

_____

Completed By: _____ Date: 12/30/16

Enthalpy Analytical, Inc.
Formerly Associated Labs
806 N. Batavia - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.associatedlabs.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: CES Group, Inc.
Address: 33353 Temecula Pkwy.
Suite 104 #333
Temecula, CA 92592
Attn: Skye Green

Lab Request: 386077
Report Date: 01/12/2017
Date Received: 01/04/2017
Client ID: 15581

Comments: Francis Poly HS
PO# 27116
12431 Roscoe Blvd., Sun Valley, CA

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID	Sample #	Client Sample ID
386077-001	S22-0.5ft	386077-025	S67-2.5ft	386077-049	S96-1.5ft
386077-002	S22-1.5ft	386077-026	S69-0.5ft	386077-050	S96-2.5ft
386077-003	S22-2.5ft	386077-027	S69-1.5ft	386077-051	S97-0.5ft
386077-004	S57-0.5ft	386077-028	S69-2.5ft	386077-052	S97-1.5ft
386077-005	S57-1.5ft	386077-029	S64D-0.5ft	386077-053	S97-2.5ft
386077-006	S57-2.5ft	386077-030	S71-0.5ft	386077-054	S98-0.5ft
386077-007	S58-0.5ft	386077-031	S71-1.5ft	386077-055	S98-1.5ft
386077-008	S58-1.5ft	386077-032	S71-2.5ft	386077-056	S98-2.5ft
386077-009	S58-2.5ft	386077-033	S73-0.5ft	386077-057	S99-0.5ft
386077-010	S22D-0.5ft	386077-034	S73-1.5ft	386077-058	S99-1.5ft
386077-011	S59-0.5ft	386077-035	S73-2.5ft	386077-059	S99-2.5ft
386077-012	S59-1.5ft	386077-036	S74-0.5ft	386077-060	S100-0.5ft
386077-013	S59-2.5ft	386077-037	S74-1.5ft	386077-061	S100-1.5ft
386077-014	S60-0.5ft	386077-038	S74-2.5ft	386077-062	S100-2.5ft
386077-015	S60-1.5ft	386077-039	S75-0.5ft	386077-063	S101-0.5ft
386077-016	S60-2.5ft	386077-040	S75-1.5ft	386077-064	S101-1.5ft
386077-017	S63-0.5ft	386077-041	S75-2.5ft	386077-065	S101-2.5ft
386077-018	S63-1.5ft	386077-042	S76-0.5ft	386077-066	S102-0.5ft
386077-019	S63-2.5ft	386077-043	S76-1.5ft	386077-067	S102-1.5ft
386077-020	S64-0.5ft	386077-044	S76-2.5ft	386077-068	S102-2.5ft
386077-021	S64-1.5ft	386077-045	S95-0.5ft	386077-069	S103-0.5ft
386077-022	S64-2.5ft	386077-046	S95-1.5ft	386077-070	S103-1.5ft
386077-023	S67-0.5ft	386077-047	S95-2.5ft	386077-071	S103-2.5ft
386077-024	S67-1.5ft	386077-048	S96-0.5ft	386077-072	S106-0.5ft

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 13:43 **Site:**
Sample #: **386077-001** **Client Sample #:** S22-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174055		
Lead	**0.43 J**	1	0.32	0.5	mg/Kg	01/05/16	01/06/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 13:45 **Site:**
Sample #: **386077-002** **Client Sample #:** S22-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 13:50 **Site:**
Sample #: **386077-003** **Client Sample #:** S22-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 13:55 **Site:**
Sample #: **386077-004** **Client Sample #:** S57-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**0.904 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:00 **Site:**
Sample #: **386077-005** **Client Sample #:** S57-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:05 **Site:**
Sample #: **386077-006** **Client Sample #:** S57-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:40 **Site:**
Sample #: **386077-007** **Client Sample #:** S58-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**0.745 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:45 **Site:**
Sample #: **386077-008** **Client Sample #:** S58-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:50 **Site:**
Sample #: 386077-009 **Client Sample #:** S58-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 13:40 **Site:**
Sample #: 386077-010 **Client Sample #:** S22D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174055		
Lead	**2.45**	1	0.32	0.5	mg/Kg	01/05/16	01/06/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:55 **Site:**
Sample #: 386077-011 **Client Sample #:** S59-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.126 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:00 **Site:**
Sample #: 386077-012 **Client Sample #:** S59-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:05 **Site:**
Sample #: 386077-013 **Client Sample #:** S59-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:25 **Site:**
Sample #: 386077-014 **Client Sample #:** S60-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**2.63 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*94*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:30 **Site:**
Sample #: 386077-015 **Client Sample #:** S60-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:35 **Site:**
Sample #: 386077-016 **Client Sample #:** S60-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:05 **Site:**
Sample #: 386077-017 **Client Sample #:** S63-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.322 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:10 **Site:**
Sample #: 386077-018 **Client Sample #:** S63-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:15 **Site:**
Sample #: 386077-019 **Client Sample #:** S63-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:48 **Site:**
Sample #: 386077-020 **Client Sample #:** S64-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.365 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:50 **Site:**
Sample #: 386077-021 **Client Sample #:** S64-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:55 **Site:**
Sample #: 386077-022 **Client Sample #:** S64-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:25 **Site:**
Sample #: **386077-023** **Client Sample #:** S67-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**2.67 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:30 **Site:**
Sample #: **386077-024** **Client Sample #:** S67-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:35 **Site:**
Sample #: **386077-025** **Client Sample #:** S67-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 11:05 **Site:**
Sample #: **386077-026** **Client Sample #:** S69-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.478 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 11:10 **Site:**
Sample #: **386077-027** **Client Sample #:** S69-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 11:15 **Site:**
Sample #: **386077-028** **Client Sample #:** S69-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:45 **Site:**
Sample #: **386077-029** **Client Sample #:** S64D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.408 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:15 **Site:**
Sample #: **386077-030** **Client Sample #:** S71-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**2.36 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:20 **Site:**
Sample #: 386077-031 **Client Sample #:** S71-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:25 **Site:**
Sample #: 386077-032 **Client Sample #:** S71-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:50 **Site:**
Sample #: 386077-033 **Client Sample #:** S73-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.927 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:55 **Site:**
Sample #: 386077-034 **Client Sample #:** S73-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 11:00 **Site:**
Sample #: 386077-035 **Client Sample #:** S73-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:30 **Site:**
Sample #: 386077-036 **Client Sample #:** S74-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**2.70 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:35 **Site:**
Sample #: 386077-037 **Client Sample #:** S74-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:40 **Site:**
Sample #: 386077-038 **Client Sample #:** S74-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:25 **Site:**
Sample #: 386077-039 **Client Sample #:** S75-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.935 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 11:00 **Site:**
Sample #: 386077-040 **Client Sample #:** S75-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 11:15 **Site:**
Sample #: 386077-041 **Client Sample #:** S75-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:00 **Site:**
Sample #: 386077-042 **Client Sample #:** S76-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.639 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:05 **Site:**
Sample #: 386077-043 **Client Sample #:** S76-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 10:10 **Site:**
Sample #: 386077-044 **Client Sample #:** S76-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:15 **Site:**
Sample #: 386077-045 **Client Sample #:** S95-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.091 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:20 **Site:**
Sample #: 386077-046 **Client Sample #:** S95-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:25 **Site:**
Sample #: **386077-047** **Client Sample #:** S95-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:00 **Site:**
Sample #: **386077-048** **Client Sample #:** S96-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.326 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:05 **Site:**
Sample #: **386077-049** **Client Sample #:** S96-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:10 **Site:**
Sample #: **386077-050** **Client Sample #:** S96-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:25 **Site:**
Sample #: **386077-051** **Client Sample #:** S97-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.532 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:30 **Site:**
Sample #: **386077-052** **Client Sample #:** S97-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:35 **Site:**
Sample #: **386077-053** **Client Sample #:** S97-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:30 **Site:**
Sample #: **386077-054** **Client Sample #:** S98-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.360 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:40 **Site:**
Sample #: 386077-055 **Client Sample #:** S98-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:45 **Site:**
Sample #: 386077-056 **Client Sample #:** S98-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:10 **Site:**
Sample #: 386077-057 **Client Sample #:** S99-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.310 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:15 **Site:**
Sample #: 386077-058 **Client Sample #:** S99-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:20 **Site:**
Sample #: 386077-059 **Client Sample #:** S99-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 07:55 **Site:**
Sample #: 386077-060 **Client Sample #:** S100-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174056		
Arsenic	**1.112 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*74*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:00 **Site:**
Sample #: **386077-061** **Client Sample #:** S100-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:05 **Site:**
Sample #: **386077-062** **Client Sample #:** S100-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:40 **Site:**
Sample #: **386077-063** **Client Sample #:** S101-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**1.205 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:45 **Site:**
Sample #: **386077-064** **Client Sample #:** S101-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:50 **Site:**
Sample #: **386077-065** **Client Sample #:** S101-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:10 **Site:**
Sample #: **386077-066** **Client Sample #:** S102-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**1.440 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:15 **Site:**
Sample #: **386077-067** **Client Sample #:** S102-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:20 **Site:**
Sample #: **386077-068** **Client Sample #:** S102-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:40 **Site:**
Sample #: **386077-069** **Client Sample #:** S103-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**1.424 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:45 **Site:**
Sample #: **386077-070** **Client Sample #:** S103-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:50 **Site:**
Sample #: **386077-071** **Client Sample #:** S103-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:55 **Site:**
Sample #: **386077-072** **Client Sample #:** S106-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**1.993 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 15:59 **Site:**
Sample #: **386077-073** **Client Sample #:** S106-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 16:05 **Site:**
Sample #: **386077-074** **Client Sample #:** S106-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:25 **Site:**
Sample #: **386077-075** **Client Sample #:** S107-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**1.363 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:30 **Site:**
Sample #: **386077-076** **Client Sample #:** S107-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:35 **Site:**
Sample #: **386077-077** **Client Sample #:** S107-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:10 **Site:**
Sample #: **386077-078** **Client Sample #:** S108-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**1.785 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:15 **Site:**
Sample #: **386077-079** **Client Sample #:** S108-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 14:20 **Site:**
Sample #: **386077-080** **Client Sample #:** S108-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:45 **Site:**
Sample #: **386077-081** **Client Sample #:** S109-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**1.518 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:50 **Site:**
Sample #: **386077-082** **Client Sample #:** S109-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:55 **Site:**
Sample #: **386077-083** **Client Sample #:** S109-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:50 **Site:**
Sample #: **386077-084** **Client Sample #:** S110-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**2.11 J**	10	0.2	3	mg/Kg	01/05/16	01/06/17	KLN	
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*70*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 08:55 **Site:**
Sample #: **386077-085** **Client Sample #:** S110-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:00 **Site:**
Sample #: **386077-086** **Client Sample #:** S110-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:05 **Site:**
Sample #: **386077-087** **Client Sample #:** S111-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**1.830 J**	10	0.2	3	mg/Kg	01/05/16	01/09/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:10 **Site:**
Sample #: **386077-088** **Client Sample #:** S111-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/03/2017 09:15 **Site:**
Sample #: **386077-089** **Client Sample #:** S111-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 09:30	**Site:**			
Sample #:	**386077-090**	**Client Sample #:**	S112-0.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174057		
Arsenic	**1.965 J**	10	0.2	3	mg/Kg	01/05/16	01/09/17	KLN	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 09:35	**Site:**			
Sample #:	**386077-091**	**Client Sample #:**	S112-1.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 09:40	**Site:**			
Sample #:	**386077-092**	**Client Sample #:**	S112-2.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

QCBatchID: QC1174055	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/05/2017	**Instrument:** AAICP (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174055MB1					
Antimony	**0.90 J**	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	**0.55 J**	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	0.5	
Molybdenum	ND	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	1	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	1	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174055LCS1											
Antimony	100		112		mg/Kg	112			80-120		
Arsenic	100		103		mg/Kg	103			80-120		
Barium	100		104		mg/Kg	104			80-120		
Beryllium	100		93.3		mg/Kg	93			80-120		
Cadmium	100		102		mg/Kg	102			80-120		
Chromium	100		99.6		mg/Kg	100			80-120		
Cobalt	100		103		mg/Kg	103			80-120		
Copper	100		95.1		mg/Kg	95			80-120		
Lead	100		104		mg/Kg	104			80-120		
Molybdenum	100		101		mg/Kg	101			80-120		
Nickel	100		101		mg/Kg	101			80-120		
Selenium	100		90.1		mg/Kg	90			80-120		
Silver	100		89.0		mg/Kg	89			80-120		
Thallium	100		112		mg/Kg	112			80-120		
Vanadium	100		97.4		mg/Kg	97			80-120		
Zinc	100		102		mg/Kg	102			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174055MS1, QC1174055MSD1												**Source: 386077-001**
Antimony	ND	100	100	51.4	51.8	mg/Kg	51	52	0.8	75-125	20	M
Arsenic	1.41	100	100	99.2	96.4	mg/Kg	98	95	2.9	75-125	20	
Barium	38.5	100	100	140	157	mg/Kg	102	119	11.4	75-125	20	
Beryllium	ND	100	100	92.6	90.6	mg/Kg	93	91	2.2	75-125	20	
Cadmium	ND	100	100	96.4	97.6	mg/Kg	96	98	1.2	75-125	20	
Chromium	5.03	100	100	98.9	100	mg/Kg	94	95	1.1	75-125	20	
Cobalt	3.90	100	100	99.4	102	mg/Kg	96	98	2.6	75-125	20	
Copper	6.82	100	100	102	107	mg/Kg	95	100	4.8	75-125	20	
Lead	0.43	100	100	102	101	mg/Kg	102	101	1.0	75-125	20	

QCBatchID: QC1174055	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/05/2017	**Instrument:** AAICP (group)			

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174055MS1, QC1174055MSD1											**Source:**	**386077-001**
Molybdenum	ND	100	100	100	96.7	mg/Kg	100	97	3.4	75-125	20	
Nickel	2.95	100	100	89.8	99.0	mg/Kg	87	96	9.7	75-125	20	
Selenium	ND	100	100	84.1	82.9	mg/Kg	84	83	1.4	75-125	20	
Silver	ND	100	100	84.3	84.9	mg/Kg	84	85	0.7	75-125	20	
Thallium	ND	100	100	93.8	91.3	mg/Kg	94	91	2.7	75-125	20	
Vanadium	16.6	100	100	114	116	mg/Kg	97	99	1.7	75-125	20	
Zinc	19.4	100	100	118	130	mg/Kg	99	111	9.7	75-125	20	

QCBatchID:	**QC1174056**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	01/05/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174056MB1					
Arsenic	ND	mg/Kg	0.02	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174056LCS1											
Arsenic	50		53.7		mg/Kg	107			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174056MS1, QC1174056MSD1												**Source: 386077-004**
Arsenic	0.904	50	50	53.0	52.8	mg/Kg	104	104	0.4	75-125	20	

QCBatchID:	**QC1174057**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	01/05/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174057MB1					
Arsenic	ND	mg/Kg	0.02	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174057LCS1											
Arsenic	50		52.4		mg/Kg	105			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174057MS1, QC1174057MSD1												**Source: 386077-063**
Arsenic	1.205	50	50	46.0	49.4	mg/Kg	90	96	7.1	75-125	20	

QCBatchID:	**QC1174196**	**Analyst:**	nhernandez	**Method:**	EPA 8082
Matrix:	Solid	**Analyzed:**	01/10/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174196MB1					
PCB-1016	ND	ug/Kg	3	50	
PCB-1221	ND	ug/Kg	14	50	
PCB-1232	ND	ug/Kg	9.5	50	
PCB-1242	ND	ug/Kg	14	50	
PCB-1248	ND	ug/Kg	19	50	
PCB-1254	ND	ug/Kg	20	50	
PCB-1260	ND	ug/Kg	6.9	50	
PCB-1262	ND	ug/Kg	17	50	
PCB-1268	ND	ug/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174196LCS1											
PCB-1016	500		390		ug/Kg	78			70-130		
PCB-1260	500		400		ug/Kg	80			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174196MS1, QC1174196MSD1												**Source: 386077-014**
PCB-1016	ND	500	500	370	460	ug/Kg	74	92	21.7	70-130	20	M
PCB-1260	ND	500	500	320	450	ug/Kg	64	90	33.8	70-130	20	M

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386077	Standard: x 4 Day: 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 1 of 10	2 Day: 1 Day: Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S22-0.5ft	01/03/17	1:43 PM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S22-1.5ft	01/03/17	1:45 PM	S	1/8oz											x	
3	S22-2.5ft	01/03/17	1:50 PM	S	1/8oz											x	
4	S57-0.5ft	01/03/17	1:55 PM	S	1/8oz			x									
5	S57-1.5ft	01/03/17	2:00 PM	S	1/8oz											x	
6	S57-2.5ft	01/03/17	2:05 PM	S	1/8oz											x	
7	S58-0.5ft	01/03/17	2:40 PM	S	1/8oz			x									
8	S58-1.5ft	01/03/17	2:45 PM	S	1/8oz											x	
9	S58-2.5ft	01/03/17	2:50 PM	S	1/8oz											x	
10	S22D-0.5ft	01/03/17	1:40 PM	S	1/8oz		x										

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:		Kevin Gay	Enthalpy	1/4/17 1140
[2] Relinquished By:		Kevin Gay	Enthalpy	1/4/17 1435
[2] Received By:		T. Nash	EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386077				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	2	of	10	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S59-0.5ft	01/03/17	2:55 PM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S59-1.5ft	01/03/17	3:00 PM	S	1/8oz											x	
3	S59-2.5ft	01/03/17	3:05 PM	S	1/8oz											x	
4	S60-0.5ft	01/03/17	3:25 PM	S	1/8oz			x				x					
5	S60-1.5ft	01/03/17	3:30 PM	S	1/8oz											x	
6	S60-2.5ft	01/03/17	3:35 PM	S	1/8oz											x	
7	S63-0.5ft	01/03/17	10:05 AM	S	1/8oz			x									
8	S63-1.5ft	01/03/17	10:10 AM	S	1/8oz											x	
9	S63-2.5ft	01/03/17	10:15 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:			Enthalpy	1/4/17 1140
[2] Relinquished By:			Enthalpy	1/4/17 1935
[2] Received By:		T.Nash	EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No: 386077				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 3	of	10		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group										
1 Park Plaza, Suite 1000, Irvine, CA 92614										

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S64-0.5ft	01/03/17	9:48 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S64-1.5ft	01/03/17	9:50 AM	S	1/8oz											x	
3	S64-2.5ft	01/03/17	9:55 AM	S	1/8oz											x	
4	S67-0.5ft	01/03/17	9:25 AM	S	1/8oz			x									
5	S67-1.5ft	01/03/17	9:30 AM	S	1/8oz											x	
6	S67-2.5ft	01/03/17	9:35 AM	S	1/8oz											x	
7	S69-0.5ft	01/03/17	11:05 AM	S	1/8oz			x									
8	S69-1.5ft	01/03/17	11:10 AM	S	1/8oz											x	
9	S69-2.5ft	01/03/17	11:15 AM	S	1/8oz											x	
10	S64D-0.5ft	01/03/17	9:45 AM	S	1/8oz			x									

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	D Baysa	Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:	Kevin Gyn	Kevin Gyn	Enthalpy	1/4/17 1140
[2] Relinquished By:	Kevin Gyn	Kevin Gyn	Enthalpy	1/4/17 1435
[2] Received By:	T Nash	T Nash	EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386077	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 4 of 10	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)	pH		Hold	Test Instructions / Comments
1	S71-0.5ft	01/03/17	10:15 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples unless analysis noted.
2	S71-1.5ft	01/03/17	10:20 AM	S	1/8oz											x	
3	S71-2.5ft	01/03/17	10:25 AM	S	1/8oz											x	
4	S73-0.5ft	01/03/17	10:50 AM	S	1/8oz			x									
5	S73-1.5ft	01/03/17	10:55 AM	S	1/8oz											x	
6	S73-2.5ft	01/03/17	11:00 AM	S	1/8oz											x	
7	S74-0.5ft	01/03/17	10:30 AM	S	1/8oz			x									
8	S74-1.5ft	01/03/17	10:35 AM	S	1/8oz											x	
9	S74-2.5ft	01/03/17	10:40 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:			Enthalpy	1/4/17 1140
[2] Relinquished By:			Enthalpy	1/4/17 1435
[2] Received By:			EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386077	Standard: x 4 Day: 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 5 of 10	2 Day: 1 Day: Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S75-0.5ft	01/03/17	10:25 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S75-1.5ft	01/03/17	11:00 AM	S	1/8oz											x	
3	S75-2.5ft	01/03/17	11:15 AM	S	1/8oz											x	
4	S76-0.5ft	01/03/17	10:00 AM	S	1/8oz			x									
5	S76-1.5ft	01/03/17	10:05 AM	S	1/8oz											x	
6	S76-2.5ft	01/03/17	10:10 AM	S	1/8oz											x	
7	S95-0.5ft	01/03/17	9:15 AM	S	8oz			x									
8	S95-1.5ft	01/03/17	9:20 AM	S	8oz											x	
9	S95-2.5ft	01/03/17	9:25 AM	S	8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:			Enthalpy	1/4/17 1140
[2] Relinquished By:			Enthalpy	1/4/17 1435
[2] Received By:		TiNash	EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386077	Standard: x 4 Day: 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 6 of 10	2 Day: 1 Day: Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S96-0.5ft	01/03/17	9:00 AM	S	8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S96-1.5ft	01/03/17	9:05 AM	S	8oz											x	
3	S96-2.5ft	01/03/17	9:10 AM	S	8oz											x	
4	S97-0.5ft	01/03/17	8:25 AM	S	8oz			x									
5	S97-1.5ft	01/03/17	8:30 AM	S	8oz											x	
6	S97-2.5ft	01/03/17	8:35 AM	S	8oz											x	
7	S98-0.5ft	01/03/17	8:30 AM	S	8oz			x									
8	S98-1.5ft	01/03/17	8:40 AM	S	8oz											x	
9	S98-2.5ft	01/03/17	8:45 AM	S	8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:			Enthalpy	1/4/17 1140
[2] Relinquished By:			Enthalpy	1/4/17 1935
[2] Received By:			EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	386077			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	7	of	10	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S99-0.5ft	01/03/17	8:10 AM	S	8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S99-1.5ft	01/03/17	8:15 AM	S	8oz											x	
3	S99-2.5ft	01/03/17	8:20 AM	S	8oz											x	
4	S100-0.5ft	01/03/17	7:55 AM	S	8oz			x				x					
5	S100-1.5ft	01/03/17	8:00 AM	S	8oz											x	
6	S100-2.5ft	01/03/17	8:05 AM	S	8oz											x	
7	S101-0.5ft	01/03/17	8:40 AM	S	8oz			x									
8	S101-1.5ft	01/03/17	8:45 AM	S	8oz											x	
9	S101-2.5ft	01/03/17	8:50 AM	S	8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:			Enthalpy	1/4/17 1140
[2] Relinquished By:			Enthalpy	1/4/17 1435
[2] Received By:			FA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 38677				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	8	of	10	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S102-0.5ft	01/03/17	3:10 PM	S	8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S102-1.5ft	01/03/17	3:15 PM	S	8oz											x	
3	S102-2.5ft	01/03/17	3:20 PM	S	8oz											x	
4	S103-0.5ft	01/03/17	3:40 PM	S	8oz			x									
5	S103-1.5ft	01/03/17	3:45 PM	S	8oz											x	
6	S103-2.5ft	01/03/17	3:50 PM	S	8oz											x	
7	S106-0.5ft	01/03/17	3:55 PM	S	8oz			x									
8	S106-1.5ft	01/03/17	3:59 PM	S	8oz											x	
9	S106-2.5ft	01/03/17	4:05 PM	S	8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:		Kevin Guy	Enthalpy	1/4/17 1140
[2] Relinquished By:		Kevin Guy	Enthalpy	1/4/17 1435
[2] Received By:		T. Nasr	EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386077	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 9 of 10	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S107-0.5ft	01/03/17	2:25 PM	S	8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S107-1.5ft	01/03/17	2:30 PM	S	8oz											x	
3	S107-2.5ft	01/03/17	2:35 PM	S	8oz											x	
4	S108-0.5ft	01/03/17	2:10 PM	S	8oz			x									
5	S108-1.5ft	01/03/17	2:15 PM	S	8oz											x	
6	S108-2.5ft	01/03/17	2:20 PM	S	8oz											x	
7	S109-0.5ft	01/03/17	9:45 AM	S	8oz			x									
8	S109-1.5ft	01/03/17	9:50 AM	S	8oz											x	
9	S109-2.5ft	01/03/17	9:55 AM	S	8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:			Enthalpy	1/4/17 1140
[2] Relinquished By:			Enthalpy	1/4/17 1435
[2] Received By:			EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386077				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	10	of	10	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S110-0.5ft	01/03/17	8:50 AM	S	8oz			x				x					Analyze 0.5' samples. Hold deeper samples.
2	S110-1.5ft	01/03/17	8:55 AM	S	8oz											x	
3	S110-2.5ft	01/03/17	9:00 AM	S	8oz											x	
4	S111-0.5ft	01/03/17	9:05 AM	S	8oz			x									
5	S111-1.5ft	01/03/17	9:10 AM	S	8oz											x	
6	S111-2.5ft	01/03/17	9:15 AM	S	8oz											x	
7	S112-0.5ft	01/03/17	9:30 AM	S	8oz			x									
8	S112-1.5ft	01/03/17	9:35 AM	S	8oz											x	
9	S112-2.5ft	01/03/17	9:40 AM	S	8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:			Enthalpy	1/4/17 1140
[2] Relinquished By:			Enthalpy	1/4/17 1435
[2] Received By:		T Nash	EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPY analytical

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: CES Project: FRANKS POLYTECHNIC H.S.

Date Received: 1/4/17 Sampler's Name Present: Yes No

Sample(s) received in a cooler? Yes How many? 2 No (skip section 2) Sample Temp (°C): _____

Sample Temp (°C) from each cooler: #1: 9.7°C #2: 9.9°C #3: _____ #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: _____

Section 2

Was the cooler packed with: ✓ Ice ___ Ice Packs ___ Bubble Wrap ___ Styrofoam ___ Paper ___ None ___ Other _____

Cooler Temp (°C): #1: 5.3°C #2: 2.2°C #3: _____ #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relinquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were custody seals present?		✓	
If Yes – were they intact?			✓
Were all samples sealed in plastic bags? TV	✓	✓	
Did all samples arrive intact? If no, indicate below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of sample sent for tests indicated?	✓		
Was there headspace in VOA vials?			✓
Were the containers labeled with correct preservatives?			✓

Section 4

Explanations/Comments: _____

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: [signature] Date: 1/4/17

Enthalpy Analytical, Inc.
Formerly Associated Labs
806 N. Batavia - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.associatedlabs.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	CES Group, Inc.
Address:	33353 Temecula Pkwy. Suite 104 #333 Temecula, CA 92592
Attn:	Skye Green

Lab Request:	386080
Report Date:	01/13/2017
Date Received:	01/04/2017
Client ID:	15581

Comments: Francis Polytechnic HS
PO# 27116
12431 Roscoe Blvd., Sun Valley, CA

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
386080-001	S65-5ft
386080-002	S65-10ft
386080-003	S66-5ft
386080-004	S66-10ft
386080-005	S70-5ft
386080-006	S70-10ft
386080-007	S72-5ft
386080-008	S72-10ft
386080-009	S82-5ft
386080-010	S82-10ft

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 14:00	**Site:**			
Sample #:	**386080-001**	**Client Sample #:**	S65-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	1.8		90	Vppm		01/11/17 10:30	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/09/17 21:06	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/09/17 21:06	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/09/17 21:06	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/09/17 21:06	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/09/17 21:06	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/09/17 21:06	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/09/17 21:06	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/09/17 21:06	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/09/17 21:06	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/09/17 21:06	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/09/17 21:06	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/09/17 21:06	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/09/17 21:06	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/09/17 21:06	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/09/17 21:06	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/09/17 21:06	ZZ	
Benzene	**1.3 J**	1	1	3.2	ug/m3		01/09/17 21:06	ZZ	J
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/09/17 21:06	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/09/17 21:06	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/09/17 21:06	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/09/17 21:06	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/09/17 21:06	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/09/17 21:06	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/09/17 21:06	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/09/17 21:06	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/09/17 21:06	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/09/17 21:06	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/09/17 21:06	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/09/17 21:06	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/09/17 21:06	ZZ	
m and p-Xylene	**3.5 J**	1	1.7	4.3	ug/m3		01/09/17 21:06	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/09/17 21:06	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/09/17 21:06	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/09/17 21:06	ZZ	
Styrene	**5.5**	1	1.3	4.3	ug/m3		01/09/17 21:06	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/09/17 21:06	ZZ	
Toluene	**4.5**	1	1.5	3.8	ug/m3		01/09/17 21:06	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/09/17 21:06	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/09/17 21:06	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/09/17 21:06	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/09/17 21:06	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/09/17 21:06	ZZ	
Xylenes (Total)	**3.5 J**	1	2.2	4.3	ug/m3		01/09/17 21:06	ZZ	J

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 14:25	**Site:**			
Sample #:	**386080-002**	**Client Sample #:**	S65-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	1.5		75	Vppm		01/11/17 10:41	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	2	2.2	11	ug/m3		01/09/17 21:49	ZZ	
1,1,2,2-Tetrachloroethane	ND	2	8.2	13.8	ug/m3		01/09/17 21:49	ZZ	
1,1,2-Trichloroethane	ND	2	3.4	11	ug/m3		01/09/17 21:49	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	2	6.2	15.4	ug/m3		01/09/17 21:49	ZZ	
1,1-Dichloroethane	ND	2	2.4	8.2	ug/m3		01/09/17 21:49	ZZ	
1,1-Dichloroethene	ND	2	4.8	8	ug/m3		01/09/17 21:49	ZZ	
1,2,4-Trichlorobenzene	ND	2	7.4	14.8	ug/m3		01/09/17 21:49	ZZ	
1,2,4-Trimethylbenzene	ND	2	4	9.8	ug/m3		01/09/17 21:49	ZZ	
1,2-Dibromoethane	ND	2	7.8	15.4	ug/m3		01/09/17 21:49	ZZ	
1,2-Dichlorobenzene	ND	2	72	120	ug/m3		01/09/17 21:49	ZZ	
1,2-Dichloroethane	ND	2	3.2	8.2	ug/m3		01/09/17 21:49	ZZ	
1,2-Dichloropropane	ND	2	3.6	9.2	ug/m3		01/09/17 21:49	ZZ	
1,3,5-Trimethylbenzene	ND	2	9.8	9.8	ug/m3		01/09/17 21:49	ZZ	
1,3-Dichlorobenzene	ND	2	7.2	12	ug/m3		01/09/17 21:49	ZZ	
1,4-Dichlorobenzene	ND	2	7.2	12	ug/m3		01/09/17 21:49	ZZ	
4-Ethyltoluene	ND	2	5	9.8	ug/m3		01/09/17 21:49	ZZ	
Benzene	**14.0**	2	2	6.4	ug/m3		01/09/17 21:49	ZZ	
Bromodichloromethane	ND	2	5.4	13.4	ug/m3		01/09/17 21:49	ZZ	
Bromoform	ND	2	8.2	20.6	ug/m3		01/09/17 21:49	ZZ	
Bromomethane	ND	2	6.2	7.8	ug/m3		01/09/17 21:49	ZZ	
Carbon Tetrachloride	ND	2	3.8	12.6	ug/m3		01/09/17 21:49	ZZ	
Chlorobenzene	ND	2	3.6	9.2	ug/m3		01/09/17 21:49	ZZ	
Chlorodibromomethane	ND	2	6.8	17	ug/m3		01/09/17 21:49	ZZ	
Chloroethane	ND	2	26	26	ug/m3		01/09/17 21:49	ZZ	
Chloroform	ND	2	9.8	9.8	ug/m3		01/09/17 21:49	ZZ	
Chloromethane	ND	2	21	21	ug/m3		01/09/17 21:49	ZZ	
cis-1,2-Dichloroethene	ND	2	6.4	8	ug/m3		01/09/17 21:49	ZZ	
cis-1,3-dichloropropene	ND	2	3.6	9	ug/m3		01/09/17 21:49	ZZ	
Dichlorodifluoromethane	ND	2	5	9.8	ug/m3		01/09/17 21:49	ZZ	
Ethylbenzene	ND	2	3.4	8.6	ug/m3		01/09/17 21:49	ZZ	
m and p-Xylene	**3.5 J**	2	3.4	8.6	ug/m3		01/09/17 21:49	ZZ	J
Methylene chloride	ND	2	7	7	ug/m3		01/09/17 21:49	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	2	2.8	7.2	ug/m3		01/09/17 21:49	ZZ	
o-Xylene	ND	2	4.4	8.6	ug/m3		01/09/17 21:49	ZZ	
Styrene	**9.4**	2	2.6	8.6	ug/m3		01/09/17 21:49	ZZ	
Tetrachloroethene	ND	2	5.4	13.6	ug/m3		01/09/17 21:49	ZZ	
Toluene	**5.3 J**	2	3	7.6	ug/m3		01/09/17 21:49	ZZ	J
trans-1,2-dichloroethene	ND	2	6.4	8	ug/m3		01/09/17 21:49	ZZ	
trans-1,3-dichloropropene	ND	2	2.4	8	ug/m3		01/09/17 21:49	ZZ	
Trichloroethene	ND	2	3.2	10.8	ug/m3		01/09/17 21:49	ZZ	
Trichlorofluoromethane	ND	2	3.4	11.2	ug/m3		01/09/17 21:49	ZZ	
Vinyl Chloride	ND	2	2	5.2	ug/m3		01/09/17 21:49	ZZ	
Xylenes (Total)	ND	2	4.4	8.6	ug/m3		01/09/17 21:49	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 13:50	**Site:**			
Sample #:	**386080-003**	**Client Sample #:**	S66-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	1.4		70	Vppm		01/11/17 10:47	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/09/17 23:20	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/09/17 23:20	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/09/17 23:20	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/09/17 23:20	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/09/17 23:20	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/09/17 23:20	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/09/17 23:20	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/09/17 23:20	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/09/17 23:20	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/09/17 23:20	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/09/17 23:20	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/09/17 23:20	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/09/17 23:20	ZZ	
1,3-Dichlorobenzene	**12.0**	1	3.6	6	ug/m3		01/09/17 23:20	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/09/17 23:20	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/09/17 23:20	ZZ	
Benzene	**3.8**	1	1	3.2	ug/m3		01/09/17 23:20	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/09/17 23:20	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/09/17 23:20	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/09/17 23:20	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/09/17 23:20	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/09/17 23:20	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/09/17 23:20	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/09/17 23:20	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/09/17 23:20	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/09/17 23:20	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/09/17 23:20	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/09/17 23:20	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/09/17 23:20	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/09/17 23:20	ZZ	
m and p-Xylene	**5.2**	1	1.7	4.3	ug/m3		01/09/17 23:20	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/09/17 23:20	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/09/17 23:20	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/09/17 23:20	ZZ	
Styrene	**5.1**	1	1.3	4.3	ug/m3		01/09/17 23:20	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/09/17 23:20	ZZ	
Toluene	**7.9**	1	1.5	3.8	ug/m3		01/09/17 23:20	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/09/17 23:20	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/09/17 23:20	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/09/17 23:20	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/09/17 23:20	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/09/17 23:20	ZZ	
Xylenes (Total)	**5.2**	1	2.2	4.3	ug/m3		01/09/17 23:20	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 14:15	**Site:**			
Sample #:	**386080-004**	**Client Sample #:**	S66-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.5		125	Vppm		01/11/17 10:52	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 07:28	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 07:28	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 07:28	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 07:28	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 07:28	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 07:28	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 07:28	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 07:28	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 07:28	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 07:28	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 07:28	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 07:28	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 07:28	ZZ	
1,3-Dichlorobenzene	**15.0**	1	3.6	6	ug/m3		01/10/17 07:28	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 07:28	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 07:28	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 07:28	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 07:28	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 07:28	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 07:28	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 07:28	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 07:28	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 07:28	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 07:28	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 07:28	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 07:28	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 07:28	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 07:28	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 07:28	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 07:28	ZZ	
m and p-Xylene	**3.9 J**	1	1.7	4.3	ug/m3		01/10/17 07:28	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 07:28	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 07:28	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 07:28	ZZ	
Styrene	**4.7**	1	1.3	4.3	ug/m3		01/10/17 07:28	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 07:28	ZZ	
Toluene	**6.4**	1	1.5	3.8	ug/m3		01/10/17 07:28	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 07:28	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 07:28	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 07:28	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/10/17 07:28	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 07:28	ZZ	
Xylenes (Total)	**3.9 J**	1	2.2	4.3	ug/m3		01/10/17 07:28	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 15:05	**Site:**			
Sample #:	**386080-005**	**Client Sample #:**	S70-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.4		120	Vppm		01/11/17 10:58	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 08:15	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 08:15	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 08:15	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 08:15	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 08:15	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 08:15	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 08:15	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 08:15	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 08:15	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 08:15	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 08:15	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 08:15	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 08:15	ZZ	
1,3-Dichlorobenzene	**11.4**	1	3.6	6	ug/m3		01/10/17 08:15	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 08:15	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 08:15	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 08:15	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 08:15	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 08:15	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 08:15	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 08:15	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 08:15	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 08:15	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 08:15	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 08:15	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 08:15	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 08:15	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 08:15	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 08:15	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 08:15	ZZ	
m and p-Xylene	**3.9 J**	1	1.7	4.3	ug/m3		01/10/17 08:15	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 08:15	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 08:15	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 08:15	ZZ	
Styrene	**6.8**	1	1.3	4.3	ug/m3		01/10/17 08:15	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 08:15	ZZ	
Toluene	**4.9**	1	1.5	3.8	ug/m3		01/10/17 08:15	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 08:15	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 08:15	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 08:15	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 08:15	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 08:15	ZZ	
Xylenes (Total)	**3.9 J**	1	2.2	4.3	ug/m3		01/10/17 08:15	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 15:20	**Site:**			
Sample #:	**386080-006**	**Client Sample #:**	S70-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.4		120	Vppm		01/11/17 11:09	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 09:02	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 09:02	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 09:02	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 09:02	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 09:02	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 09:02	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 09:02	ZZ	
1,2,4-Trimethylbenzene	**19.6**	1	2	4.9	ug/m3		01/10/17 09:02	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 09:02	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 09:02	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 09:02	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 09:02	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 09:02	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 09:02	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 09:02	ZZ	
4-Ethyltoluene	**6.4**	1	2.5	4.9	ug/m3		01/10/17 09:02	ZZ	
Benzene	**1.3 J**	1	1	3.2	ug/m3		01/10/17 09:02	ZZ	J
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 09:02	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 09:02	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 09:02	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 09:02	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 09:02	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 09:02	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 09:02	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 09:02	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 09:02	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 09:02	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 09:02	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 09:02	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 09:02	ZZ	
m and p-Xylene	**3.5 J**	1	1.7	4.3	ug/m3		01/10/17 09:02	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 09:02	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 09:02	ZZ	
o-Xylene	**3.0 J**	1	2.2	4.3	ug/m3		01/10/17 09:02	ZZ	J
Styrene	ND	1	1.3	4.3	ug/m3		01/10/17 09:02	ZZ	
Tetrachloroethene	**183**	1	2.7	6.8	ug/m3		01/10/17 09:02	ZZ	
Toluene	**3.8**	1	1.5	3.8	ug/m3		01/10/17 09:02	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 09:02	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 09:02	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 09:02	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 09:02	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 09:02	ZZ	
Xylenes (Total)	**6.5**	1	2.2	4.3	ug/m3		01/10/17 09:02	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 15:00	**Site:**			
Sample #:	**386080-007**	**Client Sample #:**	S72-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.4		120	Vppm		01/11/17 11:21	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 10:35	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 10:35	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 10:35	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 10:35	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 10:35	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 10:35	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 10:35	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 10:35	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 10:35	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 10:35	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 10:35	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 10:35	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 10:35	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 10:35	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 10:35	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 10:35	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 10:35	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 10:35	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 10:35	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 10:35	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 10:35	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 10:35	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 10:35	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 10:35	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 10:35	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 10:35	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 10:35	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 10:35	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 10:35	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 10:35	ZZ	
m and p-Xylene	**3.5 J**	1	1.7	4.3	ug/m3		01/10/17 10:35	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 10:35	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 10:35	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 10:35	ZZ	
Styrene	**8.1**	1	1.3	4.3	ug/m3		01/10/17 10:35	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 10:35	ZZ	
Toluene	**4.9**	1	1.5	3.8	ug/m3		01/10/17 10:35	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 10:35	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 10:35	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 10:35	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/10/17 10:35	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 10:35	ZZ	
Xylenes (Total)	**3.5 J**	1	2.2	4.3	ug/m3		01/10/17 10:35	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 15:25	**Site:**			
Sample #:	**386080-008**	**Client Sample #:**	S72-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.3		115	Vppm		01/11/17 11:30	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	2	2.2	11	ug/m3		01/10/17 15:12	ZZ	
1,1,2,2-Tetrachloroethane	ND	2	8.2	13.8	ug/m3		01/10/17 15:12	ZZ	
1,1,2-Trichloroethane	ND	2	3.4	11	ug/m3		01/10/17 15:12	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	2	6.2	15.4	ug/m3		01/10/17 15:12	ZZ	
1,1-Dichloroethane	ND	2	2.4	8.2	ug/m3		01/10/17 15:12	ZZ	
1,1-Dichloroethene	ND	2	4.8	8	ug/m3		01/10/17 15:12	ZZ	
1,2,4-Trichlorobenzene	ND	2	7.4	14.8	ug/m3		01/10/17 15:12	ZZ	
1,2,4-Trimethylbenzene	ND	2	4	9.8	ug/m3		01/10/17 15:12	ZZ	
1,2-Dibromoethane	ND	2	7.8	15.4	ug/m3		01/10/17 15:12	ZZ	
1,2-Dichlorobenzene	ND	2	72	120	ug/m3		01/10/17 15:12	ZZ	
1,2-Dichloroethane	ND	2	3.2	8.2	ug/m3		01/10/17 15:12	ZZ	
1,2-Dichloropropane	ND	2	3.6	9.2	ug/m3		01/10/17 15:12	ZZ	
1,3,5-Trimethylbenzene	ND	2	9.8	9.8	ug/m3		01/10/17 15:12	ZZ	
1,3-Dichlorobenzene	**12.0**	2	7.2	12	ug/m3		01/10/17 15:12	ZZ	
1,4-Dichlorobenzene	ND	2	7.2	12	ug/m3		01/10/17 15:12	ZZ	
4-Ethyltoluene	ND	2	5	9.8	ug/m3		01/10/17 15:12	ZZ	
Benzene	ND	2	2	6.4	ug/m3		01/10/17 15:12	ZZ	
Bromodichloromethane	ND	2	5.4	13.4	ug/m3		01/10/17 15:12	ZZ	
Bromoform	ND	2	8.2	20.6	ug/m3		01/10/17 15:12	ZZ	
Bromomethane	ND	2	6.2	7.8	ug/m3		01/10/17 15:12	ZZ	
Carbon Tetrachloride	ND	2	3.8	12.6	ug/m3		01/10/17 15:12	ZZ	
Chlorobenzene	ND	2	3.6	9.2	ug/m3		01/10/17 15:12	ZZ	
Chlorodibromomethane	ND	2	6.8	17	ug/m3		01/10/17 15:12	ZZ	
Chloroethane	ND	2	26	26	ug/m3		01/10/17 15:12	ZZ	
Chloroform	ND	2	9.8	9.8	ug/m3		01/10/17 15:12	ZZ	
Chloromethane	ND	2	21	21	ug/m3		01/10/17 15:12	ZZ	
cis-1,2-Dichloroethene	ND	2	6.4	8	ug/m3		01/10/17 15:12	ZZ	
cis-1,3-dichloropropene	ND	2	3.6	9	ug/m3		01/10/17 15:12	ZZ	
Dichlorodifluoromethane	ND	2	5	9.8	ug/m3		01/10/17 15:12	ZZ	
Ethylbenzene	ND	2	3.4	8.6	ug/m3		01/10/17 15:12	ZZ	
m and p-Xylene	**7.8 J**	2	3.4	8.6	ug/m3		01/10/17 15:12	ZZ	J
Methylene chloride	ND	2	7	7	ug/m3		01/10/17 15:12	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	2	2.8	7.2	ug/m3		01/10/17 15:12	ZZ	
o-Xylene	ND	2	4.4	8.6	ug/m3		01/10/17 15:12	ZZ	
Styrene	**5.1 J**	2	2.6	8.6	ug/m3		01/10/17 15:12	ZZ	J
Tetrachloroethene	ND	2	5.4	13.6	ug/m3		01/10/17 15:12	ZZ	
Toluene	**6.0 J**	2	3	7.6	ug/m3		01/10/17 15:12	ZZ	J
trans-1,2-dichloroethene	ND	2	6.4	8	ug/m3		01/10/17 15:12	ZZ	
trans-1,3-dichloropropene	ND	2	2.4	8	ug/m3		01/10/17 15:12	ZZ	
Trichloroethene	ND	2	3.2	10.8	ug/m3		01/10/17 15:12	ZZ	
Trichlorofluoromethane	ND	2	3.4	11.2	ug/m3		01/10/17 15:12	ZZ	
Vinyl Chloride	ND	2	2	5.2	ug/m3		01/10/17 15:12	ZZ	
Xylenes (Total)	**7.8 J**	2	4.4	8.6	ug/m3		01/10/17 15:12	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 16:20	**Site:**			
Sample #:	**386080-009**	**Client Sample #:**	S82-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.1		105	Vppm		01/11/17 11:38	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 15:59	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 15:59	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 15:59	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 15:59	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 15:59	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 15:59	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 15:59	ZZ	
1,2,4-Trimethylbenzene	**2.9 J**	1	2	4.9	ug/m3		01/10/17 15:59	ZZ	J
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 15:59	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 15:59	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 15:59	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 15:59	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 15:59	ZZ	
1,3-Dichlorobenzene	**8.4**	1	3.6	6	ug/m3		01/10/17 15:59	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 15:59	ZZ	
4-Ethyltoluene	**7.4**	1	2.5	4.9	ug/m3		01/10/17 15:59	ZZ	
Benzene	**6.7**	1	1	3.2	ug/m3		01/10/17 15:59	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 15:59	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 15:59	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 15:59	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 15:59	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 15:59	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 15:59	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 15:59	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 15:59	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 15:59	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 15:59	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 15:59	ZZ	
Dichlorodifluoromethane	**3.5 J**	1	2.5	4.9	ug/m3		01/10/17 15:59	ZZ	J
Ethylbenzene	**8.2**	1	1.7	4.3	ug/m3		01/10/17 15:59	ZZ	
m and p-Xylene	**34.7**	1	1.7	4.3	ug/m3		01/10/17 15:59	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 15:59	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 15:59	ZZ	
o-Xylene	**10.4**	1	2.2	4.3	ug/m3		01/10/17 15:59	ZZ	
Styrene	**7.7**	1	1.3	4.3	ug/m3		01/10/17 15:59	ZZ	
Tetrachloroethene	**4.7 J**	1	2.7	6.8	ug/m3		01/10/17 15:59	ZZ	J
Toluene	**34.3**	1	1.5	3.8	ug/m3		01/10/17 15:59	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 15:59	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 15:59	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 15:59	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 15:59	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 15:59	ZZ	
Xylenes (Total)	**45.1**	1	2.2	4.3	ug/m3		01/10/17 15:59	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 16:35	**Site:**			
Sample #:	**386080-010**	**Client Sample #:**	S82-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.2		110	Vppm		01/11/17 11:47	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 16:56	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 16:56	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 16:56	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 16:56	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 16:56	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 16:56	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 16:56	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 16:56	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 16:56	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 16:56	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 16:56	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 16:56	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 16:56	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 16:56	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 16:56	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 16:56	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 16:56	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 16:56	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 16:56	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 16:56	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 16:56	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 16:56	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 16:56	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 16:56	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 16:56	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 16:56	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 16:56	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 16:56	ZZ	
Dichlorodifluoromethane	**3.0 J**	1	2.5	4.9	ug/m3		01/10/17 16:56	ZZ	J
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 16:56	ZZ	
m and p-Xylene	ND	1	1.7	4.3	ug/m3		01/10/17 16:56	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 16:56	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 16:56	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 16:56	ZZ	
Styrene	ND	1	1.3	4.3	ug/m3		01/10/17 16:56	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 16:56	ZZ	
Toluene	ND	1	1.5	3.8	ug/m3		01/10/17 16:56	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 16:56	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 16:56	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 16:56	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 16:56	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 16:56	ZZ	
Xylenes (Total)	ND	1	2.2	4.3	ug/m3		01/10/17 16:56	ZZ	

QCBatchID: QC1174087	**Analyst:** sandyw	**Method:** EPA 8015B			
Matrix: Air	**Analyzed:** 01/11/2017	**Instrument:** VOA-GC (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174087MB1					
Methane	ND	Vppm		50	

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1174087DUP1						**Source: 386334-001**
Methane	11.0	11.3	Vppm	2.7	20	

QCBatchID: QC1174247	**Analyst:** nicollez		**Method:** EPA 8260B		
Matrix: Air	**Analyzed:** 01/09/2017		**Instrument:** VOA-MS (group)		

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174247MB1					
1,1,1-Trichloroethane	ND	ug/m3	1.1	5.5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.1	6.9	
1,1,2-Trichloroethane	ND	ug/m3	1.7	5.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	3.1	7.7	
1,1-Dichloroethane	ND	ug/m3	1.2	4.1	
1,1-Dichloroethene	ND	ug/m3	2.4	4	
1,2,4-Trichlorobenzene	ND	ug/m3	3.7	7.4	
1,2,4-Trimethylbenzene	ND	ug/m3	2	4.9	
1,2-Dibromoethane	ND	ug/m3	3.9	7.7	
1,2-Dichlorobenzene	ND	ug/m3	36	60	
1,2-Dichloroethane	ND	ug/m3	1.6	4.1	
1,2-Dichloropropane	ND	ug/m3	1.8	4.6	
1,3,5-Trimethylbenzene	ND	ug/m3	4.9	4.9	
1,3-Dichlorobenzene	ND	ug/m3	3.6	6	
1,4-Dichlorobenzene	ND	ug/m3	3.6	6	
4-Ethyltoluene	ND	ug/m3	2.5	4.9	
Benzene	ND	ug/m3	1	3.2	
Bromodichloromethane	ND	ug/m3	2.7	6.7	
Bromoform	ND	ug/m3	4.1	10.3	
Bromomethane	ND	ug/m3	3.1	3.9	
Carbon Tetrachloride	ND	ug/m3	1.9	6.3	
Chlorobenzene	ND	ug/m3	1.8	4.6	
Chlorodibromomethane	ND	ug/m3	3.4	8.5	
Chloroethane	ND	ug/m3	13	13	
Chloroform	ND	ug/m3	4.9	4.9	
Chloromethane	ND	ug/m3	10.5	10.5	
cis-1,2-Dichloroethene	ND	ug/m3	3.2	4	
cis-1,3-dichloropropene	ND	ug/m3	1.8	4.5	
Dichlorodifluoromethane	ND	ug/m3	2.5	4.9	
Ethylbenzene	ND	ug/m3	1.7	4.3	
m and p-Xylene	ND	ug/m3	1.7	4.3	
Methylene chloride	ND	ug/m3	3.5	3.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/m3	1.4	3.6	
o-Xylene	ND	ug/m3	2.2	4.3	
Styrene	ND	ug/m3	1.3	4.3	
Tetrachloroethene	ND	ug/m3	2.7	6.8	
Toluene	ND	ug/m3	1.5	3.8	
trans-1,2-dichloroethene	ND	ug/m3	3.2	4	
trans-1,3-dichloropropene	ND	ug/m3	1.2	4	
Trichloroethene	ND	ug/m3	1.6	5.4	
Trichlorofluoromethane	ND	ug/m3	1.7	5.6	
Vinyl Chloride	ND	ug/m3	1	2.6	
Xylenes (Total)	ND	ug/m3	2.2	4.3	

QCBatchID: QC1174247	**Analyst:** nicollez	**Method:** EPA 8260B			
Matrix: Air	**Analyzed:** 01/09/2017	**Instrument:** VOA-MS (group)			

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1174247DUP1						**Source: 386080-002**
1,2,4-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3,5-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3-Dichlorobenzene	ND	4.8	ug/m3	0.0	20	
4-Ethyltoluene	ND	ND	ug/m3	0.0	20	
Benzene	14.0	14.0	ug/m3	0.0	20	
Dichlorodifluoromethane	ND	ND	ug/m3	0.0	20	
Ethylbenzene	ND	ND	ug/m3	0.0	20	
m and p-Xylene	3.5	3.5	ug/m3	0.0	20	
Methyl-t-butyl Ether (MTBE)	ND	ND	ug/m3	0.0	20	
o-Xylene	ND	ND	ug/m3	0.0	20	
Styrene	9.4	9.4	ug/m3	0.0	20	
Toluene	5.3	5.3	ug/m3	0.0	20	
Trichloroethene	ND	ND	ug/m3	0.0	20	
Trichlorofluoromethane	ND	ND	ug/m3	0.0	20	
Xylenes (Total)	ND	3.5	ug/m3	0.0	20	

QCBatchID: QC1174249	**Analyst:** nicollez		**Method:** EPA 8260B		
Matrix: Air	**Analyzed:** 01/10/2017		**Instrument:** VOA-MS (group)		

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174249MB1					
1,1,1-Trichloroethane	ND	ug/m3	1.1	5.5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.1	6.9	
1,1,2-Trichloroethane	ND	ug/m3	1.7	5.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	3.1	7.7	
1,1-Dichloroethane	ND	ug/m3	1.2	4.1	
1,1-Dichloroethene	ND	ug/m3	2.4	4	
1,2,4-Trichlorobenzene	ND	ug/m3	3.7	7.4	
1,2,4-Trimethylbenzene	ND	ug/m3	2	4.9	
1,2-Dibromoethane	ND	ug/m3	3.9	7.7	
1,2-Dichlorobenzene	ND	ug/m3	36	60	
1,2-Dichloroethane	ND	ug/m3	1.6	4.1	
1,2-Dichloropropane	ND	ug/m3	1.8	4.6	
1,3,5-Trimethylbenzene	ND	ug/m3	4.9	4.9	
1,3-Dichlorobenzene	ND	ug/m3	3.6	6	
1,4-Dichlorobenzene	ND	ug/m3	3.6	6	
4-Ethyltoluene	ND	ug/m3	2.5	4.9	
Benzene	ND	ug/m3	1	3.2	
Bromodichloromethane	ND	ug/m3	2.7	6.7	
Bromoform	ND	ug/m3	4.1	10.3	
Bromomethane	ND	ug/m3	3.1	3.9	
Carbon Tetrachloride	ND	ug/m3	1.9	6.3	
Chlorobenzene	ND	ug/m3	1.8	4.6	
Chlorodibromomethane	ND	ug/m3	3.4	8.5	
Chloroethane	ND	ug/m3	13	13	
Chloroform	ND	ug/m3	4.9	4.9	
Chloromethane	ND	ug/m3	10.5	10.5	
cis-1,2-Dichloroethene	ND	ug/m3	3.2	4	
cis-1,3-dichloropropene	ND	ug/m3	1.8	4.5	
Dichlorodifluoromethane	ND	ug/m3	2.5	4.9	
Ethylbenzene	ND	ug/m3	1.7	4.3	
m and p-Xylene	ND	ug/m3	1.7	4.3	
Methylene chloride	ND	ug/m3	3.5	3.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/m3	1.4	3.6	
o-Xylene	ND	ug/m3	2.2	4.3	
Styrene	ND	ug/m3	1.3	4.3	
Tetrachloroethene	ND	ug/m3	2.7	6.8	
Toluene	ND	ug/m3	1.5	3.8	
trans-1,2-dichloroethene	ND	ug/m3	3.2	4	
trans-1,3-dichloropropene	ND	ug/m3	1.2	4	
Trichloroethene	ND	ug/m3	1.6	5.4	
Trichlorofluoromethane	ND	ug/m3	1.7	5.6	
Vinyl Chloride	ND	ug/m3	1	2.6	
Xylenes (Total)	ND	ug/m3	2.2	4.3	

QCBatchID: QC1174249	**Analyst:** nicollez	**Method:** EPA 8260B			
Matrix: Air	**Analyzed:** 01/10/2017	**Instrument:** VOA-MS (group)			

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1174249DUP1						**Source: 386080-008**
1,2,4-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3,5-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3-Dichlorobenzene	12.0	12.0	ug/m3	0.0	20	
1,4-Dichlorobenzene	ND	ND	ug/m3	0.0	20	
4-Ethyltoluene	ND	4.9	ug/m3	0.0	20	
Benzene	ND	ND	ug/m3	0.0	20	
Chloromethane	ND	1.2	ug/m3	0.0	20	
Dichlorodifluoromethane	ND	3.0	ug/m3	0.0	20	
m and p-Xylene	7.8	7.8	ug/m3	0.0	20	
Methyl-t-butyl Ether (MTBE)	ND	ND	ug/m3	0.0	20	
o-Xylene	ND	2.6	ug/m3	0.0	20	
Styrene	5.1	5.1	ug/m3	0.0	20	
Toluene	6.0	6.0	ug/m3	0.0	20	
Trichlorofluoromethane	ND	ND	ug/m3	0.0	20	
Xylenes (Total)	7.8	7.8	ug/m3	0.0	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386080				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page: 1	of	1		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Polytechnic HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)	ASTM 1946 Methane			Test Instructions / Comments
1	S65-5ft	01/03/17	2:00 PM	A	1/1L						x			x			Can#83843
2	S65-10ft	01/03/17	2:25 PM	A	1/1L						x			x			Can#83911
3	S66-5ft	01/03/17	1:50 PM	A	1/1L						x			x			Can#83849
4	S66-10ft	01/03/17	2:15 PM	A	1/1L						x			x			Can#83904
5	S70-5ft	01/03/17	3:05 PM	A	1/1L						x			x			Can#83905
6	S70-10ft	01/03/17	3:20 PM	A	1/1L						x			x			Can#83656
7	S72-5ft	01/03/17	3:00 PM	A	1/1L						x			x			Can#83903
8	S72-10ft	01/03/17	3:25 PM	A	1/1L						x			x			Can#83668
9	S82-5ft	01/03/17	4:20 PM	A	1/1L						x			x			Can#83660
10	S82-10ft	01/03/16	4:35 PM	A	1/1L						x			x			Can#83664

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:	Kevin Sayer	Kevin Sayer	Enthalpy	1/4/17 1140
[2] Relinquished By:	Kevin Sayer	Kevin Sayer	Enthalpy	1/4/17 1435
[2] Received By:	Taylor Nash	T Nash	EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPY analytical, inc.

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: CES GROUP Project: FRANCIS POLYTECHNIC HS

Date Received: 1/4/17 Sampler's Name Present: (Yes) No

Sample(s) received in a cooler? Yes How many? _____ (No) (skip section 2) Sample Temp (°C): AIR CANISTER

Sample Temp (°C) from each cooler: #1: _____ #2: _____ #3: _____ #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: _____

Section 2

Was the cooler packed with: ____ Ice ____ Ice Packs ____ Bubble Wrap ____ Styrofoam ____ Paper ____ None ____ Other _____

Cooler Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relinquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were custody seals present?		✓	
If Yes – were they intact?			✓
Were all samples sealed in plastic bags?			✓
Did all samples arrive intact? If no, indicate below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of sample sent for tests indicated?	✓		
Was there headspace in VOA vials?			✓
Were the containers labeled with correct preservatives?			✓

Section 4

Explanations/Comments: _____

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 1/4/17

Enthalpy Analytical, Inc.
Formerly Associated Labs
806 N. Batavia - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.associatedlabs.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: CES Group, Inc.
Address: 33353 Temecula Pkwy.
Suite 104 #333
Temecula, CA 92592
Attn: Skye Green

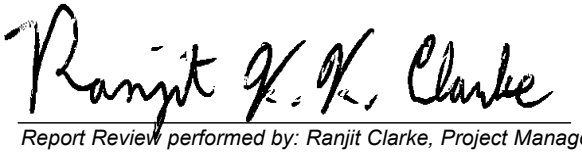
Lab Request: 386145
Report Date: 01/13/2017
Date Received: 01/05/2017
Client ID: 15581

Comments: Francis Poly HS
PO# 27116
12431 Roscoe Blvd., Sun Valley, CA

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID	Sample #	Client Sample ID
386145-001	S20-0.5ft	386145-025	S42-2.5ft	386145-049	S51-0.5ft
386145-002	S20-1.5ft	386145-026	S43-0.5ft	386145-050	S51-1.5ft
386145-003	S20-2.5ft	386145-027	S43-1.5ft	386145-051	S51-2.5ft
386145-004	S21-0.5ft	386145-028	S43-2.5ft	386145-052	S52-0.5ft
386145-005	S21-1.5ft	386145-029	S42D-0.5ft	386145-053	S52-1.5ft
386145-006	S21-2.5ft	386145-030	S44-0.5ft	386145-054	S52-2.5ft
386145-007	S23-0.5ft	386145-031	S44-1.5ft	386145-055	S53-0.5ft
386145-008	S23-1.5ft	386145-032	S44-2.5ft	386145-056	S53-1.5ft
386145-009	S23-2.5ft	386145-033	S45-0.5ft	386145-057	S53-2.5ft
386145-010	S24-0.5ft	386145-034	S45-1.5ft	386145-058	S53D-0.5ft
386145-011	S24-1.5ft	386145-035	S45-2.5ft	386145-059	S54-0.5ft
386145-012	S24-2.5ft	386145-036	S46-0.5ft	386145-060	S54-1.5ft
386145-013	S25-0.5ft	386145-037	S46-1.5ft	386145-061	S54-2.5ft
386145-014	S25-1.5ft	386145-038	S46-2.5ft	386145-062	S61-0.5ft
386145-015	S25-2.5ft	386145-039	S47-0.5ft	386145-063	S61-1.5ft
386145-016	S26-0.5ft	386145-040	S47-1.5ft	386145-064	S61-2.5ft
386145-017	S26-1.5ft	386145-041	S47-2.5ft	386145-065	S62-0.5ft
386145-018	S26-2.5ft	386145-042	S48-0.5ft	386145-066	S62-1.5ft
386145-019	S24D-0.5ft	386145-043	S48-1.5ft	386145-067	S62-2.5ft
386145-020	S41-0.5ft	386145-044	S48-2.5ft	386145-068	S68-0.5ft
386145-021	S41-1.5ft	386145-045	S50-0.5ft	386145-069	S68-1.5ft
386145-022	S41-2.5ft	386145-046	S50-1.5ft	386145-070	S68-2.5ft
386145-023	S42-0.5ft	386145-047	S50-2.5ft	386145-071	S80-0.5ft
386145-024	S42-1.5ft	386145-048	S50D-0.5ft	386145-072	S80-1.5ft

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.



Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:20 **Site:**
Sample #: **386145-001** **Client Sample #:** S20-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174093		
Lead	**3.44**	1	0.32	0.5	mg/Kg	01/06/17	01/09/17	JN	
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*80*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:30 **Site:**
Sample #: **386145-002** **Client Sample #:** S20-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:40 **Site:**
Sample #: **386145-003** **Client Sample #:** S20-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:50 **Site:**
Sample #: **386145-004** **Client Sample #:** S21-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174093		
Lead	**11.7**	1	0.32	0.5	mg/Kg	01/06/17	01/09/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:55 **Site:**
Sample #: **386145-005** **Client Sample #:** S21-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:00 **Site:**
Sample #: **386145-006** **Client Sample #:** S21-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:30 **Site:**
Sample #: **386145-007** **Client Sample #:** S23-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174093		
Lead	**6.66**	1	0.32	0.5	mg/Kg	01/06/17	01/09/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:35 **Site:**
Sample #: **386145-008** **Client Sample #:** S23-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:40 **Site:**
Sample #: **386145-009** **Client Sample #:** S23-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:05 **Site:**
Sample #: **386145-010** **Client Sample #:** S24-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174093		
Lead	**5.28**	1	0.32	0.5	mg/Kg	01/06/17	01/09/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:10 **Site:**
Sample #: **386145-011** **Client Sample #:** S24-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:15 **Site:**
Sample #: **386145-012** **Client Sample #:** S24-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:50 **Site:**
Sample #: **386145-013** **Client Sample #:** S25-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174097		
Lead	**8.07**	1	0.32	0.5	mg/Kg	01/06/17	01/10/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:55 **Site:**
Sample #: **386145-014** **Client Sample #:** S25-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:00 **Site:**
Sample #: **386145-015** **Client Sample #:** S25-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:30 **Site:**
Sample #: **386145-016** **Client Sample #:** S26-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174097		
Lead	**1.47**	1	0.32	0.5	mg/Kg	01/06/17	01/10/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:35 **Site:**
Sample #: **386145-017** **Client Sample #:** S26-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:40 **Site:**
Sample #: **386145-018** **Client Sample #:** S26-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:07 **Site:**
Sample #: **386145-019** **Client Sample #:** S24D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174097		
Lead	**2.50**	1	0.32	0.5	mg/Kg	01/06/17	01/10/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:45 **Site:**
Sample #: **386145-020** **Client Sample #:** S41-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.958 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:50 **Site:**
Sample #: **386145-021** **Client Sample #:** S41-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:55 **Site:**
Sample #: **386145-022** **Client Sample #:** S41-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:05 **Site:**
Sample #: **386145-023** **Client Sample #:** S42-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**5.00**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:10 **Site:**
Sample #: **386145-024** **Client Sample #:** S42-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:15 **Site:**
Sample #: **386145-025** **Client Sample #:** S42-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:20 **Site:**
Sample #: **386145-026** **Client Sample #:** S43-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.855 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:25 **Site:**
Sample #: **386145-027** **Client Sample #:** S43-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:30 **Site:**
Sample #: **386145-028** **Client Sample #:** S43-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:00 **Site:**
Sample #: **386145-029** **Client Sample #:** S42D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.047 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:45 **Site:**
Sample #: **386145-030** **Client Sample #:** S44-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.580 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:50 **Site:**
Sample #: 386145-031 **Client Sample #:** S44-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:55 **Site:**
Sample #: 386145-032 **Client Sample #:** S44-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:15 **Site:**
Sample #: 386145-033 **Client Sample #:** S45-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**0.837 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:20 **Site:**
Sample #: 386145-034 **Client Sample #:** S45-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:25 **Site:**
Sample #: 386145-035 **Client Sample #:** S45-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:30 **Site:**
Sample #: 386145-036 **Client Sample #:** S46-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**0.959 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:35 **Site:**
Sample #: 386145-037 **Client Sample #:** S46-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:40 **Site:**
Sample #: 386145-038 **Client Sample #:** S46-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:45 **Site:**
Sample #: 386145-039 **Client Sample #:** S47-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.099 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:50 **Site:**
Sample #: 386145-040 **Client Sample #:** S47-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:55 **Site:**
Sample #: 386145-041 **Client Sample #:** S47-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 12:00 **Site:**
Sample #: 386145-042 **Client Sample #:** S48-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**3.53**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 12:05 **Site:**
Sample #: 386145-043 **Client Sample #:** S48-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 12:10 **Site:**
Sample #: 386145-044 **Client Sample #:** S48-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:00 **Site:**
Sample #: **386145-045** **Client Sample #:** S50-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.725 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*62*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:05 **Site:**
Sample #: **386145-046** **Client Sample #:** S50-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:20 **Site:**
Sample #: **386145-047** **Client Sample #:** S50-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 10:03 **Site:**
Sample #: **386145-048** **Client Sample #:** S50D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.155 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*77*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:25 **Site:**
Sample #: **386145-049** **Client Sample #:** S51-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**2.04 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:30 **Site:**
Sample #: **386145-050** **Client Sample #:** S51-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:35 **Site:**
Sample #: **386145-051** **Client Sample #:** S51-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:00 **Site:**
Sample #: **386145-052** **Client Sample #:** S52-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.039 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:05 **Site:**
Sample #: **386145-053** **Client Sample #:** S52-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 11:10 **Site:**
Sample #: **386145-054** **Client Sample #:** S52-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:10 **Site:**
Sample #: **386145-055** **Client Sample #:** S53-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**2.37 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:15 **Site:**
Sample #: **386145-056** **Client Sample #:** S53-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:20 **Site:**
Sample #: 386145-057 **Client Sample #:** S53-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:13 **Site:**
Sample #: 386145-058 **Client Sample #:** S53D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.918 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:55 **Site:**
Sample #: 386145-059 **Client Sample #:** S54-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**3.29**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:00 **Site:**
Sample #: 386145-060 **Client Sample #:** S54-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:05 **Site:**
Sample #: 386145-061 **Client Sample #:** S54-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:40 **Site:**
Sample #: 386145-062 **Client Sample #:** S61-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.555 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:45 **Site:**
Sample #: 386145-063 **Client Sample #:** S61-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 08:50 **Site:**
Sample #: 386145-064 **Client Sample #:** S61-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:25 **Site:**
Sample #: **386145-065** **Client Sample #:** S62-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.921 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:30 **Site:**
Sample #: **386145-066** **Client Sample #:** S62-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:35 **Site:**
Sample #: **386145-067** **Client Sample #:** S62-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:10 **Site:**
Sample #: **386145-068** **Client Sample #:** S68-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**1.127 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:15 **Site:**
Sample #: **386145-069** **Client Sample #:** S68-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:20 **Site:**
Sample #: **386145-070** **Client Sample #:** S68-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:35 **Site:**
Sample #: **386145-071** **Client Sample #:** S80-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174052		
4,4'-DDD	ND	1	0.67	5	ug/Kg	01/05/17	01/08/17	LW	
4,4'-DDE	**12.1**	1	0.57	5	ug/Kg	01/05/17	01/08/17	LW	
4,4'-DDT	**5.1**	1	0.95	5	ug/Kg	01/05/17	01/08/17	LW	
a-BHC	ND	1	0.2	5	ug/Kg	01/05/17	01/08/17	LW	
Aldrin	ND	1	0.34	5	ug/Kg	01/05/17	01/08/17	LW	
b-BHC	ND	1	1.2	5	ug/Kg	01/05/17	01/08/17	LW	
Chlordane (technical)	ND	1	12	50	ug/Kg	01/05/17	01/08/17	LW	
d-BHC	ND	1	0.45	5	ug/Kg	01/05/17	01/08/17	LW	
Dieldrin	ND	1	0.63	5	ug/Kg	01/05/17	01/08/17	LW	
Endosulfan I	ND	1	0.28	5	ug/Kg	01/05/17	01/08/17	LW	
Endosulfan II	ND	1	0.8	5	ug/Kg	01/05/17	01/08/17	LW	
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/05/17	01/08/17	LW	
Endrin	ND	1	0.62	5	ug/Kg	01/05/17	01/08/17	LW	
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/05/17	01/08/17	LW	L
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/05/17	01/08/17	LW	
Heptachlor	ND	1	0.44	5	ug/Kg	01/05/17	01/08/17	LW	
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/05/17	01/08/17	LW	
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/05/17	01/08/17	LW	
Methoxychlor	ND	1	5.2	10	ug/Kg	01/05/17	01/08/17	LW	
Toxaphene	ND	1	12	100	ug/Kg	01/05/17	01/08/17	LW	

Surrogate	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	*65*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*88*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	*99*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:40 **Site:**
Sample #: **386145-072** **Client Sample #:** S80-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: Prep Method:							QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 09:45 **Site:**
Sample #: **386145-073** **Client Sample #:** S80-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: Prep Method:							QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 15:15 **Site:**
Sample #: 386145-074 **Client Sample #:** S91-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174220		
Arsenic	**2.69 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 15:20 **Site:**
Sample #: 386145-075 **Client Sample #:** S91-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 15:25 **Site:**
Sample #: 386145-076 **Client Sample #:** S91-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 15:00 **Site:**
Sample #: 386145-077 **Client Sample #:** S92-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174107		
Arsenic	**2.90 J**	10	0.2	3	mg/Kg	01/07/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 15:05 **Site:**
Sample #: 386145-078 **Client Sample #:** S92-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 15:10 **Site:**
Sample #: 386145-079 **Client Sample #:** S92-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 14:45 **Site:**
Sample #: 386145-080 **Client Sample #:** S93-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174107		
Arsenic	**3.75**	10	0.2	3	mg/Kg	01/07/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 14:50 **Site:**
Sample #: 386145-081 **Client Sample #:** S93-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 14:55 **Site:**
Sample #: 386145-082 **Client Sample #:** S93-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 14:25 **Site:**
Sample #: 386145-083 **Client Sample #:** S94-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174107		
Arsenic	**1.825 J**	10	0.2	3	mg/Kg	01/07/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 14:35 **Site:**
Sample #: 386145-084 **Client Sample #:** S94-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 14:40 **Site:**
Sample #: 386145-085 **Client Sample #:** S94-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 14:30 **Site:**
Sample #: 386145-086 **Client Sample #:** S94D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174107		
Arsenic	**1.508 J**	10	0.2	3	mg/Kg	01/07/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 07:40 **Site:**
Sample #: 386145-087 **Client Sample #:** S104-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174107		
Arsenic	**2.76 J**	10	0.2	3	mg/Kg	01/07/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 07:45 **Site:**
Sample #: 386145-088 **Client Sample #:** S104-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/04/2017 07:50 **Site:**
Sample #: 386145-089 **Client Sample #:** S104-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/04/2017 07:55	**Site:**			
Sample #:	**386145-090**	**Client Sample #:**	S105-0.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174107		
Arsenic	**3.74**	10	0.2	3	mg/Kg	01/07/17	01/12/17	KLN	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/04/2017 08:00	**Site:**			
Sample #:	**386145-091**	**Client Sample #:**	S105-1.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/04/2017 08:05	**Site:**			
Sample #:	**386145-092**	**Client Sample #:**	S105-2.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

QCBatchID: QC1174052	**Analyst:** nhernandez	**Method:** EPA 8081A			
Matrix: Solid	**Analyzed:** 01/05/2017	**Instrument:** SVOA-GC (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174052MB1					
4,4'-DDD	ND	mg/Kg	0.67	5	
4,4'-DDE	ND	mg/Kg	0.57	5	
4,4'-DDT	ND	mg/Kg	0.95	5	
a-BHC	ND	mg/Kg	0.2	5	
Aldrin	ND	mg/Kg	0.34	5	
b-BHC	ND	mg/Kg	1.2	5	
Chlordane (technical)	ND	mg/Kg	12	50	
d-BHC	ND	mg/Kg	0.45	5	
Dieldrin	ND	mg/Kg	0.63	5	
Endosulfan I	ND	mg/Kg	0.28	5	
Endosulfan II	ND	mg/Kg	0.8	5	
Endosulfan sulfate	ND	mg/Kg	1.7	5	
Endrin	ND	mg/Kg	0.62	5	
Endrin aldehyde	ND	mg/Kg	0.9	5	
Endrin Ketone	ND	mg/Kg	1.2	5	
Heptachlor	ND	mg/Kg	0.44	5	
Heptachlor epoxide	ND	mg/Kg	0.27	5	
Lindane (Gamma-BHC)	ND	mg/Kg	0.3	5	
Methoxychlor	ND	mg/Kg	5.2	10	
Toxaphene	ND	mg/Kg	12	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174052LCS1											
4,4'-DDE	0.005		0.00500		mg/Kg	100			70-130		
4,4'-DDT	0.005		0.00490		mg/Kg	98			70-130		
a-BHC	0.005		0.00500		mg/Kg	100			70-130		
Aldrin	0.005		0.00470		mg/Kg	94			70-130		
b-BHC	0.005		0.00520		mg/Kg	104			70-130		
d-BHC	0.005		0.00540		mg/Kg	108			70-130		
Dieldrin	0.005		0.00480		mg/Kg	96			70-130		
Endosulfan I	0.005		0.00470		mg/Kg	94			70-130		
Endosulfan II	0.005		0.00440		mg/Kg	88			70-130		
Endosulfan sulfate	0.005		0.00540		mg/Kg	108			70-130		
Endrin	0.005		0.00490		mg/Kg	98			70-130		
Endrin aldehyde	0.005		0.00320		mg/Kg	64			70-130		L
Heptachlor	0.005		0.00470		mg/Kg	94			70-130		
Heptachlor epoxide	0.005		0.00460		mg/Kg	92			70-130		
Lindane (Gamma-BHC)	0.005		0.00520		mg/Kg	104			70-130		
Methoxychlor	0.005		0.0063		mg/Kg	126			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174052MS1, QC1174052MSD1												**Source: 386015-001**
4,4'-DDE	ND	0.005	0.005	0.00520	0.00510	mg/Kg	104	102	1.9	70-130	20	
4,4'-DDT	ND	0.005	0.005	0.00650	0.00670	mg/Kg	130	134	3.0	70-130	20	M
a-BHC	ND	0.005	0.005	0.00480	0.00480	mg/Kg	96	96	0.0	70-130	20	
Aldrin	ND	0.005	0.005	0.00450	0.00460	mg/Kg	90	92	2.2	70-130	20	
b-BHC	ND	0.005	0.005	0.00510	0.00490	mg/Kg	102	98	4.0	70-130	20	

QCBatchID: QC1174052	**Analyst:** nhernandez	**Method:** EPA 8081A	
Matrix: Solid	**Analyzed:** 01/05/2017	**Instrument:** SVOA-GC (group)	

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174052MS1, QC1174052MSD1											**Source:**	**386015-001**
d-BHC	ND	0.005	0.005	0.00540	0.00540	mg/Kg	108	108	0.0	70-130	20	
Dieldrin	ND	0.005	0.005	0.00510	0.00510	mg/Kg	102	102	0.0	70-130	20	
Endosulfan I	ND	0.005	0.005	0.00470	0.00470	mg/Kg	94	94	0.0	70-130	20	
Endosulfan II	ND	0.005	0.005	0.00480	0.00470	mg/Kg	96	94	2.1	70-130	20	
Endosulfan sulfate	ND	0.005	0.005	0.00600	0.00690	mg/Kg	120	138	14.0	70-130	20	M
Endrin	ND	0.005	0.005	0.00550	0.00550	mg/Kg	110	110	0.0	70-130	20	
Endrin aldehyde	ND	0.005	0.005	0.00490	0.00450	mg/Kg	98	90	8.5	70-130	20	
Heptachlor	ND	0.005	0.005	0.00450	0.00480	mg/Kg	90	96	6.5	70-130	20	
Heptachlor epoxide	ND	0.005	0.005	0.00500	0.00480	mg/Kg	100	96	4.1	70-130	20	
Lindane (Gamma-BHC)	ND	0.005	0.005	0.00520	0.00530	mg/Kg	104	106	1.9	70-130	20	
Methoxychlor	ND	0.005	0.005	0.0073	0.0077	mg/Kg	146	154	5.3	70-130	20	M

QCBatchID: QC1174093	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 01/06/2017	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result		Units	MDL	RDL	Notes
QC1174093MB1						
Antimony	**0.66**	**J**	mg/Kg	0.37	3	
Arsenic	**0.79**	**J**	mg/Kg	0.36	1	
Barium	ND		mg/Kg	0.23	1	
Beryllium	ND		mg/Kg	0.17	0.5	
Cadmium	ND		mg/Kg	0.21	0.5	
Chromium	ND		mg/Kg	0.13	1	
Cobalt	ND		mg/Kg	0.19	0.5	
Copper	**0.72**	**J**	mg/Kg	0.31	1	
Lead	ND		mg/Kg	0.32	0.5	
Molybdenum	**0.42**	**J**	mg/Kg	0.13	1	
Nickel	ND		mg/Kg	0.2	1.5	
Selenium	ND		mg/Kg	0.72	1	
Silver	**0.46**	**J**	mg/Kg	0.13	0.5	
Thallium	ND		mg/Kg	0.42	1	
Vanadium	ND		mg/Kg	0.37	0.5	
Zinc	ND		mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1174093LCS1											
Antimony	100		99.3		mg/Kg	99			80-120		
Arsenic	100		100		mg/Kg	100			80-120		
Barium	100		106		mg/Kg	106			80-120		
Beryllium	100		99.6		mg/Kg	100			80-120		
Cadmium	100		104		mg/Kg	104			80-120		
Chromium	100		102		mg/Kg	102			80-120		
Cobalt	100		104		mg/Kg	104			80-120		
Copper	100		96.6		mg/Kg	97			80-120		
Lead	100		107		mg/Kg	107			80-120		
Molybdenum	100		107		mg/Kg	107			80-120		
Nickel	100		104		mg/Kg	104			80-120		
Selenium	100		85.8		mg/Kg	86			80-120		
Silver	100		92.5		mg/Kg	93			80-120		
Thallium	100		112		mg/Kg	112			80-120		
Vanadium	100		99.4		mg/Kg	99			80-120		
Zinc	100		100		mg/Kg	100			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1174093MS1, QC1174093MSD1												**Source: 386054-001**
Antimony	ND	100	100	25.9	26.4	mg/Kg	26	26	1.9	75-125	20	M
Arsenic	3.29	100	100	85.6	86.1	mg/Kg	82	83	0.6	75-125	20	
Barium	61.0	100	100	122	135	mg/Kg	61	74	10.1	75-125	20	M
Beryllium	ND	100	100	84.9	84.4	mg/Kg	85	84	0.6	75-125	20	
Cadmium	ND	100	100	77.8	85.7	mg/Kg	78	86	9.7	75-125	20	
Chromium	11.0	100	100	89.4	97.6	mg/Kg	78	87	8.8	75-125	20	
Cobalt	5.10	100	100	83.1	91.5	mg/Kg	78	86	9.6	75-125	20	
Copper	6.33	100	100	83.6	93.9	mg/Kg	77	88	11.6	75-125	20	
Lead	3.04	100	100	87.3	89.6	mg/Kg	84	87	2.6	75-125	20	

QCBatchID: QC1174093	**Analyst:** dswafford	**Method:** EPA 6010B	
Matrix: Solid	**Analyzed:** 01/06/2017	**Instrument:** AAICP (group)	

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174093MS1, QC1174093MSD1											**Source:**	**386054-001**
Molybdenum	0.16	100	100	79.1	81.2	mg/Kg	79	81	2.6	75-125	20	
Nickel	4.24	100	100	84.0	92.4	mg/Kg	80	88	9.5	75-125	20	
Selenium	1.61	100	100	72.5	74.1	mg/Kg	71	72	2.2	75-125	20	M
Silver	ND	100	100	72.9	81.3	mg/Kg	73	81	10.9	75-125	20	M
Thallium	ND	100	100	83.3	84.9	mg/Kg	83	85	1.9	75-125	20	
Vanadium	34.7	100	100	114	114	mg/Kg	79	79	0.0	75-125	20	
Zinc	14.0	100	100	91.5	100	mg/Kg	78	86	8.9	75-125	20	

QCBatchID: QC1174097	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 01/06/2017	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174097MB1					
Antimony	ND	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	ND	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	0.5	
Molybdenum	ND	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	1	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	1	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174097LCS1											
Antimony	100		95.6		mg/Kg	96			80-120		
Arsenic	100		89.4		mg/Kg	89			80-120		
Barium	100		96.6		mg/Kg	97			80-120		
Beryllium	100		97.0		mg/Kg	97			80-120		
Cadmium	100		99.6		mg/Kg	100			80-120		
Chromium	100		103		mg/Kg	103			80-120		
Cobalt	100		101		mg/Kg	101			80-120		
Copper	100		90.9		mg/Kg	91			80-120		
Lead	100		101		mg/Kg	101			80-120		
Molybdenum	100		96.4		mg/Kg	96			80-120		
Nickel	100		102		mg/Kg	102			80-120		
Selenium	100		82.0		mg/Kg	82			80-120		
Silver	100		89.9		mg/Kg	90			80-120		
Thallium	100		92.5		mg/Kg	93			80-120		
Vanadium	100		98.1		mg/Kg	98			80-120		
Zinc	100		92.5		mg/Kg	93			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174097MS1, QC1174097MSD1												**Source: 386113-001**
Antimony	ND	100	100	59.7	60.9	mg/Kg	60	61	2.0	75-125	20	M
Arsenic	1.16	100	100	93.9	94.0	mg/Kg	93	93	0.1	75-125	20	
Barium	15.9	100	100	114	111	mg/Kg	98	95	2.7	75-125	20	
Beryllium	ND	100	100	94.6	89.2	mg/Kg	95	89	5.9	75-125	20	
Cadmium	ND	100	100	92.5	90.5	mg/Kg	93	91	2.2	75-125	20	
Chromium	7.08	100	100	101	97.9	mg/Kg	94	91	3.1	75-125	20	
Cobalt	1.48	100	100	95.7	92.7	mg/Kg	94	91	3.2	75-125	20	
Copper	1.16	100	100	97.0	95.6	mg/Kg	96	94	1.5	75-125	20	
Lead	0.44	100	100	94.0	95.7	mg/Kg	94	95	1.8	75-125	20	

QCBatchID: QC1174097	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/06/2017	**Instrument:** AAICP (group)			

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174097MS1, QC1174097MSD1												**Source: 386113-001**
Molybdenum	0.75	100	100	94.4	95.5	mg/Kg	94	95	1.2	75-125	20	
Nickel	3.30	100	100	96.6	93.2	mg/Kg	93	90	3.6	75-125	20	
Selenium	ND	100	100	86.8	87.5	mg/Kg	87	88	0.8	75-125	20	
Silver	ND	100	100	88.8	87.8	mg/Kg	89	88	1.1	75-125	20	
Thallium	ND	100	100	97.2	97.8	mg/Kg	97	98	0.6	75-125	20	
Vanadium	6.64	100	100	102	99.8	mg/Kg	95	93	2.2	75-125	20	
Zinc	7.14	100	100	92.4	90.8	mg/Kg	85	84	1.7	75-125	20	

QCBatchID:	**QC1174107**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	01/06/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174107MB1					
Arsenic	ND	mg/Kg	0.02	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174107LCS1											
Arsenic	50		49.7		mg/Kg	99			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174107MS1, QC1174107MSD1												**Source: 386145-077**
Arsenic	2.90	50	50	43.2	44.1	mg/Kg	81	82	2.1	75-125	20	

QCBatchID:	**QC1174196**	**Analyst:**	nhernandez	**Method:**	EPA 8082
Matrix:	Solid	**Analyzed:**	01/10/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174196MB1					
PCB-1016	ND	ug/Kg	3	50	
PCB-1221	ND	ug/Kg	14	50	
PCB-1232	ND	ug/Kg	9.5	50	
PCB-1242	ND	ug/Kg	14	50	
PCB-1248	ND	ug/Kg	19	50	
PCB-1254	ND	ug/Kg	20	50	
PCB-1260	ND	ug/Kg	6.9	50	
PCB-1262	ND	ug/Kg	17	50	
PCB-1268	ND	ug/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174196LCS1											
PCB-1016	500		390		ug/Kg	78			70-130		
PCB-1260	500		400		ug/Kg	80			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174196MS1, QC1174196MSD1												**Source: 386077-014**
PCB-1016	ND	500	500	370	460	ug/Kg	74	92	21.7	70-130	20	M
PCB-1260	ND	500	500	320	450	ug/Kg	64	90	33.8	70-130	20	M

QCBatchID:	**QC1174220**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	01/11/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174220MB1					
Arsenic	ND	mg/Kg	0.02	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174220LCS1											
Arsenic	50		54.3		mg/Kg	109			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174220MS1, QC1174220MSD1												**Source: 386145-020**
Arsenic	1.958	50	50	43.3	46.6	mg/Kg	83	89	7.3	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 3901145	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 1 of 10	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S20-0.5ft	01/04/17	11:20 AM	S	1/8oz		x					x					Analyze 0.5' samples. Hold deeper samples.
2	S20-1.5ft	01/04/17	11:30 AM	S	1/8oz											x	
3	S20-2.5ft	01/04/17	11:40 AM	S	1/8oz											x	
4	S21-0.5ft	01/04/17	10:50 AM	S	1/8oz		x										
5	S21-1.5ft	01/04/17	10:55 AM	S	1/8oz											x	
6	S21-2.5ft	01/04/17	11:00 AM	S	1/8oz											x	
7	S23-0.5ft	01/04/17	10:30 AM	S	1/8oz		x										
8	S23-1.5ft	01/04/17	10:35 AM	S	1/8oz											x	
9	S23-2.5ft	01/04/17	10:40 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:		Kevin Gay	Enthalpy	1/5/17 1035
[2] Relinquished By:		Kevin Gay	Enthalpy	1/5/17 1420
[2] Received By:		Zaid P.	EA	1/5/17 1420
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record		Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386145		Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page: 2 of 10		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water		Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3					
c/o Montrose Environmental Group		FL = Food Liquid FS = Food Solid L = Liquid		4 = H_2SO_4 5 = NaOH 6 = Other					
1 Park Plaza, Suite 1000, Irvine, CA 92614		PP = Pure Product S = Solid SeaW = Sea Water							
		SW = Swab W = Water WP = Wipe O = Other							

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S24-0.5ft	01/04/17	9:05 AM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S24-1.5ft	01/04/17	9:10 AM	S	1/8oz											x	
3	S24-2.5ft	01/04/17	9:15 AM	S	1/8oz											x	
4	S25-0.5ft	01/04/17	8:50 AM	S	1/8oz		x										
5	S25-1.5ft	01/04/17	8:55 AM	S	1/8oz											x	
6	S25-2.5ft	01/04/17	9:00 AM	S	1/8oz											x	
7	S26-0.5ft	01/04/17	9:30 AM	S	1/8oz		x										
8	S26-1.5ft	01/04/17	9:35 AM	S	1/8oz											x	
9	S26-2.5ft	01/04/17	9:40 AM	S	1/8oz											x	
10	S24D-0.5ft	01/04/17	9:07 AM	S	1/8oz		x										

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:	Kevin Stylt	Kevin Stylt	Enthalpy	1/5/17 1035
[2] Relinquished By:	Kevin Stylt	Kevin Stylt	Enthalpy	1/5/17 1420
[2] Received By:		AMD P.	EA	1/5/17 H20
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	386145			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	3	of	10	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S41-0.5ft	01/04/17	9:45 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S41-1.5ft	01/04/17	9:50 AM	S	1/8oz											x	
3	S41-2.5ft	01/04/17	9:55 AM	S	1/8oz											x	
4	S42-0.5ft	01/04/17	10:05 AM	S	1/8oz			x									
5	S42-1.5ft	01/04/17	10:10 AM	S	1/8oz											x	
6	S42-2.5ft	01/04/17	10:15 AM	S	1/8oz											x	
7	S43-0.5ft	01/04/17	10:20 AM	S	1/8oz			x									
8	S43-1.5ft	01/04/17	10:25 AM	S	1/8oz											x	
9	S43-2.5ft	01/04/17	10:30 AM	S	1/8oz											x	
10	S42D-0.5ft	01/04/17	10:00 AM	S	1/8oz			x									

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:			Enthalpy	1/5/17 1035
[2] Relinquished By:			Enthalpy	1/5/17 1420
[2] Received By:			EA	1/5/17 1420
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No:	386145			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page:	4	of	10	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group										
1 Park Plaza, Suite 1000, Irvine, CA 92614										

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)	pH		Hold	Test Instructions / Comments
1	S44-0.5ft	01/04/17	10:45 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples unless analysis noted.
2	S44-1.5ft	01/04/17	10:50 AM	S	1/8oz											x	
3	S44-2.5ft	01/04/17	10:55 AM	S	1/8oz											x	
4	S45-0.5ft	01/04/17	11:15 AM	S	1/8oz			x									
5	S45-1.5ft	01/04/17	11:20 AM	S	1/8oz											x	
6	S45-2.5ft	01/04/17	11:25 AM	S	1/8oz											x	
7	S46-0.5ft	01/04/17	11:30 AM	S	1/8oz			x									
8	S46-1.5ft	01/04/17	11:35 AM	S	1/8oz											x	
9	S46-2.5ft	01/04/17	11:40 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:			Enthalpy	1/5/17 1035
[2] Relinquished By:			Enthalpy	1/5/17 1420
[2] Received By:			EA	1/5/17 1420
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386145	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 5 of 10	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S47-0.5ft	01/04/17	11:45 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S47-1.5ft	01/04/17	11:50 AM	S	1/8oz											x	
3	S47-2.5ft	01/04/17	11:55 AM	S	1/8oz											x	
4	S48-0.5ft	01/04/17	12:00 PM	S	1/8oz			x									
5	S48-1.5ft	01/04/17	12:05 PM	S	1/8oz											x	
6	S48-2.5ft	01/04/17	12:10 PM	S	1/8oz											x	
7	S50-0.5ft	01/04/17	10:00 AM	S	1/8oz			x				x					
8	S50-1.5ft	01/04/17	10:05 AM	S	1/8oz											x	
9	S50-2.5ft	01/04/17	10:20 AM	S	1/8oz											x	
10	S50D-0.5ft	01/04/17	10:03 AM	S	1/8oz			x				x					

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:			Enthalpy	1/5/17 1035
[2] Relinquished By:			Enthalpy	1/5/17 - 1420
[2] Received By:		TMD P.	EA	1/5/17 1420
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386145	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 6 of 10	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal	Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other
c/o Montrose Environmental Group		
1 Park Plaza, Suite 1000, Irvine, CA 92614		

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S51-0.5ft	01/04/17	8:25 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S51-1.5ft	01/04/17	8:30 AM	S	1/8oz											x	
3	S51-2.5ft	01/04/17	8:35 AM	S	1/8oz											x	
4	S52-0.5ft	01/04/17	11:00 AM	S	1/8oz			x									
5	S52-1.5ft	01/04/17	11:05 AM	S	1/8oz											x	
6	S52-2.5ft	01/04/17	11:10 AM	S	1/8oz											x	
7	S53-0.5ft	01/04/17	8:10 AM	S	1/8oz			x									
8	S53-1.5ft	01/04/17	8:15 AM	S	1/8oz											x	
9	S53-2.5ft	01/04/17	8:20 AM	S	1/8oz											x	
10	S53D-0.5ft	01/04/17	8:13 AM	S	1/8oz			x									

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:			Enthalpy	1/5/17 1035
[2] Relinquished By:			Enthalpy	1/5/17 1420
[2] Received By:			EA	1/5/17 1420
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.
806 N. Batavia St., Orange, CA 92868
Phone: (714) 771-6900 Fax: (714)771-9933
Billing: Enthalpy - SoCal
c/o Montrose Environmental Group
1 Park Plaza, Suite 1000, Irvine, CA 92614

ENTHALPY analytical, inc.

Chain of Custody Record

Lab No: 386146
Page: 7 of 10

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Turn Around Time (Rush by advanced notice only)

Standard:	x	4 Day:		3 Day:	
2 Day:		1 Day:		Same Day:	

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S54-0.5ft	01/04/17	8:55 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S54-1.5ft	01/04/17	9:00 AM	S	1/8oz											x	
3	S54-2.5ft	01/04/17	9:05 AM	S	1/8oz											x	
4	S61-0.5ft	01/04/17	8:40 AM	S	1/8oz			x									
5	S61-1.5ft	01/04/17	8:45 AM	S	1/8oz											x	
6	S61-2.5ft	01/04/17	8:50 AM	S	1/8oz											x	
7	S62-0.5ft	01/04/17	9:25 AM	S	1/8oz			x									
8	S62-1.5ft	01/04/17	9:30 AM	S	1/8oz											x	
9	S62-2.5ft	01/04/17	9:35 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:	Kevin Gyre	Kevin Gyre	Enthalpy	1/5/17 1435
[2] Relinquished By:	Kevin Gyre	Kevin Gyre	Enthalpy	1/5/17 1420
[2] Received By:		ZAID P.	EA	1/5/17 1420
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record		Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386145		Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page: 8 of 10		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water		Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3					
c/o Montrose Environmental Group		FL = Food Liquid FS = Food Solid L = Liquid		4 = H_2SO_4 5 = NaOH 6 = Other					
1 Park Plaza, Suite 1000, Irvine, CA 92614		PP = Pure Product S = Solid SeaW = Sea Water							
		SW = Swab W = Water WP = Wipe O = Other							

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S68-0.5ft	01/04/17	9:10 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S68-1.5ft	01/04/17	9:15 AM	S	1/8oz											x	
3	S68-2.5ft	01/04/17	9:20 AM	S	1/8oz											x	
4	S80-0.5ft	01/04/17	9:35 AM	S	1/8oz				x			x					
5	S80-1.5ft	01/04/17	9:40 AM	S	1/8oz											x	
6	S80-2.5ft	01/04/17	9:45 AM	S	1/8oz											x	
7	S91-0.5ft	01/04/17	3:15 PM	S	1/8oz			x									
8	S91-1.5ft	01/04/17	3:20 PM	S	1/8oz											x	
9	S91-2.5ft	01/04/17	3:25 PM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:			Enthalpy	1/5/17 1035
[2] Relinquished By:			Enthalpy	1/5/17 1420
[2] Received By:			EA	1/5/17 1420
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386145	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 9 of 10	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S92-0.5ft	01/04/17	3:00 PM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S92-1.5ft	01/04/17	3:05 PM	S	1/8oz											x	
3	S92-2.5ft	01/04/17	3:10 PM	S	1/8oz											x	
4	S93-0.5ft	01/04/17	2:45 PM	S	1/8oz			x									
5	S93-1.5ft	01/04/17	2:50 PM	S	1/8oz											x	
6	S93-2.5ft	01/04/17	2:55 PM	S	1/8oz											x	
7	S94-0.5ft	01/04/17	2:25 PM	S	1/8oz			x									
8	S94-1.5ft	01/04/17	2:35 PM	S	1/8oz											x	
9	S94-2.5ft	01/04/17	2:40 PM	S	1/8oz											x	
10	S94D-0.5ft	01/04/17	2:30 PM	S	1/8oz			x									

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:			Enthalpy	1/5/17 1035
[2] Relinquished By:			Enthalpy	1/5/17 1420
[2] Received By:			EA	1/5/17 1420
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	396145			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	10	of	10	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3					
c/o Montrose Environmental Group		FL = Food Liquid FS = Food Solid L = Liquid				4 = H_2SO_4 5 = NaOH 6 = Other					
1 Park Plaza, Suite 1000, Irvine, CA 92614		PP = Pure Product S = Solid SeaW = Sea Water									
		SW = Swab W = Water WP = Wipe O = Other									

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S104-0.5ft	01/04/17	7:40 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S104-1.5ft	01/04/17	7:45 AM	S	1/8oz											x	
3	S104-2.5ft	01/04/17	7:50 AM	S	1/8oz											x	
4	S105-0.5ft	01/04/17	7:55 AM	S	1/8oz			x									
5	S105-1.5ft	01/04/17	8:00 AM	S	1/8oz											x	
6	S105-2.5ft	01/04/17	8:05 AM	S	1/8oz											x	
7																	
8																	
9																	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/05/17 0500
[1] Received By:			Enthalpy	1/5/17 1035
[2] Relinquished By:			Enthalpy	1/5/17 1420
[2] Received By:			EA	1/5/17 1420
[3] Relinquished By:				
[3] Received By:				

ENTHALPY analytical, inc.

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: CES Project: FRANCIS POLY HS

Date Received: 1/05/17 Sampler's Name Present: (Yes) No

Sample(s) received in a cooler? (Yes) How many? 2 No (skip section 2) Sample Temp (°C): _____

Sample Temp (°C) from each cooler: #1: 10.7 #2: 7.8°C #3: _____ #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: _____

Section 2

Was the cooler packed with: ✓ Ice ____ Ice Packs ____ Bubble Wrap ____ Styrofoam

____ Paper ____ None ____ Other _____

Cooler Temp (°C): #1: 10.6 #2: 5.6°C #3: _____ #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relinquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were custody seals present?		✓	
If Yes – were they intact?			✓
Were all samples sealed in plastic bags?	✓		
Did all samples arrive intact? If no, indicate below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of sample sent for tests indicated?	✓		
Was there headspace in VOA vials?			✓
Were the containers labeled with correct preservatives?			✓

Section 4

Explanations/Comments: _____

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response: _____

Completed By: _____ Date: 1/05/17

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Enthalpy Analytical, Inc.
Formerly Associated Labs
806 N. Batavia - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.associatedlabs.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: CES Group, Inc.
Address: 33353 Temecula Pkwy.
Suite 104 #333
Temecula, CA 92592
Attn: Skye Green

Lab Request: 386235
Report Date: 01/24/2017
Date Received: 01/06/2017
Client ID: 15581

Comments: Francis Poly HS
PO# 27116
12431 Roscoe Blvd., Sun Valley, CA

Supplemental Report 1

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID	Sample #	Client Sample ID
386235-001	S1-0.5ft	386235-025	S8-2.5ft	386235-049	S16-2.5ft
386235-002	S1-1.5ft	386235-026	S9-0.5ft	386235-050	S17-0.5ft
386235-003	S1-2.5ft	386235-027	S9-1.5ft	386235-051	S17-1.5ft
386235-004	S2-0.5ft	386235-028	S9-2.5ft	386235-052	S17-2.5ft
386235-005	S2-1.5ft	386235-029	S10-0.5ft	386235-053	S18-0.5ft
386235-006	S2-2.5ft	386235-030	S10-1.5ft	386235-054	S18-1.5ft
386235-007	S3-0.5ft	386235-031	S10-2.5ft	386235-055	S18-2.5ft
386235-008	S3-1.5ft	386235-032	S11-0.5ft	386235-056	S19-0.5ft
386235-009	S3-2.5ft	386235-033	S11-1.5ft	386235-057	S19-1.5ft
386235-010	S1D-0.5ft	386235-034	S11-2.5ft	386235-058	S19-2.5ft
386235-011	S4-0.5ft	386235-035	S12-0.5ft	386235-059	S29-0.5ft
386235-012	S4-1.5ft	386235-036	S12-1.5ft	386235-060	S29-1.5ft
386235-013	S4-2.5ft	386235-037	S12-2.5ft	386235-061	S29-2.5ft
386235-014	S5-0.5ft	386235-038	S13-0.5ft	386235-062	S30-0.5ft
386235-015	S5-1.5ft	386235-039	S13-1.5ft	386235-063	S30-1.5ft
386235-016	S5-2.5ft	386235-040	S13-2.5ft	386235-064	S30-2.5ft
386235-017	S6-0.5ft	386235-041	S14-0.5ft	386235-065	S31-0.5ft
386235-018	S6-1.5ft	386235-042	S14-1.5ft	386235-066	S31-1.5ft
386235-019	S6-2.5ft	386235-043	S14-2.5ft	386235-067	S31-2.5ft
386235-020	S7-0.5ft	386235-044	S15-0.5ft	386235-068	S33-0.5ft
386235-021	S7-1.5ft	386235-045	S15-1.5ft	386235-069	S33-1.5ft
386235-022	S7-2.5ft	386235-046	S15-2.5ft	386235-070	S33-2.5ft
386235-023	S8-0.5ft	386235-047	S16-0.5ft	386235-071	S34-0.5ft
386235-024	S8-1.5ft	386235-048	S16-1.5ft	386235-072	S34-1.5ft

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix: Solid	**Client:** CES Group, Inc.			**Collector:** Client	
Sampled: 01/05/2017 13:10	**Site:**				
Sample #: **386235-001**	**Client Sample #:** S1-0.5ft			**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**34.2**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid	**Client:** CES Group, Inc.			**Collector:** Client	
Sampled: 01/05/2017 13:15	**Site:**				
Sample #: **386235-002**	**Client Sample #:** S1-1.5ft			**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid	**Client:** CES Group, Inc.			**Collector:** Client	
Sampled: 01/05/2017 13:20	**Site:**				
Sample #: **386235-003**	**Client Sample #:** S1-2.5ft			**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid	**Client:** CES Group, Inc.			**Collector:** Client	
Sampled: 01/05/2017 12:40	**Site:**				
Sample #: **386235-004**	**Client Sample #:** S2-0.5ft			**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**40.7**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid	**Client:** CES Group, Inc.			**Collector:** Client	
Sampled: 01/05/2017 12:45	**Site:**				
Sample #: **386235-005**	**Client Sample #:** S2-1.5ft			**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid	**Client:** CES Group, Inc.			**Collector:** Client	
Sampled: 01/05/2017 12:50	**Site:**				
Sample #: **386235-006**	**Client Sample #:** S2-2.5ft			**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:30 **Site:**
Sample #: **386235-007** **Client Sample #:** S3-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**19.9**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 8081A *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174135		
4,4'-DDD	ND	1	0.67	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**39**	1	0.57	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDT	**7.8**	1	0.95	5	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	1	12	50	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	ND	1	0.63	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	1	0.62	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*132*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*98*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:35 **Site:**
Sample #: **386235-008** **Client Sample #:** S3-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:40 **Site:**
Sample #: **386235-009** **Client Sample #:** S3-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:13 **Site:**
Sample #: **386235-010** **Client Sample #:** S1D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**16.5**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:40 **Site:**
Sample #: **386235-011** **Client Sample #:** S4-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**63.5**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 6010B *NELAC*	Prep Method: STLC						QCBatchID: QC1174535		
Lead	**5.16**	10	0.12	0.15	mg/L	01/20/17	01/23/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:45 **Site:**
Sample #: **386235-012** **Client Sample #:** S4-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174444		
Lead	**5.24**	1	0.32	0.5	mg/Kg	01/18/17	01/19/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:50 **Site:**
Sample #: **386235-013** **Client Sample #:** S4-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:35 **Site:**
Sample #: **386235-014** **Client Sample #:** S5-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**9.08**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:40 **Site:**
Sample #: **386235-015** **Client Sample #:** S5-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:45 **Site:**
Sample #: **386235-016** **Client Sample #:** S5-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:00 **Site:**
Sample #: **386235-017** **Client Sample #:** S6-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**18.5**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:05 **Site:**
Sample #: **386235-018** **Client Sample #:** S6-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:10 **Site:**
Sample #: **386235-019** **Client Sample #:** S6-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:50 **Site:**
Sample #: **386235-020** **Client Sample #:** S7-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**7.38**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:55 **Site:**
Sample #: **386235-021** **Client Sample #:** S7-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:00 **Site:**
Sample #: **386235-022** **Client Sample #:** S7-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:15 **Site:**
Sample #: **386235-023** **Client Sample #:** S8-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**4.50**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:20 **Site:**
Sample #: **386235-024** **Client Sample #:** S8-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:25 **Site:**
Sample #: **386235-025** **Client Sample #:** S8-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/05/2017 10:30	**Site:**			
Sample #:	**386235-026**	**Client Sample #:**	S9-0.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**65.1**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 6010B *NELAC*	Prep Method: STLC						QCBatchID: QC1174535		
Lead	**3.03**	10	0.12	0.15	mg/L	01/20/17	01/23/17	KLN	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/05/2017 10:35	**Site:**			
Sample #:	**386235-027**	**Client Sample #:**	S9-1.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174444		
Lead	**9.14**	1	0.32	0.5	mg/Kg	01/18/17	01/19/17	JN	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/05/2017 10:40	**Site:**			
Sample #:	**386235-028**	**Client Sample #:**	S9-2.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:40 **Site:**
Sample #: **386235-029** **Client Sample #:** S10-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1174225		
Lead	**78.8**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 6010B *NELAC* Prep Method: STLC							QCBatchID: QC1174535		
Lead	**3.29**	10	0.12	0.15	mg/L	01/20/17	01/23/17	KLN	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174135		
4,4'-DDD	ND	1	0.67	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**39**	1	0.57	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDT	**19**	1	0.95	5	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	1	12	50	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	ND	1	0.63	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	1	0.62	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*126*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*100*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*87*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:45 **Site:**
Sample #: **386235-030** **Client Sample #:** S10-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1174444		
Lead	**1.67**	1	0.32	0.5	mg/Kg	01/18/17	01/19/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:50 **Site:**
Sample #: **386235-031** **Client Sample #:** S10-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:00 **Site:**
Sample #: **386235-032** **Client Sample #:** S11-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**23.9**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:05 **Site:**
Sample #: **386235-033** **Client Sample #:** S11-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:10 **Site:**
Sample #: **386235-034** **Client Sample #:** S11-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:55 **Site:**
Sample #: **386235-035** **Client Sample #:** S12-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 1311/3010A						QCBatchID: QC1174536		
Lead	ND	1	0.004	0.05	mg/L	01/20/17	01/23/17	KLN	
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**176**	1	0.32	0.5	mg/Kg	01/11/17	01/13/17	JN	
Method: EPA 6010B *NELAC*	Prep Method: STLC						QCBatchID: QC1174535		
Lead	**11.0**	10	0.12	0.15	mg/L	01/20/17	01/23/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:00 **Site:**
Sample #: **386235-036** **Client Sample #:** S12-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174444		
Lead	**2.56**	1	0.32	0.5	mg/Kg	01/18/17	01/19/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:05 **Site:**
Sample #: **386235-037** **Client Sample #:** S12-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:00 **Site:**
Sample #: **386235-038** **Client Sample #:** S13-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**12.2**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:05 **Site:**
Sample #: **386235-039** **Client Sample #:** S13-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:10 **Site:**
Sample #: **386235-040** **Client Sample #:** S13-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:10 **Site:**
Sample #: **386235-041** **Client Sample #:** S14-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**47.6**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:15 **Site:**
Sample #: **386235-042** **Client Sample #:** S14-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:20 **Site:**
Sample #: **386235-043** **Client Sample #:** S14-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:20 **Site:**
Sample #: **386235-044** **Client Sample #:** S15-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**25.6**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:25 **Site:**
Sample #: **386235-045** **Client Sample #:** S15-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:30 **Site:**
Sample #: 386235-046 **Client Sample #:** S15-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:50 **Site:**
Sample #: 386235-047 **Client Sample #:** S16-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**15.6**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:55 **Site:**
Sample #: 386235-048 **Client Sample #:** S16-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:00 **Site:**
Sample #: 386235-049 **Client Sample #:** S16-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:20 **Site:**
Sample #: 386235-050 **Client Sample #:** S17-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**22.3**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:25 **Site:**
Sample #: 386235-051 **Client Sample #:** S17-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:30 **Site:**
Sample #: 386235-052 **Client Sample #:** S17-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 07:50 **Site:**
Sample #: 386235-053 **Client Sample #:** S18-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**6.53**	1	0.32	0.5	mg/Kg	01/11/17	01/13/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 07:55 **Site:**
Sample #: **386235-054** **Client Sample #:** S18-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:00 **Site:**
Sample #: **386235-055** **Client Sample #:** S18-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:30 **Site:**
Sample #: **386235-056** **Client Sample #:** S19-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**15.8**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:35 **Site:**
Sample #: **386235-057** **Client Sample #:** S19-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:40 **Site:**
Sample #: **386235-058** **Client Sample #:** S19-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:40 **Site:**
Sample #: **386235-059** **Client Sample #:** S29-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.631 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:45 **Site:**
Sample #: **386235-060** **Client Sample #:** S29-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:50 **Site:**
Sample #: **386235-061** **Client Sample #:** S29-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:15 **Site:**
Sample #: **386235-062** **Client Sample #:** S30-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.733 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*80*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:30 **Site:**
Sample #: **386235-063** **Client Sample #:** S30-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:35 **Site:**
Sample #: **386235-064** **Client Sample #:** S30-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:40 **Site:**
Sample #: **386235-065** **Client Sample #:** S31-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.651 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:45 **Site:**
Sample #: **386235-066** **Client Sample #:** S31-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:50 **Site:**
Sample #: **386235-067** **Client Sample #:** S31-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:05 **Site:**
Sample #: **386235-068** **Client Sample #:** S33-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.301 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:10 **Site:**
Sample #: **386235-069** **Client Sample #:** S33-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:15 **Site:**
Sample #: **386235-070** **Client Sample #:** S33-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:35 **Site:**
Sample #: **386235-071** **Client Sample #:** S34-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.410 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:40 **Site:**
Sample #: **386235-072** **Client Sample #:** S34-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:45 **Site:**
Sample #: **386235-073** **Client Sample #:** S34-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:35 **Site:**
Sample #: **386235-074** **Client Sample #:** S35-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.553 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:40 **Site:**
Sample #: **386235-075** **Client Sample #:** S35-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:45 **Site:**
Sample #: **386235-076** **Client Sample #:** S35-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:05 **Site:**
Sample #: **386235-077** **Client Sample #:** S36-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**2.27 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:10 **Site:**
Sample #: **386235-078** **Client Sample #:** S36-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:15 **Site:**
Sample #: **386235-079** **Client Sample #:** S36-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:00 **Site:**
Sample #: **386235-080** **Client Sample #:** S40-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.114 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*79*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:15 **Site:**
Sample #: **386235-081** **Client Sample #:** S40-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:20 **Site:**
Sample #: **386235-082** **Client Sample #:** S40-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: **386235-083** **Client Sample #:** S78-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC*	Prep Method: EPA 3545						QCBatchID:	QC1174135	
4,4'-DDD	**12**	1	0.67	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**280**	2	1.14	10	ug/Kg	01/09/17	01/11/17	LW	
4,4'-DDT	**61**	1	0.95	5	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	1	12	50	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	**13**	1	0.63	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	1	0.62	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*126*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*106*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: **386235-084** **Client Sample #:** S78-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: **386235-085** **Client Sample #:** S78-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-086 **Client Sample #:** S79-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**13.5**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 8081A NELAC	Prep Method: EPA 3545						QCBatchID: QC1174135		
4,4'-DDD	ND	2	1.34	10	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**100**	2	1.14	10	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDT	**26**	2	1.9	10	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	2	0.4	10	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	2	0.68	10	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	2	2.4	10	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	2	24	100	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	2	0.9	10	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	ND	2	1.26	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	2	0.56	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	2	1.6	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	2	3.4	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	2	1.24	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	2	1.8	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	2	2.4	10	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	2	0.88	10	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	2	0.54	10	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	2	0.6	10	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	2	10.4	20	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	2	24	200	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*129*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*141*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-087 **Client Sample #:** S79-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-088 **Client Sample #:** S79-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/05/2017	**Site:**			
Sample #:	**386235-089**	**Client Sample #:**	S78D-0.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174135		
4,4'-DDD	**47**	1	0.67	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**330**	5	0.57	5	ug/Kg	01/09/17	01/13/17	LW	
4,4'-DDT	**64**	1	0.95	5	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	**230**	1	12	50	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	**37**	1	0.63	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin	**12**	1	0.62	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*131*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*93*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-090 **Client Sample #:** S79D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**16.3**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 8081A NELAC	Prep Method: EPA 3545						QCBatchID: QC1174135		
4,4'-DDD	ND	2	1.34	10	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**160**	2	1.14	10	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDT	**25**	2	1.9	10	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	2	0.4	10	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	2	0.68	10	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	2	2.4	10	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	2	24	100	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	2	0.9	10	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	ND	2	1.26	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	2	0.56	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	2	1.6	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	2	3.4	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	2	1.24	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	2	1.8	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	2	2.4	10	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	2	0.88	10	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	2	0.54	10	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	2	0.6	10	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	2	10.4	20	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	2	24	200	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*118*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*120*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:25 **Site:**
Sample #: 386235-091 **Client Sample #:** S86-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**2.90 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:30 **Site:**
Sample #: 386235-092 **Client Sample #:** S86-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:35 **Site:**
Sample #: 386235-093 **Client Sample #:** S86-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid	**Client:** CES Group, Inc.						**Collector:** Client				
Sampled: 01/05/2017 13:10	**Site:**										
Sample #: **386235-094**	**Client Sample #:** S87-0.5ft						**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**		
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221				
Arsenic	**2.29 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J		

Matrix: Solid	**Client:** CES Group, Inc.						**Collector:** Client				
Sampled: 01/05/2017 13:15	**Site:**										
Sample #: **386235-095**	**Client Sample #:** S87-1.5ft						**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**		
Method:	Prep Method:						QCBatchID:				
N/A	**N/A**	1									

Matrix: Solid	**Client:** CES Group, Inc.						**Collector:** Client				
Sampled: 01/05/2017 13:20	**Site:**										
Sample #: **386235-096**	**Client Sample #:** S87-2.5ft						**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**		
Method:	Prep Method:						QCBatchID:				
N/A	**N/A**	1									

Matrix: Solid	**Client:** CES Group, Inc.						**Collector:** Client				
Sampled: 01/05/2017 13:40	**Site:**										
Sample #: **386235-097**	**Client Sample #:** S88-0.5ft						**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**		
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221				
Arsenic	**1.596 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J		

Matrix: Solid	**Client:** CES Group, Inc.						**Collector:** Client				
Sampled: 01/05/2017 13:45	**Site:**										
Sample #: **386235-098**	**Client Sample #:** S88-1.5ft						**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**		
Method:	Prep Method:						QCBatchID:				
N/A	**N/A**	1									

Matrix: Solid	**Client:** CES Group, Inc.						**Collector:** Client				
Sampled: 01/05/2017 13:50	**Site:**										
Sample #: **386235-099**	**Client Sample #:** S88-2.5ft						**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**		
Method:	Prep Method:						QCBatchID:				
N/A	**N/A**	1									

Matrix: Solid	**Client:** CES Group, Inc.						**Collector:** Client				
Sampled: 01/05/2017 14:10	**Site:**										
Sample #: **386235-100**	**Client Sample #:** S89-0.5ft						**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**		
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221				
Arsenic	**3.81**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN			

Matrix: Solid	**Client:** CES Group, Inc.						**Collector:** Client				
Sampled: 01/05/2017 14:15	**Site:**										
Sample #: **386235-101**	**Client Sample #:** S89-1.5ft						**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**		
Method:	Prep Method:						QCBatchID:				
N/A	**N/A**	1									

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:20 **Site:**
Sample #: **386235-102** **Client Sample #:** S89-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:55 **Site:**
Sample #: **386235-103** **Client Sample #:** S90-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:		QC1174221
Arsenic	**3.31**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID:		QC1174196
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*81*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:00 **Site:**
Sample #: **386235-104** **Client Sample #:** S90-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:05 **Site:**
Sample #: **386235-105** **Client Sample #:** S90-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:05 **Site:**
Sample #: **386235-106** **Client Sample #:** S27-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:		QC1174221
Arsenic	**1.353 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:10 **Site:**
Sample #: **386235-107** **Client Sample #:** S27-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:15 **Site:**
Sample #: **386235-108** **Client Sample #:** S27-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:55 **Site:**
Sample #: **386235-109** **Client Sample #:** S28-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.462 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:00 **Site:**
Sample #: **386235-110** **Client Sample #:** S28-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:05 **Site:**
Sample #: **386235-111** **Client Sample #:** S28-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 09:05 **Site:**
Sample #: **386235-112** **Client Sample #:** S37-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**0.701 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 09:10 **Site:**
Sample #: **386235-113** **Client Sample #:** S37-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 09:15 **Site:**
Sample #: **386235-114** **Client Sample #:** S37-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:50 **Site:**
Sample #: **386235-115** **Client Sample #:** S38-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**0.881 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:55 **Site:**
Sample #: 386235-116 **Client Sample #:** S38-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 09:00 **Site:**
Sample #: 386235-117 **Client Sample #:** S38-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:30 **Site:**
Sample #: 386235-118 **Client Sample #:** S39-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**0.966 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:35 **Site:**
Sample #: 386235-119 **Client Sample #:** S39-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:40 **Site:**
Sample #: 386235-120 **Client Sample #:** S39-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:35 **Site:**
Sample #: 386235-121 **Client Sample #:** S83-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.073 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:40 **Site:**
Sample #: 386235-122 **Client Sample #:** S83-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:45 **Site:**
Sample #: 386235-123 **Client Sample #:** S83-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:30 **Site:**
Sample #: **386235-124** **Client Sample #:** S83D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**2.63 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:40 **Site:**
Sample #: **386235-125** **Client Sample #:** S84-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174222		
Arsenic	**2.95 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:45 **Site:**
Sample #: **386235-126** **Client Sample #:** S84-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:50 **Site:**
Sample #: **386235-127** **Client Sample #:** S84-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:50 **Site:**
Sample #: **386235-128** **Client Sample #:** S85-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174222		
Arsenic	**3.01**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:55 **Site:**
Sample #: **386235-129** **Client Sample #:** S85-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:00 **Site:**
Sample #: **386235-130** **Client Sample #:** S85-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:30	**Site:**			
Sample #:	**386235-131**	**Client Sample #:**	Soil Drums	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1174226		
Antimony	ND	1	0.37	3	mg/Kg	01/11/17	01/13/17	JN	
Arsenic	**2.82**	1	0.36	1	mg/Kg	01/11/17	01/13/17	JN	
Barium	**76.5**	1	0.23	1	mg/Kg	01/11/17	01/13/17	JN	
Beryllium	ND	1	0.17	0.5	mg/Kg	01/11/17	01/13/17	JN	
Cadmium	**0.24 J**	1	0.21	0.5	mg/Kg	01/11/17	01/13/17	JN	J
Chromium	**9.90**	1	0.13	1	mg/Kg	01/11/17	01/13/17	JN	
Cobalt	**8.48**	1	0.19	0.5	mg/Kg	01/11/17	01/13/17	JN	
Copper	**9.45**	1	0.31	1	mg/Kg	01/11/17	01/13/17	JN	
Lead	**4.58**	1	0.32	0.5	mg/Kg	01/11/17	01/13/17	JN	
Molybdenum	ND	1	0.13	1	mg/Kg	01/11/17	01/13/17	JN	
Nickel	**6.58**	1	0.2	1.5	mg/Kg	01/11/17	01/13/17	JN	
Selenium	ND	1	0.72	1	mg/Kg	01/11/17	01/16/17	JN	
Silver	**0.42 J**	1	0.13	0.5	mg/Kg	01/11/17	01/13/17	JN	J
Thallium	ND	1	0.42	1	mg/Kg	01/11/17	01/13/17	JN	
Vanadium	**23.6**	1	0.37	0.5	mg/Kg	01/11/17	01/13/17	JN	
Zinc	**33.6**	1	0.28	5	mg/Kg	01/11/17	01/13/17	JN	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID: QC1174263		
Mercury	**0.03 J**	1	0.02	0.14	mg/Kg	01/12/17	01/12/17	JP	J
Method: EPA 8015M Prep Method:							QCBatchID: QC1174158		
TPH (C10 to C28)	ND	1		10	mg/Kg	01/09/17	01/10/17	LT	T3
TPH (C28 to C40)	**75**	1		20	mg/Kg	01/09/17	01/10/17	LT	T3
TPH (C8 to C10)	ND	1		10	mg/Kg	01/09/17	01/10/17	LT	T3
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174135		
4,4'-DDD	ND	1	0.67	5	ug/Kg	01/09/17	01/11/17	LW	T3
4,4'-DDE	**110**	1	0.57	5	ug/Kg	01/09/17	01/11/17	LW	T3
4,4'-DDT	**29**	1	0.95	5	ug/Kg	01/09/17	01/11/17	LW	T3
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/11/17	LW	T3
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/11/17	LW	T3
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/11/17	LW	T3
Chlordane (technical)	ND	1	12	50	ug/Kg	01/09/17	01/11/17	LW	T3
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/11/17	LW	T3
Dieldrin	ND	1	0.63	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endrin	ND	1	0.62	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/11/17	LW	T3
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/11/17	LW	T3
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/11/17	LW	T3
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/11/17	LW	T3
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/11/17	LW	T3
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/11/17	LW	T3

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*122*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*101*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	T3

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/23/2016 10:30 **Site:**
Sample #: 386235-131 **Client Sample #:** Soil Drums **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	T3

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*68*	*50-150*	

Method: EPA 8260B *NELAC* Prep Method: EPA 5035A QCBatchID: QC1174152

1,1,1,2-Tetrachloroethane	ND	0.91	0.2184	4.55	ug/Kg	01/09/17	ZZ	T3
1,1,1-Trichloroethane	ND	0.91	0.1365	4.55	ug/Kg	01/09/17	ZZ	T3
1,1,2,2-Tetrachloroethane	ND	0.91	0.2639	4.55	ug/Kg	01/09/17	ZZ	T3
1,1,2-Trichloroethane	ND	0.91	0.2002	4.55	ug/Kg	01/09/17	ZZ	T3
1,1,2-Trichlorotrifluoroethane	ND	0.91	0.6734	4.55	ug/Kg	01/09/17	ZZ	T3
1,1-Dichloroethane	ND	0.91	0.2093	4.55	ug/Kg	01/09/17	ZZ	T3
1,1-Dichloroethene	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
1,1-Dichloropropene	ND	0.91	0.1911	4.55	ug/Kg	01/09/17	ZZ	T3
1,2,3-Trichlorobenzene	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
1,2,3-Trichloropropane	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
1,2,4-Trichlorobenzene	ND	0.91	0.3003	4.55	ug/Kg	01/09/17	ZZ	T3
1,2,4-Trimethylbenzene	ND	0.91	0.2548	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dibromo-3-chloropropane	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dibromoethane	ND	0.91	0.1092	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dichlorobenzene	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dichloroethane	ND	0.91	0.1274	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dichloropropane	ND	0.91	0.3094	4.55	ug/Kg	01/09/17	ZZ	T3
1,3,5-Trimethylbenzene	ND	0.91	0.2093	4.55	ug/Kg	01/09/17	ZZ	T3
1,3-Dichlorobenzene	ND	0.91	0.1911	4.55	ug/Kg	01/09/17	ZZ	T3
1,3-Dichloropropane	ND	0.91	0.1729	4.55	ug/Kg	01/09/17	ZZ	T7
1,4-Dichlorobenzene	ND	0.91	0.2184	4.55	ug/Kg	01/09/17	ZZ	T3
2,2-Dichloropropane	ND	0.91	0.1729	4.55	ug/Kg	01/09/17	ZZ	T3
2-Butanone (MEK)	ND	0.91	0.6552	91	ug/Kg	01/09/17	ZZ	T3
2-Chloroethyl Vinyl Ether	ND	0.91	0.273	4.55	ug/Kg	01/09/17	ZZ	T3
2-Chlorotoluene	ND	0.91	0.2275	4.55	ug/Kg	01/09/17	ZZ	T3
4-Chlorotoluene	ND	0.91	0.2002	4.55	ug/Kg	01/09/17	ZZ	T3
4-Isopropyltoluene	ND	0.91	0.2457	4.55	ug/Kg	01/09/17	ZZ	T3
4-Methyl-2-pentanone (MIBK)	ND	0.91	0.1547	4.55	ug/Kg	01/09/17	ZZ	T3
Acetone	**15 J**	0.91	9.1	91	ug/Kg	01/09/17	ZZ	J,T3
Allyl Chloride	ND	0.91	0.1274	4.55	ug/Kg	01/09/17	ZZ	T3
Benzene	**1.7 J**	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	J,T3
Bromobenzene	ND	0.91	0.273	4.55	ug/Kg	01/09/17	ZZ	T3
Bromochloromethane	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
Bromodichloromethane	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
Bromoform	ND	0.91	0.1729	4.55	ug/Kg	01/09/17	ZZ	T3
Bromomethane	ND	0.91	0.2002	4.55	ug/Kg	01/09/17	ZZ	T3
Carbon Tetrachloride	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
Chlorobenzene	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
Chlorodibromomethane	ND	0.91	0.1729	4.55	ug/Kg	01/09/17	ZZ	T3
Chloroethane	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
Chloroform	ND	0.91	0.1547	4.55	ug/Kg	01/09/17	ZZ	T3
Chloromethane	ND	0.91	0.1911	4.55	ug/Kg	01/09/17	ZZ	T3
cis-1,2-Dichloroethene	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
cis-1,3-dichloropropene	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
cis-1,4-dichloro-2-butene	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:30	**Site:**			
Sample #:	**386235-131**	**Client Sample #:**	Soil Drums	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Dibromomethane	ND	0.91	0.1911	4.55	ug/Kg		01/09/17	ZZ	T3
Dichlorodifluoromethane	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Di-isopropyl ether (DIPE)	ND	0.91	0.1911	4.55	ug/Kg		01/09/17	ZZ	T3
Ethylbenzene	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Ethyl-tertbutylether (ETBE)	ND	0.91	0.3822	4.55	ug/Kg		01/09/17	ZZ	T3
Hexachlorobutadiene	ND	0.91	0.3822	4.55	ug/Kg		01/09/17	ZZ	T3
Isopropylbenzene	ND	0.91	0.2275	4.55	ug/Kg		01/09/17	ZZ	T3
m and p-Xylene	ND	0.91	0.3458	4.55	ug/Kg		01/09/17	ZZ	T3
Methylene chloride	ND	0.91	0.1911	4.55	ug/Kg		01/09/17	ZZ	T3
Methyl-t-butyl Ether (MTBE)	ND	0.91	0.1547	4.55	ug/Kg		01/09/17	ZZ	T3
Naphthalene	ND	0.91	0.1456	4.55	ug/Kg		01/09/17	ZZ	T3
N-butylbenzene	ND	0.91	0.2275	4.55	ug/Kg		01/09/17	ZZ	T3
N-propylbenzene	ND	0.91	0.2002	4.55	ug/Kg		01/09/17	ZZ	T3
o-Xylene	ND	0.91	0.1729	4.55	ug/Kg		01/09/17	ZZ	T3
Sec-butylbenzene	ND	0.91	0.2548	4.55	ug/Kg		01/09/17	ZZ	T3
Styrene	ND	0.91	0.1183	4.55	ug/Kg		01/09/17	ZZ	T3
t-Butyl alcohol (TBA)	ND	0.91	8.008	9.1	ug/Kg		01/09/17	ZZ	T3
Tert-amylmethylether (TAME)	ND	0.91	0.1729	4.55	ug/Kg		01/09/17	ZZ	T3
Tert-butylbenzene	ND	0.91	0.3094	4.55	ug/Kg		01/09/17	ZZ	T3
Tetrachloroethene	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Toluene	**0.51 J**	0.91	0.1547	4.55	ug/Kg		01/09/17	ZZ	J,T3
trans-1,2-dichloroethene	ND	0.91	0.1729	4.55	ug/Kg		01/09/17	ZZ	T3
trans-1,3-dichloropropene	ND	0.91	0.1638	4.55	ug/Kg		01/09/17	ZZ	T3
trans-1,4-dichloro-2-butene	ND	0.91	0.182	4.55	ug/Kg		01/09/17	ZZ	T3
Trichloroethene	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Trichlorofluoromethane	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Vinyl Chloride	ND	0.91	0.1274	4.55	ug/Kg		01/09/17	ZZ	T3
Xylenes (Total)	ND	0.91	0.3458	4.55	ug/Kg		01/09/17	ZZ	T3

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*143*	*70-145*	
4-Bromofluorobenzene (SUR)	*96*	*70-145*	
Dibromodifluoromethane (SUR)	*113*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Water	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:00	**Site:**			
Sample #:	**386235-132**	**Client Sample #:**	Drum Water	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B NELAC	Prep Method: EPA 3510C						QCBatchID: QC1174265		
TPH (C10 to C22)	**0.26**	1	0.04	0.1	mg/L	01/12/17	01/12/17	LT	
TPH (C22 to C36)	ND	1	0.07	0.3	mg/L	01/12/17	01/12/17	LT	
TPH (C8 to C10)	ND	1	0.06	0.2	mg/L	01/12/17	01/12/17	LT	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*42*	*50-150*	*S*

Method: EPA 8081A NELAC	Prep Method: EPA 3510C						QCBatchID: QC1174210		
4,4'-DDD	ND	1	0.011	0.1	ug/L	01/11/17	01/13/17	LW	
4,4'-DDE	**0.27**	1	0.006	0.1	ug/L	01/11/17	01/13/17	LW	
4,4'-DDT	**0.10**	1	0.011	0.1	ug/L	01/11/17	01/13/17	LW	
Aldrin	ND	1	0.007	0.1	ug/L	01/11/17	01/13/17	LW	
b-BHC	ND	1	0.003	0.1	ug/L	01/11/17	01/13/17	LW	
Chlordane (technical)	ND	1	0.27	1	ug/L	01/11/17	01/13/17	LW	
d-BHC	ND	1	0.006	0.1	ug/L	01/11/17	01/13/17	LW	
Dieldrin	ND	1	0.006	0.1	ug/L	01/11/17	01/13/17	LW	
Endosulfan I	ND	1	0.004	0.1	ug/L	01/11/17	01/13/17	LW	
Endosulfan II	ND	1	0.011	0.1	ug/L	01/11/17	01/13/17	LW	
Endosulfan sulfate	ND	1	0.012	0.1	ug/L	01/11/17	01/13/17	LW	
Endrin	ND	1	0.008	0.1	ug/L	01/11/17	01/13/17	LW	
Endrin aldehyde	ND	1	0.009	0.1	ug/L	01/11/17	01/13/17	LW	
Endrin Ketone	ND	1	0.011	0.1	ug/L	01/11/17	01/13/17	LW	
Heptachlor	ND	1	0.003	0.1	ug/L	01/11/17	01/13/17	LW	
Heptachlor epoxide	ND	1	0.002	0.1	ug/L	01/11/17	01/13/17	LW	
Lindane (Gamma-BHC)	ND	1	0.002	0.1	ug/L	01/11/17	01/13/17	LW	
Methoxychlor	ND	1	0.055	0.1	ug/L	01/11/17	01/13/17	LW	
Toxaphene	ND	1	0.48	2	ug/L	01/11/17	01/13/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*92*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*83*	*50-150*	

Method: EPA 8082 NELAC	Prep Method: EPA 3510C						QCBatchID: QC1174351		
PCB-1016	ND	1	0.13	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1221	ND	1	0.24	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1232	ND	1	0.12	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1242	ND	1	0.071	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1248	ND	1	0.12	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1254	ND	1	0.084	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1260	ND	1	0.082	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1262	ND	1	0.083	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1268	ND	1	0.039	0.5	ug/L	01/16/17	01/16/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*78*	*50-150*	

Method: EPA 8260B NELAC	Prep Method: EPA 5030B						QCBatchID: QC1174113		
1,1,1,2-Tetrachloroethane	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
1,1,1-Trichloroethane	ND	5	1.9	25	ug/L		01/08/17	LZ	D2
1,1,2,2-Tetrachloroethane	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
1,1,2-Trichloroethane	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
1,1,2-Trichlorotrifluoroethane	ND	5	1.45	25	ug/L		01/08/17	LZ	D2
1,1-Dichloroethane	ND	5	1.6	25	ug/L		01/08/17	LZ	D2
1,1-Dichloroethene	ND	5	1.5	25	ug/L		01/08/17	LZ	D2
1,1-Dichloropropene	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
1,2,3-Trichlorobenzene	ND	5	1.4	25	ug/L		01/08/17	LZ	D2
1,2,3-Trichloropropane	ND	5	0.8	25	ug/L		01/08/17	LZ	D2

Matrix:	Water	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:00	**Site:**			
Sample #:	**386235-132**	**Client Sample #:**	Drum Water	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
1,2,4-Trichlorobenzene	ND	5	1.35	25	ug/L		01/08/17	LZ	D2
1,2,4-Trimethylbenzene	ND	5	1.4	25	ug/L		01/08/17	LZ	D2
1,2-Dibromo-3-chloropropane	ND	5	0.6	25	ug/L		01/08/17	LZ	D2
1,2-Dibromoethane	ND	5	0.95	25	ug/L		01/08/17	LZ	D2
1,2-Dichlorobenzene	ND	5	1.3	25	ug/L		01/08/17	LZ	D2
1,2-Dichloroethane	ND	5	1	25	ug/L		01/08/17	LZ	D2
1,2-Dichloropropane	ND	5	1.8	25	ug/L		01/08/17	LZ	D2
1,3,5-Trimethylbenzene	ND	5	1.2	25	ug/L		01/08/17	LZ	D2
1,3-Dichlorobenzene	ND	5	1.7	25	ug/L		01/08/17	LZ	D2
1,3-Dichloropropane	ND	5	0.95	25	ug/L		01/08/17	LZ	D2
1,4-Dichlorobenzene	ND	5	2.15	25	ug/L		01/08/17	LZ	D2
2,2-Dichloropropane	ND	5	1.6	25	ug/L		01/08/17	LZ	D2
2-Butanone (MEK)	ND	5	3.9	500	ug/L		01/08/17	LZ	D2
2-Chlorotoluene	ND	5	1.65	25	ug/L		01/08/17	LZ	D2
4-Chlorotoluene	ND	5	1.55	25	ug/L		01/08/17	LZ	D2
4-Isopropyltoluene	ND	5	1.6	25	ug/L		01/08/17	LZ	D2
4-Methyl-2-pentanone (MIBK)	ND	5	0.6	25	ug/L		01/08/17	LZ	D2
Acetone	ND	5	50	500	ug/L		01/08/17	LZ	D2
Allyl Chloride	ND	5	0.95	25	ug/L		01/08/17	LZ	D2
Benzene	ND	5	0.9	5	ug/L		01/08/17	LZ	D2
Bromobenzene	ND	5	2.65	25	ug/L		01/08/17	LZ	D2
Bromochloromethane	ND	5	0.85	25	ug/L		01/08/17	LZ	D2
Bromodichloromethane	ND	5	1.55	25	ug/L		01/08/17	LZ	D2
Bromoform	ND	5	0.65	25	ug/L		01/08/17	LZ	D2
Bromomethane	ND	5	3.4	25	ug/L		01/08/17	LZ	D2
Carbon Tetrachloride	ND	5	1.35	25	ug/L		01/08/17	LZ	D2
Chlorobenzene	ND	5	0.95	25	ug/L		01/08/17	LZ	D2
Chlorodibromomethane	**3.6 J**	5	1.05	25	ug/L		01/08/17	LZ	J,D2
Chloroethane	ND	5	2.25	25	ug/L		01/08/17	LZ	D2
Chloroform	**1.2 J**	5	0.9	25	ug/L		01/08/17	LZ	J,D2
Chloromethane	ND	5	1.35	25	ug/L		01/08/17	LZ	D2
cis-1,2-Dichloroethene	ND	5	1.35	25	ug/L		01/08/17	LZ	D2
cis-1,3-dichloropropene	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
cis-1,4-dichloro-2-butene	ND	5	0.85	25	ug/L		01/08/17	LZ	D2
Dibromomethane	ND	5	1.15	25	ug/L		01/08/17	LZ	D2
Dichlorodifluoromethane	ND	5	1.65	25	ug/L		01/08/17	LZ	D2
Ethylbenzene	ND	5	1.05	25	ug/L		01/08/17	LZ	D2
Hexachlorobutadiene	ND	5	2.55	25	ug/L		01/08/17	LZ	D2
Isopropylbenzene	ND	5	1.2	25	ug/L		01/08/17	LZ	D2
m and p-Xylene	ND	5	2.25	25	ug/L		01/08/17	LZ	D2
Methylene chloride	ND	5	0.8	25	ug/L		01/08/17	LZ	D2
Methyl-t-butyl Ether (MTBE)	ND	5	0.95	5	ug/L		01/08/17	LZ	D2
Naphthalene	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
N-butylbenzene	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
N-propylbenzene	ND	5	1.55	25	ug/L		01/08/17	LZ	D2
o-Xylene	ND	5	1.45	25	ug/L		01/08/17	LZ	D2
Sec-butylbenzene	ND	5	1.6	25	ug/L		01/08/17	LZ	D2
Styrene	ND	5	1.1	25	ug/L		01/08/17	LZ	D2
Tert-butylbenzene	ND	5	2	25	ug/L		01/08/17	LZ	D2
Tetrachloroethene	ND	5	0.9	25	ug/L		01/08/17	LZ	D2
Toluene	ND	5	1.2	25	ug/L		01/08/17	LZ	D2
trans-1,2-dichloroethene	ND	5	1.65	25	ug/L		01/08/17	LZ	D2
trans-1,3-dichloropropene	ND	5	1.15	25	ug/L		01/08/17	LZ	D2

Matrix:	Water	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:00	**Site:**			
Sample #:	**386235-132**	**Client Sample #:**	Drum Water	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
trans-1,4-dichloro-2-butene	ND	5	0.85	25	ug/L		01/08/17	LZ	D2
Trichloroethene	ND	5	1.95	25	ug/L		01/08/17	LZ	D2
Trichlorofluoromethane	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
Vinyl Chloride	ND	5	0.9	25	ug/L		01/08/17	LZ	D2
Xylenes (Total)	ND	5	2.25	25	ug/L		01/08/17	LZ	D2

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*102*	*70-145*	
4-Bromofluorobenzene (SUR)	*107*	*70-145*	
Dibromodifluoromethane (SUR)	*99*	*70-145*	
Toluene-d8 (SUR)	*104*	*70-145*	

QCBatchID: QC1174113	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 01/07/2017	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174113MB1					
1,1,1,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,1-Trichloroethane	ND	ug/L	0.38	5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,2-Trichloroethane	ND	ug/L	0.25	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	0.29	5	
1,1-Dichloroethane	ND	ug/L	0.32	5	
1,1-Dichloroethene	ND	ug/L	0.3	5	
1,1-Dichloropropene	ND	ug/L	0.25	5	
1,2,3-Trichlorobenzene	ND	ug/L	0.28	5	
1,2,3-Trichloropropane	ND	ug/L	0.16	5	
1,2,4-Trichlorobenzene	ND	ug/L	0.27	5	
1,2,4-Trimethylbenzene	ND	ug/L	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.12	5	
1,2-Dibromoethane	ND	ug/L	0.19	5	
1,2-Dichlorobenzene	ND	ug/L	0.26	5	
1,2-Dichloroethane	ND	ug/L	0.2	5	
1,2-Dichloropropane	ND	ug/L	0.36	5	
1,3,5-Trimethylbenzene	ND	ug/L	0.24	5	
1,3-Dichlorobenzene	ND	ug/L	0.34	5	
1,3-Dichloropropane	ND	ug/L	0.19	5	
1,4-Dichlorobenzene	ND	ug/L	0.43	5	
2,2-Dichloropropane	ND	ug/L	0.32	5	
2-Butanone (MEK)	ND	ug/L	0.78	100	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.23	10	
2-Chlorotoluene	ND	ug/L	0.33	5	
4-Chlorotoluene	ND	ug/L	0.31	5	
4-Isopropyltoluene	ND	ug/L	0.32	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	0.12	5	
Acetone	ND	ug/L	10	100	
Allyl Chloride	ND	ug/L	0.19	5	
Benzene	ND	ug/L	0.18	1	
Bromobenzene	ND	ug/L	0.53	5	
Bromochloromethane	ND	ug/L	0.17	5	
Bromodichloromethane	ND	ug/L	0.31	5	
Bromoform	ND	ug/L	0.13	5	
Bromomethane	ND	ug/L	0.68	5	
Carbon Tetrachloride	ND	ug/L	0.27	5	
Chlorobenzene	ND	ug/L	0.19	5	
Chlorodibromomethane	ND	ug/L	0.21	5	
Chloroethane	ND	ug/L	0.45	5	
Chloroform	ND	ug/L	0.18	5	
Chloromethane	ND	ug/L	0.27	5	
cis-1,2-Dichloroethene	ND	ug/L	0.27	5	
cis-1,3-dichloropropene	ND	ug/L	0.25	5	
cis-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Dibromomethane	ND	ug/L	0.23	5	
Dichlorodifluoromethane	ND	ug/L	0.33	5	
Di-isopropyl ether (DIPE)	ND	ug/L	0.17	1	
Ethylbenzene	ND	ug/L	0.21	5	
Ethyl-tertbutylether (ETBE)	ND	ug/L	0.23	1	
Hexachlorobutadiene	ND	ug/L	0.51	5	

QCBatchID: QC1174113	**Analyst:** lucy	**Method:** EPA 8260B	
Matrix: Water	**Analyzed:** 01/07/2017	**Instrument:** VOA-MS (group)	

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174113MB1					
Isopropylbenzene	ND	ug/L	0.24	5	
m and p-Xylene	ND	ug/L	0.45	5	
Methylene chloride	ND	ug/L	0.16	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.19	1	
Naphthalene	ND	ug/L	0.25	5	
N-butylbenzene	ND	ug/L	0.25	5	
N-propylbenzene	ND	ug/L	0.31	5	
o-Xylene	ND	ug/L	0.29	5	
Sec-butylbenzene	ND	ug/L	0.32	5	
Styrene	ND	ug/L	0.22	5	
t-Butyl alcohol (TBA)	ND	ug/L	5.2	10	
Tert-amylmethylether (TAME)	ND	ug/L	0.19	5	
Tert-butylbenzene	ND	ug/L	0.4	5	
Tetrachloroethene	ND	ug/L	0.8	5	
Toluene	ND	ug/L	0.24	5	
trans-1,2-dichloroethene	ND	ug/L	0.33	5	
trans-1,3-dichloropropene	ND	ug/L	0.23	5	
trans-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Trichloroethene	ND	ug/L	0.39	5	
Trichlorofluoromethane	ND	ug/L	0.25	5	
Vinyl Chloride	ND	ug/L	0.18	5	
Xylenes (Total)	ND	ug/L	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174113LCS1											
1,1-Dichloroethene	50		48		ug/L	96			59-172		
Benzene	50		47		ug/L	94			62-137		
Chlorobenzene	50		49		ug/L	98			60-133		
Methyl-t-butyl Ether (MTBE)	50		60		ug/L	120			62-137		
Toluene	50		48		ug/L	96			59-139		
Trichloroethene	50		52		ug/L	104			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174113MS1, QC1174113MSD1												**Source: 386231-001**
1,1-Dichloroethene	ND	50	50	52	46	ug/L	104	92	12.2	59-172	22	
Benzene	ND	50	50	51	46	ug/L	102	92	10.3	62-137	24	
Chlorobenzene	ND	50	50	51	46	ug/L	102	92	10.3	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	60	58	ug/L	120	116	3.4	62-137	21	
Toluene	ND	50	50	48	45	ug/L	96	90	6.5	59-139	21	
Trichloroethene	ND	50	50	51	47	ug/L	102	94	8.2	66-142	21	

QCBatchID: QC1174135	**Analyst:** nhernandez	**Method:** EPA 8081A			
Matrix: Solid	**Analyzed:** 01/09/2017	**Instrument:** SVOA-GC (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174135MB1					
4,4'-DDD	ND	mg/Kg	0.67	5	
4,4'-DDE	ND	mg/Kg	0.57	5	
4,4'-DDT	ND	mg/Kg	0.95	5	
a-BHC	ND	mg/Kg	0.2	5	
Aldrin	ND	mg/Kg	0.34	5	
b-BHC	ND	mg/Kg	1.2	5	
Chlordane (technical)	ND	mg/Kg	12	50	
d-BHC	ND	mg/Kg	0.45	5	
Dieldrin	ND	mg/Kg	0.63	5	
Endosulfan I	ND	mg/Kg	0.28	5	
Endosulfan II	ND	mg/Kg	0.8	5	
Endosulfan sulfate	ND	mg/Kg	1.7	5	
Endrin	ND	mg/Kg	0.62	5	
Endrin aldehyde	ND	mg/Kg	0.9	5	
Endrin Ketone	ND	mg/Kg	1.2	5	
Heptachlor	ND	mg/Kg	0.44	5	
Heptachlor epoxide	ND	mg/Kg	0.27	5	
Lindane (Gamma-BHC)	ND	mg/Kg	0.3	5	
Methoxychlor	ND	mg/Kg	5.2	10	
Toxaphene	ND	mg/Kg	12	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174135LCS1											
4,4'-DDE	0.05		0.04		mg/Kg	80			70-130		
4,4'-DDT	0.05		0.04		mg/Kg	80			70-130		
a-BHC	0.05		0.04		mg/Kg	80			70-130		
Aldrin	0.05		0.04		mg/Kg	80			70-130		
b-BHC	0.05		0.04		mg/Kg	80			70-130		
d-BHC	0.05		0.04		mg/Kg	80			70-130		
Dieldrin	0.05		0.04		mg/Kg	80			70-130		
Endosulfan I	0.05		0.04		mg/Kg	80			70-130		
Endosulfan II	0.05		0.04		mg/Kg	80			70-130		
Endosulfan sulfate	0.05		0.04		mg/Kg	80			70-130		
Endrin	0.05		0.04		mg/Kg	80			70-130		
Endrin aldehyde	0.05		0.04		mg/Kg	80			70-130		
Heptachlor	0.05		0.04		mg/Kg	80			70-130		
Heptachlor epoxide	0.05		0.04		mg/Kg	80			70-130		
Lindane (Gamma-BHC)	0.05		0.04		mg/Kg	80			70-130		
Methoxychlor	0.05		0.05		mg/Kg	100			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174135MS1, QC1174135MSD1												**Source: 386202-001**
4,4'-DDE	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
4,4'-DDT	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
a-BHC	ND	0.05	0.05	0.02	0.03	mg/Kg	40	60	40.0	70-130	20	
Aldrin	ND	0.05	0.05	0.03	0.03	mg/Kg	60	60	0.0	70-130	20	
b-BHC	ND	0.05	0.05	0.03	0.03	mg/Kg	60	60	0.0	70-130	20	

QCBatchID: QC1174135	**Analyst:** nhernandez	**Method:** EPA 8081A	
Matrix: Solid	**Analyzed:** 01/09/2017	**Instrument:** SVOA-GC (group)	

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174135MS1, QC1174135MSD1											**Source:**	**386202-001**
d-BHC	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Dieldrin	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Endosulfan I	ND	0.05	0.05	0.03	0.03	mg/Kg	60	60	0.0	70-130	20	
Endosulfan II	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Endosulfan sulfate	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Endrin	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Endrin aldehyde	ND	0.05	0.05	0.04	0.03	mg/Kg	80	60	28.6	70-130	20	
Heptachlor	ND	0.05	0.05	0.03	0.03	mg/Kg	60	60	0.0	70-130	20	
Heptachlor epoxide	ND	0.05	0.05	0.03	0.04	mg/Kg	60	80	28.6	70-130	20	
Lindane (Gamma-BHC)	ND	0.05	0.05	0.02	0.03	mg/Kg	40	60	40.0	70-130	20	
Methoxychlor	ND	0.05	0.05	0.05	0.04	mg/Kg	100	80	22.2	70-130	20	

QCBatchID: QC1174152	**Analyst:** nicollez		**Method:** EPA 8260B		
Matrix: Solid	**Analyzed:** 01/09/2017		**Instrument:** VOA-MS (group)		

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174152MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chloroethyl Vinyl Ether	ND	ug/Kg	0.3	5	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	10	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.21	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.23	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.42	5	

QCBatchID: QC1174152	**Analyst:** nicollez		**Method:** EPA 8260B		
Matrix: Solid	**Analyzed:** 01/09/2017		**Instrument:** VOA-MS (group)		

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174152MB1					
Isopropylbenzene	ND	ug/Kg	0.25	5	
m and p-Xylene	ND	ug/Kg	0.38	5	
Methylene chloride	ND	ug/Kg	0.21	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.17	5	
Naphthalene	ND	ug/Kg	0.16	5	
N-butylbenzene	ND	ug/Kg	0.25	5	
N-propylbenzene	ND	ug/Kg	0.22	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.28	5	
Styrene	ND	ug/Kg	0.13	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.34	5	
Tetrachloroethene	ND	ug/Kg	0.23	5	
Toluene	ND	ug/Kg	0.17	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.19	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.18	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Trichloroethene	ND	ug/Kg	0.23	5	
Trichlorofluoromethane	ND	ug/Kg	0.23	5	
Vinyl Chloride	ND	ug/Kg	0.14	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174152LCS1, QC1174152LCSD1											
1,1-Dichloroethene	50	50	51	52	ug/Kg	102	104	2	59-172	22	
Benzene	50	50	49	51	ug/Kg	98	102	4	62-137	24	
Chlorobenzene	50	50	51	53	ug/Kg	102	106	4	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	47	50	ug/Kg	94	100	6	62-137	21	
Toluene	50	50	53	53	ug/Kg	106	106	0	59-139	21	
Trichloroethene	50	50	50	50	ug/Kg	100	100	0	66-142	21	

QCBatchID:	**QC1174158**	**Analyst:**	lytagas	**Method:**	EPA 8015M
Matrix:	Solid	**Analyzed:**	01/09/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174158MB1					
TPH (C10 to C28)	ND	mg/Kg		10	
TPH (C28 to C40)	ND	mg/Kg		20	
TPH (C8 to C10)	ND	mg/Kg		10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174158LCS1											
TPH (C10 to C28)	250		300		mg/Kg	120			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174158MS1, QC1174158MSD1												**Source: 386275-001**
TPH (C10 to C28)	ND	250	250	260	220	mg/Kg	104	88	16.7	70-130	20	

QCBatchID:	**QC1174196**	**Analyst:**	nhernandez	**Method:**	EPA 8082
Matrix:	Solid	**Analyzed:**	01/10/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174196MB1					
PCB-1016	ND	ug/Kg	3	50	
PCB-1221	ND	ug/Kg	14	50	
PCB-1232	ND	ug/Kg	9.5	50	
PCB-1242	ND	ug/Kg	14	50	
PCB-1248	ND	ug/Kg	19	50	
PCB-1254	ND	ug/Kg	20	50	
PCB-1260	ND	ug/Kg	6.9	50	
PCB-1262	ND	ug/Kg	17	50	
PCB-1268	ND	ug/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174196LCS1											
PCB-1016	500		390		ug/Kg	78			70-130		
PCB-1260	500		400		ug/Kg	80			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174196MS1, QC1174196MSD1												**Source: 386077-014**
PCB-1016	ND	500	500	370	460	ug/Kg	74	92	21.7	70-130	20	M
PCB-1260	ND	500	500	320	450	ug/Kg	64	90	33.8	70-130	20	M

QCBatchID: QC1174210	**Analyst:** nhernandez	**Method:** EPA 8081A	
Matrix: Water	**Analyzed:** 01/11/2017	**Instrument:** SVOA-GC (group)	

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174210MB1					
4,4'-DDD	ND	ug/L	0.011	0.1	
4,4'-DDE	ND	ug/L	0.006	0.1	
4,4'-DDT	ND	ug/L	0.011	0.1	
a-BHC	ND	ug/L	0.002	0.1	
Aldrin	ND	ug/L	0.007	0.1	
b-BHC	ND	ug/L	0.003	0.1	
Chlordane (technical)	ND	ug/L	0.27	1	
d-BHC	ND	ug/L	0.006	0.1	
Dieldrin	ND	ug/L	0.006	0.1	
Endosulfan I	ND	ug/L	0.004	0.1	
Endosulfan II	ND	ug/L	0.011	0.1	
Endosulfan sulfate	ND	ug/L	0.012	0.1	
Endrin	ND	ug/L	0.008	0.1	
Endrin aldehyde	ND	ug/L	0.009	0.1	
Endrin Ketone	ND	ug/L	0.011	0.1	
Heptachlor	ND	ug/L	0.003	0.1	
Heptachlor epoxide	ND	ug/L	0.002	0.1	
Lindane (Gamma-BHC)	ND	ug/L	0.002	0.1	
Methoxychlor	ND	ug/L	0.055	0.1	
Toxaphene	ND	ug/L	0.48	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1174210LCS1, QC1174210LCSD1											
4,4'-DDE	0.05	0.05	0.044	0.046	ug/L	88	92	4	70-130	20	
4,4'-DDT	0.05	0.05	0.047	0.048	ug/L	94	96	2	70-130	20	
a-BHC	0.05	0.05	0.042	0.045	ug/L	84	90	7	70-130	20	
Aldrin	0.05	0.05	0.040	0.043	ug/L	80	86	7	70-130	20	
b-BHC	0.05	0.05	0.041	0.044	ug/L	82	88	7	70-130	20	
d-BHC	0.05	0.05	0.044	0.047	ug/L	88	94	7	70-130	20	
Dieldrin	0.05	0.05	0.044	0.046	ug/L	88	92	4	70-130	20	
Endosulfan I	0.05	0.05	0.040	0.042	ug/L	80	84	5	70-130	20	
Endosulfan II	0.05	0.05	0.043	0.045	ug/L	86	90	5	70-130	20	
Endosulfan sulfate	0.05	0.05	0.051	0.052	ug/L	102	104	2	70-130	20	
Endrin	0.05	0.05	0.046	0.048	ug/L	92	96	4	70-130	20	
Endrin aldehyde	0.05	0.05	0.044	0.046	ug/L	88	92	4	70-130	20	
Heptachlor	0.05	0.05	0.044	0.047	ug/L	88	94	7	70-130	20	
Heptachlor epoxide	0.05	0.05	0.043	0.046	ug/L	86	92	7	70-130	20	
Lindane (Gamma-BHC)	0.05	0.05	0.042	0.045	ug/L	84	90	7	70-130	20	
Methoxychlor	0.05	0.05	0.055	0.057	ug/L	110	114	4	70-130	20	

QCBatchID:	**QC1174221**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	01/11/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174221MB1					
Arsenic	ND	mg/Kg	0.02	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174221LCS1											
Arsenic	50		55.1		mg/Kg	110			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174221MS1, QC1174221MSD1												**Source: 386235-059**
Arsenic	1.631	50	50	50.6	50.2	mg/Kg	98	97	0.8	75-125	20	

QCBatchID:	**QC1174222**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	01/11/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174222MB1					
Arsenic	ND	mg/Kg	0.02	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1174222LCS1											
Arsenic	50		59.6		mg/Kg	119			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1174222MS1, QC1174222MSD1												**Source: 386235-125**
Arsenic	2.95	50	50	45.9	45.5	mg/Kg	86	85	0.9	75-125	20	

QCBatchID:	**QC1174225**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	01/11/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174225MB1					
Lead	ND	mg/Kg	0.32	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174225LCS1											
Lead	100		108		mg/Kg	108			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174225MS1, QC1174225MSD1												**Source: 384618-005**
Lead	14.7	100	100	110	114	mg/Kg	95	99	3.6	75-125	20	

QCBatchID: QC1174226	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/11/2017	**Instrument:** AAICP (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174226MB1					
Antimony	ND	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	ND	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	0.5	
Molybdenum	ND	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	1	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	1	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	**0.85 J**	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174226LCS1											
Antimony	100		94.9		mg/Kg	95			80-120		
Arsenic	100		95.2		mg/Kg	95			80-120		
Barium	100		103		mg/Kg	103			80-120		
Beryllium	100		97.5		mg/Kg	98			80-120		
Cadmium	100		103		mg/Kg	103			80-120		
Chromium	100		100		mg/Kg	100			80-120		
Cobalt	100		98.9		mg/Kg	99			80-120		
Copper	100		103		mg/Kg	103			80-120		
Lead	100		101		mg/Kg	101			80-120		
Molybdenum	100		95.2		mg/Kg	95			80-120		
Nickel	100		98.9		mg/Kg	99			80-120		
Selenium	100		87.6		mg/Kg	88			80-120		
Silver	100		92.4		mg/Kg	92			80-120		
Thallium	100		97.9		mg/Kg	98			80-120		
Vanadium	100		108		mg/Kg	108			80-120		
Zinc	100		95.9		mg/Kg	96			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174226MS1, QC1174226MSD1												**Source: 386235-035**
Antimony	ND	100	100	25.6	25.6	mg/Kg	26	26	0.0	75-125	20	M
Arsenic	11.5	100	100	108	104	mg/Kg	97	93	3.8	75-125	20	
Barium	147	100	100	259	247	mg/Kg	112	100	4.7	75-125	20	
Beryllium	ND	100	100	96.6	92.1	mg/Kg	97	92	4.8	75-125	20	
Cadmium	3.59	100	100	111	108	mg/Kg	107	104	2.7	75-125	20	
Chromium	84.0	100	100	190	183	mg/Kg	106	99	3.8	75-125	20	
Cobalt	9.97	100	100	107	105	mg/Kg	97	95	1.9	75-125	20	
Copper	97.8	100	100	206	192	mg/Kg	108	94	7.0	75-125	20	
Lead	176	100	100	280	267	mg/Kg	104	91	4.8	75-125	20	

QCBatchID: QC1174226	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/11/2017	**Instrument:** AAICP (group)			

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174226MS1, QC1174226MSD1											**Source:**	**386235-035**
Molybdenum	0.49	100	100	91.9	90.2	mg/Kg	91	90	1.9	75-125	20	
Nickel	17.2	100	100	115	114	mg/Kg	98	97	0.9	75-125	20	
Selenium	ND	100	100	30.0	29.5	mg/Kg	30	30	1.7	75-125	20	M
Silver	2.62	100	100	94.8	90.4	mg/Kg	92	88	4.8	75-125	20	
Thallium	ND	100	100	88.9	87.2	mg/Kg	89	87	1.9	75-125	20	
Vanadium	32.3	100	100	142	136	mg/Kg	110	104	4.3	75-125	20	
Zinc	226	100	100	336	329	mg/Kg	110	103	2.1	75-125	20	

QCBatchID:	**QC1174263**	**Analyst:**	JParedes	**Method:**	EPA 7471A
Matrix:	Solid	**Analyzed:**	01/12/2017	**Instrument:**	AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174263MB1					
Mercury	ND	mg/Kg	0.02	0.14	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1174263LCS1											
Mercury	0.83		0.82		mg/Kg	99			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1174263MS1, QC1174263MSD1												**Source: 386235-131**
Mercury	0.03	0.83	0.83	0.82	0.88	mg/Kg	95	102	7.1	75-125	20	

QCBatchID:	**QC1174265**	**Analyst:**	lytagas	**Method:**	EPA 8015B
Matrix:	Water	**Analyzed:**	01/12/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174265MB1					
TPH (C10 to C22)	ND	mg/L	0.04	0.1	
TPH (C22 to C36)	ND	mg/L	0.07	0.3	
TPH (C8 to C10)	ND	mg/L	0.06	0.2	

QCBatchID:	**QC1174351**	**Analyst:**	nhernandez	**Method:**	EPA 8082
Matrix:	Water	**Analyzed:**	01/16/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174351MB1					
PCB-1016	ND	ug/L	0.13	0.5	
PCB-1221	ND	ug/L	0.24	0.5	
PCB-1232	ND	ug/L	0.12	0.5	
PCB-1242	ND	ug/L	0.071	0.5	
PCB-1248	ND	ug/L	0.12	0.5	
PCB-1254	ND	ug/L	0.084	0.5	
PCB-1260	ND	ug/L	0.082	0.5	
PCB-1262	ND	ug/L	0.083	0.5	
PCB-1268	ND	ug/L	0.039	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174351LCS1, QC1174351LCSD1											
PCB-1016	5	5	4.4	4.5	ug/L	88	90	2	70-130	20	
PCB-1260	5	5	3.7	3.6	ug/L	74	72	3	70-130	20	

QCBatchID: QC1174444	**Analyst:** jeannynguye	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/18/2017	**Instrument:** AAICP (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174444MB1					
Antimony	**0.51 J**	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	ND	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	0.5	
Molybdenum	ND	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	1	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	1	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174444LCS1											
Antimony	100		107		mg/Kg	107			80-120		
Arsenic	100		91.7		mg/Kg	92			80-120		
Barium	100		104		mg/Kg	104			80-120		
Beryllium	100		95.7		mg/Kg	96			80-120		
Cadmium	100		101		mg/Kg	101			80-120		
Chromium	100		98.9		mg/Kg	99			80-120		
Cobalt	100		101		mg/Kg	101			80-120		
Copper	100		92.9		mg/Kg	93			80-120		
Lead	100		98.7		mg/Kg	99			80-120		
Molybdenum	100		100		mg/Kg	100			80-120		
Nickel	100		101		mg/Kg	101			80-120		
Selenium	100		86.6		mg/Kg	87			80-120		
Silver	100		92.0		mg/Kg	92			80-120		
Thallium	100		100		mg/Kg	100			80-120		
Vanadium	100		97.9		mg/Kg	98			80-120		
Zinc	100		98.2		mg/Kg	98			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174444MS1, QC1174444MSD1												**Source: 386559-001**
Antimony	0.42	100	100	115	104	mg/Kg	115	104	10.0	75-125	20	
Arsenic	ND	100	100	109	103	mg/Kg	109	103	5.7	75-125	20	
Barium	2.66	100	100	114	111	mg/Kg	111	108	2.7	75-125	20	
Beryllium	ND	100	100	117	106	mg/Kg	117	106	9.9	75-125	20	
Cadmium	ND	100	100	118	113	mg/Kg	118	113	4.3	75-125	20	
Chromium	0.42	100	100	110	110	mg/Kg	110	110	0.0	75-125	20	
Cobalt	ND	100	100	113	115	mg/Kg	113	115	1.8	75-125	20	
Copper	2.48	100	100	111	109	mg/Kg	109	107	1.8	75-125	20	
Lead	ND	100	100	111	108	mg/Kg	111	108	2.7	75-125	20	

QCBatchID: QC1174444	**Analyst:** jeannynguye	**Method:** EPA 6010B	
Matrix: Solid	**Analyzed:** 01/18/2017	**Instrument:** AAICP (group)	

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174444MS1, QC1174444MSD1											**Source:**	**386559-001**
Molybdenum	0.15	100	100	112	108	mg/Kg	112	108	3.6	75-125	20	
Nickel	0.30	100	100	115	117	mg/Kg	115	117	1.7	75-125	20	
Selenium	1.73	100	100	111	103	mg/Kg	109	101	7.5	75-125	20	
Silver	ND	100	100	100	95.7	mg/Kg	100	96	4.4	75-125	20	
Thallium	ND	100	100	108	108	mg/Kg	108	108	0.0	75-125	20	
Vanadium	0.47	100	100	112	110	mg/Kg	112	110	1.8	75-125	20	
Zinc	6.94	100	100	121	117	mg/Kg	114	110	3.4	75-125	20	

QCBatchID:	**QC1174535**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	01/20/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174535MB1					
Lead	ND	mg/L	0.012	0.015	

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174535MS1, QC1174535MSD1												**Source: 386235-011**
Lead	5.16	10	10	15.1	15.7	mg/L	99	105	3.9	75-125	20	

QCBatchID: QC1174536	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/20/2017	**Instrument:** AAICP (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174536MB1					
Arsenic	ND	mg/L	0.004	0.05	
Barium	**0.08 J**	mg/L	0.001	0.5	
Cadmium	ND	mg/L	0.001	0.05	
Chromium	ND	mg/L	0.002	0.05	
Lead	ND	mg/L	0.004	0.05	
Selenium	**0.031 J**	mg/L	0.004	0.05	
Silver	ND	mg/L	0.001	0.05	
QC1174536MB2					
Arsenic	ND	mg/L	0.004	0.05	
Barium	**0.07 J**	mg/L	0.001	0.5	
Cadmium	ND	mg/L	0.001	0.05	
Chromium	ND	mg/L	0.002	0.05	
Lead	ND	mg/L	0.004	0.05	
Selenium	ND	mg/L	0.004	0.05	
Silver	ND	mg/L	0.001	0.05	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174536LCS1											
Arsenic	2		2.50		mg/L	125			80-120		L
Barium	2		2.25		mg/L	113			80-120		
Cadmium	2		2.44		mg/L	122			80-120		L
Chromium	2		2.14		mg/L	107			80-120		
Lead	2		2.16		mg/L	108			80-120		
Selenium	2		2.57		mg/L	129			80-120		L
Silver	2		2.21		mg/L	111			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174536MS1, QC1174536MSD1												**Source: 386235-035**
Arsenic	0.079	1	1	1.376	1.319	mg/L	130	124	4.2	75-125	20	M
Barium	0.54	1	1	1.68	1.60	mg/L	114	106	4.9	75-125	20	
Cadmium	ND	1	1	1.270	1.233	mg/L	127	123	3.0	75-125	20	M
Chromium	ND	1	1	1.137	1.082	mg/L	114	108	5.0	75-125	20	
Lead	ND	1	1	1.178	1.113	mg/L	118	111	5.7	75-125	20	
Selenium	0.034	1	1	1.325	1.289	mg/L	129	126	2.8	75-125	20	M
Silver	0.002	1	1	1.105	1.055	mg/L	110	105	4.6	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No: 386235	Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 1 of 12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					

ENTHALPY analytical, inc.

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

Analysis Request

Test Instructions / Comments

Analyze 0.5' samples. Hold deeper samples.

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S1-0.5ft	01/05/17	1:10 PM	S	1/8oz		x										
2	S1-1.5ft	01/05/17	1:15 PM	S	1/8oz											x	
3	S1-2.5ft	01/05/17	1:20 PM	S	1/8oz											x	
4	S2-0.5ft	01/05/17	12:40 PM	S	1/8oz		x										
5	S2-1.5ft	01/05/17	12:45 PM	S	1/8oz											x	
6	S2-2.5ft	01/05/17	12:50 PM	S	1/8oz											x	
7	S3-0.5ft	01/05/17	12:30 PM	S	1/8oz		x		x								
8	S3-1.5ft	01/05/17	12:35 PM	S	1/8oz											x	
9	S3-2.5ft	01/05/17	12:40 PM	S	1/8oz											x	
10	S1D-0.5ft	01/05/17	1:13 PM	S	1/8oz		x										

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
1 Received By:	[signature]	L. Marrott		1/6/17 1400
2 Relinquished By:	[signature]	L. Marrott		1/6/17 1507
2 Received By:	[signature]	[illegible]		1/6/17 1507
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	386235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	2	of	12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S4-0.5ft	01/05/17	2:40 PM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S4-1.5ft	01/05/17	2:45 PM	S	1/8oz											x	
3	S4-2.5ft	01/05/17	2:50 PM	S	1/8oz											x	
4	S5-0.5ft	01/05/17	2:35 PM	S	1/8oz		x										
5	S5-1.5ft	01/05/17	2:40 PM	S	1/8oz											x	
6	S5-2.5ft	01/05/17	2:45 PM	S	1/8oz											x	
7	S6-0.5ft	01/05/17	10:00 AM	S	1/8oz		x										
8	S6-1.5ft	01/05/17	10:05 AM	S	1/8oz											x	
9	S6-2.5ft	01/05/17	10:10 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		E. Marroletti		1/6/17 1400
[2] Relinquished By:		E. Marroletti		1/6/17 1507
[2] Received By:		ZAID D		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.
806 N. Batavia St., Orange, CA 92868
Phone: (714) 771-6900 Fax: (714)771-9933
Billing: Enthalpy - SoCal
c/o Montrose Environmental Group
1 Park Plaza, Suite 1000, Irvine, CA 92614

ENTHALPY analytical, inc.

Chain of Custody Record

Lab No: 386235
Page: 3 of 12

Turn Around Time (Rush by advanced notice only)

Standard:	x	4 Day:		3 Day:	
2 Day:		1 Day:		Same Day:	

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S7-0.5ft	01/05/17	10:50 AM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S7-1.5ft	01/05/17	10:55 AM	S	1/8oz											x	
3	S7-2.5ft	01/05/17	11:00 AM	S	1/8oz											x	
4	S8-0.5ft	01/05/17	10:15 AM	S	1/8oz		x										
5	S8-1.5ft	01/05/17	10:20 AM	S	1/8oz											x	
6	S8-2.5ft	01/05/17	10:25 AM	S	1/8oz											x	
7	S9-0.5ft	01/05/17	10:30 AM	S	1/8oz		x										
8	S9-1.5ft	01/05/17	10:35 AM	S	1/8oz											x	
9	S9-2.5ft	01/05/17	10:40 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		C. Marcelli		1/6/17 1400
[2] Relinquished By:		C. Marcelli		1/6/17 1507
[2] Received By:		ZAID D.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386235	Standard: x 4 Day: 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 4 of 12	2 Day: 1 Day: Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)	pH		Hold	Test Instructions / Comments
1	S10-0.5ft	01/05/17	9:40 AM	S	1/8oz		x		x			x					Analyze 0.5' samples. Hold deeper samples unless analysis noted.
2	S10-1.5ft	01/05/17	9:45 AM	S	1/8oz											x	
3	S10-2.5ft	01/05/17	9:50 AM	S	1/8oz											x	
4	S11-0.5ft	01/05/17	10:00 AM	S	1/8oz		x										
5	S11-1.5ft	01/05/17	10:05 AM	S	1/8oz											x	
6	S11-2.5ft	01/05/17	10:10 AM	S	1/8oz											x	
7	S12-0.5ft	01/05/17	12:55 PM	S	1/8oz		x										
8	S12-1.5ft	01/05/17	1:00 PM	S	1/8oz											x	
9	S12-2.5ft	01/05/17	1:05 PM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marriott		1/6/17 1400
[2] Relinquished By:		L. Marriott		1/6/17 1507
[2] Received By:		FED EX		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 306235	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 5 of 12	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S13-0.5ft	01/05/17	2:00 PM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S13-1.5ft	01/05/17	2:05 PM	S	1/8oz											x	
3	S13-2.5ft	01/05/17	2:10 PM	S	1/8oz											x	
4	S14-0.5ft	01/05/17	11:10 AM	S	1/8oz		x										
5	S14-1.5ft	01/05/17	11:15 AM	S	1/8oz											x	
6	S14-2.5ft	01/05/17	11:20 AM	S	1/8oz											x	
7	S15-0.5ft	01/05/17	9:20 AM	S	1/8oz		x										
8	S15-1.5ft	01/05/17	9:25 AM	S	1/8oz											x	
9	S15-2.5ft	01/05/17	9:30 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marcelli		1/6/17 1400
[2] Relinquished By:		L. Marcelli		1/6/17 1507
[2] Received By:		ZAID P.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No: 386235				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 6	of	12		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group										
1 Park Plaza, Suite 1000, Irvine, CA 92614										

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S16-0.5ft	01/05/17	8:50 AM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S16-1.5ft	01/05/17	8:55 AM	S	1/8oz											x	
3	S16-2.5ft	01/05/17	9:00 AM	S	1/8oz											x	
4	S17-0.5ft	01/05/17	8:20 AM	S	1/8oz		x										
5	S17-1.5ft	01/05/17	8:25 AM	S	1/8oz											x	
6	S17-2.5ft	01/05/17	8:30 AM	S	1/8oz											x	
7	S18-0.5ft	01/05/17	7:50 AM	S	1/8oz		x										
8	S18-1.5ft	01/05/17	7:55 AM	S	1/8oz											x	
9	S18-2.5ft	01/05/17	8:00 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Mangelli		1/6/17 1400
[2] Relinquished By:		L. Mangelli		1/6/17 1507
[2] Received By:		ZAIO P.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.
806 N. Batavia St., Orange, CA 92868
Phone: (714) 771-6900 Fax: (714)771-9933
Billing: Enthalpy - SoCal
c/o Montrose Environmental Group
1 Park Plaza, Suite 1000, Irvine, CA 92614

ENTHALPY analytical, inc.

Chain of Custody Record

Lab No: 3806235
Page: 7 of 12

Turn Around Time (Rush by advanced notice only)

Standard:	x	4 Day:		3 Day:	
2 Day:		1 Day:		Same Day:	

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S19-0.5ft	01/05/17	8:30 AM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S19-1.5ft	01/05/17	8:35 AM	S	1/8oz											x	
3	S19-2.5ft	01/05/17	8:40 AM	S	1/8oz											x	
4	S29-0.5ft	01/05/17	11:40 AM	S	1/8oz			x									
5	S29-1.5ft	01/05/17	11:45 AM	S	1/8oz											x	
6	S29-2.5ft	01/05/17	11:50 AM	S	1/8oz											x	
7	S30-0.5ft	01/05/17	11:15 AM	S	1/8oz			x				x					
8	S30-1.5ft	01/05/17	11:30 AM	S	1/8oz											x	
9	S30-2.5ft	01/05/17	11:35 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	D Baysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		E Marriott		1/6/17 1400
[2] Relinquished By:		E Marriott		1/6/17 1507
[2] Received By:		ZHOP		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No: 386235	Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 8 of 12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

Analysis Request

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S31-0.5ft	01/05/17	12:40 PM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S31-1.5ft	01/05/17	12:45 PM	S	1/8oz											x	
3	S31-2.5ft	01/05/17	12:50 PM	S	1/8oz											x	
4	S33-0.5ft	01/05/17	9:05 AM	S	1/8oz			x									
5	S33-1.5ft	01/05/17	9:10 AM	S	1/8oz											x	
6	S33-2.5ft	01/05/17	9:15 AM	S	1/8oz											x	
7	S34-0.5ft	01/05/17	8:35 AM	S	1/8oz			x									
8	S34-1.5ft	01/05/17	8:40 AM	S	1/8oz											x	
9	S34-2.5ft	01/05/17	8:45 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	D Baysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
1 Received By:	[signature]	L. Marrotti		1/6/17 1400
2 Relinquished By:	[signature]	L. Marrotti		1/6/17 1507
2 Received By:	[signature]	TAD		1/6/17 1507
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386235	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 9 of 12	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S35-0.5ft	01/05/17	8:35 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S35-1.5ft	01/05/17	8:40 AM	S	1/8oz											x	
3	S35-2.5ft	01/05/17	8:45 AM	S	1/8oz											x	
4	S36-0.5ft	01/05/17	8:05 AM	S	1/8oz			x									
5	S36-1.5ft	01/05/17	8:10 AM	S	1/8oz											x	
6	S36-2.5ft	01/05/17	8:15 AM	S	1/8oz											x	
7	S40-0.5ft	01/05/17	8:00 AM	S	1/8oz			x				x					
8	S40-1.5ft	01/05/17	8:15 AM	S	1/8oz											x	
9	S40-2.5ft	01/05/17	8:20 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marriott		1/6/17 1400
[2] Relinquished By:		L. Marriott		1/6/17 1507
[2] Received By:				1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386235				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page: 10	of	12		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3					
c/o Montrose Environmental Group		FL = Food Liquid FS = Food Solid L = Liquid				4 = H_2SO_4 5 = NaOH 6 = Other					
1 Park Plaza, Suite 1000, Irvine, CA 92614		PP = Pure Product S = Solid SeaW = Sea Water									
		SW = Swab W = Water WP = Wipe O = Other									

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S78-0.5ft	01/05/17		S	1/8oz				x								Analyze 0.5' samples. Hold deeper samples.
2	S78-1.5ft	01/05/17		S	1/8oz											x	
3	S78-2.5ft	01/05/17		S	1/8oz											x	
4	S79-0.5ft	01/05/17		S	1/8oz		x		x								
5	S79-1.5ft	01/05/17		S	1/8oz											x	
6	S79-2.5ft	01/05/17		S	1/8oz											x	
7	S78D-0.5ft	01/05/17		S	1/8oz				x								
8	S79D-0.5ft	01/05/17		S	1/8oz		x		x								
9																	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marrokkt		1/6/17 1400
[2] Relinquished By:		L. Marrokkt		1/6/17 1507
[2] Received By:		TODD P		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	306235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	11	of	12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S86-0.5ft	01/05/17	1:25 PM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S86-1.5ft	01/05/17	1:30 PM	S	1/8oz											x	
3	S86-2.5ft	01/05/17	1:35 PM	S	1/8oz											x	
4	S87-0.5ft	01/05/17	1:10 PM	S	1/8oz			x									
5	S87-1.5ft	01/05/17	1:15 PM	S	1/8oz											x	
6	S87-2.5ft	01/05/17	1:20 PM	S	1/8oz											x	
7	S88-0.5ft	01/05/17	1:40 PM	S	1/8oz			x									
8	S88-1.5ft	01/05/17	1:45 PM	S	1/8oz											x	
9	S88-2.5ft	01/05/17	1:50 PM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marrokki		1/6/17 1400
[2] Relinquished By:		L. Marrokki		1/6/17 1507
[2] Received By:		[illegible]		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	3806235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	12	of	12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other					Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S89-0.5ft	01/05/17	2:10 PM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S89-1.5ft	01/05/17	2:15 PM	S	1/8oz											x	
3	S89-2.5ft	01/05/17	2:20 PM	S	1/8oz											x	
4	S90-0.5ft	01/05/17	1:55 PM	S	1/8oz			x				x					
5	S90-1.5ft	01/05/17	2:00 PM	S	1/8oz											x	
6	S90-2.5ft	01/05/17	2:05 PM	S	1/8oz											x	
7																	
8																	
9																	
10																	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
1 Received By:		L. Marcelli		1/6/17 1400
2 Relinquished By:		L. Marcelli		1/6/17 1507
2 Received By:		ZOTP		1/6/17 1507
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No:	396235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page:	1	of	3	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group										
1 Park Plaza, Suite 1000, Irvine, CA 92614										

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S27-0.5ft	01/06/17	8:05 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S27-1.5ft	01/06/17	8:10 AM	S	1/8oz											x	
3	S27-2.5ft	01/06/17	8:15 AM	S	1/8oz											x	
4	S28-0.5ft	01/06/17	7:55 AM	S	1/8oz			x									
5	S28-1.5ft	01/06/17	8:00 AM	S	1/8oz											x	
6	S28-2.5ft	01/06/17	8:05 AM	S	1/8oz											x	
7	S37-0.5ft	01/06/17	9:05 AM	S	1/8oz			x									
8	S37-1.5ft	01/06/17	9:10 AM	S	1/8oz											x	
9	S37-2.5ft	01/06/17	9:15 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 ~~1100~~ 1330
[1] Received By:		E. Marcketti		1/6/17 1400
[2] Relinquished By:		E. Marcketti		1/6/17 1507
[2] Received By:		ZAID P.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	396236			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	2	of	3	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S38-0.5ft	01/06/17	8:50 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S38-1.5ft	01/06/17	8:55 AM	S	1/8oz											x	
3	S38-2.5ft	01/06/17	9:00 AM	S	1/8oz											x	
4	S39-0.5ft	01/06/17	8:30 AM	S	1/8oz			x									
5	S39-1.5ft	01/06/17	8:35 AM	S	1/8oz											x	
6	S39-2.5ft	01/06/17	8:40 AM	S	1/8oz											x	
7	S83-0.5ft	01/06/17	7:35 AM	S	1/8oz			x									
8	S83-1.5ft	01/06/17	7:40 AM	S	1/8oz											x	
9	S83-2.5ft	01/06/17	7:45 AM	S	1/8oz											x	
10	S83D-0.5ft	01/06/17	7:30 AM	S	1/8oz			x									

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 1330
[1] Received By:		L. Marcelli		1/6/17 1408
[2] Relinquished By:		L. Marcelli		1/6/17 1507
[2] Received By:		ZAMP		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	386235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	3	of	3	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S84-0.5ft	01/06/17	7:40 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S84-1.5ft	01/06/17	7:45 AM	S	1/8oz											x	
3	S84-2.5ft	01/06/17	7:50 AM	S	1/8oz											x	
4	S85-0.5ft	01/06/17	7:50 AM	S	1/8oz			x									
5	S85-1.5ft	01/06/17	7:55 AM	S	1/8oz											x	
6	S85-2.5ft	01/06/17	8:00 AM	S	1/8oz											x	
7				S													
8	Soil Drums	12/23/16	10:30 AM	S	5/VOAs, 1/8oz				x	x	x	x	x				
9	Drum Water	12/23/16	10:00 AM	W	3/VOAs, 3/1L				x	x	x	x					
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 1330
[1] Received By:		L. Marrolett.		1/6/17 1400
[2] Relinquished By:		L. Marrolett.		1/6/17 1507
[2] Received By:		ZAIDA P.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPY analytical, inc.

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: CES Project: FRANCIS POLY HS

Date Received: 1/06/17 Sampler's Name Present: (Yes) No

Sample(s) received in a cooler? (Yes) How many? 3 No (skip section 2) Sample Temp (°C): _____

Sample Temp (°C) from each cooler: #1: 5.2°C #2: 7.4°C #3: 6.1°C #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: _____

Section 2

Was the cooler packed with: ✓ Ice ___ Ice Packs ___ Bubble Wrap ___ Styrofoam

___ Paper ___ None ___ Other _____

Cooler Temp (°C): #1: 1.4 #2: 2.3°C #3: 1.3°C #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relinquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were custody seals present?		✓	
If Yes – were they intact?			✓
Were all samples sealed in plastic bags?	✓		
Did all samples arrive intact? If no, indicate below.	✓		
Did all bottle labels agree with COC? (ID, dates and times) *	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of sample sent for tests indicated?	✓		
Was there headspace in VOA vials?		✓	
Were the containers labeled with correct preservatives?	✓		

Section 4

Explanations/Comments: * SAMPLE 'S30-0.5ft' TIME ON CONTAINER READS '11:25' & C.O.C. READS '11:15'.

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 1/06/17

Ranjit Clarke

From: Skye Green <sgreen@cesgroup.co>
Sent: Tuesday, January 17, 2017 11:24 AM
To: Ranjit Clarke
Subject: RE: Francis Poly HS (12/23/16 & 01/05/17 - 01/06/17) - Enthalpy Analytical Final Report #386235

Ranjit,
Please run Francis Poly HS results for the following:

S4-0.5' lead STLC
S4-1.5' for lead
S9-0.5' lead STLC
S9-1.5' for lead
S10-0.5' lead STLC
S10-1.5' for lead
S12-0.5' lead STLC and TCLP
S12-1.5' for lead

Skye Green, **P.E.**
CES Group, Inc.
CES/Novacom/ERG
951-808-8585 office
714-398-6363 mobile
951-848-9812 fax
sgreen@cesgroup.co
www.cesgroup.co

From: Ranjit Clarke [mailto:Ranjit.Clarke@enthalpy.com]
Sent: Monday, January 16, 2017 6:04 PM
To: sgreen@cesgroup.co; 'Danny Baysa' <dbaysa@cesgroup.co>
Subject: Francis Poly HS (12/23/16 & 01/05/17 - 01/06/17) - Enthalpy Analytical Final Report #386235

Hi Skye Green,

Attached is your final report #386235. A few samples may require STLC and/or TCLP analysis:

S4-0.5ft Lead (STLC)

S9-0.5ft Lead (STLC)

S10-0.5ft Lead (STLC)

S12-0.5ft STLC (Pb); TCLP (Pb)

Enthalpy Analytical, Inc.
Formerly Associated Labs
806 N. Batavia - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.associatedlabs.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	CES Group, Inc.
Address:	33353 Temecula Pkwy. Suite 104 #333 Temecula, CA 92592
Attn:	Skye Green

Lab Request:	387649
Report Date:	03/22/2017
Date Received:	02/13/2017
Client ID:	15581

Comments: Francis Poly HS
PO #27116
12431 Roscoe Blvd., Sun Valley, CA

Supplemental Report 2

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
387649-001	S12-5N-0.5ft
387649-002	S12-5N-1.5ft
387649-003	S12-5N-2.5ft
387649-004	S12-10N-0.5ft
387649-005	S12-10N-1.5ft
387649-006	S12-10N-2.5ft
387649-007	S12-5S-0.5ft
387649-008	S12-5S-1.5ft
387649-009	S12-5S-2.5ft
387649-010	S12-10S-0.5ft
387649-011	S12-10S-1.5ft
387649-012	S12-10S-2.5ft

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

The reports of the Enthalpy Analytical, Inc. are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 02/11/2017 12:25 **Site:**
Sample #: **387649-001** **Client Sample #:** S12-5N-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1175354		
Lead	**79.7**	1	0.32	0.5	mg/Kg	02/13/17	02/14/17	JN	
Method: EPA 6010B *NELAC*	Prep Method: STLC						QCBatchID: QC1175628		
Lead	**3.47**	10	0.12	0.15	mg/L	02/22/17	02/22/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 02/11/2017 12:30 **Site:**
Sample #: **387649-002** **Client Sample #:** S12-5N-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1175564		
Lead	**26.5**	1	0.32	0.5	mg/Kg	02/20/17	02/20/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 02/11/2017 12:35 **Site:**
Sample #: **387649-003** **Client Sample #:** S12-5N-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 02/11/2017 12:30 **Site:**
Sample #: **387649-004** **Client Sample #:** S12-10N-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1175564		
Lead	**55.7**	1	0.32	0.5	mg/Kg	02/20/17	02/20/17	JN	
Method: EPA 6010B *NELAC*	Prep Method: STLC						QCBatchID: QC1176539		
Lead	**3.14**	10	0.12	0.15	mg/L		03/20/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 02/11/2017 12:35 **Site:**
Sample #: **387649-005** **Client Sample #:** S12-10N-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 02/11/2017 12:40 **Site:**
Sample #: **387649-006** **Client Sample #:** S12-10N-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 02/11/2017 12:35 **Site:**
Sample #: **387649-007** **Client Sample #:** S12-5S-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1175354		
Lead	**47.2**	1	0.32	0.5	mg/Kg	02/13/17	02/14/17	JN	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	02/11/2017 12:40	**Site:**			
Sample #:	**387649-008**	**Client Sample #:**	S12-5S-1.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	02/11/2017 12:45	**Site:**			
Sample #:	**387649-009**	**Client Sample #:**	S12-5S-2.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	02/11/2017 12:25	**Site:**			
Sample #:	**387649-010**	**Client Sample #:**	S12-10S-0.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	02/11/2017 12:30	**Site:**			
Sample #:	**387649-011**	**Client Sample #:**	S12-10S-1.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	02/11/2017 12:40	**Site:**			
Sample #:	**387649-012**	**Client Sample #:**	S12-10S-2.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

QCBatchID: QC1175354	Analyst: dswafford	Method: EPA 6010B
Matrix: Solid	Analyzed: 02/14/2017	Instrument: AAICP (group)

Blank Summary

Analyte	Blank Result		Units	MDL	RDL	Notes
QC1175354MB1						
Antimony	ND		mg/Kg	0.37	3	
Arsenic	ND		mg/Kg	0.36	1	
Barium	ND		mg/Kg	0.23	1	
Beryllium	ND		mg/Kg	0.17	0.5	
Cadmium	ND		mg/Kg	0.21	0.5	
Calcium	**7.72**	**J**	mg/Kg	0.94	50	
Chromium	ND		mg/Kg	0.13	1	
Cobalt	ND		mg/Kg	0.19	0.5	
Copper	ND		mg/Kg	0.31	1	
Iron	**1.16**	**J**	mg/Kg	0.4	5	
Lead	ND		mg/Kg	0.32	0.5	
Molybdenum	**0.28**	**J**	mg/Kg	0.13	1	
Nickel	ND		mg/Kg	0.2	1.5	
Potassium	**3.58**	**J**	mg/Kg	3.07	50	
Selenium	**4.50**		mg/Kg	0.72	1	B
Silver	ND		mg/Kg	0.13	0.5	
Sodium	**4.94**	**J**	mg/Kg	3.07	50	
Thallium	ND		mg/Kg	0.42	1	
Vanadium	ND		mg/Kg	0.37	0.5	
Zinc	ND		mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1175354LCS1											
Antimony	100		103		mg/Kg	103			80-120		
Arsenic	100		94.9		mg/Kg	95			80-120		
Barium	100		97.0		mg/Kg	97			80-120		
Beryllium	100		89.7		mg/Kg	90			80-120		
Cadmium	100		97.1		mg/Kg	97			80-120		
Chromium	100		94.0		mg/Kg	94			80-120		
Cobalt	100		96.7		mg/Kg	97			80-120		
Copper	100		99.2		mg/Kg	99			80-120		
Lead	100		96.3		mg/Kg	96			80-120		
Molybdenum	100		96.3		mg/Kg	96			80-120		
Nickel	100		98.6		mg/Kg	99			80-120		
Selenium	100		91.1		mg/Kg	91			80-120		
Silver	100		90.3		mg/Kg	90			80-120		
Thallium	100		102		mg/Kg	102			80-120		
Vanadium	100		99.6		mg/Kg	100			80-120		
Zinc	100		92.4		mg/Kg	92			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1175354MS1, QC1175354MSD1												**Source: 387627-001**
Antimony	ND	100	100	45.5	44.4	mg/Kg	46	44	2.4	75-125	20	M
Arsenic	2.99	100	100	109	97.8	mg/Kg	106	95	10.8	75-125	20	
Barium	94.3	100	100	211	191	mg/Kg	117	97	10.0	75-125	20	
Beryllium	ND	100	100	92.1	88.3	mg/Kg	92	88	4.2	75-125	20	
Cadmium	0.27	100	100	105	94.8	mg/Kg	105	95	10.2	75-125	20	

QCBatchID: QC1175354	**Analyst:** dswafford	**Method:** EPA 6010B	
Matrix: Solid	**Analyzed:** 02/14/2017	**Instrument:** AAICP (group)	

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1175354MS1, QC1175354MSD1											**Source:**	**387627-001**
Chromium	11.8	100	100	116	104	mg/Kg	104	92	10.9	75-125	20	
Cobalt	8.03	100	100	110	99.4	mg/Kg	102	91	10.1	75-125	20	
Copper	12.6	100	100	118	107	mg/Kg	105	94	9.8	75-125	20	
Lead	12.8	100	100	112	100	mg/Kg	99	87	11.3	75-125	20	
Molybdenum	0.32	100	100	99.0	88.3	mg/Kg	99	88	11.4	75-125	20	
Nickel	7.77	100	100	110	99.2	mg/Kg	102	91	10.3	75-125	20	
Selenium	ND	100	100	53.9	51.6	mg/Kg	54	52	4.4	75-125	20	M
Silver	ND	100	100	95.6	85.4	mg/Kg	96	85	11.3	75-125	20	
Thallium	ND	100	100	99.5	87.8	mg/Kg	100	88	12.5	75-125	20	
Vanadium	31.3	100	100	140	126	mg/Kg	109	95	10.5	75-125	20	
Zinc	53.6	100	100	166	150	mg/Kg	112	96	10.1	75-125	20	

QCBatchID:	**QC1175564**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	02/20/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1175564MB1					
Lead	ND	mg/Kg	0.32	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1175564LCS1											
Lead	200		168		mg/Kg	84			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1175564MS1, QC1175564MSD1												**Source: 387645-010**
Lead	16.0	50	50	56.0	58.3	mg/Kg	80	85	4.0	75-125	20	

QCBatchID:	**QC1175628**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	02/22/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1175628MB1					
Lead	ND	mg/L	0.012	0.015	

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1175628MS1, QC1175628MSD1											**Source:**	**387645-009**
Lead	4.15	10	10	11.6	12.4	mg/L	75	83	6.7	75-125	20	M

QCBatchID:	**QC1176539**	**Analyst:**	kedy	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	03/20/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1176539MB1					
Arsenic	ND	mg/L	0.012	0.03	
Lead	ND	mg/L	0.012	0.015	

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1176539MS1, QC1176539MSD1												**Source: 388617-004**
Arsenic	3.66	10	10	14.5	14.8	mg/L	108	111	2.0	75-125	20	
Lead	0.436	10	10	10.3	9.43	mg/L	98	89	8.8	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 387649	Standard:	4 Day:	3 Day: X
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 1 of ~~2~~ 2	2 Day:	1 Day:	Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Ste 104 #333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S12-5N-0.5ft	02/11/17	12:25 PM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S12-5N-1.5ft	02/11/17	12:30 PM	S	1/8oz											x	
3	S12-5N-2.5ft	02/11/17	12:35 PM	S	1/8oz											x	
4	S12-10N-0.5ft	02/11/17	12:30 PM	S	1/8oz											x	
5	S12-10N-1.5ft	02/11/17	12:35 PM	S	1/8oz											x	
6	S12-10N-2.5ft	02/11/17	12:40 PM	S	1/8oz											x	
7	S12-5S-0.5ft	02/11/17	12:35 PM	S	1/8oz		x										
8	S12-5S-1.5ft	02/11/17	12:40 PM	S	1/8oz											x	
9	S12-5S-2.5ft	02/11/17	12:45 PM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	2/13/17 1200
1 Received By:		L. Marrolletti		2/13/17 1316
2 Relinquished By:		L. Marrolletti		2/13/17 1439
2 Received By:		ZAID PADILLA	EA	2/13/17 1440
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 387649	Standard:	4 Day:	3 Day: X
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 2 of 2	2 Day:	1 Day:	Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold
1	S12-10S-0.5ft	02/11/17	12:25 PM	S	1/8oz											x
2	S12-10S-1.5ft	02/11/17	12:30 PM	S	1/8oz											x
3	S12-10S-2.5ft	02/11/17	12:40 PM	S	1/8oz											x
4																
5																
6																
7																
8																
9																
10																

Analysis Request

Test Instructions / Comments

Analyze 0.5' samples. Hold deeper samples.

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	2/13/17 1200
[1] Received By:		C. Mandelli		2/13/17 1316
[2] Relinquished By:				2/13/17 1439
[2] Received By:		ZAIN PADILLA	EA	2/13/17 1440
[3] Relinquished By:				
[3] Received By:				

ENTHALPY analytical, inc.

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: CES GROUP Project: FRANCIS POLY HS

Date Received: 2/13/17 Sampler's Name Present: (Yes) No

Sample(s) received in a cooler? (Yes) How many? 2 No (skip section 2) Sample Temp (°C): _____

Sample Temp (°C) from each cooler: #1: 4.7°C #2: 13.4°C #3: _____ #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: _____

Section 2

Was the cooler packed with: ✓ Ice ____ Ice Packs ____ Bubble Wrap ____ Styrofoam ____ Paper ____ None ____ Other _____

Cooler Temp (°C): #1: 0.2°C #2: 3.4°C #3: _____ #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? Recommended for Microbiology samples)		✓	
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 4

Explanations/Comments: _____

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 2/13/17

Ranjit Clarke

From: Skye Green <sgreen@cesgroup.co>
Sent: Wednesday, March 15, 2017 3:42 PM
To: Ranjit Clarke
Subject: Francis Poly

Ranjit,
For the Francis Polytechnic HS site sampled on Feb 11, can you run sample S12-10N-0.5ft for lead STLC?
Thank you,

Skye Green, **P.E.**
CES Group, Inc.
CES/Novacom/ERG
951-808-8585 office
714-398-6363 mobile
951-848-9812 fax
sgreen@cesgroup.co
www.cesgroup.co

Enthalpy Analytical, Inc.
Formerly Associated Labs
806 N. Batavia - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.associatedlabs.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	CES Group, Inc.
Address:	33353 Temecula Pkwy. Suite 104 #333 Temecula, CA 92592
Attn:	Skye Green

Lab Request:	386080
Report Date:	01/13/2017
Date Received:	01/04/2017
Client ID:	15581

Comments: Francis Polytechnic HS
PO# 27116
12431 Roscoe Blvd., Sun Valley, CA

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
386080-001	S65-5ft
386080-002	S65-10ft
386080-003	S66-5ft
386080-004	S66-10ft
386080-005	S70-5ft
386080-006	S70-10ft
386080-007	S72-5ft
386080-008	S72-10ft
386080-009	S82-5ft
386080-010	S82-10ft

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 14:00	**Site:**			
Sample #:	**386080-001**	**Client Sample #:**	S65-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	1.8		90	Vppm		01/11/17 10:30	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/09/17 21:06	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/09/17 21:06	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/09/17 21:06	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/09/17 21:06	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/09/17 21:06	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/09/17 21:06	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/09/17 21:06	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/09/17 21:06	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/09/17 21:06	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/09/17 21:06	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/09/17 21:06	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/09/17 21:06	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/09/17 21:06	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/09/17 21:06	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/09/17 21:06	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/09/17 21:06	ZZ	
Benzene	**1.3 J**	1	1	3.2	ug/m3		01/09/17 21:06	ZZ	J
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/09/17 21:06	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/09/17 21:06	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/09/17 21:06	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/09/17 21:06	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/09/17 21:06	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/09/17 21:06	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/09/17 21:06	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/09/17 21:06	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/09/17 21:06	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/09/17 21:06	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/09/17 21:06	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/09/17 21:06	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/09/17 21:06	ZZ	
m and p-Xylene	**3.5 J**	1	1.7	4.3	ug/m3		01/09/17 21:06	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/09/17 21:06	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/09/17 21:06	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/09/17 21:06	ZZ	
Styrene	**5.5**	1	1.3	4.3	ug/m3		01/09/17 21:06	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/09/17 21:06	ZZ	
Toluene	**4.5**	1	1.5	3.8	ug/m3		01/09/17 21:06	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/09/17 21:06	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/09/17 21:06	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/09/17 21:06	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/09/17 21:06	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/09/17 21:06	ZZ	
Xylenes (Total)	**3.5 J**	1	2.2	4.3	ug/m3		01/09/17 21:06	ZZ	J

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 14:25	**Site:**			
Sample #:	**386080-002**	**Client Sample #:**	S65-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	1.5		75	Vppm		01/11/17 10:41	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	2	2.2	11	ug/m3		01/09/17 21:49	ZZ	
1,1,2,2-Tetrachloroethane	ND	2	8.2	13.8	ug/m3		01/09/17 21:49	ZZ	
1,1,2-Trichloroethane	ND	2	3.4	11	ug/m3		01/09/17 21:49	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	2	6.2	15.4	ug/m3		01/09/17 21:49	ZZ	
1,1-Dichloroethane	ND	2	2.4	8.2	ug/m3		01/09/17 21:49	ZZ	
1,1-Dichloroethene	ND	2	4.8	8	ug/m3		01/09/17 21:49	ZZ	
1,2,4-Trichlorobenzene	ND	2	7.4	14.8	ug/m3		01/09/17 21:49	ZZ	
1,2,4-Trimethylbenzene	ND	2	4	9.8	ug/m3		01/09/17 21:49	ZZ	
1,2-Dibromoethane	ND	2	7.8	15.4	ug/m3		01/09/17 21:49	ZZ	
1,2-Dichlorobenzene	ND	2	72	120	ug/m3		01/09/17 21:49	ZZ	
1,2-Dichloroethane	ND	2	3.2	8.2	ug/m3		01/09/17 21:49	ZZ	
1,2-Dichloropropane	ND	2	3.6	9.2	ug/m3		01/09/17 21:49	ZZ	
1,3,5-Trimethylbenzene	ND	2	9.8	9.8	ug/m3		01/09/17 21:49	ZZ	
1,3-Dichlorobenzene	ND	2	7.2	12	ug/m3		01/09/17 21:49	ZZ	
1,4-Dichlorobenzene	ND	2	7.2	12	ug/m3		01/09/17 21:49	ZZ	
4-Ethyltoluene	ND	2	5	9.8	ug/m3		01/09/17 21:49	ZZ	
Benzene	**14.0**	2	2	6.4	ug/m3		01/09/17 21:49	ZZ	
Bromodichloromethane	ND	2	5.4	13.4	ug/m3		01/09/17 21:49	ZZ	
Bromoform	ND	2	8.2	20.6	ug/m3		01/09/17 21:49	ZZ	
Bromomethane	ND	2	6.2	7.8	ug/m3		01/09/17 21:49	ZZ	
Carbon Tetrachloride	ND	2	3.8	12.6	ug/m3		01/09/17 21:49	ZZ	
Chlorobenzene	ND	2	3.6	9.2	ug/m3		01/09/17 21:49	ZZ	
Chlorodibromomethane	ND	2	6.8	17	ug/m3		01/09/17 21:49	ZZ	
Chloroethane	ND	2	26	26	ug/m3		01/09/17 21:49	ZZ	
Chloroform	ND	2	9.8	9.8	ug/m3		01/09/17 21:49	ZZ	
Chloromethane	ND	2	21	21	ug/m3		01/09/17 21:49	ZZ	
cis-1,2-Dichloroethene	ND	2	6.4	8	ug/m3		01/09/17 21:49	ZZ	
cis-1,3-dichloropropene	ND	2	3.6	9	ug/m3		01/09/17 21:49	ZZ	
Dichlorodifluoromethane	ND	2	5	9.8	ug/m3		01/09/17 21:49	ZZ	
Ethylbenzene	ND	2	3.4	8.6	ug/m3		01/09/17 21:49	ZZ	
m and p-Xylene	**3.5 J**	2	3.4	8.6	ug/m3		01/09/17 21:49	ZZ	J
Methylene chloride	ND	2	7	7	ug/m3		01/09/17 21:49	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	2	2.8	7.2	ug/m3		01/09/17 21:49	ZZ	
o-Xylene	ND	2	4.4	8.6	ug/m3		01/09/17 21:49	ZZ	
Styrene	**9.4**	2	2.6	8.6	ug/m3		01/09/17 21:49	ZZ	
Tetrachloroethene	ND	2	5.4	13.6	ug/m3		01/09/17 21:49	ZZ	
Toluene	**5.3 J**	2	3	7.6	ug/m3		01/09/17 21:49	ZZ	J
trans-1,2-dichloroethene	ND	2	6.4	8	ug/m3		01/09/17 21:49	ZZ	
trans-1,3-dichloropropene	ND	2	2.4	8	ug/m3		01/09/17 21:49	ZZ	
Trichloroethene	ND	2	3.2	10.8	ug/m3		01/09/17 21:49	ZZ	
Trichlorofluoromethane	ND	2	3.4	11.2	ug/m3		01/09/17 21:49	ZZ	
Vinyl Chloride	ND	2	2	5.2	ug/m3		01/09/17 21:49	ZZ	
Xylenes (Total)	ND	2	4.4	8.6	ug/m3		01/09/17 21:49	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 13:50	**Site:**			
Sample #:	**386080-003**	**Client Sample #:**	S66-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	1.4		70	Vppm		01/11/17 10:47	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/09/17 23:20	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/09/17 23:20	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/09/17 23:20	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/09/17 23:20	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/09/17 23:20	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/09/17 23:20	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/09/17 23:20	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/09/17 23:20	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/09/17 23:20	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/09/17 23:20	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/09/17 23:20	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/09/17 23:20	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/09/17 23:20	ZZ	
1,3-Dichlorobenzene	**12.0**	1	3.6	6	ug/m3		01/09/17 23:20	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/09/17 23:20	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/09/17 23:20	ZZ	
Benzene	**3.8**	1	1	3.2	ug/m3		01/09/17 23:20	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/09/17 23:20	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/09/17 23:20	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/09/17 23:20	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/09/17 23:20	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/09/17 23:20	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/09/17 23:20	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/09/17 23:20	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/09/17 23:20	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/09/17 23:20	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/09/17 23:20	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/09/17 23:20	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/09/17 23:20	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/09/17 23:20	ZZ	
m and p-Xylene	**5.2**	1	1.7	4.3	ug/m3		01/09/17 23:20	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/09/17 23:20	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/09/17 23:20	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/09/17 23:20	ZZ	
Styrene	**5.1**	1	1.3	4.3	ug/m3		01/09/17 23:20	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/09/17 23:20	ZZ	
Toluene	**7.9**	1	1.5	3.8	ug/m3		01/09/17 23:20	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/09/17 23:20	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/09/17 23:20	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/09/17 23:20	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/09/17 23:20	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/09/17 23:20	ZZ	
Xylenes (Total)	**5.2**	1	2.2	4.3	ug/m3		01/09/17 23:20	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 14:15	**Site:**			
Sample #:	**386080-004**	**Client Sample #:**	S66-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.5		125	Vppm		01/11/17 10:52	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 07:28	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 07:28	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 07:28	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 07:28	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 07:28	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 07:28	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 07:28	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 07:28	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 07:28	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 07:28	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 07:28	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 07:28	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 07:28	ZZ	
1,3-Dichlorobenzene	**15.0**	1	3.6	6	ug/m3		01/10/17 07:28	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 07:28	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 07:28	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 07:28	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 07:28	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 07:28	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 07:28	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 07:28	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 07:28	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 07:28	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 07:28	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 07:28	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 07:28	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 07:28	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 07:28	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 07:28	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 07:28	ZZ	
m and p-Xylene	**3.9 J**	1	1.7	4.3	ug/m3		01/10/17 07:28	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 07:28	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 07:28	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 07:28	ZZ	
Styrene	**4.7**	1	1.3	4.3	ug/m3		01/10/17 07:28	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 07:28	ZZ	
Toluene	**6.4**	1	1.5	3.8	ug/m3		01/10/17 07:28	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 07:28	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 07:28	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 07:28	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/10/17 07:28	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 07:28	ZZ	
Xylenes (Total)	**3.9 J**	1	2.2	4.3	ug/m3		01/10/17 07:28	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 15:05	**Site:**			
Sample #:	**386080-005**	**Client Sample #:**	S70-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.4		120	Vppm		01/11/17 10:58	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 08:15	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 08:15	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 08:15	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 08:15	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 08:15	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 08:15	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 08:15	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 08:15	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 08:15	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 08:15	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 08:15	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 08:15	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 08:15	ZZ	
1,3-Dichlorobenzene	**11.4**	1	3.6	6	ug/m3		01/10/17 08:15	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 08:15	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 08:15	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 08:15	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 08:15	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 08:15	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 08:15	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 08:15	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 08:15	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 08:15	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 08:15	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 08:15	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 08:15	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 08:15	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 08:15	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 08:15	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 08:15	ZZ	
m and p-Xylene	**3.9 J**	1	1.7	4.3	ug/m3		01/10/17 08:15	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 08:15	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 08:15	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 08:15	ZZ	
Styrene	**6.8**	1	1.3	4.3	ug/m3		01/10/17 08:15	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 08:15	ZZ	
Toluene	**4.9**	1	1.5	3.8	ug/m3		01/10/17 08:15	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 08:15	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 08:15	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 08:15	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 08:15	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 08:15	ZZ	
Xylenes (Total)	**3.9 J**	1	2.2	4.3	ug/m3		01/10/17 08:15	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 15:20	**Site:**			
Sample #:	**386080-006**	**Client Sample #:**	S70-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.4		120	Vppm		01/11/17 11:09	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 09:02	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 09:02	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 09:02	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 09:02	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 09:02	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 09:02	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 09:02	ZZ	
1,2,4-Trimethylbenzene	**19.6**	1	2	4.9	ug/m3		01/10/17 09:02	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 09:02	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 09:02	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 09:02	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 09:02	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 09:02	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 09:02	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 09:02	ZZ	
4-Ethyltoluene	**6.4**	1	2.5	4.9	ug/m3		01/10/17 09:02	ZZ	
Benzene	**1.3 J**	1	1	3.2	ug/m3		01/10/17 09:02	ZZ	J
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 09:02	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 09:02	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 09:02	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 09:02	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 09:02	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 09:02	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 09:02	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 09:02	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 09:02	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 09:02	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 09:02	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 09:02	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 09:02	ZZ	
m and p-Xylene	**3.5 J**	1	1.7	4.3	ug/m3		01/10/17 09:02	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 09:02	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 09:02	ZZ	
o-Xylene	**3.0 J**	1	2.2	4.3	ug/m3		01/10/17 09:02	ZZ	J
Styrene	ND	1	1.3	4.3	ug/m3		01/10/17 09:02	ZZ	
Tetrachloroethene	**183**	1	2.7	6.8	ug/m3		01/10/17 09:02	ZZ	
Toluene	**3.8**	1	1.5	3.8	ug/m3		01/10/17 09:02	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 09:02	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 09:02	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 09:02	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 09:02	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 09:02	ZZ	
Xylenes (Total)	**6.5**	1	2.2	4.3	ug/m3		01/10/17 09:02	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 15:00	**Site:**			
Sample #:	**386080-007**	**Client Sample #:**	S72-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.4		120	Vppm		01/11/17 11:21	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174247		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 10:35	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 10:35	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 10:35	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 10:35	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 10:35	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 10:35	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 10:35	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 10:35	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 10:35	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 10:35	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 10:35	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 10:35	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 10:35	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 10:35	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 10:35	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 10:35	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 10:35	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 10:35	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 10:35	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 10:35	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 10:35	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 10:35	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 10:35	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 10:35	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 10:35	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 10:35	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 10:35	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 10:35	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 10:35	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 10:35	ZZ	
m and p-Xylene	**3.5 J**	1	1.7	4.3	ug/m3		01/10/17 10:35	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 10:35	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 10:35	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 10:35	ZZ	
Styrene	**8.1**	1	1.3	4.3	ug/m3		01/10/17 10:35	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 10:35	ZZ	
Toluene	**4.9**	1	1.5	3.8	ug/m3		01/10/17 10:35	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 10:35	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 10:35	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 10:35	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/10/17 10:35	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 10:35	ZZ	
Xylenes (Total)	**3.5 J**	1	2.2	4.3	ug/m3		01/10/17 10:35	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 15:25	**Site:**			
Sample #:	**386080-008**	**Client Sample #:**	S72-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.3		115	Vppm		01/11/17 11:30	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	2	2.2	11	ug/m3		01/10/17 15:12	ZZ	
1,1,2,2-Tetrachloroethane	ND	2	8.2	13.8	ug/m3		01/10/17 15:12	ZZ	
1,1,2-Trichloroethane	ND	2	3.4	11	ug/m3		01/10/17 15:12	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	2	6.2	15.4	ug/m3		01/10/17 15:12	ZZ	
1,1-Dichloroethane	ND	2	2.4	8.2	ug/m3		01/10/17 15:12	ZZ	
1,1-Dichloroethene	ND	2	4.8	8	ug/m3		01/10/17 15:12	ZZ	
1,2,4-Trichlorobenzene	ND	2	7.4	14.8	ug/m3		01/10/17 15:12	ZZ	
1,2,4-Trimethylbenzene	ND	2	4	9.8	ug/m3		01/10/17 15:12	ZZ	
1,2-Dibromoethane	ND	2	7.8	15.4	ug/m3		01/10/17 15:12	ZZ	
1,2-Dichlorobenzene	ND	2	72	120	ug/m3		01/10/17 15:12	ZZ	
1,2-Dichloroethane	ND	2	3.2	8.2	ug/m3		01/10/17 15:12	ZZ	
1,2-Dichloropropane	ND	2	3.6	9.2	ug/m3		01/10/17 15:12	ZZ	
1,3,5-Trimethylbenzene	ND	2	9.8	9.8	ug/m3		01/10/17 15:12	ZZ	
1,3-Dichlorobenzene	**12.0**	2	7.2	12	ug/m3		01/10/17 15:12	ZZ	
1,4-Dichlorobenzene	ND	2	7.2	12	ug/m3		01/10/17 15:12	ZZ	
4-Ethyltoluene	ND	2	5	9.8	ug/m3		01/10/17 15:12	ZZ	
Benzene	ND	2	2	6.4	ug/m3		01/10/17 15:12	ZZ	
Bromodichloromethane	ND	2	5.4	13.4	ug/m3		01/10/17 15:12	ZZ	
Bromoform	ND	2	8.2	20.6	ug/m3		01/10/17 15:12	ZZ	
Bromomethane	ND	2	6.2	7.8	ug/m3		01/10/17 15:12	ZZ	
Carbon Tetrachloride	ND	2	3.8	12.6	ug/m3		01/10/17 15:12	ZZ	
Chlorobenzene	ND	2	3.6	9.2	ug/m3		01/10/17 15:12	ZZ	
Chlorodibromomethane	ND	2	6.8	17	ug/m3		01/10/17 15:12	ZZ	
Chloroethane	ND	2	26	26	ug/m3		01/10/17 15:12	ZZ	
Chloroform	ND	2	9.8	9.8	ug/m3		01/10/17 15:12	ZZ	
Chloromethane	ND	2	21	21	ug/m3		01/10/17 15:12	ZZ	
cis-1,2-Dichloroethene	ND	2	6.4	8	ug/m3		01/10/17 15:12	ZZ	
cis-1,3-dichloropropene	ND	2	3.6	9	ug/m3		01/10/17 15:12	ZZ	
Dichlorodifluoromethane	ND	2	5	9.8	ug/m3		01/10/17 15:12	ZZ	
Ethylbenzene	ND	2	3.4	8.6	ug/m3		01/10/17 15:12	ZZ	
m and p-Xylene	**7.8 J**	2	3.4	8.6	ug/m3		01/10/17 15:12	ZZ	J
Methylene chloride	ND	2	7	7	ug/m3		01/10/17 15:12	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	2	2.8	7.2	ug/m3		01/10/17 15:12	ZZ	
o-Xylene	ND	2	4.4	8.6	ug/m3		01/10/17 15:12	ZZ	
Styrene	**5.1 J**	2	2.6	8.6	ug/m3		01/10/17 15:12	ZZ	J
Tetrachloroethene	ND	2	5.4	13.6	ug/m3		01/10/17 15:12	ZZ	
Toluene	**6.0 J**	2	3	7.6	ug/m3		01/10/17 15:12	ZZ	J
trans-1,2-dichloroethene	ND	2	6.4	8	ug/m3		01/10/17 15:12	ZZ	
trans-1,3-dichloropropene	ND	2	2.4	8	ug/m3		01/10/17 15:12	ZZ	
Trichloroethene	ND	2	3.2	10.8	ug/m3		01/10/17 15:12	ZZ	
Trichlorofluoromethane	ND	2	3.4	11.2	ug/m3		01/10/17 15:12	ZZ	
Vinyl Chloride	ND	2	2	5.2	ug/m3		01/10/17 15:12	ZZ	
Xylenes (Total)	**7.8 J**	2	4.4	8.6	ug/m3		01/10/17 15:12	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 16:20	**Site:**			
Sample #:	**386080-009**	**Client Sample #:**	S82-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.1		105	Vppm		01/11/17 11:38	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 15:59	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 15:59	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 15:59	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 15:59	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 15:59	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 15:59	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 15:59	ZZ	
1,2,4-Trimethylbenzene	**2.9 J**	1	2	4.9	ug/m3		01/10/17 15:59	ZZ	J
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 15:59	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 15:59	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 15:59	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 15:59	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 15:59	ZZ	
1,3-Dichlorobenzene	**8.4**	1	3.6	6	ug/m3		01/10/17 15:59	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 15:59	ZZ	
4-Ethyltoluene	**7.4**	1	2.5	4.9	ug/m3		01/10/17 15:59	ZZ	
Benzene	**6.7**	1	1	3.2	ug/m3		01/10/17 15:59	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 15:59	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 15:59	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 15:59	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 15:59	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 15:59	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 15:59	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 15:59	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 15:59	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 15:59	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 15:59	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 15:59	ZZ	
Dichlorodifluoromethane	**3.5 J**	1	2.5	4.9	ug/m3		01/10/17 15:59	ZZ	J
Ethylbenzene	**8.2**	1	1.7	4.3	ug/m3		01/10/17 15:59	ZZ	
m and p-Xylene	**34.7**	1	1.7	4.3	ug/m3		01/10/17 15:59	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 15:59	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 15:59	ZZ	
o-Xylene	**10.4**	1	2.2	4.3	ug/m3		01/10/17 15:59	ZZ	
Styrene	**7.7**	1	1.3	4.3	ug/m3		01/10/17 15:59	ZZ	
Tetrachloroethene	**4.7 J**	1	2.7	6.8	ug/m3		01/10/17 15:59	ZZ	J
Toluene	**34.3**	1	1.5	3.8	ug/m3		01/10/17 15:59	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 15:59	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 15:59	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 15:59	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 15:59	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 15:59	ZZ	
Xylenes (Total)	**45.1**	1	2.2	4.3	ug/m3		01/10/17 15:59	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/03/2017 16:35	**Site:**			
Sample #:	**386080-010**	**Client Sample #:**	S82-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.2		110	Vppm		01/11/17 11:47	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 16:56	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 16:56	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 16:56	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 16:56	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 16:56	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 16:56	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 16:56	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 16:56	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 16:56	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 16:56	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 16:56	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 16:56	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 16:56	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 16:56	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 16:56	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 16:56	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 16:56	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 16:56	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 16:56	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 16:56	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 16:56	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 16:56	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 16:56	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 16:56	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 16:56	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 16:56	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 16:56	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 16:56	ZZ	
Dichlorodifluoromethane	**3.0 J**	1	2.5	4.9	ug/m3		01/10/17 16:56	ZZ	J
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 16:56	ZZ	
m and p-Xylene	ND	1	1.7	4.3	ug/m3		01/10/17 16:56	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 16:56	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 16:56	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 16:56	ZZ	
Styrene	ND	1	1.3	4.3	ug/m3		01/10/17 16:56	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 16:56	ZZ	
Toluene	ND	1	1.5	3.8	ug/m3		01/10/17 16:56	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 16:56	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 16:56	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 16:56	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 16:56	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 16:56	ZZ	
Xylenes (Total)	ND	1	2.2	4.3	ug/m3		01/10/17 16:56	ZZ	

QCBatchID: QC1174087	**Analyst:** sandyw	**Method:** EPA 8015B			
Matrix: Air	**Analyzed:** 01/11/2017	**Instrument:** VOA-GC (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174087MB1					
Methane	ND	Vppm		50	

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1174087DUP1						**Source: 386334-001**
Methane	11.0	11.3	Vppm	2.7	20	

QCBatchID: QC1174247	**Analyst:** nicollez		**Method:** EPA 8260B		
Matrix: Air	**Analyzed:** 01/09/2017		**Instrument:** VOA-MS (group)		

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174247MB1					
1,1,1-Trichloroethane	ND	ug/m3	1.1	5.5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.1	6.9	
1,1,2-Trichloroethane	ND	ug/m3	1.7	5.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	3.1	7.7	
1,1-Dichloroethane	ND	ug/m3	1.2	4.1	
1,1-Dichloroethene	ND	ug/m3	2.4	4	
1,2,4-Trichlorobenzene	ND	ug/m3	3.7	7.4	
1,2,4-Trimethylbenzene	ND	ug/m3	2	4.9	
1,2-Dibromoethane	ND	ug/m3	3.9	7.7	
1,2-Dichlorobenzene	ND	ug/m3	36	60	
1,2-Dichloroethane	ND	ug/m3	1.6	4.1	
1,2-Dichloropropane	ND	ug/m3	1.8	4.6	
1,3,5-Trimethylbenzene	ND	ug/m3	4.9	4.9	
1,3-Dichlorobenzene	ND	ug/m3	3.6	6	
1,4-Dichlorobenzene	ND	ug/m3	3.6	6	
4-Ethyltoluene	ND	ug/m3	2.5	4.9	
Benzene	ND	ug/m3	1	3.2	
Bromodichloromethane	ND	ug/m3	2.7	6.7	
Bromoform	ND	ug/m3	4.1	10.3	
Bromomethane	ND	ug/m3	3.1	3.9	
Carbon Tetrachloride	ND	ug/m3	1.9	6.3	
Chlorobenzene	ND	ug/m3	1.8	4.6	
Chlorodibromomethane	ND	ug/m3	3.4	8.5	
Chloroethane	ND	ug/m3	13	13	
Chloroform	ND	ug/m3	4.9	4.9	
Chloromethane	ND	ug/m3	10.5	10.5	
cis-1,2-Dichloroethene	ND	ug/m3	3.2	4	
cis-1,3-dichloropropene	ND	ug/m3	1.8	4.5	
Dichlorodifluoromethane	ND	ug/m3	2.5	4.9	
Ethylbenzene	ND	ug/m3	1.7	4.3	
m and p-Xylene	ND	ug/m3	1.7	4.3	
Methylene chloride	ND	ug/m3	3.5	3.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/m3	1.4	3.6	
o-Xylene	ND	ug/m3	2.2	4.3	
Styrene	ND	ug/m3	1.3	4.3	
Tetrachloroethene	ND	ug/m3	2.7	6.8	
Toluene	ND	ug/m3	1.5	3.8	
trans-1,2-dichloroethene	ND	ug/m3	3.2	4	
trans-1,3-dichloropropene	ND	ug/m3	1.2	4	
Trichloroethene	ND	ug/m3	1.6	5.4	
Trichlorofluoromethane	ND	ug/m3	1.7	5.6	
Vinyl Chloride	ND	ug/m3	1	2.6	
Xylenes (Total)	ND	ug/m3	2.2	4.3	

QCBatchID: QC1174247	**Analyst:** nicollez	**Method:** EPA 8260B			
Matrix: Air	**Analyzed:** 01/09/2017	**Instrument:** VOA-MS (group)			

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1174247DUP1						**Source: 386080-002**
1,2,4-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3,5-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3-Dichlorobenzene	ND	4.8	ug/m3	0.0	20	
4-Ethyltoluene	ND	ND	ug/m3	0.0	20	
Benzene	14.0	14.0	ug/m3	0.0	20	
Dichlorodifluoromethane	ND	ND	ug/m3	0.0	20	
Ethylbenzene	ND	ND	ug/m3	0.0	20	
m and p-Xylene	3.5	3.5	ug/m3	0.0	20	
Methyl-t-butyl Ether (MTBE)	ND	ND	ug/m3	0.0	20	
o-Xylene	ND	ND	ug/m3	0.0	20	
Styrene	9.4	9.4	ug/m3	0.0	20	
Toluene	5.3	5.3	ug/m3	0.0	20	
Trichloroethene	ND	ND	ug/m3	0.0	20	
Trichlorofluoromethane	ND	ND	ug/m3	0.0	20	
Xylenes (Total)	ND	3.5	ug/m3	0.0	20	

QCBatchID: QC1174249	**Analyst:** nicollez		**Method:** EPA 8260B		
Matrix: Air	**Analyzed:** 01/10/2017		**Instrument:** VOA-MS (group)		

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174249MB1					
1,1,1-Trichloroethane	ND	ug/m3	1.1	5.5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.1	6.9	
1,1,2-Trichloroethane	ND	ug/m3	1.7	5.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	3.1	7.7	
1,1-Dichloroethane	ND	ug/m3	1.2	4.1	
1,1-Dichloroethene	ND	ug/m3	2.4	4	
1,2,4-Trichlorobenzene	ND	ug/m3	3.7	7.4	
1,2,4-Trimethylbenzene	ND	ug/m3	2	4.9	
1,2-Dibromoethane	ND	ug/m3	3.9	7.7	
1,2-Dichlorobenzene	ND	ug/m3	36	60	
1,2-Dichloroethane	ND	ug/m3	1.6	4.1	
1,2-Dichloropropane	ND	ug/m3	1.8	4.6	
1,3,5-Trimethylbenzene	ND	ug/m3	4.9	4.9	
1,3-Dichlorobenzene	ND	ug/m3	3.6	6	
1,4-Dichlorobenzene	ND	ug/m3	3.6	6	
4-Ethyltoluene	ND	ug/m3	2.5	4.9	
Benzene	ND	ug/m3	1	3.2	
Bromodichloromethane	ND	ug/m3	2.7	6.7	
Bromoform	ND	ug/m3	4.1	10.3	
Bromomethane	ND	ug/m3	3.1	3.9	
Carbon Tetrachloride	ND	ug/m3	1.9	6.3	
Chlorobenzene	ND	ug/m3	1.8	4.6	
Chlorodibromomethane	ND	ug/m3	3.4	8.5	
Chloroethane	ND	ug/m3	13	13	
Chloroform	ND	ug/m3	4.9	4.9	
Chloromethane	ND	ug/m3	10.5	10.5	
cis-1,2-Dichloroethene	ND	ug/m3	3.2	4	
cis-1,3-dichloropropene	ND	ug/m3	1.8	4.5	
Dichlorodifluoromethane	ND	ug/m3	2.5	4.9	
Ethylbenzene	ND	ug/m3	1.7	4.3	
m and p-Xylene	ND	ug/m3	1.7	4.3	
Methylene chloride	ND	ug/m3	3.5	3.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/m3	1.4	3.6	
o-Xylene	ND	ug/m3	2.2	4.3	
Styrene	ND	ug/m3	1.3	4.3	
Tetrachloroethene	ND	ug/m3	2.7	6.8	
Toluene	ND	ug/m3	1.5	3.8	
trans-1,2-dichloroethene	ND	ug/m3	3.2	4	
trans-1,3-dichloropropene	ND	ug/m3	1.2	4	
Trichloroethene	ND	ug/m3	1.6	5.4	
Trichlorofluoromethane	ND	ug/m3	1.7	5.6	
Vinyl Chloride	ND	ug/m3	1	2.6	
Xylenes (Total)	ND	ug/m3	2.2	4.3	

QCBatchID: QC1174249	**Analyst:** nicollez	**Method:** EPA 8260B			
Matrix: Air	**Analyzed:** 01/10/2017	**Instrument:** VOA-MS (group)			

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1174249DUP1						**Source: 386080-008**
1,2,4-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3,5-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3-Dichlorobenzene	12.0	12.0	ug/m3	0.0	20	
1,4-Dichlorobenzene	ND	ND	ug/m3	0.0	20	
4-Ethyltoluene	ND	4.9	ug/m3	0.0	20	
Benzene	ND	ND	ug/m3	0.0	20	
Chloromethane	ND	1.2	ug/m3	0.0	20	
Dichlorodifluoromethane	ND	3.0	ug/m3	0.0	20	
m and p-Xylene	7.8	7.8	ug/m3	0.0	20	
Methyl-t-butyl Ether (MTBE)	ND	ND	ug/m3	0.0	20	
o-Xylene	ND	2.6	ug/m3	0.0	20	
Styrene	5.1	5.1	ug/m3	0.0	20	
Toluene	6.0	6.0	ug/m3	0.0	20	
Trichlorofluoromethane	ND	ND	ug/m3	0.0	20	
Xylenes (Total)	7.8	7.8	ug/m3	0.0	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386080				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page: 1	of	1		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Polytechnic HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)	ASTM 1946 Methane			Test Instructions / Comments
1	S65-5ft	01/03/17	2:00 PM	A	1/1L						x			x			Can#83843
2	S65-10ft	01/03/17	2:25 PM	A	1/1L						x			x			Can#83911
3	S66-5ft	01/03/17	1:50 PM	A	1/1L						x			x			Can#83849
4	S66-10ft	01/03/17	2:15 PM	A	1/1L						x			x			Can#83904
5	S70-5ft	01/03/17	3:05 PM	A	1/1L						x			x			Can#83905
6	S70-10ft	01/03/17	3:20 PM	A	1/1L						x			x			Can#83656
7	S72-5ft	01/03/17	3:00 PM	A	1/1L						x			x			Can#83903
8	S72-10ft	01/03/17	3:25 PM	A	1/1L						x			x			Can#83668
9	S82-5ft	01/03/17	4:20 PM	A	1/1L						x			x			Can#83660
10	S82-10ft	01/03/16	4:35 PM	A	1/1L						x			x			Can#83664

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/04/17 0500
[1] Received By:	Kevin Sayer	Kevin Sayer	Enthalpy	1/4/17 1140
[2] Relinquished By:	Kevin Sayer	Kevin Sayer	Enthalpy	1/4/17 1435
[2] Received By:	Taylor Nash	T Nash	EA	1/4/17 1622
[3] Relinquished By:				
[3] Received By:				

ENTHALPY analytical, inc.

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: CES GROUP Project: FRANCIS POLYTECHNIC HS

Date Received: 1/4/17 Sampler's Name Present: (Yes) No

Sample(s) received in a cooler? Yes How many? _____ (No) (skip section 2) Sample Temp (°C): AIR CANISTER

Sample Temp (°C) from each cooler: #1: _____ #2: _____ #3: _____ #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: _____

Section 2

Was the cooler packed with: ____ Ice ____ Ice Packs ____ Bubble Wrap ____ Styrofoam ____ Paper ____ None ____ Other _____

Cooler Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relinquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were custody seals present?		✓	
If Yes – were they intact?			✓
Were all samples sealed in plastic bags?			✓
Did all samples arrive intact? If no, indicate below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of sample sent for tests indicated?	✓		
Was there headspace in VOA vials?			✓
Were the containers labeled with correct preservatives?			✓

Section 4

Explanations/Comments: _____

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 1/4/17

Enthalpy Analytical, Inc.
Formerly Associated Labs
806 N. Batavia - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.associatedlabs.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	CES Group, Inc.
Address:	33353 Temecula Pkwy. Suite 104 #333 Temecula, CA 92592
Attn:	Skye Green

Lab Request:	386138
Report Date:	01/13/2017
Date Received:	01/05/2017
Client ID:	15581

Comments: Francis Polytechnic HS
PO# 27116
12431 Roscoe Blvd., Sun Valley, CA

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
386138-001	S55-5ft
386138-002	S55-10ft
386138-003	S56-5ft
386138-004	S56-10ft
386138-005	S81-5ft
386138-006	S81-10ft

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/04/2017 10:00	**Site:**			
Sample #:	**386138-001**	**Client Sample #:**	S55-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	1		50	Vppm		01/11/17 23:54	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 17:43	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 17:43	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 17:43	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 17:43	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 17:43	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 17:43	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 17:43	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 17:43	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 17:43	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 17:43	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 17:43	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 17:43	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 17:43	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 17:43	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 17:43	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 17:43	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 17:43	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 17:43	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 17:43	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 17:43	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 17:43	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 17:43	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 17:43	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 17:43	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 17:43	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 17:43	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 17:43	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 17:43	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 17:43	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 17:43	ZZ	
m and p-Xylene	ND	1	1.7	4.3	ug/m3		01/10/17 17:43	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 17:43	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 17:43	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 17:43	ZZ	
Styrene	ND	1	1.3	4.3	ug/m3		01/10/17 17:43	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 17:43	ZZ	
Toluene	**1.9 J**	1	1.5	3.8	ug/m3		01/10/17 17:43	ZZ	J
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 17:43	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 17:43	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 17:43	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/10/17 17:43	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 17:43	ZZ	
Xylenes (Total)	ND	1	2.2	4.3	ug/m3		01/10/17 17:43	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/04/2017 10:25	**Site:**			
Sample #:	**386138-002**	**Client Sample #:**	S55-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.2		110	Vppm		01/11/17 12:01	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 18:30	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 18:30	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 18:30	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 18:30	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 18:30	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 18:30	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 18:30	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 18:30	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 18:30	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 18:30	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 18:30	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 18:30	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 18:30	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 18:30	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 18:30	ZZ	
4-Ethyltoluene	**2.9 J**	1	2.5	4.9	ug/m3		01/10/17 18:30	ZZ	J
Benzene	ND	1	1	3.2	ug/m3		01/10/17 18:30	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 18:30	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 18:30	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 18:30	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 18:30	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 18:30	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 18:30	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 18:30	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 18:30	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 18:30	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 18:30	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 18:30	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 18:30	ZZ	
Ethylbenzene	**3.0 J**	1	1.7	4.3	ug/m3		01/10/17 18:30	ZZ	J
m and p-Xylene	**7.8**	1	1.7	4.3	ug/m3		01/10/17 18:30	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 18:30	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 18:30	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 18:30	ZZ	
Styrene	**4.3**	1	1.3	4.3	ug/m3		01/10/17 18:30	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 18:30	ZZ	
Toluene	**3.0 J**	1	1.5	3.8	ug/m3		01/10/17 18:30	ZZ	J
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 18:30	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 18:30	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 18:30	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/10/17 18:30	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 18:30	ZZ	
Xylenes (Total)	**7.8**	1	2.2	4.3	ug/m3		01/10/17 18:30	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/04/2017 10:55	**Site:**			
Sample #:	**386138-003**	**Client Sample #:**	S56-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.3		115	Vppm		01/11/17 12:10	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 19:18	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 19:18	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 19:18	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 19:18	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 19:18	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 19:18	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 19:18	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 19:18	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 19:18	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 19:18	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 19:18	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 19:18	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 19:18	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 19:18	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 19:18	ZZ	
4-Ethyltoluene	**5.9**	1	2.5	4.9	ug/m3		01/10/17 19:18	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 19:18	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 19:18	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 19:18	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 19:18	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 19:18	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 19:18	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 19:18	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 19:18	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 19:18	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 19:18	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 19:18	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 19:18	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 19:18	ZZ	
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 19:18	ZZ	
m and p-Xylene	**6.1**	1	1.7	4.3	ug/m3		01/10/17 19:18	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 19:18	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 19:18	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 19:18	ZZ	
Styrene	**3.4 J**	1	1.3	4.3	ug/m3		01/10/17 19:18	ZZ	J
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 19:18	ZZ	
Toluene	**2.3 J**	1	1.5	3.8	ug/m3		01/10/17 19:18	ZZ	J
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 19:18	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 19:18	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 19:18	ZZ	
Trichlorofluoromethane	ND	1	1.7	5.6	ug/m3		01/10/17 19:18	ZZ	
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 19:18	ZZ	
Xylenes (Total)	**6.1**	1	2.2	4.3	ug/m3		01/10/17 19:18	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/04/2017 11:15	**Site:**			
Sample #:	**386138-004**	**Client Sample #:**	S56-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.4		120	Vppm		01/11/17 12:20	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 20:05	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 20:05	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 20:05	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 20:05	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 20:05	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 20:05	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 20:05	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 20:05	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 20:05	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 20:05	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 20:05	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 20:05	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 20:05	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 20:05	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 20:05	ZZ	
4-Ethyltoluene	**3.9 J**	1	2.5	4.9	ug/m3		01/10/17 20:05	ZZ	J
Benzene	ND	1	1	3.2	ug/m3		01/10/17 20:05	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 20:05	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 20:05	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 20:05	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 20:05	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 20:05	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 20:05	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 20:05	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 20:05	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 20:05	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 20:05	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 20:05	ZZ	
Dichlorodifluoromethane	ND	1	2.5	4.9	ug/m3		01/10/17 20:05	ZZ	
Ethylbenzene	**3.5 J**	1	1.7	4.3	ug/m3		01/10/17 20:05	ZZ	J
m and p-Xylene	**6.1**	1	1.7	4.3	ug/m3		01/10/17 20:05	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 20:05	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 20:05	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 20:05	ZZ	
Styrene	**16.2**	1	1.3	4.3	ug/m3		01/10/17 20:05	ZZ	
Tetrachloroethene	ND	1	2.7	6.8	ug/m3		01/10/17 20:05	ZZ	
Toluene	**4.9**	1	1.5	3.8	ug/m3		01/10/17 20:05	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 20:05	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 20:05	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 20:05	ZZ	
Trichlorofluoromethane	**2.8 J**	1	1.7	5.6	ug/m3		01/10/17 20:05	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 20:05	ZZ	
Xylenes (Total)	**6.1**	1	2.2	4.3	ug/m3		01/10/17 20:05	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/04/2017 13:15	**Site:**			
Sample #:	**386138-005**	**Client Sample #:**	S81-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.4		120	Vppm		01/11/17 12:26	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 20:53	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 20:53	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 20:53	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 20:53	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 20:53	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 20:53	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 20:53	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 20:53	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 20:53	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 20:53	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 20:53	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 20:53	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 20:53	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 20:53	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 20:53	ZZ	
4-Ethyltoluene	**3.4 J**	1	2.5	4.9	ug/m3		01/10/17 20:53	ZZ	J
Benzene	ND	1	1	3.2	ug/m3		01/10/17 20:53	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 20:53	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 20:53	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 20:53	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 20:53	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 20:53	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 20:53	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 20:53	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 20:53	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 20:53	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 20:53	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 20:53	ZZ	
Dichlorodifluoromethane	**4.0 J**	1	2.5	4.9	ug/m3		01/10/17 20:53	ZZ	J
Ethylbenzene	ND	1	1.7	4.3	ug/m3		01/10/17 20:53	ZZ	
m and p-Xylene	**3.9 J**	1	1.7	4.3	ug/m3		01/10/17 20:53	ZZ	J
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 20:53	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 20:53	ZZ	
o-Xylene	ND	1	2.2	4.3	ug/m3		01/10/17 20:53	ZZ	
Styrene	**7.2**	1	1.3	4.3	ug/m3		01/10/17 20:53	ZZ	
Tetrachloroethene	**3.4 J**	1	2.7	6.8	ug/m3		01/10/17 20:53	ZZ	J
Toluene	**3.0 J**	1	1.5	3.8	ug/m3		01/10/17 20:53	ZZ	J
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 20:53	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 20:53	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 20:53	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 20:53	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 20:53	ZZ	
Xylenes (Total)	**3.9 J**	1	2.2	4.3	ug/m3		01/10/17 20:53	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/04/2017 13:35	**Site:**			
Sample #:	**386138-006**	**Client Sample #:**	S81-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B	Prep Method: RSK-175						QCBatchID: QC1174087		
Methane	ND	2.3		115	Vppm		01/11/17 12:36	EW	
Method: EPA 8260B	Prep Method: Method						QCBatchID: QC1174249		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/m3		01/10/17 21:40	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	4.1	6.9	ug/m3		01/10/17 21:40	ZZ	
1,1,2-Trichloroethane	ND	1	1.7	5.5	ug/m3		01/10/17 21:40	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	3.1	7.7	ug/m3		01/10/17 21:40	ZZ	
1,1-Dichloroethane	ND	1	1.2	4.1	ug/m3		01/10/17 21:40	ZZ	
1,1-Dichloroethene	ND	1	2.4	4	ug/m3		01/10/17 21:40	ZZ	
1,2,4-Trichlorobenzene	ND	1	3.7	7.4	ug/m3		01/10/17 21:40	ZZ	
1,2,4-Trimethylbenzene	ND	1	2	4.9	ug/m3		01/10/17 21:40	ZZ	
1,2-Dibromoethane	ND	1	3.9	7.7	ug/m3		01/10/17 21:40	ZZ	
1,2-Dichlorobenzene	ND	1	36	60	ug/m3		01/10/17 21:40	ZZ	
1,2-Dichloroethane	ND	1	1.6	4.1	ug/m3		01/10/17 21:40	ZZ	
1,2-Dichloropropane	ND	1	1.8	4.6	ug/m3		01/10/17 21:40	ZZ	
1,3,5-Trimethylbenzene	ND	1	4.9	4.9	ug/m3		01/10/17 21:40	ZZ	
1,3-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 21:40	ZZ	
1,4-Dichlorobenzene	ND	1	3.6	6	ug/m3		01/10/17 21:40	ZZ	
4-Ethyltoluene	ND	1	2.5	4.9	ug/m3		01/10/17 21:40	ZZ	
Benzene	ND	1	1	3.2	ug/m3		01/10/17 21:40	ZZ	
Bromodichloromethane	ND	1	2.7	6.7	ug/m3		01/10/17 21:40	ZZ	
Bromoform	ND	1	4.1	10.3	ug/m3		01/10/17 21:40	ZZ	
Bromomethane	ND	1	3.1	3.9	ug/m3		01/10/17 21:40	ZZ	
Carbon Tetrachloride	ND	1	1.9	6.3	ug/m3		01/10/17 21:40	ZZ	
Chlorobenzene	ND	1	1.8	4.6	ug/m3		01/10/17 21:40	ZZ	
Chlorodibromomethane	ND	1	3.4	8.5	ug/m3		01/10/17 21:40	ZZ	
Chloroethane	ND	1	13	13	ug/m3		01/10/17 21:40	ZZ	
Chloroform	ND	1	4.9	4.9	ug/m3		01/10/17 21:40	ZZ	
Chloromethane	ND	1	10.5	10.5	ug/m3		01/10/17 21:40	ZZ	
cis-1,2-Dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 21:40	ZZ	
cis-1,3-dichloropropene	ND	1	1.8	4.5	ug/m3		01/10/17 21:40	ZZ	
Dichlorodifluoromethane	**4.4 J**	1	2.5	4.9	ug/m3		01/10/17 21:40	ZZ	J
Ethylbenzene	**3.9 J**	1	1.7	4.3	ug/m3		01/10/17 21:40	ZZ	J
m and p-Xylene	**21.7**	1	1.7	4.3	ug/m3		01/10/17 21:40	ZZ	
Methylene chloride	ND	1	3.5	3.5	ug/m3		01/10/17 21:40	ZZ	
Methyl-t-butyl Ether (MTBE)	ND	1	1.4	3.6	ug/m3		01/10/17 21:40	ZZ	
o-Xylene	**4.8**	1	2.2	4.3	ug/m3		01/10/17 21:40	ZZ	
Styrene	**14.1**	1	1.3	4.3	ug/m3		01/10/17 21:40	ZZ	
Tetrachloroethene	**5.4 J**	1	2.7	6.8	ug/m3		01/10/17 21:40	ZZ	J
Toluene	**5.7**	1	1.5	3.8	ug/m3		01/10/17 21:40	ZZ	
trans-1,2-dichloroethene	ND	1	3.2	4	ug/m3		01/10/17 21:40	ZZ	
trans-1,3-dichloropropene	ND	1	1.2	4	ug/m3		01/10/17 21:40	ZZ	
Trichloroethene	ND	1	1.6	5.4	ug/m3		01/10/17 21:40	ZZ	
Trichlorofluoromethane	**2.2 J**	1	1.7	5.6	ug/m3		01/10/17 21:40	ZZ	J
Vinyl Chloride	ND	1	1	2.6	ug/m3		01/10/17 21:40	ZZ	
Xylenes (Total)	**26.5**	1	2.2	4.3	ug/m3		01/10/17 21:40	ZZ	

QCBatchID: QC1174087	**Analyst:** sandyw	**Method:** EPA 8015B			
Matrix: Air	**Analyzed:** 01/11/2017	**Instrument:** VOA-GC (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174087MB1					
Methane	ND	Vppm		50	

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1174087DUP1						**Source: 386334-001**
Methane	11.0	11.3	Vppm	2.7	20	

QCBatchID: QC1174249	**Analyst:** nicollez		**Method:** EPA 8260B		
Matrix: Air	**Analyzed:** 01/10/2017		**Instrument:** VOA-MS (group)		

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174249MB1					
1,1,1-Trichloroethane	ND	ug/m3	1.1	5.5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	4.1	6.9	
1,1,2-Trichloroethane	ND	ug/m3	1.7	5.5	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	3.1	7.7	
1,1-Dichloroethane	ND	ug/m3	1.2	4.1	
1,1-Dichloroethene	ND	ug/m3	2.4	4	
1,2,4-Trichlorobenzene	ND	ug/m3	3.7	7.4	
1,2,4-Trimethylbenzene	ND	ug/m3	2	4.9	
1,2-Dibromoethane	ND	ug/m3	3.9	7.7	
1,2-Dichlorobenzene	ND	ug/m3	36	60	
1,2-Dichloroethane	ND	ug/m3	1.6	4.1	
1,2-Dichloropropane	ND	ug/m3	1.8	4.6	
1,3,5-Trimethylbenzene	ND	ug/m3	4.9	4.9	
1,3-Dichlorobenzene	ND	ug/m3	3.6	6	
1,4-Dichlorobenzene	ND	ug/m3	3.6	6	
4-Ethyltoluene	ND	ug/m3	2.5	4.9	
Benzene	ND	ug/m3	1	3.2	
Bromodichloromethane	ND	ug/m3	2.7	6.7	
Bromoform	ND	ug/m3	4.1	10.3	
Bromomethane	ND	ug/m3	3.1	3.9	
Carbon Tetrachloride	ND	ug/m3	1.9	6.3	
Chlorobenzene	ND	ug/m3	1.8	4.6	
Chlorodibromomethane	ND	ug/m3	3.4	8.5	
Chloroethane	ND	ug/m3	13	13	
Chloroform	ND	ug/m3	4.9	4.9	
Chloromethane	ND	ug/m3	10.5	10.5	
cis-1,2-Dichloroethene	ND	ug/m3	3.2	4	
cis-1,3-dichloropropene	ND	ug/m3	1.8	4.5	
Dichlorodifluoromethane	ND	ug/m3	2.5	4.9	
Ethylbenzene	ND	ug/m3	1.7	4.3	
m and p-Xylene	ND	ug/m3	1.7	4.3	
Methylene chloride	ND	ug/m3	3.5	3.5	
Methyl-t-butyl Ether (MTBE)	ND	ug/m3	1.4	3.6	
o-Xylene	ND	ug/m3	2.2	4.3	
Styrene	ND	ug/m3	1.3	4.3	
Tetrachloroethene	ND	ug/m3	2.7	6.8	
Toluene	ND	ug/m3	1.5	3.8	
trans-1,2-dichloroethene	ND	ug/m3	3.2	4	
trans-1,3-dichloropropene	ND	ug/m3	1.2	4	
Trichloroethene	ND	ug/m3	1.6	5.4	
Trichlorofluoromethane	ND	ug/m3	1.7	5.6	
Vinyl Chloride	ND	ug/m3	1	2.6	
Xylenes (Total)	ND	ug/m3	2.2	4.3	

QCBatchID: QC1174249	**Analyst:** nicollez	**Method:** EPA 8260B			
Matrix: Air	**Analyzed:** 01/10/2017	**Instrument:** VOA-MS (group)			

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1174249DUP1						**Source: 386080-008**
1,2,4-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3,5-Trimethylbenzene	ND	ND	ug/m3	0.0	20	
1,3-Dichlorobenzene	12.0	12.0	ug/m3	0.0	20	
1,4-Dichlorobenzene	ND	ND	ug/m3	0.0	20	
4-Ethyltoluene	ND	4.9	ug/m3	0.0	20	
Benzene	ND	ND	ug/m3	0.0	20	
Chloromethane	ND	1.2	ug/m3	0.0	20	
Dichlorodifluoromethane	ND	3.0	ug/m3	0.0	20	
m and p-Xylene	7.8	7.8	ug/m3	0.0	20	
Methyl-t-butyl Ether (MTBE)	ND	ND	ug/m3	0.0	20	
o-Xylene	ND	2.6	ug/m3	0.0	20	
Styrene	5.1	5.1	ug/m3	0.0	20	
Toluene	6.0	6.0	ug/m3	0.0	20	
Trichlorofluoromethane	ND	ND	ug/m3	0.0	20	
Xylenes (Total)	7.8	7.8	ug/m3	0.0	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386138				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page: 1 of 1				2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Polytechnic HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)	ASTM 1946 Methane			Test Instructions / Comments
1	S55-5ft	01/04/17	10:00 AM	A	1/1L						x			x			can#83658
2	S55-10ft	01/04/17	10:25 AM	A	1/1L						x			x			can#83851
3	S56-5ft	01/04/17	10:55 AM	A	1/1L						x			x			can#83650
4	S56-10ft	01/04/17	11:15 AM	A	1/1L						x			x			can#83846
5	S81-5ft	01/04/17	1:15 PM	A	1/1L						x			x			can#83662
6	S81-10ft	01/04/17	1:35 PM	A	1/1L						x			x			can#83669
7				A	1/1L						x			x			
8				A	1/1L						x			x			
9				A	1/1L						x			x			
10				A	1/1L						x			x			

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	D Baysa	Danny Baysa	CES Group/ Field Supervisor	01/05/17 0800
[1] Received By:			Enthalpy	1/5/17 1035
[2] Relinquished By:			Enthalpy	1/5/17 1420
[2] Received By:		ZAID P.	EA	1/5/17 1420.
[3] Relinquished By:				
[3] Received By:				

ENTHALPY analytical, inc.

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: CES Project: FRANCIS POLYTECHNIC HS

Date Received: 1/05/17 Sampler's Name Present: (Yes) No

Sample(s) received in a cooler? Yes How many? _____ (No) skip section 2) Sample Temp (°C): _____

Sample Temp (°C) from each cooler: #1: _____ #2: _____ #3: _____ #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: (SUMA CANISTERS)

Section 2

Was the cooler packed with: ____ Ice ____ Ice Packs ____ Bubble Wrap ____ Styrofoam

____ Paper ____ None ____ Other _____

Cooler Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relinquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were custody seals present?		✓	
If Yes – were they intact?			✓
Were all samples sealed in plastic bags?		✓	
Did all samples arrive intact? If no, indicate below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of sample sent for tests indicated?	✓		
Was there headspace in VOA vials?			✓
Were the containers labeled with correct preservatives?			✓

Section 4

Explanations/Comments: _____

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response: _____

Completed By: _____ Date: 1/05/17

Enthalpy Analytical, Inc.
Formerly Associated Labs
806 N. Batavia - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.associatedlabs.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client:	CES Group, Inc.	Lab Request:	387652
Address:	33353 Temecula Pkwy. Suite 104 #333 Temecula, CA 92592	Report Date:	02/20/2017
		Date Received:	02/13/2017
		Client ID:	15581
Attn:	Skye Green		

Comments: Francis Poly - LAUSD
PO #27116
12431 Roscoe Blvd., Sun Valley, CA

Revised Report - TO-15 results are now reported in ug/m3 units.

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
387652-001	S70-5ft
387652-002	S70-10ft

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	02/11/2017 13:00	**Site:**			
Sample #:	**387652-001**	**Client Sample #:**	S70-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: ASTM D1946	Prep Method: Method						QCBatchID: QC1175399		
Methane	**2.67**	2.34		11.7	Vppm		02/14/17 15:21	EW	
Method: EPA TO-15	Prep Method: Method						QCBatchID: QC1175488		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/cubic meter		02/14/17 13:32	ZZ	
1,1,2,2-Tetrachloroethane	**4.1 J**	1	1.38	6.9	ug/cubic meter		02/14/17 13:32	ZZ	J
1,1,2-Trichloroethane	ND	1	1.1	5.5	ug/cubic meter		02/14/17 13:32	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	1.54	7.7	ug/cubic meter		02/14/17 13:32	ZZ	
1,1-Dichloroethane	ND	1	0.82	4.1	ug/cubic meter		02/14/17 13:32	ZZ	
1,1-Dichloroethene	ND	1	0.8	4	ug/cubic meter		02/14/17 13:32	ZZ	
1,2,4-Trichlorobenzene	**86.1**	1	1.48	7.4	ug/cubic meter		02/14/17 13:32	ZZ	
1,2,4-Trimethylbenzene	**6.4**	1	0.98	4.9	ug/cubic meter		02/14/17 13:32	ZZ	
1,2-Dibromoethane	ND	1	1.54	7.7	ug/cubic meter		02/14/17 13:32	ZZ	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1	1.4	7	ug/cubic meter		02/14/17 13:32	ZZ	
1,2-Dichlorobenzene	**14.4**	1	1.2	6	ug/cubic meter		02/14/17 13:32	ZZ	
1,2-Dichloroethane	ND	1	0.82	4.1	ug/cubic meter		02/14/17 13:32	ZZ	
1,2-Dichloropropane	ND	1	0.92	4.6	ug/cubic meter		02/14/17 13:32	ZZ	
1,3,5-Trimethylbenzene	**5.4**	1	0.98	4.9	ug/cubic meter		02/14/17 13:32	ZZ	
1,3-Butadiene	ND	1	0.44	2.2	ug/cubic meter		02/14/17 13:32	ZZ	
1,3-Dichlorobenzene	**13.8**	1	1.2	6	ug/cubic meter		02/14/17 13:32	ZZ	
1,4-Dichlorobenzene	**13.8**	1	1.2	6	ug/cubic meter		02/14/17 13:32	ZZ	
1,4-Dioxane	**1.1 J**	1	0.72	3.6	ug/cubic meter		02/14/17 13:32	ZZ	J
2-Butanone (MEK)	**8.0**	1	0.12	3	ug/cubic meter		02/14/17 13:32	ZZ	
2-Hexanone	**5.3**	1	0.82	4.1	ug/cubic meter		02/14/17 13:32	ZZ	
4-Ethyltoluene	**9.8**	1	0.98	4.9	ug/cubic meter		02/14/17 13:32	ZZ	
4-Methyl-2-pentanone (MIBK)	**1.6 J**	1	0.82	4.1	ug/cubic meter		02/14/17 13:32	ZZ	J
Acetone	**25.8**	1	1.2	2.4	ug/cubic meter		02/14/17 13:32	ZZ	
Benzene	**4.5**	1	0.64	3.2	ug/cubic meter		02/14/17 13:32	ZZ	
Benzyl Chloride	**3.1 J**	1	1.04	5.2	ug/cubic meter		02/14/17 13:32	ZZ	J
Bromodichloromethane	ND	1	1.34	6.7	ug/cubic meter		02/14/17 13:32	ZZ	
Bromoform	ND	1	2.06	10.3	ug/cubic meter		02/14/17 13:32	ZZ	
Bromomethane	ND	1	0.78	3.9	ug/cubic meter		02/14/17 13:32	ZZ	
Carbon disulfide	**0.9 J**	1	0.62	3.1	ug/cubic meter		02/14/17 13:32	ZZ	J
Carbon Tetrachloride	ND	1	1.26	6.3	ug/cubic meter		02/14/17 13:32	ZZ	
Chlorobenzene	**1.4 J**	1	0.92	4.6	ug/cubic meter		02/14/17 13:32	ZZ	J
Chlorodibromomethane	ND	1	1.7	8.5	ug/cubic meter		02/14/17 13:32	ZZ	
Chloroethane	ND	1	0.52	2.6	ug/cubic meter		02/14/17 13:32	ZZ	
Chloroform	ND	1	0.98	4.9	ug/cubic meter		02/14/17 13:32	ZZ	
Chloromethane	**0.8 J**	1	0.42	2.1	ug/cubic meter		02/14/17 13:32	ZZ	J
cis-1,2-Dichloroethene	ND	1	0.8	4	ug/cubic meter		02/14/17 13:32	ZZ	
cis-1,3-dichloropropene	ND	1	0.9	4.5	ug/cubic meter		02/14/17 13:32	ZZ	
Cyclohexane	ND	1	0.68	3.4	ug/cubic meter		02/14/17 13:32	ZZ	
Dichlorodifluoromethane	**2.0 J**	1	0.98	4.9	ug/cubic meter		02/14/17 13:32	ZZ	J
Ethanol	**41.4**	1	0.95	1.9	ug/cubic meter		02/14/17 13:32	ZZ	
Ethyl Acetate	ND	1	0.36	3.6	ug/cubic meter		02/14/17 13:32	ZZ	
Ethylbenzene	**1.7 J**	1	0.86	4.3	ug/cubic meter		02/14/17 13:32	ZZ	J
Heptane	ND	1	0.82	4.1	ug/cubic meter		02/14/17 13:32	ZZ	
Hexachlorobutadiene	**43.7**	1	2.14	10.7	ug/cubic meter		02/14/17 13:32	ZZ	
Hexane	ND	1	0.7	3.5	ug/cubic meter		02/14/17 13:32	ZZ	
Isopropyl alcohol (IPA)	**7.6**	1	1.2	2.4	ug/cubic meter		02/14/17 13:32	ZZ	
m and p-Xylene	**5.2**	1	0.86	4.3	ug/cubic meter		02/14/17 13:32	ZZ	
Methylene chloride	**2.8 J**	1	0.7	3.5	ug/cubic meter		02/14/17 13:32	ZZ	J
Methyl-t-butyl Ether (MTBE)	**1.1 J**	1	0.72	3.6	ug/cubic meter		02/14/17 13:32	ZZ	J
o-Xylene	**3.0 J**	1	0.86	4.3	ug/cubic meter		02/14/17 13:32	ZZ	J

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	02/11/2017 13:00	**Site:**			
Sample #:	**387652-001**	**Client Sample #:**	S70-5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Propene	ND	1	0.34	1.7	ug/cubic meter		02/14/17 13:32	ZZ	
Styrene	**4.7**	1	0.86	4.3	ug/cubic meter		02/14/17 13:32	ZZ	
Tetrachloroethene	ND	1	1.36	6.8	ug/cubic meter		02/14/17 13:32	ZZ	
Toluene	**1.9 J**	1	0.76	3.8	ug/cubic meter		02/14/17 13:32	ZZ	J
trans-1,2-dichloroethene	ND	1	0.8	4	ug/cubic meter		02/14/17 13:32	ZZ	
trans-1,3-dichloropropene	**2.3 J**	1	0.8	4	ug/cubic meter		02/14/17 13:32	ZZ	J
Trichloroethene	ND	1	1.08	5.4	ug/cubic meter		02/14/17 13:32	ZZ	
Trichlorofluoromethane	**1.7 J**	1	1.12	5.6	ug/cubic meter		02/14/17 13:32	ZZ	J
Vinyl acetate	ND	1	1.75	3.5	ug/cubic meter		02/14/17 13:32	ZZ	
Vinyl Chloride	ND	1	0.52	2.6	ug/cubic meter		02/14/17 13:32	ZZ	
Xylenes (Total)	**8.2**	1	0.86	4.3	ug/cubic meter		02/14/17 13:32	ZZ	

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*92*	*60-140*	

Method: EPA TO-3M Prep Method: Method QCBatchID: QC1175444

TPH Gasoline	ND	2.34	0.702	11.7	Vppm		02/15/17 11:54	EW	D1
TPH gasoline ugL	ND	2.34	2.87118	47.853	ug/L		02/15/17 11:54	EW	D1
TPH gasoline ugM3	ND	2.34	2871.18	47853	ug/cubic meter		02/15/17 11:54	EW	D1

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	02/11/2017 13:15	**Site:**			
Sample #:	**387652-002**	**Client Sample #:**	S70-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: ASTM D1946	Prep Method: Method						QCBatchID: QC1175399		
Methane	**5.12**	2.96		14.8	Vppm		02/14/17 15:28	EW	
Method: EPA TO-15	Prep Method: Method						QCBatchID: QC1175488		
1,1,1-Trichloroethane	ND	1	1.1	5.5	ug/cubic meter		02/14/17 14:20	ZZ	
1,1,2,2-Tetrachloroethane	ND	1	1.38	6.9	ug/cubic meter		02/14/17 14:20	ZZ	
1,1,2-Trichloroethane	ND	1	1.1	5.5	ug/cubic meter		02/14/17 14:20	ZZ	
1,1,2-Trichlorotrifluoroethane	ND	1	1.54	7.7	ug/cubic meter		02/14/17 14:20	ZZ	
1,1-Dichloroethane	ND	1	0.82	4.1	ug/cubic meter		02/14/17 14:20	ZZ	
1,1-Dichloroethene	ND	1	0.8	4	ug/cubic meter		02/14/17 14:20	ZZ	
1,2,4-Trichlorobenzene	ND	1	1.48	7.4	ug/cubic meter		02/14/17 14:20	ZZ	
1,2,4-Trimethylbenzene	ND	1	0.98	4.9	ug/cubic meter		02/14/17 14:20	ZZ	
1,2-Dibromoethane	ND	1	1.54	7.7	ug/cubic meter		02/14/17 14:20	ZZ	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1	1.4	7	ug/cubic meter		02/14/17 14:20	ZZ	
1,2-Dichlorobenzene	ND	1	1.2	6	ug/cubic meter		02/14/17 14:20	ZZ	
1,2-Dichloroethane	ND	1	0.82	4.1	ug/cubic meter		02/14/17 14:20	ZZ	
1,2-Dichloropropane	ND	1	0.92	4.6	ug/cubic meter		02/14/17 14:20	ZZ	
1,3,5-Trimethylbenzene	ND	1	0.98	4.9	ug/cubic meter		02/14/17 14:20	ZZ	
1,3-Butadiene	ND	1	0.44	2.2	ug/cubic meter		02/14/17 14:20	ZZ	
1,3-Dichlorobenzene	ND	1	1.2	6	ug/cubic meter		02/14/17 14:20	ZZ	
1,4-Dichlorobenzene	ND	1	1.2	6	ug/cubic meter		02/14/17 14:20	ZZ	
1,4-Dioxane	ND	1	0.72	3.6	ug/cubic meter		02/14/17 14:20	ZZ	
2-Butanone (MEK)	**21.5**	1	0.12	3	ug/cubic meter		02/14/17 14:20	ZZ	
2-Hexanone	**2.5 J**	1	0.82	4.1	ug/cubic meter		02/14/17 14:20	ZZ	J
4-Ethyltoluene	**2.0 J**	1	0.98	4.9	ug/cubic meter		02/14/17 14:20	ZZ	J
4-Methyl-2-pentanone (MIBK)	ND	1	0.82	4.1	ug/cubic meter		02/14/17 14:20	ZZ	
Acetone	**38.4**	1	1.2	2.4	ug/cubic meter		02/14/17 14:20	ZZ	
Benzene	**2.9 J**	1	0.64	3.2	ug/cubic meter		02/14/17 14:20	ZZ	J
Benzyl Chloride	ND	1	1.04	5.2	ug/cubic meter		02/14/17 14:20	ZZ	
Bromodichloromethane	ND	1	1.34	6.7	ug/cubic meter		02/14/17 14:20	ZZ	
Bromoform	ND	1	2.06	10.3	ug/cubic meter		02/14/17 14:20	ZZ	
Bromomethane	ND	1	0.78	3.9	ug/cubic meter		02/14/17 14:20	ZZ	
Carbon disulfide	ND	1	0.62	3.1	ug/cubic meter		02/14/17 14:20	ZZ	
Carbon Tetrachloride	ND	1	1.26	6.3	ug/cubic meter		02/14/17 14:20	ZZ	
Chlorobenzene	ND	1	0.92	4.6	ug/cubic meter		02/14/17 14:20	ZZ	
Chlorodibromomethane	ND	1	1.7	8.5	ug/cubic meter		02/14/17 14:20	ZZ	
Chloroethane	ND	1	0.52	2.6	ug/cubic meter		02/14/17 14:20	ZZ	
Chloroform	ND	1	0.98	4.9	ug/cubic meter		02/14/17 14:20	ZZ	
Chloromethane	**1.6 J**	1	0.42	2.1	ug/cubic meter		02/14/17 14:20	ZZ	J
cis-1,2-Dichloroethene	ND	1	0.8	4	ug/cubic meter		02/14/17 14:20	ZZ	
cis-1,3-dichloropropene	ND	1	0.9	4.5	ug/cubic meter		02/14/17 14:20	ZZ	
Cyclohexane	**1.0 J**	1	0.68	3.4	ug/cubic meter		02/14/17 14:20	ZZ	J
Dichlorodifluoromethane	**1.5 J**	1	0.98	4.9	ug/cubic meter		02/14/17 14:20	ZZ	J
Ethanol	**32.9**	1	0.95	1.9	ug/cubic meter		02/14/17 14:20	ZZ	
Ethyl Acetate	ND	1	0.36	3.6	ug/cubic meter		02/14/17 14:20	ZZ	
Ethylbenzene	ND	1	0.86	4.3	ug/cubic meter		02/14/17 14:20	ZZ	
Heptane	ND	1	0.82	4.1	ug/cubic meter		02/14/17 14:20	ZZ	
Hexachlorobutadiene	ND	1	2.14	10.7	ug/cubic meter		02/14/17 14:20	ZZ	
Hexane	ND	1	0.7	3.5	ug/cubic meter		02/14/17 14:20	ZZ	
Isopropyl alcohol (IPA)	ND	1	1.2	2.4	ug/cubic meter		02/14/17 14:20	ZZ	
m and p-Xylene	**2.2 J**	1	0.86	4.3	ug/cubic meter		02/14/17 14:20	ZZ	J
Methylene chloride	**3.1 J**	1	0.7	3.5	ug/cubic meter		02/14/17 14:20	ZZ	J
Methyl-t-butyl Ether (MTBE)	**1.1 J**	1	0.72	3.6	ug/cubic meter		02/14/17 14:20	ZZ	J
o-Xylene	ND	1	0.86	4.3	ug/cubic meter		02/14/17 14:20	ZZ	

Matrix:	Air	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	02/11/2017 13:15	**Site:**			
Sample #:	**387652-002**	**Client Sample #:**	S70-10ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Propene	ND	1	0.34	1.7	ug/cubic meter		02/14/17 14:20	ZZ	
Styrene	**2.1 J**	1	0.86	4.3	ug/cubic meter		02/14/17 14:20	ZZ	J
Tetrachloroethene	ND	1	1.36	6.8	ug/cubic meter		02/14/17 14:20	ZZ	
Toluene	**1.5 J**	1	0.76	3.8	ug/cubic meter		02/14/17 14:20	ZZ	J
trans-1,2-dichloroethene	ND	1	0.8	4	ug/cubic meter		02/14/17 14:20	ZZ	
trans-1,3-dichloropropene	ND	1	0.8	4	ug/cubic meter		02/14/17 14:20	ZZ	
Trichloroethene	ND	1	1.08	5.4	ug/cubic meter		02/14/17 14:20	ZZ	
Trichlorofluoromethane	**1.7 J**	1	1.12	5.6	ug/cubic meter		02/14/17 14:20	ZZ	J
Vinyl acetate	ND	1	1.75	3.5	ug/cubic meter		02/14/17 14:20	ZZ	
Vinyl Chloride	ND	1	0.52	2.6	ug/cubic meter		02/14/17 14:20	ZZ	
Xylenes (Total)	**2.2 J**	1	0.86	4.3	ug/cubic meter		02/14/17 14:20	ZZ	J

Surrogate	*% Recovery*	*Limits*	*Notes*
4-Bromofluorobenzene (SUR)	*90*	*60-140*	

Method: EPA TO-3M Prep Method: Method QCBatchID: QC1175444

TPH Gasoline	ND	2.96	0.888	14.8	Vppm		02/15/17 12:36	EW	D1
TPH gasoline ugL	ND	2.96	3.63192	60.532	ug/L		02/15/17 12:36	EW	D1
TPH gasoline ugM3	ND	2.96	3631.92	60532	ug/cubic meter		02/15/17 12:36	EW	D1

QCBatchID:	**QC1175399**	**Analyst:**	sandyw	**Method:**	ASTM D1946
Matrix:	Air	**Analyzed:**	02/14/2017	**Instrument:**	VOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1175399MB1					
Methane	ND	mg/L	0.005	0.005	

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1175399DUP1						**Source: 387391-001**
Methane	8.59	8.88	mg/L	3.3	30	

QCBatchID:	**QC1175444**	**Analyst:**	sandyw	**Method:**	EPA TO-3M
Matrix:	Air	**Analyzed:**	02/15/2017	**Instrument:**	VOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1175444MB1					
TPH Gasoline	ND	ug/L	20	20	
TPH Gasoline Vppm	ND	Vppm	5	5	

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1175444DUP2						**Source: 387695-007**
TPH Gasoline	1300	1300	ug/L	0.0	20	
TPH Gasoline Vppm	320	320	Vppm	0.0	20	

QCBatchID: QC1175488	**Analyst:** nicollez		**Method:** EPA TO-15		
Matrix: Air	**Analyzed:** 02/14/2017		**Instrument:** VOA-MS (group)		

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1175488MB1					
1,1,1-Trichloroethane	ND	Vppb	0.2	1	
1,1,2,2-Tetrachloroethane	ND	Vppb	0.2	1	
1,1,2-Trichloroethane	ND	Vppb	0.2	1	
1,1,2-Trichlorotrifluoroethane	ND	Vppb	0.2	1	
1,1-Dichloroethane	ND	Vppb	0.2	1	
1,1-Dichloroethene	ND	Vppb	0.2	1	
1,2,4-Trichlorobenzene	ND	Vppb	0.2	1	
1,2,4-Trimethylbenzene	ND	Vppb	0.2	1	
1,2-Dibromoethane	ND	Vppb	0.2	1	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	Vppb	0.2	1	
1,2-Dichlorobenzene	ND	Vppb	0.2	1	
1,2-Dichloroethane	ND	Vppb	0.2	1	
1,2-Dichloropropane	ND	Vppb	0.2	1	
1,3,5-Trimethylbenzene	ND	Vppb	0.2	1	
1,3-Butadiene	ND	Vppb	0.2	1	
1,3-Dichlorobenzene	ND	Vppb	0.2	1	
1,4-Dichlorobenzene	ND	Vppb	0.2	1	
1,4-Dioxane	ND	Vppb	0.2	1	
2-Butanone (MEK)	ND	Vppb	0.2	5	
2-Hexanone	ND	Vppb	0.2	1	
4-Ethyltoluene	ND	Vppb	0.2	1	
4-Methyl-2-pentanone (MIBK)	ND	Vppb	0.2	1	
Acetone	ND	Vppb	2.5	5	
Benzene	ND	Vppb	0.2	1	
Benzyl Chloride	ND	Vppb	0.2	1	
Bromodichloromethane	ND	Vppb	0.2	1	
Bromoform	ND	Vppb	0.2	1	
Bromomethane	ND	Vppb	0.2	1	
Carbon disulfide	ND	Vppb	0.2	1	
Carbon Tetrachloride	ND	Vppb	0.2	1	
Chlorobenzene	ND	Vppb	0.2	1	
Chlorodibromomethane	ND	Vppb	0.2	1	
Chloroethane	ND	Vppb	0.2	1	
Chloroform	ND	Vppb	0.2	1	
Chloromethane	ND	Vppb	0.2	1	
cis-1,2-Dichloroethene	ND	Vppb	0.2	1	
cis-1,3-dichloropropene	ND	Vppb	0.2	1	
Cyclohexane	ND	Vppb	0.2	1	
Dichlorobenzenes (Total)	ND	Vppb	0.2	1	
Dichlorodifluoromethane	ND	Vppb	0.2	1	
Ethanol	ND	Vppb	2.5	5	
Ethyl Acetate	ND	Vppb	0.2	2	
Ethylbenzene	ND	Vppb	0.2	1	
Heptane	ND	Vppb	0.2	1	
Hexachlorobutadiene	ND	Vppb	0.2	1	
Hexane	ND	Vppb	0.2	1	
Isobutane	ND	Vppb			
Isopropyl alcohol (IPA)	ND	Vppb	2.5	5	
m and p-Xylene	ND	Vppb	0.2	1	
Methylene chloride	ND	Vppb	0.2	1	
Methyl-t-butyl Ether (MTBE)	ND	Vppb	0.2	1	

QCBatchID: QC1175488	**Analyst:** nicollez	**Method:** EPA TO-15			
Matrix: Air	**Analyzed:** 02/14/2017	**Instrument:** VOA-MS (group)			

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1175488MB1					
Naphthalene	ND	Vppb	5	5	
o-Xylene	ND	Vppb	0.2	1	
Propene	ND	Vppb	0.2	1	
Styrene	ND	Vppb	0.2	1	
Tetrachloroethene	ND	Vppb	0.2	1	
Toluene	ND	Vppb	0.2	1	
trans-1,2-dichloroethene	ND	Vppb	0.2	1	
trans-1,3-dichloropropene	ND	Vppb	0.2	1	
Trichloroethene	ND	Vppb	0.2	1	
Trichlorofluoromethane	ND	Vppb	0.2	1	
Vinyl acetate	ND	Vppb	2.5	5	
Vinyl Chloride	ND	Vppb	0.2	1	
Xylenes (Total)	ND	Vppb	0.2	1	

Duplicate Summary

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1175488DUP1						**Source: 387652-001**
1,1,1-Trichloroethane	ND	ND	Vppb	0.0	30	
1,1,2,2-Tetrachloroethane	0.6	0.4	Vppb	40.0	30	D
1,1,2-Trichloroethane	ND	ND	Vppb	0.0	30	
1,1,2-Trichlorotrifluoroethane	ND	ND	Vppb	0.0	30	
1,1-Dichloroethane	ND	ND	Vppb	0.0	30	
1,1-Dichloroethene	ND	ND	Vppb	0.0	30	
1,2,4-Trichlorobenzene	12	7.1	Vppb	51.3	30	D
1,2,4-Trimethylbenzene	1.3	0.8	Vppb	47.6	30	D
1,2-Dibromoethane	ND	ND	Vppb	0.0	30	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	Vppb	0.0	30	
1,2-Dichlorobenzene	2.4	1.5	Vppb	46.2	30	D
1,2-Dichloroethane	ND	ND	Vppb	0.0	30	
1,2-Dichloropropane	ND	ND	Vppb	0.0	30	
1,3,5-Trimethylbenzene	1.1	0.7	Vppb	44.4	30	D
1,3-Butadiene	ND	ND	Vppb	0.0	30	
1,3-Dichlorobenzene	2.3	ND	Vppb	200.0	30	D
1,4-Dichlorobenzene	2.3	1.4	Vppb	48.6	30	D
1,4-Dioxane	0.3	0.2	Vppb	40.0	30	D
2-Butanone (MEK)	2.7	1.8	Vppb	40.0	30	D
2-Hexanone	1.3	0.8	Vppb	47.6	30	D
4-Ethyltoluene	2.0	1.3	Vppb	42.4	30	D
4-Methyl-2-pentanone (MIBK)	0.4	0.2	Vppb	66.7	30	D
Acetone	11	12	Vppb	8.7	30	
Benzene	1.4	0.9	Vppb	43.5	30	D
Benzyl Chloride	0.6	0.4	Vppb	40.0	30	D
Bromodichloromethane	ND	ND	Vppb	0.0	30	
Bromoform	ND	ND	Vppb	0.0	30	
Bromomethane	ND	ND	Vppb	0.0	30	
Carbon disulfide	0.3	0.2	Vppb	40.0	30	D
Carbon Tetrachloride	ND	ND	Vppb	0.0	30	
Chlorobenzene	0.3	0.2	Vppb	40.0	30	D
Chlorodibromomethane	ND	ND	Vppb	0.0	30	
Chloroethane	ND	ND	Vppb	0.0	30	
Chloroform	ND	ND	Vppb	0.0	30	

QCBatchID: QC1175488	**Analyst:** nicollez	**Method:** EPA TO-15	
Matrix: Air	**Analyzed:** 02/14/2017	**Instrument:** VOA-MS (group)	

Analyte	Sample Amount	Duplicate Amount	Units	RPD	Limits RPD	Notes
QC1175488DUP1						**Source: 387652-001**
Chloromethane	0.4	ND	Vppb	200.0	30	D
cis-1,2-Dichloroethene	ND	ND	Vppb	0.0	30	
cis-1,3-dichloropropene	ND	ND	Vppb	0.0	30	
Cyclohexane	ND	ND	Vppb	0.0	30	
Dichlorodifluoromethane	0.4	0.4	Vppb	0.0	30	
Ethanol	22	15	Vppb	37.8	30	D
Ethyl Acetate	ND	ND	Vppb	0.0	30	
Ethylbenzene	0.4	0.3	Vppb	28.6	30	
Heptane	ND	ND	Vppb	0.0	30	
Hexachlorobutadiene	4.1	2.6	Vppb	44.8	30	D
Hexane	ND	ND	Vppb	0.0	30	
Isopropyl alcohol (IPA)	3.1	3.2	Vppb	3.2	30	
m and p-Xylene	1.2	0.9	Vppb	28.6	30	
Methylene chloride	0.8	0.6	Vppb	28.6	30	
Methyl-t-butyl Ether (MTBE)	0.3	0.2	Vppb	40.0	30	D
o-Xylene	0.7	0.5	Vppb	33.3	30	D
Propene	ND	ND	Vppb	0.0	30	
Styrene	1.1	0.7	Vppb	44.4	30	D
Tetrachloroethene	ND	ND	Vppb	0.0	30	
Toluene	0.5	0.5	Vppb	0.0	30	
trans-1,2-dichloroethene	ND	ND	Vppb	0.0	30	
trans-1,3-dichloropropene	0.5	ND	Vppb	200.0	30	D
Trichloroethene	ND	ND	Vppb	0.0	30	
Trichlorofluoromethane	0.3	0.3	Vppb	0.0	30	
Vinyl acetate	ND	ND	Vppb	0.0	30	
Vinyl Chloride	ND	ND	Vppb	0.0	30	
Xylenes (Total)	1.9	1.4	Vppb	30.3	30	D

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

806 N. Batavia St., Orange, CA 92868
Phone: (714) 771-6900 Fax: (714) 771-9933

Billing: Enthalpy - SoCal
c/o Montrose Environmental Group
1 Park Plaza, Suite 1000, Irvine CA 92614

ENTHALPY ANALYTICAL

Air Chain of Custody Record

Lab Job No. 387652

Page 1 of 1

CUSTOMER INFORMATION		PROJECT INFORMATION		PO Number:
Company:	CES Group	Name:	Francis Poly - LAUSD	27116
Report To:	Steve Green	Number:	27116	Lab Quote Number:
Email:	SGREEN@CESGROUP.CO	Address:	12431 Roscoe Blvd	
Address:	33353 Temecula Pkwy #102-333		Sun Valley	
	Temecula, CA 92592	Global ID:		
Phone:	Fax:	Sampled By:		

Special Instructions:

Analysis Request: TO-15 VOCs; TO-3 TPHg; Methane

Required Turnaround Time: Standard ☐ 4 Day ☐ 72 Hour ☒ 48 Hour ☐ 24 Hour ☐

	Sample ID	Air Type (I) Indoor (A) Ambient (SV) Soil Vapor	Equipment Information: Canister ID	Canister Size (6L or 1L)	Flow Controller ID	Start Sampling Information: Date	Time	Canister Pressure (in. Hg)	Stop Sampling Information: Date	Time	Canister Pressure (in. Hg)	Comments
1	S70-5ft	SV	83650	1L	0005	2-11-17	1345	29.5	2-11-17	1300	3"	
2	S70-10ft	I	83668	1L	0013	I	1305	29.5	2-11-17	1315	3"	
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE / TIME
RELINQUISHED BY:		D. BANSA	CES / SUPV	2/13/17 1250
RECEIVED BY:		L Marcelli		2/13/17 1316
RELINQUISHED BY:		L. Marcelli		2/13/17 1439
RECEIVED BY:		ZAID PADILLA	EA	2/13/17 1440

ENTHALPY analytical

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: CES GROUP Project: FRANCIS POLY - LAUSD

Date Received: 2/13/17 Sampler's Name Present: Yes (No)

Sample(s) received in a cooler? Yes How many? _____ (No) (skip section 2) Sample Temp (°C): _____

Sample Temp (°C) from each cooler: #1: _____ #2: _____ #3: _____ #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on Ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: (SUMA - CANISTERS)

Section 2

Was the cooler packed with: ____ Ice ____ Ice Packs ____ Bubble Wrap ____ Styrofoam ____ Paper ____None ____ Other_____

Cooler Temp (°C): #1: _____ #2: _____ #3: _____ #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? Recommended for Microbiology samples)		✓	
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓		
Are the containers labeled with the correct preservatives?			✓
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 4

Explanations/Comments: _____

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 2/13/17

Enthalpy Analytical, Inc.
Formerly Associated Labs
806 N. Batavia - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.associatedlabs.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: CES Group, Inc.
Address: 33353 Temecula Pkwy.
Suite 104 #333
Temecula, CA 92592
Attn: Skye Green

Lab Request: 386235
Report Date: 01/31/2017
Date Received: 01/06/2017
Client ID: 15581

Comments: Francis Poly HS
PO# 27116
12431 Roscoe Blvd., Sun Valley, CA

Supplemental Report 2

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID	Sample #	Client Sample ID	Sample #	Client Sample ID
386235-001	S1-0.5ft	386235-025	S8-2.5ft	386235-049	S16-2.5ft
386235-002	S1-1.5ft	386235-026	S9-0.5ft	386235-050	S17-0.5ft
386235-003	S1-2.5ft	386235-027	S9-1.5ft	386235-051	S17-1.5ft
386235-004	S2-0.5ft	386235-028	S9-2.5ft	386235-052	S17-2.5ft
386235-005	S2-1.5ft	386235-029	S10-0.5ft	386235-053	S18-0.5ft
386235-006	S2-2.5ft	386235-030	S10-1.5ft	386235-054	S18-1.5ft
386235-007	S3-0.5ft	386235-031	S10-2.5ft	386235-055	S18-2.5ft
386235-008	S3-1.5ft	386235-032	S11-0.5ft	386235-056	S19-0.5ft
386235-009	S3-2.5ft	386235-033	S11-1.5ft	386235-057	S19-1.5ft
386235-010	S1D-0.5ft	386235-034	S11-2.5ft	386235-058	S19-2.5ft
386235-011	S4-0.5ft	386235-035	S12-0.5ft	386235-059	S29-0.5ft
386235-012	S4-1.5ft	386235-036	S12-1.5ft	386235-060	S29-1.5ft
386235-013	S4-2.5ft	386235-037	S12-2.5ft	386235-061	S29-2.5ft
386235-014	S5-0.5ft	386235-038	S13-0.5ft	386235-062	S30-0.5ft
386235-015	S5-1.5ft	386235-039	S13-1.5ft	386235-063	S30-1.5ft
386235-016	S5-2.5ft	386235-040	S13-2.5ft	386235-064	S30-2.5ft
386235-017	S6-0.5ft	386235-041	S14-0.5ft	386235-065	S31-0.5ft
386235-018	S6-1.5ft	386235-042	S14-1.5ft	386235-066	S31-1.5ft
386235-019	S6-2.5ft	386235-043	S14-2.5ft	386235-067	S31-2.5ft
386235-020	S7-0.5ft	386235-044	S15-0.5ft	386235-068	S33-0.5ft
386235-021	S7-1.5ft	386235-045	S15-1.5ft	386235-069	S33-1.5ft
386235-022	S7-2.5ft	386235-046	S15-2.5ft	386235-070	S33-2.5ft
386235-023	S8-0.5ft	386235-047	S16-0.5ft	386235-071	S34-0.5ft
386235-024	S8-1.5ft	386235-048	S16-1.5ft	386235-072	S34-1.5ft

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Ranjit K. K. Clarke

Report Review performed by: Ranjit Clarke, Project Manager

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

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ACCREDITED IN ACCORDANCE WITH nelac

Matrix: Solid	**Client:** CES Group, Inc.					**Collector:** Client				
Sampled: 01/05/2017 13:10	**Site:**									
Sample #: 386235-001	**Client Sample #:** S1-0.5ft					**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**	
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174225			
Lead	**34.2**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN		

Matrix: Solid	**Client:** CES Group, Inc.					**Collector:** Client				
Sampled: 01/05/2017 13:15	**Site:**									
Sample #: 386235-002	**Client Sample #:** S1-1.5ft					**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**	
Method:	Prep Method:						QCBatchID:			
N/A	**N/A**	1								

Matrix: Solid	**Client:** CES Group, Inc.					**Collector:** Client				
Sampled: 01/05/2017 13:20	**Site:**									
Sample #: 386235-003	**Client Sample #:** S1-2.5ft					**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**	
Method:	Prep Method:						QCBatchID:			
N/A	**N/A**	1								

Matrix: Solid	**Client:** CES Group, Inc.					**Collector:** Client				
Sampled: 01/05/2017 12:40	**Site:**									
Sample #: 386235-004	**Client Sample #:** S2-0.5ft					**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**	
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174225			
Lead	**40.7**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN		

Matrix: Solid	**Client:** CES Group, Inc.					**Collector:** Client				
Sampled: 01/05/2017 12:45	**Site:**									
Sample #: 386235-005	**Client Sample #:** S2-1.5ft					**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**	
Method:	Prep Method:						QCBatchID:			
N/A	**N/A**	1								

Matrix: Solid	**Client:** CES Group, Inc.					**Collector:** Client				
Sampled: 01/05/2017 12:50	**Site:**									
Sample #: 386235-006	**Client Sample #:** S2-2.5ft					**Sample Type:**				
Analyte	**Result**	**DF**	**MDL**	**RDL**	**Units**	**Prepared**	**Analyzed**	**By**	**Notes**	
Method:	Prep Method:						QCBatchID:			
N/A	**N/A**	1								

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:30 **Site:**
Sample #: **386235-007** **Client Sample #:** S3-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1174225		
Lead	**19.9**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174135		
4,4'-DDD	ND	1	0.67	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**39**	1	0.57	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDT	**7.8**	1	0.95	5	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	1	12	50	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	ND	1	0.63	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	1	0.62	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*132*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*98*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:35 **Site:**
Sample #: **386235-008** **Client Sample #:** S3-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: Prep Method:							QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:40 **Site:**
Sample #: **386235-009** **Client Sample #:** S3-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: Prep Method:							QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:13 **Site:**
Sample #: **386235-010** **Client Sample #:** S1D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1174225		
Lead	**16.5**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:40 **Site:**
Sample #: **386235-011** **Client Sample #:** S4-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 1311/3010A						QCBatchID: QC1174730		
Lead	**0.051**	1	0.004	0.05	mg/L	01/26/17	01/26/17	JN	
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**63.5**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 6010B *NELAC*	Prep Method: STLC						QCBatchID: QC1174535		
Lead	**5.16**	10	0.12	0.15	mg/L	01/20/17	01/23/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:45 **Site:**
Sample #: **386235-012** **Client Sample #:** S4-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174444		
Lead	**5.24**	1	0.32	0.5	mg/Kg	01/18/17	01/19/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:50 **Site:**
Sample #: **386235-013** **Client Sample #:** S4-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:35 **Site:**
Sample #: **386235-014** **Client Sample #:** S5-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**9.08**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:40 **Site:**
Sample #: **386235-015** **Client Sample #:** S5-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:45 **Site:**
Sample #: **386235-016** **Client Sample #:** S5-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:00 **Site:**
Sample #: **386235-017** **Client Sample #:** S6-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**18.5**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:05 **Site:**
Sample #: **386235-018** **Client Sample #:** S6-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:10 **Site:**
Sample #: **386235-019** **Client Sample #:** S6-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:50 **Site:**
Sample #: **386235-020** **Client Sample #:** S7-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**7.38**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:55 **Site:**
Sample #: **386235-021** **Client Sample #:** S7-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:00 **Site:**
Sample #: **386235-022** **Client Sample #:** S7-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:15 **Site:**
Sample #: **386235-023** **Client Sample #:** S8-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**4.50**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:20 **Site:**
Sample #: **386235-024** **Client Sample #:** S8-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:25 **Site:**
Sample #: **386235-025** **Client Sample #:** S8-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/05/2017 10:30	**Site:**			
Sample #:	**386235-026**	**Client Sample #:**	S9-0.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**65.1**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 6010B *NELAC*	Prep Method: STLC						QCBatchID: QC1174535		
Lead	**3.03**	10	0.12	0.15	mg/L	01/20/17	01/23/17	KLN	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/05/2017 10:35	**Site:**			
Sample #:	**386235-027**	**Client Sample #:**	S9-1.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174444		
Lead	**9.14**	1	0.32	0.5	mg/Kg	01/18/17	01/19/17	JN	

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/05/2017 10:40	**Site:**			
Sample #:	**386235-028**	**Client Sample #:**	S9-2.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:40 **Site:**
Sample #: **386235-029** **Client Sample #:** S10-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1174225		
Lead	**78.8**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 6010B *NELAC* Prep Method: STLC							QCBatchID: QC1174535		
Lead	**3.29**	10	0.12	0.15	mg/L	01/20/17	01/23/17	KLN	
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174135		
4,4'-DDD	ND	1	0.67	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**39**	1	0.57	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDT	**19**	1	0.95	5	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	1	12	50	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	ND	1	0.63	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	1	0.62	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*126*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*100*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*87*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:45 **Site:**
Sample #: **386235-030** **Client Sample #:** S10-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1174444		
Lead	**1.67**	1	0.32	0.5	mg/Kg	01/18/17	01/19/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:50 **Site:**
Sample #: **386235-031** **Client Sample #:** S10-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:00 **Site:**
Sample #: **386235-032** **Client Sample #:** S11-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174225		
Lead	**23.9**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:05 **Site:**
Sample #: **386235-033** **Client Sample #:** S11-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 10:10 **Site:**
Sample #: **386235-034** **Client Sample #:** S11-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:55 **Site:**
Sample #: **386235-035** **Client Sample #:** S12-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 1311/3010A						QCBatchID: QC1174536		
Lead	ND	1	0.004	0.05	mg/L	01/20/17	01/23/17	KLN	
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**176**	1	0.32	0.5	mg/Kg	01/11/17	01/13/17	JN	
Method: EPA 6010B *NELAC*	Prep Method: STLC						QCBatchID: QC1174535		
Lead	**11.0**	10	0.12	0.15	mg/L	01/20/17	01/23/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:00 **Site:**
Sample #: **386235-036** **Client Sample #:** S12-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174444		
Lead	**2.56**	1	0.32	0.5	mg/Kg	01/18/17	01/19/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:05 **Site:**
Sample #: **386235-037** **Client Sample #:** S12-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:00 **Site:**
Sample #: **386235-038** **Client Sample #:** S13-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**12.2**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:05 **Site:**
Sample #: **386235-039** **Client Sample #:** S13-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:10 **Site:**
Sample #: **386235-040** **Client Sample #:** S13-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:10 **Site:**
Sample #: **386235-041** **Client Sample #:** S14-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**47.6**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:15 **Site:**
Sample #: **386235-042** **Client Sample #:** S14-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:20 **Site:**
Sample #: **386235-043** **Client Sample #:** S14-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:20 **Site:**
Sample #: **386235-044** **Client Sample #:** S15-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**25.6**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:25 **Site:**
Sample #: **386235-045** **Client Sample #:** S15-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:30 **Site:**
Sample #: 386235-046 **Client Sample #:** S15-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:50 **Site:**
Sample #: 386235-047 **Client Sample #:** S16-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**15.6**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:55 **Site:**
Sample #: 386235-048 **Client Sample #:** S16-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:00 **Site:**
Sample #: 386235-049 **Client Sample #:** S16-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:20 **Site:**
Sample #: 386235-050 **Client Sample #:** S17-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**22.3**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:25 **Site:**
Sample #: 386235-051 **Client Sample #:** S17-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:30 **Site:**
Sample #: 386235-052 **Client Sample #:** S17-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 07:50 **Site:**
Sample #: 386235-053 **Client Sample #:** S18-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**6.53**	1	0.32	0.5	mg/Kg	01/11/17	01/13/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 07:55 **Site:**
Sample #: **386235-054** **Client Sample #:** S18-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:00 **Site:**
Sample #: **386235-055** **Client Sample #:** S18-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:30 **Site:**
Sample #: **386235-056** **Client Sample #:** S19-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**15.8**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:35 **Site:**
Sample #: **386235-057** **Client Sample #:** S19-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:40 **Site:**
Sample #: **386235-058** **Client Sample #:** S19-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:40 **Site:**
Sample #: **386235-059** **Client Sample #:** S29-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.631 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:45 **Site:**
Sample #: **386235-060** **Client Sample #:** S29-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:50 **Site:**
Sample #: **386235-061** **Client Sample #:** S29-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:15 **Site:**
Sample #: **386235-062** **Client Sample #:** S30-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.733 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*80*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:30 **Site:**
Sample #: **386235-063** **Client Sample #:** S30-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 11:35 **Site:**
Sample #: **386235-064** **Client Sample #:** S30-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:40 **Site:**
Sample #: **386235-065** **Client Sample #:** S31-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.651 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:45 **Site:**
Sample #: **386235-066** **Client Sample #:** S31-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 12:50 **Site:**
Sample #: **386235-067** **Client Sample #:** S31-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:05 **Site:**
Sample #: 386235-068 **Client Sample #:** S33-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.301 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:10 **Site:**
Sample #: 386235-069 **Client Sample #:** S33-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 09:15 **Site:**
Sample #: 386235-070 **Client Sample #:** S33-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:35 **Site:**
Sample #: 386235-071 **Client Sample #:** S34-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.410 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:40 **Site:**
Sample #: 386235-072 **Client Sample #:** S34-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:45 **Site:**
Sample #: 386235-073 **Client Sample #:** S34-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:35 **Site:**
Sample #: 386235-074 **Client Sample #:** S35-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.553 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:40 **Site:**
Sample #: 386235-075 **Client Sample #:** S35-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:45 **Site:**
Sample #: **386235-076** **Client Sample #:** S35-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:05 **Site:**
Sample #: **386235-077** **Client Sample #:** S36-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**2.27 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:10 **Site:**
Sample #: **386235-078** **Client Sample #:** S36-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:15 **Site:**
Sample #: **386235-079** **Client Sample #:** S36-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:00 **Site:**
Sample #: **386235-080** **Client Sample #:** S40-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.114 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*79*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:15 **Site:**
Sample #: **386235-081** **Client Sample #:** S40-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 08:20 **Site:**
Sample #: 386235-082 **Client Sample #:** S40-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-083 **Client Sample #:** S78-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC*	Prep Method: EPA 3545						QCBatchID:	QC1174135	
4,4'-DDD	**12**	1	0.67	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**280**	2	1.14	10	ug/Kg	01/09/17	01/11/17	LW	
4,4'-DDT	**61**	1	0.95	5	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	1	12	50	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	**13**	1	0.63	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	1	0.62	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*126*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*106*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-084 **Client Sample #:** S78-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-085 **Client Sample #:** S78-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-086 **Client Sample #:** S79-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**13.5**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 8081A NELAC	Prep Method: EPA 3545						QCBatchID: QC1174135		
4,4'-DDD	ND	2	1.34	10	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**100**	2	1.14	10	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDT	**26**	2	1.9	10	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	2	0.4	10	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	2	0.68	10	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	2	2.4	10	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	2	24	100	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	2	0.9	10	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	ND	2	1.26	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	2	0.56	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	2	1.6	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	2	3.4	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	2	1.24	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	2	1.8	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	2	2.4	10	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	2	0.88	10	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	2	0.54	10	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	2	0.6	10	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	2	10.4	20	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	2	24	200	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*129*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*141*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-087 **Client Sample #:** S79-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-088 **Client Sample #:** S79-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	01/05/2017	**Site:**			
Sample #:	**386235-089**	**Client Sample #:**	S78D-0.5ft	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8081A *NELAC*	Prep Method: EPA 3545						QCBatchID: QC1174135		
4,4'-DDD	**47**	1	0.67	5	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**330**	5	0.57	5	ug/Kg	01/09/17	01/13/17	LW	
4,4'-DDT	**64**	1	0.95	5	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	**230**	1	12	50	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	**37**	1	0.63	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin	**12**	1	0.62	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*131*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*93*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 **Site:**
Sample #: 386235-090 **Client Sample #:** S79D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174226		
Lead	**16.3**	1	0.32	0.5	mg/Kg	01/11/17	01/16/17	JN	
Method: EPA 8081A NELAC	Prep Method: EPA 3545						QCBatchID: QC1174135		
4,4'-DDD	ND	2	1.34	10	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDE	**160**	2	1.14	10	ug/Kg	01/09/17	01/10/17	LW	
4,4'-DDT	**25**	2	1.9	10	ug/Kg	01/09/17	01/10/17	LW	
a-BHC	ND	2	0.4	10	ug/Kg	01/09/17	01/10/17	LW	
Aldrin	ND	2	0.68	10	ug/Kg	01/09/17	01/10/17	LW	
b-BHC	ND	2	2.4	10	ug/Kg	01/09/17	01/10/17	LW	
Chlordane (technical)	ND	2	24	100	ug/Kg	01/09/17	01/10/17	LW	
d-BHC	ND	2	0.9	10	ug/Kg	01/09/17	01/10/17	LW	
Dieldrin	ND	2	1.26	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan I	ND	2	0.56	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan II	ND	2	1.6	10	ug/Kg	01/09/17	01/10/17	LW	
Endosulfan sulfate	ND	2	3.4	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin	ND	2	1.24	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin aldehyde	ND	2	1.8	10	ug/Kg	01/09/17	01/10/17	LW	
Endrin Ketone	ND	2	2.4	10	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor	ND	2	0.88	10	ug/Kg	01/09/17	01/10/17	LW	
Heptachlor epoxide	ND	2	0.54	10	ug/Kg	01/09/17	01/10/17	LW	
Lindane (Gamma-BHC)	ND	2	0.6	10	ug/Kg	01/09/17	01/10/17	LW	
Methoxychlor	ND	2	10.4	20	ug/Kg	01/09/17	01/10/17	LW	
Toxaphene	ND	2	24	200	ug/Kg	01/09/17	01/10/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*118*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*120*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:25 **Site:**
Sample #: 386235-091 **Client Sample #:** S86-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**2.90 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:30 **Site:**
Sample #: 386235-092 **Client Sample #:** S86-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:35 **Site:**
Sample #: 386235-093 **Client Sample #:** S86-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:10 **Site:**
Sample #: **386235-094** **Client Sample #:** S87-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**2.29 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:15 **Site:**
Sample #: **386235-095** **Client Sample #:** S87-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:20 **Site:**
Sample #: **386235-096** **Client Sample #:** S87-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:40 **Site:**
Sample #: **386235-097** **Client Sample #:** S88-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.596 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:45 **Site:**
Sample #: **386235-098** **Client Sample #:** S88-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:50 **Site:**
Sample #: **386235-099** **Client Sample #:** S88-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:10 **Site:**
Sample #: **386235-100** **Client Sample #:** S89-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**3.81**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:15 **Site:**
Sample #: **386235-101** **Client Sample #:** S89-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:20 **Site:**
Sample #: **386235-102** **Client Sample #:** S89-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 13:55 **Site:**
Sample #: **386235-103** **Client Sample #:** S90-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:		QC1174221
Arsenic	**3.31**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	
Method: EPA 8082 *NELAC*	Prep Method: EPA 3545						QCBatchID:		QC1174196
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*81*	*50-150*	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:00 **Site:**
Sample #: **386235-104** **Client Sample #:** S90-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/05/2017 14:05 **Site:**
Sample #: **386235-105** **Client Sample #:** S90-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:05 **Site:**
Sample #: **386235-106** **Client Sample #:** S27-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID:		QC1174221
Arsenic	**1.353 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:10 **Site:**
Sample #: **386235-107** **Client Sample #:** S27-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:15 **Site:**
Sample #: **386235-108** **Client Sample #:** S27-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:55 **Site:**
Sample #: **386235-109** **Client Sample #:** S28-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.462 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:00 **Site:**
Sample #: **386235-110** **Client Sample #:** S28-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:05 **Site:**
Sample #: **386235-111** **Client Sample #:** S28-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 09:05 **Site:**
Sample #: **386235-112** **Client Sample #:** S37-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**0.701 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 09:10 **Site:**
Sample #: **386235-113** **Client Sample #:** S37-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 09:15 **Site:**
Sample #: **386235-114** **Client Sample #:** S37-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:50 **Site:**
Sample #: **386235-115** **Client Sample #:** S38-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**0.881 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:55 **Site:**
Sample #: 386235-116 **Client Sample #:** S38-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 09:00 **Site:**
Sample #: 386235-117 **Client Sample #:** S38-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:30 **Site:**
Sample #: 386235-118 **Client Sample #:** S39-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**0.966 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:35 **Site:**
Sample #: 386235-119 **Client Sample #:** S39-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:40 **Site:**
Sample #: 386235-120 **Client Sample #:** S39-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:35 **Site:**
Sample #: 386235-121 **Client Sample #:** S83-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 *NELAC*	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**1.073 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:40 **Site:**
Sample #: 386235-122 **Client Sample #:** S83-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:45 **Site:**
Sample #: 386235-123 **Client Sample #:** S83-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:30 **Site:**
Sample #: 386235-124 **Client Sample #:** S83D-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174221		
Arsenic	**2.63 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:40 **Site:**
Sample #: 386235-125 **Client Sample #:** S84-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174222		
Arsenic	**2.95 J**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	J

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:45 **Site:**
Sample #: 386235-126 **Client Sample #:** S84-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:50 **Site:**
Sample #: 386235-127 **Client Sample #:** S84-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:50 **Site:**
Sample #: 386235-128 **Client Sample #:** S85-0.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6020 NELAC	Prep Method: EPA 3050B						QCBatchID: QC1174222		
Arsenic	**3.01**	10	0.2	3	mg/Kg	01/11/17	01/12/17	KLN	

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 07:55 **Site:**
Sample #: 386235-129 **Client Sample #:** S85-1.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 01/06/2017 08:00 **Site:**
Sample #: 386235-130 **Client Sample #:** S85-2.5ft **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method:	Prep Method:						QCBatchID:		
N/A	**N/A**	1							

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:30	**Site:**			
Sample #:	**386235-131**	**Client Sample #:**	Soil Drums	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B *NELAC* Prep Method: EPA 3050B							QCBatchID: QC1174226		
Antimony	ND	1	0.37	3	mg/Kg	01/11/17	01/13/17	JN	
Arsenic	**2.82**	1	0.36	1	mg/Kg	01/11/17	01/13/17	JN	
Barium	**76.5**	1	0.23	1	mg/Kg	01/11/17	01/13/17	JN	
Beryllium	ND	1	0.17	0.5	mg/Kg	01/11/17	01/13/17	JN	
Cadmium	**0.24 J**	1	0.21	0.5	mg/Kg	01/11/17	01/13/17	JN	J
Chromium	**9.90**	1	0.13	1	mg/Kg	01/11/17	01/13/17	JN	
Cobalt	**8.48**	1	0.19	0.5	mg/Kg	01/11/17	01/13/17	JN	
Copper	**9.45**	1	0.31	1	mg/Kg	01/11/17	01/13/17	JN	
Lead	**4.58**	1	0.32	0.5	mg/Kg	01/11/17	01/13/17	JN	
Molybdenum	ND	1	0.13	1	mg/Kg	01/11/17	01/13/17	JN	
Nickel	**6.58**	1	0.2	1.5	mg/Kg	01/11/17	01/13/17	JN	
Selenium	ND	1	0.72	1	mg/Kg	01/11/17	01/16/17	JN	
Silver	**0.42 J**	1	0.13	0.5	mg/Kg	01/11/17	01/13/17	JN	J
Thallium	ND	1	0.42	1	mg/Kg	01/11/17	01/13/17	JN	
Vanadium	**23.6**	1	0.37	0.5	mg/Kg	01/11/17	01/13/17	JN	
Zinc	**33.6**	1	0.28	5	mg/Kg	01/11/17	01/13/17	JN	
Method: EPA 7471A *NELAC* Prep Method: EPA 7471A							QCBatchID: QC1174263		
Mercury	**0.03 J**	1	0.02	0.14	mg/Kg	01/12/17	01/12/17	JP	J
Method: EPA 8015M Prep Method:							QCBatchID: QC1174158		
TPH (C10 to C28)	ND	1		10	mg/Kg	01/09/17	01/10/17	LT	T3
TPH (C28 to C40)	**75**	1		20	mg/Kg	01/09/17	01/10/17	LT	T3
TPH (C8 to C10)	ND	1		10	mg/Kg	01/09/17	01/10/17	LT	T3
Method: EPA 8081A *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174135		
4,4'-DDD	ND	1	0.67	5	ug/Kg	01/09/17	01/11/17	LW	T3
4,4'-DDE	**110**	1	0.57	5	ug/Kg	01/09/17	01/11/17	LW	T3
4,4'-DDT	**29**	1	0.95	5	ug/Kg	01/09/17	01/11/17	LW	T3
a-BHC	ND	1	0.2	5	ug/Kg	01/09/17	01/11/17	LW	T3
Aldrin	ND	1	0.34	5	ug/Kg	01/09/17	01/11/17	LW	T3
b-BHC	ND	1	1.2	5	ug/Kg	01/09/17	01/11/17	LW	T3
Chlordane (technical)	ND	1	12	50	ug/Kg	01/09/17	01/11/17	LW	T3
d-BHC	ND	1	0.45	5	ug/Kg	01/09/17	01/11/17	LW	T3
Dieldrin	ND	1	0.63	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endosulfan I	ND	1	0.28	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endosulfan II	ND	1	0.8	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endosulfan sulfate	ND	1	1.7	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endrin	ND	1	0.62	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endrin aldehyde	ND	1	0.9	5	ug/Kg	01/09/17	01/11/17	LW	T3
Endrin Ketone	ND	1	1.2	5	ug/Kg	01/09/17	01/11/17	LW	T3
Heptachlor	ND	1	0.44	5	ug/Kg	01/09/17	01/11/17	LW	T3
Heptachlor epoxide	ND	1	0.27	5	ug/Kg	01/09/17	01/11/17	LW	T3
Lindane (Gamma-BHC)	ND	1	0.3	5	ug/Kg	01/09/17	01/11/17	LW	T3
Methoxychlor	ND	1	5.2	10	ug/Kg	01/09/17	01/11/17	LW	T3
Toxaphene	ND	1	12	100	ug/Kg	01/09/17	01/11/17	LW	T3

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*122*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*101*	*50-150*	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8082 *NELAC* Prep Method: EPA 3545							QCBatchID: QC1174196		
PCB-1016	ND	1	3	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1221	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1232	ND	1	9.5	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1242	ND	1	14	50	mg/Kg	01/10/17	01/11/17	LW	T3

Matrix: Solid **Client:** CES Group, Inc. **Collector:** Client
Sampled: 12/23/2016 10:30 **Site:**
Sample #: 386235-131 **Client Sample #:** Soil Drums **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
PCB-1248	ND	1	19	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1254	ND	1	20	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1260	ND	1	6.9	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1262	ND	1	17	50	mg/Kg	01/10/17	01/11/17	LW	T3
PCB-1268	ND	1	8.6	50	mg/Kg	01/10/17	01/11/17	LW	T3

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*68*	*50-150*	

Method: EPA 8260B *NELAC* Prep Method: EPA 5035A QCBatchID: QC1174152

1,1,1,2-Tetrachloroethane	ND	0.91	0.2184	4.55	ug/Kg	01/09/17	ZZ	T3
1,1,1-Trichloroethane	ND	0.91	0.1365	4.55	ug/Kg	01/09/17	ZZ	T3
1,1,2,2-Tetrachloroethane	ND	0.91	0.2639	4.55	ug/Kg	01/09/17	ZZ	T3
1,1,2-Trichloroethane	ND	0.91	0.2002	4.55	ug/Kg	01/09/17	ZZ	T3
1,1,2-Trichlorotrifluoroethane	ND	0.91	0.6734	4.55	ug/Kg	01/09/17	ZZ	T3
1,1-Dichloroethane	ND	0.91	0.2093	4.55	ug/Kg	01/09/17	ZZ	T3
1,1-Dichloroethene	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
1,1-Dichloropropene	ND	0.91	0.1911	4.55	ug/Kg	01/09/17	ZZ	T3
1,2,3-Trichlorobenzene	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
1,2,3-Trichloropropane	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
1,2,4-Trichlorobenzene	ND	0.91	0.3003	4.55	ug/Kg	01/09/17	ZZ	T3
1,2,4-Trimethylbenzene	ND	0.91	0.2548	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dibromo-3-chloropropane	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dibromoethane	ND	0.91	0.1092	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dichlorobenzene	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dichloroethane	ND	0.91	0.1274	4.55	ug/Kg	01/09/17	ZZ	T3
1,2-Dichloropropane	ND	0.91	0.3094	4.55	ug/Kg	01/09/17	ZZ	T3
1,3,5-Trimethylbenzene	ND	0.91	0.2093	4.55	ug/Kg	01/09/17	ZZ	T3
1,3-Dichlorobenzene	ND	0.91	0.1911	4.55	ug/Kg	01/09/17	ZZ	T3
1,3-Dichloropropane	ND	0.91	0.1729	4.55	ug/Kg	01/09/17	ZZ	T7
1,4-Dichlorobenzene	ND	0.91	0.2184	4.55	ug/Kg	01/09/17	ZZ	T3
2,2-Dichloropropane	ND	0.91	0.1729	4.55	ug/Kg	01/09/17	ZZ	T3
2-Butanone (MEK)	ND	0.91	0.6552	91	ug/Kg	01/09/17	ZZ	T3
2-Chloroethyl Vinyl Ether	ND	0.91	0.273	4.55	ug/Kg	01/09/17	ZZ	T3
2-Chlorotoluene	ND	0.91	0.2275	4.55	ug/Kg	01/09/17	ZZ	T3
4-Chlorotoluene	ND	0.91	0.2002	4.55	ug/Kg	01/09/17	ZZ	T3
4-Isopropyltoluene	ND	0.91	0.2457	4.55	ug/Kg	01/09/17	ZZ	T3
4-Methyl-2-pentanone (MIBK)	ND	0.91	0.1547	4.55	ug/Kg	01/09/17	ZZ	T3
Acetone	**15 J**	0.91	9.1	91	ug/Kg	01/09/17	ZZ	J,T3
Allyl Chloride	ND	0.91	0.1274	4.55	ug/Kg	01/09/17	ZZ	T3
Benzene	**1.7 J**	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	J,T3
Bromobenzene	ND	0.91	0.273	4.55	ug/Kg	01/09/17	ZZ	T3
Bromochloromethane	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
Bromodichloromethane	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
Bromoform	ND	0.91	0.1729	4.55	ug/Kg	01/09/17	ZZ	T3
Bromomethane	ND	0.91	0.2002	4.55	ug/Kg	01/09/17	ZZ	T3
Carbon Tetrachloride	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
Chlorobenzene	ND	0.91	0.1638	4.55	ug/Kg	01/09/17	ZZ	T3
Chlorodibromomethane	ND	0.91	0.1729	4.55	ug/Kg	01/09/17	ZZ	T3
Chloroethane	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
Chloroform	ND	0.91	0.1547	4.55	ug/Kg	01/09/17	ZZ	T3
Chloromethane	ND	0.91	0.1911	4.55	ug/Kg	01/09/17	ZZ	T3
cis-1,2-Dichloroethene	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
cis-1,3-dichloropropene	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3
cis-1,4-dichloro-2-butene	ND	0.91	0.182	4.55	ug/Kg	01/09/17	ZZ	T3

Matrix:	Solid	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:30	**Site:**			
Sample #:	**386235-131**	**Client Sample #:**	Soil Drums	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Dibromomethane	ND	0.91	0.1911	4.55	ug/Kg		01/09/17	ZZ	T3
Dichlorodifluoromethane	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Di-isopropyl ether (DIPE)	ND	0.91	0.1911	4.55	ug/Kg		01/09/17	ZZ	T3
Ethylbenzene	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Ethyl-tertbutylether (ETBE)	ND	0.91	0.3822	4.55	ug/Kg		01/09/17	ZZ	T3
Hexachlorobutadiene	ND	0.91	0.3822	4.55	ug/Kg		01/09/17	ZZ	T3
Isopropylbenzene	ND	0.91	0.2275	4.55	ug/Kg		01/09/17	ZZ	T3
m and p-Xylene	ND	0.91	0.3458	4.55	ug/Kg		01/09/17	ZZ	T3
Methylene chloride	ND	0.91	0.1911	4.55	ug/Kg		01/09/17	ZZ	T3
Methyl-t-butyl Ether (MTBE)	ND	0.91	0.1547	4.55	ug/Kg		01/09/17	ZZ	T3
Naphthalene	ND	0.91	0.1456	4.55	ug/Kg		01/09/17	ZZ	T3
N-butylbenzene	ND	0.91	0.2275	4.55	ug/Kg		01/09/17	ZZ	T3
N-propylbenzene	ND	0.91	0.2002	4.55	ug/Kg		01/09/17	ZZ	T3
o-Xylene	ND	0.91	0.1729	4.55	ug/Kg		01/09/17	ZZ	T3
Sec-butylbenzene	ND	0.91	0.2548	4.55	ug/Kg		01/09/17	ZZ	T3
Styrene	ND	0.91	0.1183	4.55	ug/Kg		01/09/17	ZZ	T3
t-Butyl alcohol (TBA)	ND	0.91	8.008	9.1	ug/Kg		01/09/17	ZZ	T3
Tert-amylmethylether (TAME)	ND	0.91	0.1729	4.55	ug/Kg		01/09/17	ZZ	T3
Tert-butylbenzene	ND	0.91	0.3094	4.55	ug/Kg		01/09/17	ZZ	T3
Tetrachloroethene	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Toluene	**0.51 J**	0.91	0.1547	4.55	ug/Kg		01/09/17	ZZ	J,T3
trans-1,2-dichloroethene	ND	0.91	0.1729	4.55	ug/Kg		01/09/17	ZZ	T3
trans-1,3-dichloropropene	ND	0.91	0.1638	4.55	ug/Kg		01/09/17	ZZ	T3
trans-1,4-dichloro-2-butene	ND	0.91	0.182	4.55	ug/Kg		01/09/17	ZZ	T3
Trichloroethene	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Trichlorofluoromethane	ND	0.91	0.2093	4.55	ug/Kg		01/09/17	ZZ	T3
Vinyl Chloride	ND	0.91	0.1274	4.55	ug/Kg		01/09/17	ZZ	T3
Xylenes (Total)	ND	0.91	0.3458	4.55	ug/Kg		01/09/17	ZZ	T3

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*143*	*70-145*	
4-Bromofluorobenzene (SUR)	*96*	*70-145*	
Dibromodifluoromethane (SUR)	*113*	*70-145*	
Toluene-d8 (SUR)	*100*	*70-145*	

Matrix:	Water	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:00	**Site:**			
Sample #:	**386235-132**	**Client Sample #:**	Drum Water	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 8015B NELAC	Prep Method: EPA 3510C						QCBatchID: QC1174265		
TPH (C10 to C22)	**0.26**	1	0.04	0.1	mg/L	01/12/17	01/12/17	LT	
TPH (C22 to C36)	ND	1	0.07	0.3	mg/L	01/12/17	01/12/17	LT	
TPH (C8 to C10)	ND	1	0.06	0.2	mg/L	01/12/17	01/12/17	LT	

Surrogate	*% Recovery*	*Limits*	*Notes*
Triacontane (SUR)	*42*	*50-150*	*S*

Method: EPA 8081A NELAC	Prep Method: EPA 3510C						QCBatchID: QC1174210		
4,4'-DDD	ND	1	0.011	0.1	ug/L	01/11/17	01/13/17	LW	
4,4'-DDE	**0.27**	1	0.006	0.1	ug/L	01/11/17	01/13/17	LW	
4,4'-DDT	**0.10**	1	0.011	0.1	ug/L	01/11/17	01/13/17	LW	
Aldrin	ND	1	0.007	0.1	ug/L	01/11/17	01/13/17	LW	
b-BHC	ND	1	0.003	0.1	ug/L	01/11/17	01/13/17	LW	
Chlordane (technical)	ND	1	0.27	1	ug/L	01/11/17	01/13/17	LW	
d-BHC	ND	1	0.006	0.1	ug/L	01/11/17	01/13/17	LW	
Dieldrin	ND	1	0.006	0.1	ug/L	01/11/17	01/13/17	LW	
Endosulfan I	ND	1	0.004	0.1	ug/L	01/11/17	01/13/17	LW	
Endosulfan II	ND	1	0.011	0.1	ug/L	01/11/17	01/13/17	LW	
Endosulfan sulfate	ND	1	0.012	0.1	ug/L	01/11/17	01/13/17	LW	
Endrin	ND	1	0.008	0.1	ug/L	01/11/17	01/13/17	LW	
Endrin aldehyde	ND	1	0.009	0.1	ug/L	01/11/17	01/13/17	LW	
Endrin Ketone	ND	1	0.011	0.1	ug/L	01/11/17	01/13/17	LW	
Heptachlor	ND	1	0.003	0.1	ug/L	01/11/17	01/13/17	LW	
Heptachlor epoxide	ND	1	0.002	0.1	ug/L	01/11/17	01/13/17	LW	
Lindane (Gamma-BHC)	ND	1	0.002	0.1	ug/L	01/11/17	01/13/17	LW	
Methoxychlor	ND	1	0.055	0.1	ug/L	01/11/17	01/13/17	LW	
Toxaphene	ND	1	0.48	2	ug/L	01/11/17	01/13/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*92*	*50-150*	
Tetrachloro-m-xylene TCMX (SUR)	*83*	*50-150*	

Method: EPA 8082 NELAC	Prep Method: EPA 3510C						QCBatchID: QC1174351		
PCB-1016	ND	1	0.13	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1221	ND	1	0.24	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1232	ND	1	0.12	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1242	ND	1	0.071	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1248	ND	1	0.12	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1254	ND	1	0.084	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1260	ND	1	0.082	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1262	ND	1	0.083	0.5	ug/L	01/16/17	01/16/17	LW	
PCB-1268	ND	1	0.039	0.5	ug/L	01/16/17	01/16/17	LW	

Surrogate	*% Recovery*	*Limits*	*Notes*
Decachlorobiphenyl DCB (SUR)	*78*	*50-150*	

Method: EPA 8260B NELAC	Prep Method: EPA 5030B						QCBatchID: QC1174113		
1,1,1,2-Tetrachloroethane	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
1,1,1-Trichloroethane	ND	5	1.9	25	ug/L		01/08/17	LZ	D2
1,1,2,2-Tetrachloroethane	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
1,1,2-Trichloroethane	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
1,1,2-Trichlorotrifluoroethane	ND	5	1.45	25	ug/L		01/08/17	LZ	D2
1,1-Dichloroethane	ND	5	1.6	25	ug/L		01/08/17	LZ	D2
1,1-Dichloroethene	ND	5	1.5	25	ug/L		01/08/17	LZ	D2
1,1-Dichloropropene	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
1,2,3-Trichlorobenzene	ND	5	1.4	25	ug/L		01/08/17	LZ	D2
1,2,3-Trichloropropane	ND	5	0.8	25	ug/L		01/08/17	LZ	D2

Matrix:	Water	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:00	**Site:**			
Sample #:	**386235-132**	**Client Sample #:**	Drum Water	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
1,2,4-Trichlorobenzene	ND	5	1.35	25	ug/L		01/08/17	LZ	D2
1,2,4-Trimethylbenzene	ND	5	1.4	25	ug/L		01/08/17	LZ	D2
1,2-Dibromo-3-chloropropane	ND	5	0.6	25	ug/L		01/08/17	LZ	D2
1,2-Dibromoethane	ND	5	0.95	25	ug/L		01/08/17	LZ	D2
1,2-Dichlorobenzene	ND	5	1.3	25	ug/L		01/08/17	LZ	D2
1,2-Dichloroethane	ND	5	1	25	ug/L		01/08/17	LZ	D2
1,2-Dichloropropane	ND	5	1.8	25	ug/L		01/08/17	LZ	D2
1,3,5-Trimethylbenzene	ND	5	1.2	25	ug/L		01/08/17	LZ	D2
1,3-Dichlorobenzene	ND	5	1.7	25	ug/L		01/08/17	LZ	D2
1,3-Dichloropropane	ND	5	0.95	25	ug/L		01/08/17	LZ	D2
1,4-Dichlorobenzene	ND	5	2.15	25	ug/L		01/08/17	LZ	D2
2,2-Dichloropropane	ND	5	1.6	25	ug/L		01/08/17	LZ	D2
2-Butanone (MEK)	ND	5	3.9	500	ug/L		01/08/17	LZ	D2
2-Chlorotoluene	ND	5	1.65	25	ug/L		01/08/17	LZ	D2
4-Chlorotoluene	ND	5	1.55	25	ug/L		01/08/17	LZ	D2
4-Isopropyltoluene	ND	5	1.6	25	ug/L		01/08/17	LZ	D2
4-Methyl-2-pentanone (MIBK)	ND	5	0.6	25	ug/L		01/08/17	LZ	D2
Acetone	ND	5	50	500	ug/L		01/08/17	LZ	D2
Allyl Chloride	ND	5	0.95	25	ug/L		01/08/17	LZ	D2
Benzene	ND	5	0.9	5	ug/L		01/08/17	LZ	D2
Bromobenzene	ND	5	2.65	25	ug/L		01/08/17	LZ	D2
Bromochloromethane	ND	5	0.85	25	ug/L		01/08/17	LZ	D2
Bromodichloromethane	ND	5	1.55	25	ug/L		01/08/17	LZ	D2
Bromoform	ND	5	0.65	25	ug/L		01/08/17	LZ	D2
Bromomethane	ND	5	3.4	25	ug/L		01/08/17	LZ	D2
Carbon Tetrachloride	ND	5	1.35	25	ug/L		01/08/17	LZ	D2
Chlorobenzene	ND	5	0.95	25	ug/L		01/08/17	LZ	D2
Chlorodibromomethane	**3.6 J**	5	1.05	25	ug/L		01/08/17	LZ	J,D2
Chloroethane	ND	5	2.25	25	ug/L		01/08/17	LZ	D2
Chloroform	**1.2 J**	5	0.9	25	ug/L		01/08/17	LZ	J,D2
Chloromethane	ND	5	1.35	25	ug/L		01/08/17	LZ	D2
cis-1,2-Dichloroethene	ND	5	1.35	25	ug/L		01/08/17	LZ	D2
cis-1,3-dichloropropene	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
cis-1,4-dichloro-2-butene	ND	5	0.85	25	ug/L		01/08/17	LZ	D2
Dibromomethane	ND	5	1.15	25	ug/L		01/08/17	LZ	D2
Dichlorodifluoromethane	ND	5	1.65	25	ug/L		01/08/17	LZ	D2
Ethylbenzene	ND	5	1.05	25	ug/L		01/08/17	LZ	D2
Hexachlorobutadiene	ND	5	2.55	25	ug/L		01/08/17	LZ	D2
Isopropylbenzene	ND	5	1.2	25	ug/L		01/08/17	LZ	D2
m and p-Xylene	ND	5	2.25	25	ug/L		01/08/17	LZ	D2
Methylene chloride	ND	5	0.8	25	ug/L		01/08/17	LZ	D2
Methyl-t-butyl Ether (MTBE)	ND	5	0.95	5	ug/L		01/08/17	LZ	D2
Naphthalene	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
N-butylbenzene	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
N-propylbenzene	ND	5	1.55	25	ug/L		01/08/17	LZ	D2
o-Xylene	ND	5	1.45	25	ug/L		01/08/17	LZ	D2
Sec-butylbenzene	ND	5	1.6	25	ug/L		01/08/17	LZ	D2
Styrene	ND	5	1.1	25	ug/L		01/08/17	LZ	D2
Tert-butylbenzene	ND	5	2	25	ug/L		01/08/17	LZ	D2
Tetrachloroethene	ND	5	0.9	25	ug/L		01/08/17	LZ	D2
Toluene	ND	5	1.2	25	ug/L		01/08/17	LZ	D2
trans-1,2-dichloroethene	ND	5	1.65	25	ug/L		01/08/17	LZ	D2
trans-1,3-dichloropropene	ND	5	1.15	25	ug/L		01/08/17	LZ	D2

Matrix:	Water	**Client:**	CES Group, Inc.	**Collector:**	Client
Sampled:	12/23/2016 10:00	**Site:**			
Sample #:	**386235-132**	**Client Sample #:**	Drum Water	**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
trans-1,4-dichloro-2-butene	ND	5	0.85	25	ug/L		01/08/17	LZ	D2
Trichloroethene	ND	5	1.95	25	ug/L		01/08/17	LZ	D2
Trichlorofluoromethane	ND	5	1.25	25	ug/L		01/08/17	LZ	D2
Vinyl Chloride	ND	5	0.9	25	ug/L		01/08/17	LZ	D2
Xylenes (Total)	ND	5	2.25	25	ug/L		01/08/17	LZ	D2

Surrogate	*% Recovery*	*Limits*	*Notes*
1,2-Dichloroethane-d4 (SUR)	*102*	*70-145*	
4-Bromofluorobenzene (SUR)	*107*	*70-145*	
Dibromodifluoromethane (SUR)	*99*	*70-145*	
Toluene-d8 (SUR)	*104*	*70-145*	

QCBatchID: QC1174113	Analyst: lucy	Method: EPA 8260B
Matrix: Water	Analyzed: 01/07/2017	Instrument: VOA-MS (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174113MB1					
1,1,1,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,1-Trichloroethane	ND	ug/L	0.38	5	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.25	5	
1,1,2-Trichloroethane	ND	ug/L	0.25	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/L	0.29	5	
1,1-Dichloroethane	ND	ug/L	0.32	5	
1,1-Dichloroethene	ND	ug/L	0.3	5	
1,1-Dichloropropene	ND	ug/L	0.25	5	
1,2,3-Trichlorobenzene	ND	ug/L	0.28	5	
1,2,3-Trichloropropane	ND	ug/L	0.16	5	
1,2,4-Trichlorobenzene	ND	ug/L	0.27	5	
1,2,4-Trimethylbenzene	ND	ug/L	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/L	0.12	5	
1,2-Dibromoethane	ND	ug/L	0.19	5	
1,2-Dichlorobenzene	ND	ug/L	0.26	5	
1,2-Dichloroethane	ND	ug/L	0.2	5	
1,2-Dichloropropane	ND	ug/L	0.36	5	
1,3,5-Trimethylbenzene	ND	ug/L	0.24	5	
1,3-Dichlorobenzene	ND	ug/L	0.34	5	
1,3-Dichloropropane	ND	ug/L	0.19	5	
1,4-Dichlorobenzene	ND	ug/L	0.43	5	
2,2-Dichloropropane	ND	ug/L	0.32	5	
2-Butanone (MEK)	ND	ug/L	0.78	100	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.23	10	
2-Chlorotoluene	ND	ug/L	0.33	5	
4-Chlorotoluene	ND	ug/L	0.31	5	
4-Isopropyltoluene	ND	ug/L	0.32	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	0.12	5	
Acetone	ND	ug/L	10	100	
Allyl Chloride	ND	ug/L	0.19	5	
Benzene	ND	ug/L	0.18	1	
Bromobenzene	ND	ug/L	0.53	5	
Bromochloromethane	ND	ug/L	0.17	5	
Bromodichloromethane	ND	ug/L	0.31	5	
Bromoform	ND	ug/L	0.13	5	
Bromomethane	ND	ug/L	0.68	5	
Carbon Tetrachloride	ND	ug/L	0.27	5	
Chlorobenzene	ND	ug/L	0.19	5	
Chlorodibromomethane	ND	ug/L	0.21	5	
Chloroethane	ND	ug/L	0.45	5	
Chloroform	ND	ug/L	0.18	5	
Chloromethane	ND	ug/L	0.27	5	
cis-1,2-Dichloroethene	ND	ug/L	0.27	5	
cis-1,3-dichloropropene	ND	ug/L	0.25	5	
cis-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Dibromomethane	ND	ug/L	0.23	5	
Dichlorodifluoromethane	ND	ug/L	0.33	5	
Di-isopropyl ether (DIPE)	ND	ug/L	0.17	1	
Ethylbenzene	ND	ug/L	0.21	5	
Ethyl-tertbutylether (ETBE)	ND	ug/L	0.23	1	
Hexachlorobutadiene	ND	ug/L	0.51	5	

QCBatchID: QC1174113	**Analyst:** lucy	**Method:** EPA 8260B	
Matrix: Water	**Analyzed:** 01/07/2017	**Instrument:** VOA-MS (group)	

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174113MB1					
Isopropylbenzene	ND	ug/L	0.24	5	
m and p-Xylene	ND	ug/L	0.45	5	
Methylene chloride	ND	ug/L	0.16	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/L	0.19	1	
Naphthalene	ND	ug/L	0.25	5	
N-butylbenzene	ND	ug/L	0.25	5	
N-propylbenzene	ND	ug/L	0.31	5	
o-Xylene	ND	ug/L	0.29	5	
Sec-butylbenzene	ND	ug/L	0.32	5	
Styrene	ND	ug/L	0.22	5	
t-Butyl alcohol (TBA)	ND	ug/L	5.2	10	
Tert-amylmethylether (TAME)	ND	ug/L	0.19	5	
Tert-butylbenzene	ND	ug/L	0.4	5	
Tetrachloroethene	ND	ug/L	0.8	5	
Toluene	ND	ug/L	0.24	5	
trans-1,2-dichloroethene	ND	ug/L	0.33	5	
trans-1,3-dichloropropene	ND	ug/L	0.23	5	
trans-1,4-dichloro-2-butene	ND	ug/L	0.17	5	
Trichloroethene	ND	ug/L	0.39	5	
Trichlorofluoromethane	ND	ug/L	0.25	5	
Vinyl Chloride	ND	ug/L	0.18	5	
Xylenes (Total)	ND	ug/L	0.45	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174113LCS1											
1,1-Dichloroethene	50		48		ug/L	96			59-172		
Benzene	50		47		ug/L	94			62-137		
Chlorobenzene	50		49		ug/L	98			60-133		
Methyl-t-butyl Ether (MTBE)	50		60		ug/L	120			62-137		
Toluene	50		48		ug/L	96			59-139		
Trichloroethene	50		52		ug/L	104			66-142		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174113MS1, QC1174113MSD1												**Source: 386231-001**
1,1-Dichloroethene	ND	50	50	52	46	ug/L	104	92	12.2	59-172	22	
Benzene	ND	50	50	51	46	ug/L	102	92	10.3	62-137	24	
Chlorobenzene	ND	50	50	51	46	ug/L	102	92	10.3	60-133	24	
Methyl-t-butyl Ether (MTBE)	ND	50	50	60	58	ug/L	120	116	3.4	62-137	21	
Toluene	ND	50	50	48	45	ug/L	96	90	6.5	59-139	21	
Trichloroethene	ND	50	50	51	47	ug/L	102	94	8.2	66-142	21	

QCBatchID: QC1174135	Analyst: nhernandez	Method: EPA 8081A
Matrix: Solid	Analyzed: 01/09/2017	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174135MB1					
4,4'-DDD	ND	mg/Kg	0.67	5	
4,4'-DDE	ND	mg/Kg	0.57	5	
4,4'-DDT	ND	mg/Kg	0.95	5	
a-BHC	ND	mg/Kg	0.2	5	
Aldrin	ND	mg/Kg	0.34	5	
b-BHC	ND	mg/Kg	1.2	5	
Chlordane (technical)	ND	mg/Kg	12	50	
d-BHC	ND	mg/Kg	0.45	5	
Dieldrin	ND	mg/Kg	0.63	5	
Endosulfan I	ND	mg/Kg	0.28	5	
Endosulfan II	ND	mg/Kg	0.8	5	
Endosulfan sulfate	ND	mg/Kg	1.7	5	
Endrin	ND	mg/Kg	0.62	5	
Endrin aldehyde	ND	mg/Kg	0.9	5	
Endrin Ketone	ND	mg/Kg	1.2	5	
Heptachlor	ND	mg/Kg	0.44	5	
Heptachlor epoxide	ND	mg/Kg	0.27	5	
Lindane (Gamma-BHC)	ND	mg/Kg	0.3	5	
Methoxychlor	ND	mg/Kg	5.2	10	
Toxaphene	ND	mg/Kg	12	100	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174135LCS1											
4,4'-DDE	0.05		0.04		mg/Kg	80			70-130		
4,4'-DDT	0.05		0.04		mg/Kg	80			70-130		
a-BHC	0.05		0.04		mg/Kg	80			70-130		
Aldrin	0.05		0.04		mg/Kg	80			70-130		
b-BHC	0.05		0.04		mg/Kg	80			70-130		
d-BHC	0.05		0.04		mg/Kg	80			70-130		
Dieldrin	0.05		0.04		mg/Kg	80			70-130		
Endosulfan I	0.05		0.04		mg/Kg	80			70-130		
Endosulfan II	0.05		0.04		mg/Kg	80			70-130		
Endosulfan sulfate	0.05		0.04		mg/Kg	80			70-130		
Endrin	0.05		0.04		mg/Kg	80			70-130		
Endrin aldehyde	0.05		0.04		mg/Kg	80			70-130		
Heptachlor	0.05		0.04		mg/Kg	80			70-130		
Heptachlor epoxide	0.05		0.04		mg/Kg	80			70-130		
Lindane (Gamma-BHC)	0.05		0.04		mg/Kg	80			70-130		
Methoxychlor	0.05		0.05		mg/Kg	100			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174135MS1, QC1174135MSD1												**Source: 386202-001**
4,4'-DDE	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
4,4'-DDT	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
a-BHC	ND	0.05	0.05	0.02	0.03	mg/Kg	40	60	40.0	70-130	20	
Aldrin	ND	0.05	0.05	0.03	0.03	mg/Kg	60	60	0.0	70-130	20	
b-BHC	ND	0.05	0.05	0.03	0.03	mg/Kg	60	60	0.0	70-130	20	

QCBatchID: QC1174135	**Analyst:** nhernandez	**Method:** EPA 8081A	
Matrix: Solid	**Analyzed:** 01/09/2017	**Instrument:** SVOA-GC (group)	

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174135MS1, QC1174135MSD1											**Source:**	**386202-001**
d-BHC	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Dieldrin	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Endosulfan I	ND	0.05	0.05	0.03	0.03	mg/Kg	60	60	0.0	70-130	20	
Endosulfan II	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Endosulfan sulfate	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Endrin	ND	0.05	0.05	0.04	0.04	mg/Kg	80	80	0.0	70-130	20	
Endrin aldehyde	ND	0.05	0.05	0.04	0.03	mg/Kg	80	60	28.6	70-130	20	
Heptachlor	ND	0.05	0.05	0.03	0.03	mg/Kg	60	60	0.0	70-130	20	
Heptachlor epoxide	ND	0.05	0.05	0.03	0.04	mg/Kg	60	80	28.6	70-130	20	
Lindane (Gamma-BHC)	ND	0.05	0.05	0.02	0.03	mg/Kg	40	60	40.0	70-130	20	
Methoxychlor	ND	0.05	0.05	0.05	0.04	mg/Kg	100	80	22.2	70-130	20	

QCBatchID: QC1174152	**Analyst:** nicollez		**Method:** EPA 8260B		
Matrix: Solid	**Analyzed:** 01/09/2017		**Instrument:** VOA-MS (group)		

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174152MB1					
1,1,1,2-Tetrachloroethane	ND	ug/Kg	0.24	5	
1,1,1-Trichloroethane	ND	ug/Kg	0.15	5	
1,1,2,2-Tetrachloroethane	ND	ug/Kg	0.29	5	
1,1,2-Trichloroethane	ND	ug/Kg	0.22	5	
1,1,2-Trichlorotrifluoroethane	ND	ug/Kg	0.74	5	
1,1-Dichloroethane	ND	ug/Kg	0.23	5	
1,1-Dichloroethene	ND	ug/Kg	0.18	5	
1,1-Dichloropropene	ND	ug/Kg	0.21	5	
1,2,3-Trichlorobenzene	ND	ug/Kg	0.18	5	
1,2,3-Trichloropropane	ND	ug/Kg	0.2	5	
1,2,4-Trichlorobenzene	ND	ug/Kg	0.33	5	
1,2,4-Trimethylbenzene	ND	ug/Kg	0.28	5	
1,2-Dibromo-3-chloropropane	ND	ug/Kg	0.2	5	
1,2-Dibromoethane	ND	ug/Kg	0.12	5	
1,2-Dichlorobenzene	ND	ug/Kg	0.18	5	
1,2-Dichloroethane	ND	ug/Kg	0.14	5	
1,2-Dichloropropane	ND	ug/Kg	0.34	5	
1,3,5-Trimethylbenzene	ND	ug/Kg	0.23	5	
1,3-Dichlorobenzene	ND	ug/Kg	0.21	5	
1,3-Dichloropropane	ND	ug/Kg	0.19	5	
1,4-Dichlorobenzene	ND	ug/Kg	0.24	5	
2,2-Dichloropropane	ND	ug/Kg	0.19	5	
2-Butanone (MEK)	ND	ug/Kg	0.72	100	
2-Chloroethyl Vinyl Ether	ND	ug/Kg	0.3	5	
2-Chlorotoluene	ND	ug/Kg	0.25	5	
4-Chlorotoluene	ND	ug/Kg	0.22	5	
4-Isopropyltoluene	ND	ug/Kg	0.27	5	
4-Methyl-2-pentanone (MIBK)	ND	ug/Kg	0.17	5	
Acetone	ND	ug/Kg	10	100	
Allyl Chloride	ND	ug/Kg	0.14	5	
Benzene	ND	ug/Kg	0.18	5	
Bromobenzene	ND	ug/Kg	0.3	5	
Bromochloromethane	ND	ug/Kg	0.18	5	
Bromodichloromethane	ND	ug/Kg	0.2	5	
Bromoform	ND	ug/Kg	0.19	5	
Bromomethane	ND	ug/Kg	0.22	5	
Carbon Tetrachloride	ND	ug/Kg	0.18	5	
Chlorobenzene	ND	ug/Kg	0.18	5	
Chlorodibromomethane	ND	ug/Kg	0.19	5	
Chloroethane	ND	ug/Kg	0.2	5	
Chloroform	ND	ug/Kg	0.17	5	
Chloromethane	ND	ug/Kg	0.21	5	
cis-1,2-Dichloroethene	ND	ug/Kg	0.2	5	
cis-1,3-dichloropropene	ND	ug/Kg	0.2	5	
cis-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Dibromomethane	ND	ug/Kg	0.21	5	
Dichlorodifluoromethane	ND	ug/Kg	0.23	5	
Di-isopropyl ether (DIPE)	ND	ug/Kg	0.21	5	
Ethylbenzene	ND	ug/Kg	0.23	5	
Ethyl-tertbutylether (ETBE)	ND	ug/Kg	0.42	5	
Hexachlorobutadiene	ND	ug/Kg	0.42	5	

QCBatchID: QC1174152	**Analyst:** nicollez	**Method:** EPA 8260B	
Matrix: Solid	**Analyzed:** 01/09/2017	**Instrument:** VOA-MS (group)	

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174152MB1					
Isopropylbenzene	ND	ug/Kg	0.25	5	
m and p-Xylene	ND	ug/Kg	0.38	5	
Methylene chloride	ND	ug/Kg	0.21	5	
Methyl-t-butyl Ether (MTBE)	ND	ug/Kg	0.17	5	
Naphthalene	ND	ug/Kg	0.16	5	
N-butylbenzene	ND	ug/Kg	0.25	5	
N-propylbenzene	ND	ug/Kg	0.22	5	
o-Xylene	ND	ug/Kg	0.19	5	
Sec-butylbenzene	ND	ug/Kg	0.28	5	
Styrene	ND	ug/Kg	0.13	5	
t-Butyl alcohol (TBA)	ND	ug/Kg	8.8	10	
Tert-amylmethylether (TAME)	ND	ug/Kg	0.19	5	
Tert-butylbenzene	ND	ug/Kg	0.34	5	
Tetrachloroethene	ND	ug/Kg	0.23	5	
Toluene	ND	ug/Kg	0.17	5	
trans-1,2-dichloroethene	ND	ug/Kg	0.19	5	
trans-1,3-dichloropropene	ND	ug/Kg	0.18	5	
trans-1,4-dichloro-2-butene	ND	ug/Kg	0.2	5	
Trichloroethene	ND	ug/Kg	0.23	5	
Trichlorofluoromethane	ND	ug/Kg	0.23	5	
Vinyl Chloride	ND	ug/Kg	0.14	5	
Xylenes (Total)	ND	ug/Kg	0.38	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174152LCS1, QC1174152LCSD1											
1,1-Dichloroethene	50	50	51	52	ug/Kg	102	104	2	59-172	22	
Benzene	50	50	49	51	ug/Kg	98	102	4	62-137	24	
Chlorobenzene	50	50	51	53	ug/Kg	102	106	4	60-133	24	
Methyl-t-butyl Ether (MTBE)	50	50	47	50	ug/Kg	94	100	6	62-137	21	
Toluene	50	50	53	53	ug/Kg	106	106	0	59-139	21	
Trichloroethene	50	50	50	50	ug/Kg	100	100	0	66-142	21	

QCBatchID:	**QC1174158**	**Analyst:**	lytagas	**Method:**	EPA 8015M
Matrix:	Solid	**Analyzed:**	01/09/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174158MB1					
TPH (C10 to C28)	ND	mg/Kg		10	
TPH (C28 to C40)	ND	mg/Kg		20	
TPH (C8 to C10)	ND	mg/Kg		10	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174158LCS1											
TPH (C10 to C28)	250		300		mg/Kg	120			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174158MS1, QC1174158MSD1												**Source: 386275-001**
TPH (C10 to C28)	ND	250	250	260	220	mg/Kg	104	88	16.7	70-130	20	

QCBatchID:	**QC1174196**	**Analyst:**	nhernandez	**Method:**	EPA 8082
Matrix:	Solid	**Analyzed:**	01/10/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174196MB1					
PCB-1016	ND	ug/Kg	3	50	
PCB-1221	ND	ug/Kg	14	50	
PCB-1232	ND	ug/Kg	9.5	50	
PCB-1242	ND	ug/Kg	14	50	
PCB-1248	ND	ug/Kg	19	50	
PCB-1254	ND	ug/Kg	20	50	
PCB-1260	ND	ug/Kg	6.9	50	
PCB-1262	ND	ug/Kg	17	50	
PCB-1268	ND	ug/Kg	8.6	50	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174196LCS1											
PCB-1016	500		390		ug/Kg	78			70-130		
PCB-1260	500		400		ug/Kg	80			70-130		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174196MS1, QC1174196MSD1												**Source: 386077-014**
PCB-1016	ND	500	500	370	460	ug/Kg	74	92	21.7	70-130	20	M
PCB-1260	ND	500	500	320	450	ug/Kg	64	90	33.8	70-130	20	M

QCBatchID: QC1174210	Analyst: nhernandez	Method: EPA 8081A
Matrix: Water	Analyzed: 01/11/2017	Instrument: SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174210MB1					
4,4'-DDD	ND	ug/L	0.011	0.1	
4,4'-DDE	ND	ug/L	0.006	0.1	
4,4'-DDT	ND	ug/L	0.011	0.1	
a-BHC	ND	ug/L	0.002	0.1	
Aldrin	ND	ug/L	0.007	0.1	
b-BHC	ND	ug/L	0.003	0.1	
Chlordane (technical)	ND	ug/L	0.27	1	
d-BHC	ND	ug/L	0.006	0.1	
Dieldrin	ND	ug/L	0.006	0.1	
Endosulfan I	ND	ug/L	0.004	0.1	
Endosulfan II	ND	ug/L	0.011	0.1	
Endosulfan sulfate	ND	ug/L	0.012	0.1	
Endrin	ND	ug/L	0.008	0.1	
Endrin aldehyde	ND	ug/L	0.009	0.1	
Endrin Ketone	ND	ug/L	0.011	0.1	
Heptachlor	ND	ug/L	0.003	0.1	
Heptachlor epoxide	ND	ug/L	0.002	0.1	
Lindane (Gamma-BHC)	ND	ug/L	0.002	0.1	
Methoxychlor	ND	ug/L	0.055	0.1	
Toxaphene	ND	ug/L	0.48	2	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174210LCS1, QC1174210LCSD1											
4,4'-DDE	0.05	0.05	0.044	0.046	ug/L	88	92	4	70-130	20	
4,4'-DDT	0.05	0.05	0.047	0.048	ug/L	94	96	2	70-130	20	
a-BHC	0.05	0.05	0.042	0.045	ug/L	84	90	7	70-130	20	
Aldrin	0.05	0.05	0.040	0.043	ug/L	80	86	7	70-130	20	
b-BHC	0.05	0.05	0.041	0.044	ug/L	82	88	7	70-130	20	
d-BHC	0.05	0.05	0.044	0.047	ug/L	88	94	7	70-130	20	
Dieldrin	0.05	0.05	0.044	0.046	ug/L	88	92	4	70-130	20	
Endosulfan I	0.05	0.05	0.040	0.042	ug/L	80	84	5	70-130	20	
Endosulfan II	0.05	0.05	0.043	0.045	ug/L	86	90	5	70-130	20	
Endosulfan sulfate	0.05	0.05	0.051	0.052	ug/L	102	104	2	70-130	20	
Endrin	0.05	0.05	0.046	0.048	ug/L	92	96	4	70-130	20	
Endrin aldehyde	0.05	0.05	0.044	0.046	ug/L	88	92	4	70-130	20	
Heptachlor	0.05	0.05	0.044	0.047	ug/L	88	94	7	70-130	20	
Heptachlor epoxide	0.05	0.05	0.043	0.046	ug/L	86	92	7	70-130	20	
Lindane (Gamma-BHC)	0.05	0.05	0.042	0.045	ug/L	84	90	7	70-130	20	
Methoxychlor	0.05	0.05	0.055	0.057	ug/L	110	114	4	70-130	20	

QCBatchID:	**QC1174221**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	01/11/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174221MB1					
Arsenic	ND	mg/Kg	0.02	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1174221LCS1											
Arsenic	50		55.1		mg/Kg	110			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1174221MS1, QC1174221MSD1												**Source: 386235-059**
Arsenic	1.631	50	50	50.6	50.2	mg/Kg	98	97	0.8	75-125	20	

QCBatchID:	**QC1174222**	**Analyst:**	dswafford	**Method:**	EPA 6020
Matrix:	Solid	**Analyzed:**	01/11/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174222MB1					
Arsenic	ND	mg/Kg	0.02	0.3	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174222LCS1											
Arsenic	50		59.6		mg/Kg	119			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174222MS1, QC1174222MSD1												**Source: 386235-125**
Arsenic	2.95	50	50	45.9	45.5	mg/Kg	86	85	0.9	75-125	20	

QCBatchID:	**QC1174225**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	01/11/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174225MB1					
Lead	ND	mg/Kg	0.32	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174225LCS1											
Lead	100		108		mg/Kg	108			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174225MS1, QC1174225MSD1												**Source: 384618-005**
Lead	14.7	100	100	110	114	mg/Kg	95	99	3.6	75-125	20	

QCBatchID: QC1174226	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/11/2017	**Instrument:** AAICP (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174226MB1					
Antimony	ND	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	ND	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	0.5	
Molybdenum	ND	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	1	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	1	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	**0.85 J**	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174226LCS1											
Antimony	100		94.9		mg/Kg	95			80-120		
Arsenic	100		95.2		mg/Kg	95			80-120		
Barium	100		103		mg/Kg	103			80-120		
Beryllium	100		97.5		mg/Kg	98			80-120		
Cadmium	100		103		mg/Kg	103			80-120		
Chromium	100		100		mg/Kg	100			80-120		
Cobalt	100		98.9		mg/Kg	99			80-120		
Copper	100		103		mg/Kg	103			80-120		
Lead	100		101		mg/Kg	101			80-120		
Molybdenum	100		95.2		mg/Kg	95			80-120		
Nickel	100		98.9		mg/Kg	99			80-120		
Selenium	100		87.6		mg/Kg	88			80-120		
Silver	100		92.4		mg/Kg	92			80-120		
Thallium	100		97.9		mg/Kg	98			80-120		
Vanadium	100		108		mg/Kg	108			80-120		
Zinc	100		95.9		mg/Kg	96			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174226MS1, QC1174226MSD1												**Source: 386235-035**
Antimony	ND	100	100	25.6	25.6	mg/Kg	26	26	0.0	75-125	20	M
Arsenic	11.5	100	100	108	104	mg/Kg	97	93	3.8	75-125	20	
Barium	147	100	100	259	247	mg/Kg	112	100	4.7	75-125	20	
Beryllium	ND	100	100	96.6	92.1	mg/Kg	97	92	4.8	75-125	20	
Cadmium	3.59	100	100	111	108	mg/Kg	107	104	2.7	75-125	20	
Chromium	84.0	100	100	190	183	mg/Kg	106	99	3.8	75-125	20	
Cobalt	9.97	100	100	107	105	mg/Kg	97	95	1.9	75-125	20	
Copper	97.8	100	100	206	192	mg/Kg	108	94	7.0	75-125	20	
Lead	176	100	100	280	267	mg/Kg	104	91	4.8	75-125	20	

QCBatchID: QC1174226	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/11/2017	**Instrument:** AAICP (group)			

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174226MS1, QC1174226MSD1											**Source:**	**386235-035**
Molybdenum	0.49	100	100	91.9	90.2	mg/Kg	91	90	1.9	75-125	20	
Nickel	17.2	100	100	115	114	mg/Kg	98	97	0.9	75-125	20	
Selenium	ND	100	100	30.0	29.5	mg/Kg	30	30	1.7	75-125	20	M
Silver	2.62	100	100	94.8	90.4	mg/Kg	92	88	4.8	75-125	20	
Thallium	ND	100	100	88.9	87.2	mg/Kg	89	87	1.9	75-125	20	
Vanadium	32.3	100	100	142	136	mg/Kg	110	104	4.3	75-125	20	
Zinc	226	100	100	336	329	mg/Kg	110	103	2.1	75-125	20	

QCBatchID:	**QC1174263**	**Analyst:**	JParedes	**Method:**	EPA 7471A
Matrix:	Solid	**Analyzed:**	01/12/2017	**Instrument:**	AAICP-HG1

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174263MB1					
Mercury	ND	mg/Kg	0.02	0.14	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174263LCS1											
Mercury	0.83		0.82		mg/Kg	99			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174263MS1, QC1174263MSD1												**Source: 386235-131**
Mercury	0.03	0.83	0.83	0.82	0.88	mg/Kg	95	102	7.1	75-125	20	

QCBatchID:	**QC1174265**	**Analyst:**	lytagas	**Method:**	EPA 8015B
Matrix:	Water	**Analyzed:**	01/12/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174265MB1					
TPH (C10 to C22)	ND	mg/L	0.04	0.1	
TPH (C22 to C36)	ND	mg/L	0.07	0.3	
TPH (C8 to C10)	ND	mg/L	0.06	0.2	

QCBatchID:	**QC1174351**	**Analyst:**	nhernandez	**Method:**	EPA 8082
Matrix:	Water	**Analyzed:**	01/16/2017	**Instrument:**	SVOA-GC (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174351MB1					
PCB-1016	ND	ug/L	0.13	0.5	
PCB-1221	ND	ug/L	0.24	0.5	
PCB-1232	ND	ug/L	0.12	0.5	
PCB-1242	ND	ug/L	0.071	0.5	
PCB-1248	ND	ug/L	0.12	0.5	
PCB-1254	ND	ug/L	0.084	0.5	
PCB-1260	ND	ug/L	0.082	0.5	
PCB-1262	ND	ug/L	0.083	0.5	
PCB-1268	ND	ug/L	0.039	0.5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174351LCS1, QC1174351LCSD1											
PCB-1016	5	5	4.4	4.5	ug/L	88	90	2	70-130	20	
PCB-1260	5	5	3.7	3.6	ug/L	74	72	3	70-130	20	

QCBatchID: QC1174444	**Analyst:** jeannynguye	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/18/2017	**Instrument:** AAICP (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174444MB1					
Antimony	**0.51 J**	mg/Kg	0.37	3	
Arsenic	ND	mg/Kg	0.36	1	
Barium	ND	mg/Kg	0.23	1	
Beryllium	ND	mg/Kg	0.17	0.5	
Cadmium	ND	mg/Kg	0.21	0.5	
Chromium	ND	mg/Kg	0.13	1	
Cobalt	ND	mg/Kg	0.19	0.5	
Copper	ND	mg/Kg	0.31	1	
Lead	ND	mg/Kg	0.32	0.5	
Molybdenum	ND	mg/Kg	0.13	1	
Nickel	ND	mg/Kg	0.2	1.5	
Selenium	ND	mg/Kg	0.72	1	
Silver	ND	mg/Kg	0.13	0.5	
Thallium	ND	mg/Kg	0.42	1	
Vanadium	ND	mg/Kg	0.37	0.5	
Zinc	ND	mg/Kg	0.28	5	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174444LCS1											
Antimony	100		107		mg/Kg	107			80-120		
Arsenic	100		91.7		mg/Kg	92			80-120		
Barium	100		104		mg/Kg	104			80-120		
Beryllium	100		95.7		mg/Kg	96			80-120		
Cadmium	100		101		mg/Kg	101			80-120		
Chromium	100		98.9		mg/Kg	99			80-120		
Cobalt	100		101		mg/Kg	101			80-120		
Copper	100		92.9		mg/Kg	93			80-120		
Lead	100		98.7		mg/Kg	99			80-120		
Molybdenum	100		100		mg/Kg	100			80-120		
Nickel	100		101		mg/Kg	101			80-120		
Selenium	100		86.6		mg/Kg	87			80-120		
Silver	100		92.0		mg/Kg	92			80-120		
Thallium	100		100		mg/Kg	100			80-120		
Vanadium	100		97.9		mg/Kg	98			80-120		
Zinc	100		98.2		mg/Kg	98			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174444MS1, QC1174444MSD1												**Source: 386559-001**
Antimony	0.42	100	100	115	104	mg/Kg	115	104	10.0	75-125	20	
Arsenic	ND	100	100	109	103	mg/Kg	109	103	5.7	75-125	20	
Barium	2.66	100	100	114	111	mg/Kg	111	108	2.7	75-125	20	
Beryllium	ND	100	100	117	106	mg/Kg	117	106	9.9	75-125	20	
Cadmium	ND	100	100	118	113	mg/Kg	118	113	4.3	75-125	20	
Chromium	0.42	100	100	110	110	mg/Kg	110	110	0.0	75-125	20	
Cobalt	ND	100	100	113	115	mg/Kg	113	115	1.8	75-125	20	
Copper	2.48	100	100	111	109	mg/Kg	109	107	1.8	75-125	20	
Lead	ND	100	100	111	108	mg/Kg	111	108	2.7	75-125	20	

QCBatchID: QC1174444	**Analyst:** jeannynguye	**Method:** EPA 6010B	
Matrix: Solid	**Analyzed:** 01/18/2017	**Instrument:** AAICP (group)	

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174444MS1, QC1174444MSD1											**Source:**	**386559-001**
Molybdenum	0.15	100	100	112	108	mg/Kg	112	108	3.6	75-125	20	
Nickel	0.30	100	100	115	117	mg/Kg	115	117	1.7	75-125	20	
Selenium	1.73	100	100	111	103	mg/Kg	109	101	7.5	75-125	20	
Silver	ND	100	100	100	95.7	mg/Kg	100	96	4.4	75-125	20	
Thallium	ND	100	100	108	108	mg/Kg	108	108	0.0	75-125	20	
Vanadium	0.47	100	100	112	110	mg/Kg	112	110	1.8	75-125	20	
Zinc	6.94	100	100	121	117	mg/Kg	114	110	3.4	75-125	20	

QCBatchID:	**QC1174535**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	01/20/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174535MB1					
Lead	ND	mg/L	0.012	0.015	

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174535MS1, QC1174535MSD1												**Source: 386235-011**
Lead	5.16	10	10	15.1	15.7	mg/L	99	105	3.9	75-125	20	

QCBatchID: QC1174536	**Analyst:** dswafford	**Method:** EPA 6010B			
Matrix: Solid	**Analyzed:** 01/20/2017	**Instrument:** AAICP (group)			

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174536MB1					
Arsenic	ND	mg/L	0.004	0.05	
Barium	**0.08 J**	mg/L	0.001	0.5	
Cadmium	ND	mg/L	0.001	0.05	
Chromium	ND	mg/L	0.002	0.05	
Lead	ND	mg/L	0.004	0.05	
Selenium	**0.031 J**	mg/L	0.004	0.05	
Silver	ND	mg/L	0.001	0.05	
QC1174536MB2					
Arsenic	ND	mg/L	0.004	0.05	
Barium	**0.07 J**	mg/L	0.001	0.5	
Cadmium	ND	mg/L	0.001	0.05	
Chromium	ND	mg/L	0.002	0.05	
Lead	ND	mg/L	0.004	0.05	
Selenium	ND	mg/L	0.004	0.05	
Silver	ND	mg/L	0.001	0.05	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174536LCS1											
Arsenic	2		2.50		mg/L	125			80-120		L
Barium	2		2.25		mg/L	113			80-120		
Cadmium	2		2.44		mg/L	122			80-120		L
Chromium	2		2.14		mg/L	107			80-120		
Lead	2		2.16		mg/L	108			80-120		
Selenium	2		2.57		mg/L	129			80-120		L
Silver	2		2.21		mg/L	111			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1174536MS1, QC1174536MSD1												**Source: 386235-035**
Arsenic	0.079	1	1	1.376	1.319	mg/L	130	124	4.2	75-125	20	M
Barium	0.54	1	1	1.68	1.60	mg/L	114	106	4.9	75-125	20	
Cadmium	ND	1	1	1.270	1.233	mg/L	127	123	3.0	75-125	20	M
Chromium	ND	1	1	1.137	1.082	mg/L	114	108	5.0	75-125	20	
Lead	ND	1	1	1.178	1.113	mg/L	118	111	5.7	75-125	20	
Selenium	0.034	1	1	1.325	1.289	mg/L	129	126	2.8	75-125	20	M
Silver	0.002	1	1	1.105	1.055	mg/L	110	105	4.6	75-125	20	

QCBatchID:	**QC1174730**	**Analyst:**	dswafford	**Method:**	EPA 6010B
Matrix:	Solid	**Analyzed:**	01/26/2017	**Instrument:**	AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1174730MB1					
Lead	ND	mg/L	0.004	0.05	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD		%Rec	RPD	
QC1174730LCS1											
Lead	2		1.807		mg/L	90			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries		RPD	Limits		Notes
		MS	MSD	MS	MSD		MS	MSD		%Rec	RPD	
QC1174730MS1, QC1174730MSD1												**Source: 386235-011**
Lead	0.051	1	1	0.920	0.918	mg/L	87	87	0.2	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No: 386235	Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 1 of 12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					

ENTHALPY analytical, inc.

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

Analysis Request

Test Instructions / Comments

Analyze 0.5' samples. Hold deeper samples.

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S1-0.5ft	01/05/17	1:10 PM	S	1/8oz		x										
2	S1-1.5ft	01/05/17	1:15 PM	S	1/8oz											x	
3	S1-2.5ft	01/05/17	1:20 PM	S	1/8oz											x	
4	S2-0.5ft	01/05/17	12:40 PM	S	1/8oz		x										
5	S2-1.5ft	01/05/17	12:45 PM	S	1/8oz											x	
6	S2-2.5ft	01/05/17	12:50 PM	S	1/8oz											x	
7	S3-0.5ft	01/05/17	12:30 PM	S	1/8oz		x		x								
8	S3-1.5ft	01/05/17	12:35 PM	S	1/8oz											x	
9	S3-2.5ft	01/05/17	12:40 PM	S	1/8oz											x	
10	S1D-0.5ft	01/05/17	1:13 PM	S	1/8oz		x										

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
1 Received By:	[signature]	L. Marrott		1/6/17 1400
2 Relinquished By:	[signature]	L. Marrott		1/6/17 1507
2 Received By:	[signature]	[illegible]		1/6/17 1507
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	386235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	2	of	12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S4-0.5ft	01/05/17	2:40 PM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S4-1.5ft	01/05/17	2:45 PM	S	1/8oz											x	
3	S4-2.5ft	01/05/17	2:50 PM	S	1/8oz											x	
4	S5-0.5ft	01/05/17	2:35 PM	S	1/8oz		x										
5	S5-1.5ft	01/05/17	2:40 PM	S	1/8oz											x	
6	S5-2.5ft	01/05/17	2:45 PM	S	1/8oz											x	
7	S6-0.5ft	01/05/17	10:00 AM	S	1/8oz		x										
8	S6-1.5ft	01/05/17	10:05 AM	S	1/8oz											x	
9	S6-2.5ft	01/05/17	10:10 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		E. Marroletti		1/6/17 1400
[2] Relinquished By:		E. Marroletti		1/6/17 1507
[2] Received By:		ZAID D		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.
806 N. Batavia St., Orange, CA 92868
Phone: (714) 771-6900 Fax: (714)771-9933
Billing: Enthalpy - SoCal
c/o Montrose Environmental Group
1 Park Plaza, Suite 1000, Irvine, CA 92614

ENTHALPY analytical, inc.

Chain of Custody Record

Lab No: 386235
Page: 3 of 12

Turn Around Time (Rush by advanced notice only)

Standard:	x	4 Day:		3 Day:	
2 Day:		1 Day:		Same Day:	

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S7-0.5ft	01/05/17	10:50 AM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S7-1.5ft	01/05/17	10:55 AM	S	1/8oz											x	
3	S7-2.5ft	01/05/17	11:00 AM	S	1/8oz											x	
4	S8-0.5ft	01/05/17	10:15 AM	S	1/8oz		x										
5	S8-1.5ft	01/05/17	10:20 AM	S	1/8oz											x	
6	S8-2.5ft	01/05/17	10:25 AM	S	1/8oz											x	
7	S9-0.5ft	01/05/17	10:30 AM	S	1/8oz		x										
8	S9-1.5ft	01/05/17	10:35 AM	S	1/8oz											x	
9	S9-2.5ft	01/05/17	10:40 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		C. Marcelli		1/6/17 1400
[2] Relinquished By:		C. Marcelli		1/6/17 1507
[2] Received By:		ZAID D.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386235	Standard: x 4 Day: 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 4 of 12	2 Day: 1 Day: Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)	pH		Hold	Test Instructions / Comments
1	S10-0.5ft	01/05/17	9:40 AM	S	1/8oz		x		x			x					Analyze 0.5' samples. Hold deeper samples unless analysis noted.
2	S10-1.5ft	01/05/17	9:45 AM	S	1/8oz											x	
3	S10-2.5ft	01/05/17	9:50 AM	S	1/8oz											x	
4	S11-0.5ft	01/05/17	10:00 AM	S	1/8oz		x										
5	S11-1.5ft	01/05/17	10:05 AM	S	1/8oz											x	
6	S11-2.5ft	01/05/17	10:10 AM	S	1/8oz											x	
7	S12-0.5ft	01/05/17	12:55 PM	S	1/8oz		x										
8	S12-1.5ft	01/05/17	1:00 PM	S	1/8oz											x	
9	S12-2.5ft	01/05/17	1:05 PM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marriott		1/6/17 1400
[2] Relinquished By:		L. Marriott		1/6/17 1507
[2] Received By:		FED EX		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 306235	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 5 of 12	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S13-0.5ft	01/05/17	2:00 PM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S13-1.5ft	01/05/17	2:05 PM	S	1/8oz											x	
3	S13-2.5ft	01/05/17	2:10 PM	S	1/8oz											x	
4	S14-0.5ft	01/05/17	11:10 AM	S	1/8oz		x										
5	S14-1.5ft	01/05/17	11:15 AM	S	1/8oz											x	
6	S14-2.5ft	01/05/17	11:20 AM	S	1/8oz											x	
7	S15-0.5ft	01/05/17	9:20 AM	S	1/8oz		x										
8	S15-1.5ft	01/05/17	9:25 AM	S	1/8oz											x	
9	S15-2.5ft	01/05/17	9:30 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marcelli		1/6/17 1400
[2] Relinquished By:		L. Marcelli		1/6/17 1507
[2] Received By:		ZAID P.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No: 386235				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 6	of	12		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group										
1 Park Plaza, Suite 1000, Irvine, CA 92614										

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S16-0.5ft	01/05/17	8:50 AM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S16-1.5ft	01/05/17	8:55 AM	S	1/8oz											x	
3	S16-2.5ft	01/05/17	9:00 AM	S	1/8oz											x	
4	S17-0.5ft	01/05/17	8:20 AM	S	1/8oz		x										
5	S17-1.5ft	01/05/17	8:25 AM	S	1/8oz											x	
6	S17-2.5ft	01/05/17	8:30 AM	S	1/8oz											x	
7	S18-0.5ft	01/05/17	7:50 AM	S	1/8oz		x										
8	S18-1.5ft	01/05/17	7:55 AM	S	1/8oz											x	
9	S18-2.5ft	01/05/17	8:00 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Mangelli		1/6/17 1400
[2] Relinquished By:		L. Mangelli		1/6/17 1507
[2] Received By:		ZAIO P.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.
806 N. Batavia St., Orange, CA 92868
Phone: (714) 771-6900 Fax: (714)771-9933
Billing: Enthalpy - SoCal
c/o Montrose Environmental Group
1 Park Plaza, Suite 1000, Irvine, CA 92614

ENTHALPY analytical, inc.

Chain of Custody Record

Lab No: 3806235
Page: 7 of 12

Turn Around Time (Rush by advanced notice only)

Standard:	x	4 Day:		3 Day:	
2 Day:		1 Day:		Same Day:	

Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S19-0.5ft	01/05/17	8:30 AM	S	1/8oz		x										Analyze 0.5' samples. Hold deeper samples.
2	S19-1.5ft	01/05/17	8:35 AM	S	1/8oz											x	
3	S19-2.5ft	01/05/17	8:40 AM	S	1/8oz											x	
4	S29-0.5ft	01/05/17	11:40 AM	S	1/8oz			x									
5	S29-1.5ft	01/05/17	11:45 AM	S	1/8oz											x	
6	S29-2.5ft	01/05/17	11:50 AM	S	1/8oz											x	
7	S30-0.5ft	01/05/17	11:15 AM	S	1/8oz			x				x					
8	S30-1.5ft	01/05/17	11:30 AM	S	1/8oz											x	
9	S30-2.5ft	01/05/17	11:35 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	D Baysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		E Marriott		1/6/17 1400
[2] Relinquished By:		E Marriott		1/6/17 1507
[2] Received By:		ZHOP		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No: 386235	Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 8 of 12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

Analysis Request

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S31-0.5ft	01/05/17	12:40 PM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S31-1.5ft	01/05/17	12:45 PM	S	1/8oz											x	
3	S31-2.5ft	01/05/17	12:50 PM	S	1/8oz											x	
4	S33-0.5ft	01/05/17	9:05 AM	S	1/8oz			x									
5	S33-1.5ft	01/05/17	9:10 AM	S	1/8oz											x	
6	S33-2.5ft	01/05/17	9:15 AM	S	1/8oz											x	
7	S34-0.5ft	01/05/17	8:35 AM	S	1/8oz			x									
8	S34-1.5ft	01/05/17	8:40 AM	S	1/8oz											x	
9	S34-2.5ft	01/05/17	8:45 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:	D Baysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
1 Received By:	[signature]	L. Marrotti		1/6/17 1400
2 Relinquished By:	[signature]	L. Marrotti		1/6/17 1507
2 Received By:	[signature]	TAD		1/6/17 1507
3 Relinquished By:				
3 Received By:				

ENTHALPY ANALYTICAL, INC.	Chain of Custody Record	Turn Around Time (Rush by advanced notice only)
806 N. Batavia St., Orange, CA 92868	Lab No: 386235	Standard: x | 4 Day: | 3 Day:
Phone: (714) 771-6900 Fax: (714)771-9933	Page: 9 of 12	2 Day: | 1 Day: | Same Day:
Billing: Enthalpy - SoCal c/o Montrose Environmental Group 1 Park Plaza, Suite 1000, Irvine, CA 92614	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other	**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S35-0.5ft	01/05/17	8:35 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S35-1.5ft	01/05/17	8:40 AM	S	1/8oz											x	
3	S35-2.5ft	01/05/17	8:45 AM	S	1/8oz											x	
4	S36-0.5ft	01/05/17	8:05 AM	S	1/8oz			x									
5	S36-1.5ft	01/05/17	8:10 AM	S	1/8oz											x	
6	S36-2.5ft	01/05/17	8:15 AM	S	1/8oz											x	
7	S40-0.5ft	01/05/17	8:00 AM	S	1/8oz			x				x					
8	S40-1.5ft	01/05/17	8:15 AM	S	1/8oz											x	
9	S40-2.5ft	01/05/17	8:20 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marriott		1/6/17 1400
[2] Relinquished By:		L. Marriott		1/6/17 1507
[2] Received By:				1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No: 386235				Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page: 10	of	12		2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3					
c/o Montrose Environmental Group		FL = Food Liquid FS = Food Solid L = Liquid				4 = H_2SO_4 5 = NaOH 6 = Other					
1 Park Plaza, Suite 1000, Irvine, CA 92614		PP = Pure Product S = Solid SeaW = Sea Water									
		SW = Swab W = Water WP = Wipe O = Other									

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S78-0.5ft	01/05/17		S	1/8oz				x								Analyze 0.5' samples. Hold deeper samples.
2	S78-1.5ft	01/05/17		S	1/8oz											x	
3	S78-2.5ft	01/05/17		S	1/8oz											x	
4	S79-0.5ft	01/05/17		S	1/8oz		x		x								
5	S79-1.5ft	01/05/17		S	1/8oz											x	
6	S79-2.5ft	01/05/17		S	1/8oz											x	
7	S78D-0.5ft	01/05/17		S	1/8oz				x								
8	S79D-0.5ft	01/05/17		S	1/8oz		x		x								
9																	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:	DBaysa	Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marrokkt		1/6/17 1400
[2] Relinquished By:		L. Marrokkt		1/6/17 1507
[2] Received By:		TODD P		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	306235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	11	of	12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S86-0.5ft	01/05/17	1:25 PM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S86-1.5ft	01/05/17	1:30 PM	S	1/8oz											x	
3	S86-2.5ft	01/05/17	1:35 PM	S	1/8oz											x	
4	S87-0.5ft	01/05/17	1:10 PM	S	1/8oz			x									
5	S87-1.5ft	01/05/17	1:15 PM	S	1/8oz											x	
6	S87-2.5ft	01/05/17	1:20 PM	S	1/8oz											x	
7	S88-0.5ft	01/05/17	1:40 PM	S	1/8oz			x									
8	S88-1.5ft	01/05/17	1:45 PM	S	1/8oz											x	
9	S88-2.5ft	01/05/17	1:50 PM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
[1] Received By:		L. Marrokki		1/6/17 1400
[2] Relinquished By:		L. Marrokki		1/6/17 1507
[2] Received By:		[illegible]		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	3806235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	12	of	12	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other					Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S89-0.5ft	01/05/17	2:10 PM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S89-1.5ft	01/05/17	2:15 PM	S	1/8oz											x	
3	S89-2.5ft	01/05/17	2:20 PM	S	1/8oz											x	
4	S90-0.5ft	01/05/17	1:55 PM	S	1/8oz			x				x					
5	S90-1.5ft	01/05/17	2:00 PM	S	1/8oz											x	
6	S90-2.5ft	01/05/17	2:05 PM	S	1/8oz											x	
7																	
8																	
9																	
10																	

	Signature	Print Name	Company / Title	Date / Time
1 Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 0600
1 Received By:		L. Marcelli		1/6/17 1400
2 Relinquished By:		L. Marcelli		1/6/17 1507
2 Received By:		ZOTP		1/6/17 1507
3 Relinquished By:				
3 Received By:				

ENTHALPHY ANALYTICAL, INC.	Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868	Lab No:	396235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933	Page:	1	of	3	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal	**Matrix:** A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				**Preservatives:** 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group										
1 Park Plaza, Suite 1000, Irvine, CA 92614										

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S27-0.5ft	01/06/17	8:05 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S27-1.5ft	01/06/17	8:10 AM	S	1/8oz											x	
3	S27-2.5ft	01/06/17	8:15 AM	S	1/8oz											x	
4	S28-0.5ft	01/06/17	7:55 AM	S	1/8oz			x									
5	S28-1.5ft	01/06/17	8:00 AM	S	1/8oz											x	
6	S28-2.5ft	01/06/17	8:05 AM	S	1/8oz											x	
7	S37-0.5ft	01/06/17	9:05 AM	S	1/8oz			x									
8	S37-1.5ft	01/06/17	9:10 AM	S	1/8oz											x	
9	S37-2.5ft	01/06/17	9:15 AM	S	1/8oz											x	
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 ~~1100~~ 1330
[1] Received By:		E. Marcketti		1/6/17 1400
[2] Relinquished By:		E. Marcketti		1/6/17 1507
[2] Received By:		ZAID P.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	396236			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	2	of	3	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S38-0.5ft	01/06/17	8:50 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S38-1.5ft	01/06/17	8:55 AM	S	1/8oz											x	
3	S38-2.5ft	01/06/17	9:00 AM	S	1/8oz											x	
4	S39-0.5ft	01/06/17	8:30 AM	S	1/8oz			x									
5	S39-1.5ft	01/06/17	8:35 AM	S	1/8oz											x	
6	S39-2.5ft	01/06/17	8:40 AM	S	1/8oz											x	
7	S83-0.5ft	01/06/17	7:35 AM	S	1/8oz			x									
8	S83-1.5ft	01/06/17	7:40 AM	S	1/8oz											x	
9	S83-2.5ft	01/06/17	7:45 AM	S	1/8oz											x	
10	S83D-0.5ft	01/06/17	7:30 AM	S	1/8oz			x									

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 1330
[1] Received By:		L. Marcelli		1/6/17 1408
[2] Relinquished By:		L. Marcelli		1/6/17 1507
[2] Received By:		ZAMP		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPHY ANALYTICAL, INC.		Chain of Custody Record				Turn Around Time (Rush by advanced notice only)					
806 N. Batavia St., Orange, CA 92868		Lab No:	386235			Standard:	x	4 Day:		3 Day:	
Phone: (714) 771-6900 Fax: (714)771-9933		Page:	3	of	3	2 Day:		1 Day:		Same Day:	
Billing: Enthalpy - SoCal		Matrix: A = Air DW = Drinking Water FL = Food Liquid FS = Food Solid L = Liquid PP = Pure Product S = Solid SeaW = Sea Water SW = Swab W = Water WP = Wipe O = Other				Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other					
c/o Montrose Environmental Group											
1 Park Plaza, Suite 1000, Irvine, CA 92614											

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	CES Group	Name:	Francis Poly HS
Report To:	Skye Green	Number:	
Email:	sgreen@cesgroup.co	P.O. #:	27116
Address:	33353 Temecula Pkwy , Suite 104#333	Address:	12431 Roscoe Blvd.
	Temecula, CA 92592		Sun Valley, CA
Phone:	714-398-6363	Global ID:	
Fax:	951-848-9812	Sampled By:	D. Baysa

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Lead (6010B)	Arsenic (6020)	Organochlorine Pesticides (8081B)	Pet Hydrocarbon as gas,diesel,oil 8015cc	VOCs (8260B)	PCBs (8081A)	Title 22 Metals (6010B/7471A)			Hold	Test Instructions / Comments
1	S84-0.5ft	01/06/17	7:40 AM	S	1/8oz			x									Analyze 0.5' samples. Hold deeper samples.
2	S84-1.5ft	01/06/17	7:45 AM	S	1/8oz											x	
3	S84-2.5ft	01/06/17	7:50 AM	S	1/8oz											x	
4	S85-0.5ft	01/06/17	7:50 AM	S	1/8oz			x									
5	S85-1.5ft	01/06/17	7:55 AM	S	1/8oz											x	
6	S85-2.5ft	01/06/17	8:00 AM	S	1/8oz											x	
7				S													
8	Soil Drums	12/23/16	10:30 AM	S	5/VOAs, 1/8oz				x	x	x	x	x				
9	Drum Water	12/23/16	10:00 AM	W	3/VOAs, 3/1L				x	x	x	x					
10																	

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Danny Baysa	CES Group/ Field Supervisor	01/06/17 1330
[1] Received By:		L. Marrolett.		1/6/17 1400
[2] Relinquished By:		L. Marrolett.		1/6/17 1507
[2] Received By:		ZAIDA P.		1/6/17 1507
[3] Relinquished By:				
[3] Received By:				

ENTHALPY analytical, inc.

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: CES Project: FRANCIS POLY HS

Date Received: 1/06/17 Sampler's Name Present: (Yes) No

Sample(s) received in a cooler? (Yes) How many? 3 No (skip section 2) Sample Temp (°C): _____

Sample Temp (°C) from each cooler: #1: 5.2°C #2: 7.4°C #3: 6.1°C #4: _____

(Acceptance range is 0 to 6°C or, for samples collected the same day as sample receipt, arrival on ice; For Microbiology sample 0 to 10°C or, for samples collected the same day as sample receipt, arrival on ice)

Shipping Information: _____

Section 2

Was the cooler packed with: ✓ Ice ___ Ice Packs ___ Bubble Wrap ___ Styrofoam

___ Paper ___ None ___ Other _____

Cooler Temp (°C): #1: 1.4 #2: 2.3°C #3: 1.3°C #4: _____

Section 3	YES	NO	N/A
Was a COC received?	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relinquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were custody seals present?		✓	
If Yes – were they intact?			✓
Were all samples sealed in plastic bags?	✓		
Did all samples arrive intact? If no, indicate below.	✓		
Did all bottle labels agree with COC? (ID, dates and times) *	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of sample sent for tests indicated?	✓		
Was there headspace in VOA vials?		✓	
Were the containers labeled with correct preservatives?	✓		

Section 4

Explanations/Comments: * SAMPLE 'S30-0.5ft' TIME ON CONTAINER READS '11:25' & C.O.C. READS '11:15'.

Section 5

For discrepancies, how was the Project Manager notified? Verbal PM Initials: _____ Date/Time _____

Email (email sent to/on): _____ / _____

Project Manager's response:

Completed By: _____ Date: 1/06/17

Ranjit Clarke

From: Skye Green <sgreen@cesgroup.co>
Sent: Tuesday, January 17, 2017 11:24 AM
To: Ranjit Clarke
Subject: RE: Francis Poly HS (12/23/16 & 01/05/17 - 01/06/17) - Enthalpy Analytical Final Report #386235

Ranjit,
Please run Francis Poly HS results for the following:

S4-0.5' lead STLC
S4-1.5' for lead
S9-0.5' lead STLC
S9-1.5' for lead
S10-0.5' lead STLC
S10-1.5' for lead
S12-0.5' lead STLC and TCLP
S12-1.5' for lead

Skye Green, **P.E.**
CES Group, Inc.
CES/Novacom/ERG
951-808-8585 office
714-398-6363 mobile
951-848-9812 fax
sgreen@cesgroup.co
www.cesgroup.co

From: Ranjit Clarke [mailto:Ranjit.Clarke@enthalpy.com]
Sent: Monday, January 16, 2017 6:04 PM
To: sgreen@cesgroup.co; 'Danny Baysa' <dbaysa@cesgroup.co>
Subject: Francis Poly HS (12/23/16 & 01/05/17 - 01/06/17) - Enthalpy Analytical Final Report #386235

Hi Skye Green,

Attached is your final report #386235. A few samples may require STLC and/or TCLP analysis:

S4-0.5ft Lead (STLC)

S9-0.5ft Lead (STLC)

S10-0.5ft Lead (STLC)

S12-0.5ft STLC (Pb); TCLP (Pb)

Ranjit Clarke

From: Skye Green <sgreen@cesgroup.co>
Sent: Tuesday, January 24, 2017 12:21 PM
To: Ranjit Clarke
Subject: RE: Francis Poly HS (01/05/17) - Enthalpy Analytical Final Report #386235 - Supplemental Report 1

Ranjit,
Please run S4-0.5' for TCLP for the Francis Polytechnic site.
Thanks,

Skye Green, P.E.
CES Group, Inc.
CES/Novacom/ERG
951-808-8585 office
714-398-6363 mobile
951-848-9812 fax
sgreen@cesgroup.co
www.cesgroup.co

From: Ranjit Clarke [mailto:Ranjit.Clarke@enthalpy.com]
Sent: Tuesday, January 24, 2017 10:36 AM
To: sgreen@cesgroup.co; Danny Baysa <dbaysa@cesgroup.co>
Subject: Francis Poly HS (01/05/17) - Enthalpy Analytical Final Report #386235 - Supplemental Report 1

Hi Skye Green,

Attached is your final report #386235. Supplemental Report 1

Thank you.

In accordance with our paperless initiative, we are no longer mailing or faxing reports by default. If you require a hard copy, please inform your Project Manager.

Data qualifiers and additional information necessary for the interpretation of the test results are contained in the PDF file and may not be included in the EDD.

CONFIDENTIALITY NOTICE: The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential, proprietary and/or privileged information and may be legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments and the reply from your system. If you are not the intended recipient, you are hereby notified that any disclosure, use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

Appendix B

Soil Safe of California, Inc.

12328 Hibiscus Ave. Adelanto, CA 92301

ADE 131887

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professional Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

Manifest Number: A4-7057 Load #: 1 4/11/2017

Generator Site Information:

JOHN H FRANCIS POLYTECHNIC
HIGH SCHOOL
12431 ROSCOE BOULEVARD
SUN VALLEY, CA 91352

Weighmaster Weighed at:

SOIL SAFE OF CALIFORNIA, INC..
12328 HIBISCUS AVE
ADELANTO, CA 92301

J Provansal **Time In:** 8:40:48 AM

J Provansal **Time out:** 8:40:51 AM

	Lbs	Tons	
Gross Weight:	32560	16.28	Manual Wt
Tare Weight:	30800	15.40	Manual Wt
Net Weight:	1760	0.88	

Truck Number: 541

Trailer Number: 214

Commodity: Non Haz - Solids

Driver on Gross and Tare Transporter: AIS - BUDDY

Manifest

SOIL SAFE OF CA – TPST
Non-Hazardous Soils

↓ Manifest # ↓

Generator and/or Consultant

Date of Shipment:	Responsible for Payment:	Transport Truck #:	Facility #:	Approval Number:	Load #
	Transporter		A07	47057	991

Generator's Name and Billing Address: Los Angeles Unified School District 333 South Beaudry Ave., 28th Floor Los Angeles, CA 90017	Generator's Phone #: Person to Contact: FAX#:	Customer Account Number
Consultant's Name and Billing Address:	Consultant's Phone #: Person to Contact: FAX#:	Customer Account Number
Generation Site (Transport from): *(name & address)* John H Francis Polytechnic High School 12431 Roscoe Blvd. Sun Valley, CA 91352	Site Phone #: Person to Contact: FAX#:	
Designated Facility (Transport to): *(name & address)* Soil Safe 12328 Hibiscus Rd. Adelanto, CA 92301-1700	Facility Phone #: (800) 852-8001 Person to Contact: Joe Provansal FAX#: (760) 246-8004	
Transporter Name and Mailing Address: American Integrated Services, Inc. P.O. Box 92316 Long Beach, CA 90809-2316	Transporter's Phone #: (310) 522-1168 Person to Contact: Jennifer Sherman FAX#: (310) 522-0474	CAR000148338 Customer Account Number 7704908

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑	3		32560	30800	1760
Sand ❑ Organic ❑ Clay ❑ Other ❑	0 - 10% ❑ 10 - 20% ❑ 20% - over ❑	Gas ❑ Diesel ❑ Other ❑					.88

List any exception to items listed above: AIS Project # 37009-16-4 Scale Ticket # 131887

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils descried in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator ☑ Consultant ❑ Andrew Medugan for

Signature and date: [signature] Month 4 Day 10 Year 17

Transporter

Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Eddie LINO

Signature and date: [signature] Month 4 Day 10 Year 17

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: J. Provansal

Signature and date: [signature] 4-11-17

Please print or type.

TRANSPORTER COPY

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not Required	1	888-423-6080	032017013

GENERATOR

5. Generator's Name and Mailing Address
Los Angeles Unified School District
333 South Beaudry Ave., Suite 28th Floor
Los Angeles CA 90017
Generator's Phone: 213 241-1000

Generator's Site Address (if different than mailing address)
John H Francis Polytechnic High School
12431 Roscoe Blvd.
Sun Valley CA 91352

6. Transporter 1 Company Name
American Integrated Services Inc
U.S. EPA ID Number: CAR000148338

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Crosby & Overton, Inc.
1630 W. 17th Street
Long Beach CA 90813
Facility's Phone: 562 432-5445
U.S. EPA ID Number: CAD028409019

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous Waste Liquid	1	DM	55	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear proper PPE while handling. Weights or volumes are approximate.
Job# 37009-16-4 Profile# 27578

L4C842
D144022
1 drum

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Andrew Madrigal For LAUSD
Signature:
Month 04 Day 10 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Eddie Lino
Signature:
Month 04 Day 10 Year 17

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

11135

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Michael Mahan
Signature:
Month 4 Day 19 Year 17

169-BLC-O 5 11977 (Rev. 9/09)

TRANSPORTER #1

Appendices

F.

Noise and Vibration Background and Modeling Data

Appendices

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Noise and Vibration Background and Modeling Data

NOISE BACKGROUND

Terminology and Noise Descriptors

The following are brief definitions of noise terminology.

- **Sound.** A vibratory disturbance that, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

- **Noise**. Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

- **Decibel (dB)**. A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals (20 μPa).

- **Vibration Decibel (VdB).** A unitless measure of vibration, expressed on a logarithmic scale and with respect to a defined reference vibration velocity. In the U.S., the standard reference velocity is 1 micro-inch per second ($1x10^{-6}$ in/sec).

- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels which approximates the frequency response of the human ear.

- **Equivalent Continuous Noise Level (Leq); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.

- **Statistical Sound Level (L_n).** The sound level that is exceeded "n" percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L_{90} is the sound level

exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

- **Day-Night Level (L_{dn} or DNL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10 PM to 7 AM.

- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring during the period from 7 PM to 10 PM and 10 dB added to the A-weighted sound levels occurring during the period from 10 PM to 7 AM. For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB. As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as being equivalent in this assessment.

- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

Characteristics of Sound

Sound is a pressure wave transmitted through the air. When an object vibrates, it radiates part of its energy as acoustical pressure in the form of a sound wave. Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). The standard unit of measurement of the loudness of sound is the decibel (dB). The human hearing system is not equally sensitive to sound at all frequencies. Sound waves below 16 Hz are not heard at all and are "felt" more as a vibration. Similarly, while people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Because of the physical characteristics of noise transmission and noise perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 1 presents the subjective effect of changes in sound pressure levels. Typical human hearing can detect changes of approximately 3 dBA or greater under normal conditions. Changes of 1 to 3 dBA are detectable under quiet, controlled conditions and changes of less than 1 dBA are usually indiscernible. A change of 5 dBA or greater is typically noticeable to most people in an exterior environment and a change of 10 dBA is perceived as a doubling (or halving) of the noise.

Table 1 Change in Sound Pressure Level, dB

Change in Apparent Loudness	
± 3 dB	Threshold of human perceptibility
± 5 dB	Clearly noticeable change in noise level
± 10 dB	Half or twice as loud
± 20 dB	Much quieter or louder

Source: Bies and Hansen, Engineering Noise Control, 2009.

Point and Line Sources

Noise may be generated from a point source, such as a piece of construction equipment, or from a line source, such as a road containing moving vehicles. Because noise spreads in an ever-widening pattern, the given amount of noise striking an object, such as an eardrum, is reduced with distance from the source. This is known as "spreading loss." The typical spreading loss for point source noise is 6 dBA per doubling of the distance from the noise source.

A line source of noise, such as vehicles proceeding down a roadway, would also be reduced with distance, but the rate of reduction is affected by of both distance and the type of terrain over which the noise passes. Hard sites, such as developed areas with paving, reduce noise at a rate of 3 dBA per doubling of the distance while soft sites, such as undeveloped areas, open space and vegetated areas reduce noise at a rate of 4.5 dBA per doubling of the distance.[1] These represent the extremes and most areas would actually contain a combination of hard and soft elements with the noise reduction placed somewhere in between these two factors. Unfortunately, the only way to actually determine the absolute amount of attenuation that an area provides is through field measurement under operating conditions with subsequent noise level measurements conducted at varying distances from a constant noise source.

Objects that block the line of sight attenuate the noise source if the receptor is located within the "shadow" of the blockage (such as behind a sound wall). If a receptor is located behind the wall, but has a view of the source, the wall would do little to reduce the noise. Additionally, a receptor located on the same side of the wall as the noise source may experience an increase in the perceived noise level, as the wall would reflect noise back to the receptor compounding the noise.

[1] Surface type or ground cover is defined as the "hardness" or "softness" of the surrounding area. "Hard site environment" is areas with acoustically hard ground (e.g., pavement or water). Distance attenuation from a line source (i.e., roadway or railway) with a hard site environment is 3 dB per doubling of distance (dB/DD). "Soft site environment" is areas with acoustically soft ground (e.g., lawn or loose dirt or agricultural uses). Ground cover can affect the sound propagation rate by as much as an additional 1.5 dB/DD. (Note that this rate occurs only when both the noise source and the receiver are close to the ground and the terrain between the two is flat and soft.) As a result of this additional attenuation, the line-source sound levels decrease at a rate of 4.5 dB/DD at soft sites.

Noise Metrics

Several rating scales (or noise "metrics") exist to analyze adverse effects of noise, including traffic-generated noise, on a community. These scales include the equivalent noise level (Leq), the community noise equivalent level (CNEL) and the day/night noise level (Ldn). Leq is a measurement of the sound energy level averaged over a specified time period.

The CNEL noise metric is based on 24 hours of measurement. CNEL differs from Leq in that it applies a time-weighted factor designed to emphasize noise events that occur during the evening and nighttime hours (when quiet time and sleep disturbance is of particular concern). Noise occurring during the daytime period (7:00 AM to 7:00 PM) receives no penalty. Noise produced during the evening time period (7:00 to 10:00 PM) is penalized by 5 dB, while nighttime (10:00 PM to 7:00 AM) noise is penalized by 10 dB. The Ldn noise metric is similar to the CNEL metric except that the period from 7:00 to 10:00 PM receives no penalty. Both the CNEL and Ldn metrics yield approximately the same 24-hour value (within 1 dB) with the CNEL being the more restrictive (i.e., higher) of the two.[2]

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 160 to 165 dBA will result in dizziness or loss of equilibrium. The ambient or background noise is widespread and generally more concentrated in urban areas than in outlying, less-developed areas (see Table 2).

[2] Ldn and CNEL values rarely differ by more than 1 dB. As a matter of practice, Ldn and CNEL values are considered equivalent and are treated as such in this assessment.

Table 2 Common Sound Levels and Their Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations Relative to 70 dB
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle at a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	
Near Freeway Auto Traffic	70	Moderately Loud	
Average Office	60	Quiet	One-half as loud
Suburban Street	55	Quiet	
Light Traffic; Soft Radio Music in Apartment	50	Quiet	One-quarter as loud
Large Transformer	45	Quiet	
Average Residence without Stereo Playing	40	Faint	One-eighth as loud
Soft Whisper	30	Faint	
Rustling Leaves	20	Very Faint	
Human Breathing	10	Very Faint	Threshold of Hearing

Source: California Department of Transportation (Caltrans) 2006, October. Traffic Noise Analysis Protocol.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities such as railroads or vibration-intensive stationary sources, but can also be associated with construction equipment, such as jackhammers, pile drivers, and hydraulic hammers. Vibration displacement is the distance that a point on a surface moves away from its original static position. The instantaneous speed that a point on a surface moves is described as the velocity, and the rate of change of the speed is described as the acceleration. Each of these descriptors can be used to correlate vibration to human response, building damage, and acceptable equipment vibration levels. During the construction of a building, the operation of construction equipment could cause groundborne vibration. The three main wave types of concern in the propagation of groundborne vibrations are surface or Rayleigh waves, compression or P-waves, and shear or S-waves.

- Surface or Rayleigh waves travel along the ground surface. They carry most of their energy along an expanding cylindrical wave front, similar to the ripples produced by throwing a rock into a lake. The particle motion is more or less perpendicular to the direction of propagation (known as retrograde elliptical).

- Compression or P-waves are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal, in a push-pull motion. P-waves are analogous to airborne sound waves.

- Shear or S-waves are also body waves, carrying their energy along an expanding spherical wave front. Unlike P-waves, however, the particle motion is transverse, or perpendicular to the direction of propagation.

The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal and RMS is defined as the square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human response.

The units for PPV and RMS velocity are normally inches per second (in/sec). Often, vibration is presented and discussed in dB units to compress the range of numbers required to describe the vibration. All PPV and RMS velocity are in in/sec and all vibration levels in this study are in dB relative to 1 micro-inch per second (abbreviated as VdB). The threshold of perception is approximately 65 VdB. Typically groundborne vibration generated by manmade activities attenuates rapidly with distance from the source of the vibration. Manmade vibration problems are usually confined to short distances (500 feet or less) from the source.

Construction generally includes a wide range of activities that can generate groundborne vibration. In general, demolition of structures generates the highest vibrations. Vibratory compactors or rollers, pile drivers, and pavement breakers can generate perceptible amounts of vibration at distances within 200 feet of the vibration sources. Heavy trucks can also generate groundborne vibrations that vary, depending on vehicle type, weight, and pavement conditions. Potholes, pavement joints, discontinuities, differential settlement of pavement, etc., all increase the vibration levels from vehicles passing over a road surface. Construction vibration is normally of greater concern than vibration of normal traffic on streets and freeways with smooth pavement conditions. Trains generate substantial quantities of vibration due to their engines, steel wheels, and heavy loads.

Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. Noise- and vibration-sensitive uses include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, guest lodging, libraries, religious institutions, hospitals, nursing homes, and passive recreation areas are generally more sensitive to noise than commercial and industrial land use.

Noise Regulations and Guidelines

Compliance with State, City, and LAUSD noise requirements and guidelines is required for schools as described below.

State

California Code of Regulations, Title 24, Part 2

Current law states that every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the California Building Code (CBC) within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission. The most recent building standard adopted by the legislature and used throughout the state is the 2016 version, often with local, more restrictive amendments that are based on local geographic, topographic, or climatic conditions.[5] The State of California's noise insulation standards are codified in the CBC. These noise standards are for new construction in California for the purposes of interior compatibility with exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential, schools, or hospitals, are near major transportation noises, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

City of Los Angeles

Exterior

As specified in Sections 112.02 and 112.05 of the City of Los Angeles Municipal Code, noise attributable to mechanical equipment (such as heating, air conditioning, and ventilation equipment (HVAC) systems or any pumping, filtering, or heating equipment) cannot exceed the ambient noise level by more than 5 decibels. Ambient noise levels can be as-measured at the project site or established via Code-presumed levels. For the nearby residential neighborhood (Zone R1), the presumed ambient levels are 50 dBA (daytime, 7:00 AM to 10:00 PM) and 40 dBA (nighttime, 10:00 PM to 7:00 AM).

Further, power-equipment, including lawn mowers, backpack blowers, small lawn and garden tools, and riding tractors are restricted to no more than 65 dBA Leq at residential properties.

Construction Activities

Section 41.40 of the Los Angeles Municipal Code prohibits construction or repair work between 9:00 PM and 7:00 AM the following morning, Monday through Friday; between 6:00 PM and 8:00 AM the following morning, Saturdays or federal holidays; and anytime on Sundays. Further, Section 112.05 specifies the maximum noise level from powered equipment[3] as 75 dBA at a distance of 50 feet from the source.[4]

[3] The specified equipment for this limitation includes: construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors, and pneumatic or other powered equipment.

[4] However, this noise limitation does not apply where compliance is technically infeasible. Technically infeasible means that the above noise limitation cannot be met despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of equipment.

LAUSD

LAUSD Standard Conditions of Approval (November 2015) for noise are described below.

Exterior

The LAUSD Standard Condition of Approval SC-N-1 deals with exterior campus noise. The trigger for compliance is: "Exterior noise levels are or would be greater than 70 dBA L_{10} or 67 dBA L_{eq}." The associated standard condition is: "The LAUSD shall include features such as sound walls, building configuration, and other design features in order to attenuate exterior noise levels on a school campus to less than 70 dBA L_{10} or 67 dBA L_{eq}."

Interior

The LAUSD Standard Condition of Approval SC-N-2 deals with interior campus noise. The trigger for compliance is: "Interior classroom noise levels would be greater than 55 dBA L_{10} or 45 dBA L_{eq}." The associated standard condition is:

> "The LAUSD shall analyze the acoustical environment of the school (such as traffic) and the characteristics of planned building components (such as heating, ventilation, and air conditioning [HVAC]), and design to achieve interior classroom noise levels of less than 55 dBA L_{10} or 45 dBA L_{eq} with maximum (unoccupied) reverberation times of 0.6 seconds. Noise reduction methods shall include, but are not limited to, sound walls, building and/or classroom insulation, HVAC modifications, double-paned windows, and other design features in order to achieve the noise standards.
>
> - The District should acknowledge the ANSI (American National Standards Institute) S12 standard as a District goal that may presently not be achievable in all cases.
>
> - Where economically feasible, new school design should achieve classroom acoustical quality consistent with the ANSI standard and in no event exceed the current CHPS (California High Performance Schools) standard of 45 dBA.
>
> - Where economically feasible, new HVAC (Heating, Ventilating, and Air Conditioning) installations should be designed to achieve the lowest possible noise level consistent with the ANSI standard. In no event should these installations exceed the current CHPS standard of 45 dBA.
>
> - To promote the development of lower noise emitting HVAC units, the District's purchase of new units should give preference to manufacturers producing the lowest noise level at the lowest cost.
>
> - Existing HVAC units operating in excess of 50 dBA should be modified."

Besides the 55 dBA L_{10} or 45 dBA L_{eq} interior sound environment triggers, the LAUSD Standard Conditions also point out a design goal of achieving these interior environments in classrooms with maximum, un-occupied reverberation times of 0.6 seconds.

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NOISE ELEMENT



DEPARTMENT OF CITY PLANNING LOS ANGELES, CALIFORNIA

Noise Element
of the Los Angeles City General Plan

City Plan Case No. 97-0085
Council File No. 96-1357

Adopted by the City Council February 3, 1999
Approved by the City Planning Commission November 12, 1998

An Equal Employment Opportunity/Affirmative Action Employer

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Introduction

California State Government Code Section 65302g mandates that noise elements be included as a part of city general plans and that cities adopt comprehensive noise ordinances. The city's 1975 Noise Plan and ordinance achieved compliance with state law. This element revises and updates the 1975 plan and references the city's noise standards, which are contained in Los Angeles Municipal Code Section 111 et seq. In addition to addressing issues, such as airport related noise, which were addressed in the 1975 plan, the element addresses noise sources and noise mitigation strategies and regulations that came into existence after 1975, including new fixed rail systems.

The noise element applies to the city as a whole. It addresses noise mitigation regulations, strategies and programs and delineates federal, state and city jurisdiction relative to rail, automotive, aircraft and nuisance noise.

Regulation of noise relative to vehicles is largely outside the authority of municipal government. Primary municipal authority relates to regulation of land use, implementing federal and state regulations and enforcing nuisance noise. This element describes noise management programs of each jurisdictional entity, as they relate to the City of Los Angeles.

The exhibits contained herein include examples of noise commonly experienced by city dwellers, local airport noise contours, state environmental guidelines and a history of Los Angeles transportation and associated noise issues.

Chapters III and IV set forth noise management goals, objectives, policies and programs of the City of Los Angeles. Implementation programs include noise mitigation guidelines for community planners and permit processors, noise management activities in which the city is engaged and affirmation of the Alameda Corridor Project which will consolidate freight rail lines, thereby reducing noise impacts on local neighborhoods.

Chapter I — Background

Planning Area

The Noise Element relates to the entire City of Los Angeles. Within the city's boundaries are approximately 467 square miles of land area, including approximately 214 square miles of hills and mountains. The San Gabriel and Santa Susana Mountains bound the city on the north, the Santa Monica Mountains extend across the middle of the city and the Palos Verdes Hills and Pacific Ocean are on the south and west. Some noise impacts are generated by sources, such as rail, highway and freeway systems, which are within the purview of other governmental entities. Noise generated by aircraft associated with Los Angeles-based air facilities potentially impact people outside the city. Therefore, the element takes into account other jurisdictions and governmental entities.

Demographics

The 1990 federal census estimated that the city's population was 3,485,399 individuals. The 1996 Citywide General Plan Framework Element (aka Framework) of the city's general plan estimates that the population of the city would be increased by approximately 820,000 people to 4,306,564 by the year 2010 and that employment will be increased by an estimated 390,000 jobs. Circulation and transportation systems, a primary source of urban noise, continue to evolve in response to the city's changing needs and introduction of new technology.

California State Noise Element Requirements

Content

In 1971 the state of California required cities and counties to include noise elements in their general plans (Government Code Section 65302 et seq.). State law intended that noise elements guide policy makers in making land use determinations and in preparing noise ordinances that would limit exposure of their populations to excessive noise levels. The law required that local jurisdictions prepare noise ordinances that would help manage noise. In 1984, state noise element provisions were revised to shorten the list of noise element requirements, encourage local jurisdictions to design their own noise control approaches and to eliminate the requirement that general plan noise and circulation elements be consistent with each other.

Under the 1984 provisions, a noise element is required to "recognize" guidelines prepared by the Office of Noise Control of the California Department of Health Services and to analyze and quantify, "to the extent practicable, as determined by the legislative body," noise from the following sources: highways and freeways; primary arterials and major local streets; passenger and freight on-line railroad operations and ground rapid transit systems; commercial, general aviation, heliport, helistop and military airport operations, aircraft overflights, jet engine test stands, and other ground facilities and maintenance functions related to airport operation; local industrial plants, including, but not limited to, railroad classification yards; and other ground stationary noise sources identified by local agencies as contributing to the community noise environment.

The subject element complies with state law by describing airport related noise management programs and identifying and analyzing noise sources and noise management measures. It also provides guidelines for noise management within Los Angeles.

Noise Measurement and Standards

State law (Government Code Section 65302 et seq.) specifies that, as is practical, a community noise equiva-

lent level (CNEL) or day/night average level (Ldn) be used to measure noise exposure for the identified noise sources. Modeling is permitted as a tool for measuring noise. However, as will be noted in Chapter II, state and federal law has preempted local authority with reference to many of the above listed noise sources.

In response to the 1971 state requirements, the city simultaneously prepared a noise plan and a comprehensive noise ordinance. It utilized noise contours and modeling in order to establish ambient noise standards that were linked to zoning classifications. Identical standards were incorporated into the ordinance and plan to facilitate implementation and enforcement. The ordinance was adopted in 1973 (Los Angeles Municipal Code Section 111 et seq.). It has been amended several times. The city's first noise plan was adopted in 1975. The intent of state law was to prompt local jurisdictions to establish noise standards vis-a-vis the state's noise insulation standards and to enact plan implementation measures to address local noise problems. The city met these objectives with the adoption of the ordinance and plan. The noise standards contained in the ordinance guide the city's noise management and are consistent with state and federal standards.

The California Environmental Quality Act (CEQA) permit processing procedures and the ambient noise standards contained in the city's noise ordinance guide noise impact assessment and mitigation relative to new development that is subject to CEQA environmental assessment review. This element, combined with the city's noise ordinance, complies with the noise measurement and standards requirements of state law, to the greatest extent practicable, by providing sample noise exposure contours for local airports and by outlining airport and other noise management programs.

Insulation Standards

The California Department of Health Services noise office, which is cited in the 1984 general plan law, no longer exists. The most current guidelines prepared by the state noise officer were issued in 1987 and are contained in the "General Plan Guidelines" issued by the Governor's Office of Planning and Research in 1990. The standards contained in the city noise ordinance are consistent with the noise officer's 1987 guidelines.

General Plan Consistency

State general plan law requires that all elements and all parts of a general plan be integrated, internally consistent and compatible (Government Code Section 65300.5). The Framework element of the city's general plan provides broad policies and guidelines for preparation of the other elements of the general plan. It identifies the noise element as one of twelve general plan elements but contains no other noise element policies or guidelines. The subject noise element references and is consistent with general plan community plans that contain noise management issues or programs. In addition, it references and is consistent with local airport plans, as required by California Government Code Section 65302.3.

Implementation

General plan law requires that a general plan be meaningfully implemented (Government Code Section 65400). The noise element is implemented by a variety of city regulations. In addition, the airport plans and individual community plans contain implementation features that address noise related land use issues.

Element Scope

The subject element updates and replaces the city's 1975 noise plan. It identifies new significant potential noise sources, addresses the issue of vibration relative to rail and identifies historic and current significant noise management approaches.

Issues Not Addressed

Occupational noise is not addressed. State and federal governments, not cities, have jurisdiction over standards and enforcement relative to occupational health, including noise.

The goals, standards, objectives, policies and programs presented herein are within the jurisdiction of the City of Los Angeles. Programs outside the authority of the city are not listed. For example, rail, state highway and freeway and aspects of airports that are unrelated to land use generally are under federal and/or state, not municipal authority. The roles and relationship of various authorities are discussed in Chapter II, providing a context within which the element and can be better understood.

Chapter II — Existing Conditions, Noise Impact Issues and Noise Management History

Introduction

Noise is unwanted sound and, therefore, is an important factor in the quality of urban life. There are two main types of sound: ambient and intrusive. Ambient sound is the background sound that aggregates all sound emissions, far and near, as received within a particular locale. It is the "given" level of sound to which we are accustomed in our residential, work or other particular environments; the generally not unpleasant "hum" of sound about us. Intrusive sound is greater than the ambient sound level; it is perceived as "noise." It may be intermittent (siren, barking dog) or continuous (air conditioner equipment). Abatement of intrusive noise generally involves one or more of the following: reducing the noise at the source (turning down the volume), isolating the noise source by establishing buffer land uses (industrial uses around airports), blocking noise (walls, berms), or protecting the receiver (industrial ear protectors, home insulation).

The decibel (dB) is the standard unit used for measuring noise. To more closely approximate noise as it is received by the human ear at different frequencies, the decibel scale is 'A-weighted' (dBA). 'A' measures the level of sound the way sound is received by the human ear. The range of human hearing is approximately 3 to 140 dBA, with 110 dBA considered intolerable or painful to the human ear. Continuous levels of 70 dBA or higher can cause loss of hearing. A comparison of types of commonly experienced environmental noise is provided in Exhibit H. The goal of all noise mitigation is to reduce or manage intrusive noise so as to achieve or maintain healthful ambient sound levels.

Since the adoption of the city's noise plan in 1975, significant noise management has taken place, largely due to public demand for noise abatement. Watershed legislation was the National Environmental Policy Act of 1969 (NEPA) which required all significant potential environmental impacts to be evaluated and mitigation measures determined prior to issuance of land development permits. NEPA led to the establishment of state and local environmental laws, including the 1971 California Environmental Quality Act (CEQA) and requirements that general plans contain noise elements and that cities adopt local noise ordinances. Public concerns about noise led to establishment of national transportation policies and programs, including noise standards for aircraft. NEPA and CEQA require environmental assessment and imposition of noise mitigation measures for new development projects, including transportation projects. Millions of dollars in public funds have been expended to reduce impacts of noise from existing airports and freeways, as well as for research and development of new design, noise suppression technology and regulations for mitigating noise from transportation and other sources.

Transportation systems are a primary source of urban noise. Management of noise from the most significant of these sources (aircraft, trains and freeways) generally has been preempted by federal and state authority. Primary municipal authority is regulation of land use. The City of Los Angeles has established standards for ambient noise levels that are correlated with land use zoning classifications. The standards are contained in the city's noise ordinance, Los Angeles Municipal Code (LAMC) Section 111 et seq. Compliance is achieved by a variety of means, including barriers, buffers, separation of incompatible uses and reduction of sound at its source.

The first section of this chapter discusses ordinances and other measures for regulating noise sources and mitigating noise impacts within the city. The other sections discuss the evolution of noise impacts and

management measures associated with local transportation systems. The Appendix provides an historical perspective of the evolution of transportation systems and associated noise issues.

Building Sound Insulation and Nuisance Noise

Several city, state and federal regulations address sound insulation and nuisance noise. These range from use permit limitations and building construction provisions to nuisance abatement. This section summarizes the city's major noise management procedures and regulations.

California And Federal Legislation

CALIFORNIA NOISE INSULATION STANDARDS

The California Noise Insulation Standards of 1988 (California Building Code Title 24, Section 3501 et seq.) establishes inter-dwelling (between units in a building) and exterior sound transmission control measures. It requires that interior noise levels from the exterior source be reduced to 45 decibels (dB) or less in any habitable room of a multi-residential use facility, e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings. Measurements are based on a day/night average sound level (Ldn) or the community noise equivalent level (CNEL). Both Ldn and CNEL utilize averaging, not single event exposure. Therefore, the passing of a single train during a day would be averaged over the 24-hour period, resulting in negligible exposure.

The significant noise generation sources identified by the Noise Insulation Standards are: highways, country roads, city streets, railroads, rapid transit lines, airports and industrial areas. Noise-sensitive uses planned in proximity to such uses are required to be designed to prevent intrusion of significant exterior noise. The applicant must submit an acoustical analysis, prepared by or under the supervision of an acoustical engineer, indicating that a 45 dB or less interior noise level will be achieved within each proposed habitable room. Interior allowable noise levels can be achieved by reorienting the project on the site, providing setbacks, shielding (e.g., buffer walls or berms) the receptor from the noise source, incorporating sound insulation into the building construction, requiring that windows be unopenable or remain closed and air conditioning be provided, and any other methods.

To help permit processors assess whether special acoustical analysis and mitigation is needed, local jurisdictions are to identify areas of 60 dB or greater, averaged over a 24-hour period. The noise element of the general plan is to be used in helping to identify sites with noise levels of 60 dB or greater. In addition, the state general plan law (Government Code Section 65302 et seq.) calls for noise elements to "recognize" the state health department noise guidelines and to quantify, "to the extent practicable, as determined by the legislative body, current and projected noise levels" from transportation and other significant sources. This element identifies noise levels of 65 dB or greater with reference to airports.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

The National Environmental Policy Act of 1969 (NEPA) requires that an environmental impact statement (EIS) be prepared for federal or federally funded (including loans) projects. The EIS identifies potential impacts of the project and evaluates feasible alternatives for mitigating the impacts. The impacts and mitigation alternatives are taken into account by decision makers. However, mitigation of impacts is not required by NEPA.

FEDERAL NOISE CONTROL ACT

The Noise Control Act of 1972 (42 United States Code 4901 et seq.) gives the Environmental Protection Agency (EPA) authority to publish regulations and standards relative to transportation, construction and electrical equipment, motors, engines, etc. It reaffirms the Federal Aviation Administration and EPA preemption of state and local control over aircraft noise. It requires that the FAA to consult with the EPA prior to promulgating or amending noise regulations.

The California Environmental Quality Act of 1970 (CEQA) was patterned in part after NEPA. It mandates that mitigation measures be part of a discretionary land use development permit approval, including building permits, unless a project is deemed exempt from environmental assessment procedures. CEQA is intended to protect the natural environment from avoidable damage, including from noise impacts, by requiring that proposed land development projects mitigate identified significant potential impacts. Where an environmental impact report is required, the decision maker may issue a permit even if the potential impact cannot be reduced to a level of insignificance, providing the decision maker finds that project benefits outweigh the unavoidable impacts. Impacts on the environment (or known future environment) also are considered, including noise from exterior sources on project users or residents. Where federal agencies or funding is involved, both NEPA and CEQA apply.

Conservation of nonrenewable energy resources is a consideration under NEPA and CEQA. Mitigation measures typically include building insulation to reduce heat gain and loss so as to reduce the amount of energy needed to heat or cool buildings. Even without CEQA mitigation requirements, most new construction includes energy insulation features, combined with air conditioning and heating systems, to make projects more energy efficient. Insulation reduces exterior-to-interior noise impacts.

City Noise Ordinances

The City of Los Angeles has numerous ordinances and enforcement practices that apply to intrusive noise and that guide new construction. These are summarized in the following sections.

The city's comprehensive noise ordinance (LAMC Section 111 et seq.) establishes sound measurement and criteria, minimum ambient noise levels for different land use zoning classifications, sound emission levels for specific uses (radios, television sets, vehicle repairs and amplified equipment, etc.), hours of operation for certain uses (construction activity, rubbish collection, etc.), standards for determining noise deemed a disturbance of the peace, and legal remedies for violations. Its ambient noise standards are consistent with current state and federal noise standards. They are correlated with land use zoning classifications in order to guide the measurement of intrusive noise that results in intermittent (periodic) or extended impacts on a geographically specific site. The intent is to maintain identified ambient noise levels and to limit, mitigate, or eliminate intrusive noise that exceeds the ambient noise levels within the zones specified. The standards guide building construction and equipment installation, equipment maintenance and nuisance noise enforcement. The city council initially adopted the ordinance in 1973 and periodically amends it to reflect current issues and noise management approaches.

As a general rule, the city's building and safety department enforces noise ordinance provisions relative to equipment (air conditioning units, swimming pool pumps, car wash facilities and other machinery) and the police department enforces provisions relative to noise generated by people (parties, amplified sound, etc.). The police department also is authorized to enforce the mechanical equipment and other provisions of the noise ordinance, relative to nuisance noise complaints.

Zoning And Land Use

The city's planning and zoning code (LAMC Section 11 et seq.) contains a variety of provisions that directly or indirectly mitigate noise impacts on, or impacts that are associated with, different types of land uses. Permit processing is guided by the general plan, especially the community plans which together are the city's land use element. The plans designate appropriate land use (zoning) classifications. Noise element programs (Chapters III and IV) outline considerations that may be taken into account during community plan preparation and planning permit processing. The noise ordinance guides land use considerations by setting maximum ambient noise levels for specific zones.

Los Angeles was the first jurisdiction in the nation to establish zoning by land use category (1904 and 1908). Under the guidance of the city's first planning director, Gordon Whitnall, the zoning was changed (1930) to create the standardized classifications that are used today. These include regulation of height, area (including yards), density and parking. The combination of the various regulations contributes significantly to reduction of potential noise impacts throughout the city.

The most basic noise management measure is traditional zoning that separates agricultural, residential, commercial and industrial uses. Another is the front yard set back that not only adds attractiveness to a neighborhood but serves to distance homes from adjacent street noise. Side and rear yards also serve as noise buffers. Through zone change and subdivision processes, site or use specific conditions can be imposed to assure compatibility of land use and to protect users of a site from impacts from adjacent uses.

The commercial (C zones) and manufacturing (M zones) provisions of the code contain use specific requirements intended to reduce noise, odor and other impacts on adjacent uses. These include prohibiting of certain commercial and industrial uses within so many feet of residential or less restrictive uses or zones, requiring increased setbacks from residential uses, limiting hours of operation, containing uses wholly within an enclosed buildings, requiring sound walls, prohibiting openings that face residential uses and prohibiting audibility of noise outside a facility.

Conditional use and use variance permits (LAMC Sections 12.24, 12.27, 12.28 and 12.29) allow the planning commission, zoning administrators and, on appeal, board of zoning appeals and city council to assess potential use impacts and impose conditions to mitigate noise impacts. Conditional use or use variance permits are required in certain zones for schools, churches, homeless shelters, municipal facilities, correctional institutions, alcohol sales, golf courses, parks, rubbish disposal projects, mixed use development, stadia, automobile service and repair facilities, certain types of parking, joint living and work quarters, mini-malls, hotels and motels, drive-thru food establishments, nightclubs, keeping of certain types of animals and other unique, potentially noise intrusive uses. In most cases the uses are allowed by right in less restrictive zones. Some are prohibited entirely in residential zones. The permitting procedures include site investigations, notice to neighbors and hearings to assist decision makers in determining if the use should be permitted and, if permitted, allow imposition of appropriate conditions of approval. Typical conditions include specific site design, setbacks, use limitations on all or parts of the site, walls and hours of operation so as to minimize noise and other impacts. Violation of conditions can result in permit revocation.

Supplemental use districts or "overlay zones" (LAMC Section 13) for such uses as oil drilling, animal slaughter, surface mining and equine keeping typically contain construction, installation and operational provisions that are intended to minimize or eliminate noise impacts on adjacent uses. For example, the surface mining provisions prohibit establishment of a surface mining district closer than 100 feet from a residential zone, unless a landscaped buffer berm is provided, and limit mining activity hours. Oil drilling district noise mitigation provisions include drilling operation term limits, drilling equipment noise guidelines and a requirement that oil production activities be inaudible outside the enclosed operations structure. In some cases, the commission and city council are authorized to impose additional conditions to further mitigate potential impacts associated with a particular supplemental use.

Other code provisions allow a zoning administrator to conditionally permit, without public hearing, particular uses allowed in a zone, provided that the uses meet certain criteria, such as provision of additional parking or walls. The additional parking requirements for such uses as health clubs, restaurants, trade schools and auditoriums in part are to minimize noise impacts, especially in the evening and at night on residential neighborhoods. Poten-

tial impacts include door slamming and people talking as they walk to their cars.

The authority to revoke, discontinue a use or to impose nuisance abatement conditions on established uses has become a major tool for reducing nuisance noise. Use permits may be revoked by the commission, zoning administrator, or, on appeal, by the board of zoning appeals or city council for nuisance (including disturbance of the peace) or noncompliance with conditions of a conditional permit. In addition, a zoning administrator may discontinue or, on appeal, the board or council, may impose operational conditions on existing commercial or industrial uses that are deemed a nuisance, including for excessive noise or disturbance of the peace (LAMC Section 12.21-A.15). These two procedures have been increasingly utilized in recent years to encourage owners to operate activities on their properties in a manner that is compatible with adjacent uses, particularly residential uses.

Building Sound Insulation Regulations

With the development of inexpensive insulation materials, air conditioning and improved noise reduction techniques it became economically feasible to design buildings that provide effective insulation from outside noise as well as from weather conditions. It has been estimated that standard insulation, efficiently sealing windows and other energy conservation measures reduce exterior-to-interior noise by approximately 15 decibels. Such a reduction generally is adequate to reduce interior noise from outside sources, including street noise, to an acceptable level. Building setbacks and orientation also reduce noise impacts.

Sound transmission control requirements were added to the national Uniform Building Code (UBC) in 1992. The UBC standards were incorporated into the city's building code (LAMC Section 91) in 1994. They are consistent with state noise insulation standards (California Building Code Title 24, Section 3501 et seq.), requiring that intrusive noise not exceed 45 dB in any habitable room. As with state standards, the provisions do not apply to detached single-family residential uses. The city's airport noise abatement programs apply the standard to detached single-family dwellings.

The city's building code guides building construction. The insulation provisions are intended to mitigate interior noise from outside sources, as well as sound between structural units. The provisions vary according to the intended use of the building, e.g., residential, commercial, industrial. The regulations are intended to achieve a maximum interior sound level equal to or less than the ambient noise level standard for a particular zone, as set forth in the city's noise ordinance.

Nuisance Noise

Nuisance noise is intermittent noise that exceeds the city's ambient noise levels or is otherwise deemed a nuisance. It is addressed primarily through enforcement of municipal code provisions described in this section.

BUILDING MECHANICAL EQUIPMENT

In addition to standards and regulations contained in the noise ordinance, mechanical equipment noise (e.g., roof top air conditioners) is regulated by the building code (LAMC Section 91). The city's building and safety department administers and enforces the code as it applies to noise relative to both installation and maintenance of equipment.

DISTURBING THE PEACE

In addition to the noise ordinance, Los Angeles Municipal Code Section 41 contains several disturbance of the peace provisions that are enforced by the police department. These include regulation of noise from theaters, construction activities, devices used to emit music, miniature golf courses (including unduly loud talking) and "loud and raucous" noise. The latter probably is the most commonly requested noise enforcement provision because it relates to general public nuisance, e.g., loud parties. California Penal Code Section 415 also authorizes local police departments to enforce noise relative to public nuisances, including intentional noise making.

The street sales (vendor) ordinance (LAMC Section 42.00) is enforced by the police department. It prohibits "loud, boisterous, raucous, offensive or insulting" activity associated with the sale of goods or services, including solicitation for sight-seeing tours.

CITY PARK FACILITIES

Los Angeles Municipal Code Section 63.44 regulates use of recreation and parks department facilities. Park rangers and other recreation and parks department staff enforce regulations that include restrictions on use of sound amplification systems within parks and regulation of concert uses of park facilities. In addition, the recreation and parks department designs its facilities, locates activities within park sites, enforces park use hours and has operational policies for individual sites that are intended to minimize potential noise and activity impacts on surrounding neighborhoods.

BARKING DOGS

The animal regulation department administers the barking dog noise ordinance (LAMC Section 53.63). It investigates written complaints and issues warning notices to owners of properties on which barking dogs are located. If the problem continues, a hearing is set before an animal regulation department hearing officer who considers testimony and attempts to resolve the problem. Dog licenses can be revoked and the owner required to remove the animal from the site if the problem continues.

COMMERCIAL VEHICLES

Engines of large commercial vehicles (six tires, gross weight of 10,000 pounds or more when empty) are not permitted to be operated at night in any manner deemed disturbing to residents of dwelling units, including residential hotels (LAMC Section 80.36.3). The prohibition is enforced by the police department and applies to parked as well as moving vehicles.

EMERGENCY VEHICLES

It is operational policy of the city's fire and police departments to limit use of sirens and horns, as practical, when emergency vehicles travel past noise sensitive uses or through noise sensitive areas.

Automotive Vehicles

The noise most commonly experienced throughout the city is produced by automotive vehicles (cars, trucks, buses, motorcycles). Traffic moving along streets and freeways produces a sound level that remains relatively constant and is part of the city's minimum ambient noise level. Vehicular noise varies with the volume, speed and type of traffic. Slower traffic produces less noise than fast moving traffic. Trucks typically generate more noise than cars. Infrequent or intermittent noise also is associated with vehicles, including sirens, vehicle alarms, slamming of doors, garbage and construction vehicle activity and honking of horns. These noises add to urban noise and are regulated by a variety of agencies.

Management of automotive vehicle and associated noise is within the jurisdiction of federal, state and/or local authorities. This section reviews the jurisdictional authority of vehicle noise management relative to the City of Los Angeles.

Vehicle Emissions

Vehicle noise emission standards are promulgated by the federal Environmental Protection Agency (Title 49, Code of Federal Regulations Parts 190 et seq.). The Federal Highway Administration (FHA) of the Department of Transportation has authority to enforce noise standards pertaining to licensed interstate vehicles with a gross weight of over 10,000 pounds, providing the enforcement authority has been authorized "curbing" (i.e., police) authority. The FHA in the Los Angeles region (headquarters in Riverside County), does not have curbing authority. State and local jurisdictions may adopt the Environmental Protection Agency regulations without amendment in order to enforce the regulations. However many cities, including Los Angeles, have not done so because noise emissions, as described previously and below, can be enforced locally as nuisance noise under other authorities.

Street Noise

Occupants of buildings are protected from traffic noise and vehicle related noise by a number of lo-

cal land use, building construction and noise mitigation measures. Separation of land uses through general plan and zoning classifications traditionally has provided one of the best means of reducing noise impacts. Early land use practices and zoning designated commercial and industrial uses along highway corridors. This provided buffer uses between highways and residential areas. Construction of freeways that cut through existing communities, introduced traffic noise impacts into previously protected neighborhoods.

Modern building construction noise insulation and air filtration (air conditioning) standards contained in the city's building code generally are sufficient to mitigate noise impacts associated with city streets and ambient noise. The code also requires that outside factors, such as nearness to freeways or highways, be assessed in establishing noise insulation requirements for a particular building. The city's noise ordinance (Municipal Code Section 111 et seq.) and noise element provide minimum ambient noise levels that are correlated with land use zoning classifications. The ordinance regulates excessive noise generated by individual vehicles and incidents including noise from radios, horns, alarms, sound amplification equipment and other vehicle equipment. It also regulates hours of construction equipment operation and rubbish truck collection. These sections of the ordinance are enforced by the police department. Other noise regulations and noise mitigation procedures are contained in the municipal code and environmental review guidelines. The slower a vehicle travels, the less noise it generates. Therefore, speed limits, especially on local streets, reduce traffic noise impacts on adjacent uses. Together, the zoning and other statutes and provisions establish the city's standards and guidelines for vehicle related noise management.

The California Department of Motor Vehicles has jurisdiction over vehicle noise emissions within California. California Motor Vehicle Code Section 23130 establishes vehicle noise limits for moving vehicles, including interstate trucks that operate on streets, highways and freeways within the state, and regulates noise impacts on adjacent land uses. The provisions are enforced by the California Highway Patrol and local law enforcement agencies, such as city police.

Trucks tend to generate greater noise than cars. Certain types of trucks are prohibited by the state from traveling on certain state highways due to safety considerations. Freeways serve as the primary truck freight haul routes. Within the city, trucks are allowed to travel on streets except where prohibited by state regulations or by weight or height limits, such as on bridges, in tunnels and on some mountain or substandard streets. Because trucks can travel on most streets and highways in Los Angeles, truck noise can impact all areas of the city. Areas especially impacted tend to be those that are located adjacent to industrial and warehouse sites. Truck traffic impacts, including noise, are such a problem in the port community of Wilmington that the Wilmington-Harbor City community plan (adopted 1989) recommends that certain major highways within the community be designated as truck routes and that trucks be discouraged from using other streets.

Freeway Noise

By the late 1960s, freeways were a major source of noise throughout the state. Entire communities were impacted, especially at night, by the steady hum or roar generated by fast moving traffic. In 1973-74 state and federal agencies, in response to the 1969 National Environmental Policy Act, adopted formal policies and criteria for construction of noise barriers to mitigate impacts. In California, the responsibility for freeway and highway noise management was assumed by the California Department of Transportation (Caltrans). As a part of the nationwide highway noise abatement effort, Caltrans instituted a noise management program to reduce impacts from existing and new freeways on residential, school and other noise sensitive uses.

The program utilized noise barriers (sound walls) and/or building modification methods. The noise barrier program was the most publicly visible of the methods used. By 1996 over 150 miles of the nearly 210 miles of walls nationwide had been con-

structed in California, including more than 115 miles of walls in Los Angeles County. Sound walls typically are eight to fourteen feet in height and are installed between the freeway and adjacent homes or other impacted uses.

Where sound walls alone cannot reduce interior sound to acceptable levels, buildings sometimes are modified by adding or improving air conditioning, acoustical glass and/or other noise insulation features. Such abatement measures primarily are applied to schools. By 1996, the retrofitting program had been almost entirely completed for impacted schools located within the city's boundaries.

In addition, new freeways, such as the Glenn Anderson Interstate 105 Freeway (formerly called the Century Freeway), which opened in 1993, are constructed with noise mitigation features. These include walls and earth berms, freeway design (e.g., locating freeways in trenches) and conversion of some adjacent, potentially impacted properties to freeway compatible uses. The noise mitigation measures for both existing and new freeways has contributed significantly to reduction of ambient urban noise and has reduced direct noise impacts on adjacent uses and neighborhoods.

Rail Systems

Noise from rail systems is localized, impacting immediately adjacent communities. This section reviews noise and vibration management relative to rail systems within the city.

Railroads

JURISDICTIONAL AUTHORITY

The city cannot regulate transcontinental or intrastate trains operating within its borders. It has the authority to regulate land use as long as its determinations do not conflict with or infringe upon state or federal authority. Management of rail system related noise is within the jurisdiction of federal and/or state authorities. For example, the Federal Transit Administration (FTA) requires that all rail systems that receive federal funding must be constructed and operated in accordance with its specifications; the Federal Rail Administration (FRA) sets and enforces safety standards, including regulation of noise emissions within locomotive cabs, and requiring that train horns be a minimum of 96 dBA at 100 feet in front of a moving train; the National Environmental Policy Act (NEPA) requires federal agencies to incorporate environmental protection and enhancement measures into projects that are financed in whole or in part by federal funds (including loans). The FTA has promulgated noise and vibration impact assessment and mitigation guidelines for use by rail authorities for preparation of environmental impact reports for federally funded rail projects. Rail operations in Los Angeles are centered around Union Station and the east Los Angeles rail yards.

NOISE ISSUES

Union Station is located in the Central City North community of Los Angeles, adjacent to El Pueblo de Los Angeles Historic Monument. The train yard adjacent to the station bounds New Chinatown and extends to Taylor Yard, which is adjacent to the communities of Glassell Park and Cypress Park (Northeast community plan area). The station and yards serve both passenger and freight trains. Noise from Union Station and the adjacent yards largely is buffered from residential uses by manufacturing, commercial, office and park (Elysian Park) uses. In the early 1990s use of the yards by Metrolink trains generated public concern. An advisory committee was formed. The committee prepared a community compatibility study that recommended noise management measures.

Noise from freight train activities associated with industrial and warehouse uses and around the Los Angeles-Long Beach harbors generally is buffered from adjacent uses by surrounding industrial, warehouse and commercial uses. Overall improvement in train equipment and servicing methods has contributed significantly to reduction in noise impacts. However, some residential neighborhoods near active rail lines are impacted

by noise from intermittent passing trains and associated rail and truck activities.

ALAMEDA CORRIDOR PROJECT

Construction of the six-lane, 20-mile project began in 1997. The corridor extends from the ports of Los Angeles and Long Beach, though south and central Los Angeles to rail yards in the cities of Vernon and Commerce, interconnecting rail lines with regional truck systems. It is intended to increase the efficiency of movement of freight and expand rail capacity within the Southern California region. This is to accommodate the expected tripling of Pacific rim (Asia, North and South America and other Pacific nations) trade over the next quarter of a century. The project will consolidate some 90 miles of railroad tracks and eliminate approximately 200 at-grade street crossings. A 30-foot deep trench paralleling ten miles of Alameda Street is planned from the rail yards near downtown Los Angeles to the Artesia Freeway (Route 91) in the city of Compton. Consolidation of rail lines will reduce noise impacts by reducing the number of freight haul lines and by providing buffering of new lines, thereby eliminating or significantly reducing noise associated with freight trains.

New Rail Systems

TRAIN AND LIGHT RAIL NOISE

The Southern California Regional Rail Authority (SCRRA) is a quasi-state agency that operates the Metrolink commuter train system. Since it is regulated by federal interstate commerce laws, it is exempt from local regulations. If a train system utilizes existing rail rights-of-way, it is deemed categorically exempt under the California Environmental Quality Act (CEQA) environmental assessment and mitigation procedures. Metrolink trains utilize existing rail corridors, station areas and rail yards. Therefore its system generally have been deemed categorically exempt under CEQA. However, SCRRA voluntarily attempts to abide by local noise regulations and responds to noise complaints.

Other new rail systems are under the authority of the Los Angeles County Metropolitan Transportation Authority (MTA). The MTA serves commuter and short haul public transit passengers within the greater Los Angeles metropolitan area. As a quasi-state agency it is exempt from city noise laws. However, the MTA attempts to comply with the local noise regulations and to achieve the federal standard of 85 dBA within 50 feet of a habitable dwelling. The MTA uses comprehensive noise and vibration criteria that varies according to land use. This has enabled it, in some neighborhoods, to achieve even more restrictive sound emission levels than are set forth in the city ordinances and/or federal guidelines.

Before rail lines are constructed or new systems installed, significant potential noise and vibration must be identified and mitigation measures assured in accordance with federal and state environmental impact regulations (NEPA and CEQA). New rail systems and equipment are designed to comply with noise standards established by the FTA, the American Association of Railroads and the Public Utilities Commission relative to car, engine and track design, horns, auxiliary equipment, train operation, sound of wheels at curves, crossing signal bells and other system associated noise. Significant noise mitigation has been achieved by both MTA and SCRRA through replacement of existing rails and wood ties or construction of new tracks with continuous or seamless (not jointed) welded rails. Antilock braking systems prevent 'flat spots' on train wheels which, in the past, caused them to bump and clank whenever the flat spot and rail came into contact. New car and wheel system design and noise dampening devices also reduce external noise. These and other features have eliminated the vibration, noisy "click-clack" sound and other noises commonly associated with traditional railways.

The MTA Blue Line and Metrolink lines generally utilize existing rights-of-way that bound existing industrial, institutional, commercial, open space and other nonresidential areas, thus minimizing new noise impacts on residential uses. Securing of rail rights-of-way has enabled the MTA to, in some

cases, create open space, park and recreational buffers along rail lines, further reducing noise impacts on adjacent residential areas. Noise impacts are virtually nonexistent for the MTA's Green Line light rail system because it is located almost entirely within the Glenn Anderson Freeway.

New development on properties adjacent to rail lines must comply with the city's building code insulation provisions. Along with zoning setbacks, building insulation generally assures adequate noise mitigation relative to adjacent rail lines.

The MTA and SCRRA have attempted to be responsive to neighbors. After the Blue Line began to operate between downtown Los Angeles and Long Beach, residents in the Long Beach area complained to the MTA of the sound of wheels on rails at one section of the line. People also complained about the loudness of the train horns. These complaints prompted the MTA to hire a noise consultant to investigate. Based on the consultant's recommendation, the MTA installed quieter horns, retrofitted cars with additional dampening fixtures and materials, modified the car design, ground the rails and constructed a sound barrier at the noise complaint site, thereby achieving lower noise levels. The redesign of the cars and other modifications benefitted properties along the entire Blue Line route and are being applied to other MTA light rail systems. Similar complaints about the loudness of Metrolink horns resulted relocation of the horns from the roofs to the undercarriages of the trains, significantly reducing noise impacts.

Partially in response to community concerns, the planned Metrolink maintenance facility at Taylor Yard (Glassell Park and Cypress Park in northeast Los Angeles) was designed to reduce noise impacts. New technology and facility design enabled entire trains to be serviced without having to separate cars or locomotives. This virtually eliminated noise from separation of air hoses and coupling and uncoupling of cars.

Nevertheless, the community experienced noise impacts due to increased activity in the yards. This resulted in neighborhood demands for mitigation of rail yard noise and for development of more compatible uses along the eastern portion of the property. A study group was formed in the early 1990s. It was comprised of the representatives of the American Institute of Architects, community groups, property owners and operators, public agencies, elected officials and other entities who evaluated the potential use of parcels adjacent to and within the eastern portion of Taylor Yard. The team recommended community oriented commercial and other neighborhood compatible development of some parcels along the north side of Taylor Yard. The recommendations were used in conjunction with the revision of the Northeast community plan, which was underway in 1998.

SUBWAY NOISE AND VIBRATION

MTA's Metro Rail Red Line subway is partially completed. A single subway line operates between Union Station and Western Avenue (in the Wilshire community). Other lines are under construction, including a branch to the San Fernando Valley via Vermont Avenue and Hollywood Boulevard (Hollywood community). Because it is an enclosed underground system, noise impact concerns have been minimal, except relative to construction activities. Subway construction was granted a variance from the city's noise ordinance construction hours to enable tunneling 24 hours a day, in accordance with conditions of the variance. Any construction activities must otherwise comply with the noise ordinance.

In the Hollywood area the broadcast industry raised concerns about vibration and noise, especially during construction, relative to the proposed tunnels below television, radio and recording studios. This resulted in the hiring by the MTA of a consultant to evaluate potential noise and vibration impacts and to propose mitigation measures as a supplement to the environmental impact report for that segment of the system. The measures issued in 1989 included some subway realignment. Depth of the subway tunnels, track engineering and vibration dampening measures are expected to reduce or

eliminate impacts of vehicle generated vibration on uses located above the tunnels when the system becomes operational.

Tunneling under the community of North Hollywood began in 1996 and resulted unanticipated problems, including construction noise and vibration impacts on sensitive uses, e.g., recording studios. The MTA reanalyzed its planned train operations and environmental conditions. In response to its findings, the MTA adjusted its noise and vibration criteria, modified the track supports and offered to modify some buildings that contained sensitive uses. The measures are intended to eliminate any significant above ground noise and any vibration impacts, as measured relative to the high ambient noise levels associated with the area.

Aircraft and Airports

Airport and heliport noise is localized, affecting communities immediately adjacent to the facilities. However, the intensity and intrusiveness of jet aircraft noise has resulted in such noise becoming a major local concern. The primary issue raised during the hearings and public discussion relative to the city's first Noise Plan (1975) was the issue of aircraft noise, especially noise impacts on communities adjacent to the Los Angeles International Airport (LAX). Issues also were raised in 1975 about noise associated with heliports and the Hollywood-Burbank Airport (now called the Burbank-Glendale-Pasadena Airport). In the interim since the 1975 plan was adopted many changes have taken place that have enabled authorities to better address noise issues relating to airports. However airport noise remains the primary unresolved noise issue facing the city. This section reviews noise management of aircraft and airports (including heliports) within the city. It addresses this issue relative to the five airports that are located within or immediately adjacent to the City of Los Angeles: LAX, Van Nuys, Burbank, Santa Monica and Whiteman airports.

Jurisdictional Authority

Management of aircraft and airport related noise is within the jurisdiction of federal, state and/or local authorities.

FEDERAL

Under federal statutes, safety and national defense have primacy over noise abatement. The Federal Aviation Act of 1958 vested the Federal Aviation Administration (FAA) with exclusive authority over air safety, management and control of airspace and movement of aircraft through airspace. Local jurisdictions and local airport authorities have no direct control over airspace or air traffic control, which are safety issues under the authority of the FAA. The FAA determines landing and departure routes for public and private airports and heliports and sets construction and operational standards to assure safety. Federal authority preempts state and local authority over aircraft operations, including aircraft noise emissions, aircraft flight patterns and airport use.

STATE

Enforcement in California of federal airport regulations is delegated to the California Department of Transportation (Caltrans) and is administered by the Caltrans Aeronautics Program (CAP). CAP sets noise guidelines for local airports. In addition, the state is responsible for regulation of airport related land use and has established noise insulation standards. It has delegated authority over land use regulation largely to local governments.

LOCAL

Land use compatibility with airport uses is largely within the authority of local jurisdictions, as long as actions do not conflict with or infringe upon federal and state authority. Local governments cannot regulate flight hours, flight patterns or operational procedures. Where the local government is also the airport proprietor, it may adopt noise abatement measures affecting aircraft operations only with the express authorization of the FAA. The city has mapped airport hazard areas around the Van Nuys (VNY) and LAX airports and established procedures to regulate land development consistent

with federal safety regulations (LAMC Section 12.50). Land use within flight path hazard areas, both within and outside of airport boundaries, must comply with height, glare and other safety considerations established by the FAA.

AIRPORT LAND USE COMMISSION

State law (Public Utilities Code Section 21670 et seq.) requires creation of county airport land use commissions (ALUCs). The ALUCs advise local jurisdictions concerning coordination of airport and land use planning for adjacent geographic areas in order to achieve orderly expansion of airports, reduction of community exposure to excessive noise and elimination of safety hazards associated with airport operations. The ALUCs prepare and adopt comprehensive airport land use plans (CLUPs) that "provide for the orderly growth of each public airport and the area surrounding the airport" within the ALUC's jurisdiction and protect the welfare of the surrounding residents and general public. The plans are based upon airport layout plans, as accepted by the CAP, or locally adopted airport master plans. The ALUC plans anticipate airport growth for a period of 20 years.

An ALUC reviews those sections of a city's general plan (e.g. community plans and airport plans), as well as proposed plan amendments, specific plan ordinances and development permit requests that pertain to airport hazard and noise impact areas in order to determine consistency with the CLUP. Local authorities may overrule an ALUC's determination.

State law provides for the Los Angeles County Regional Planning Commission to act as the ALUC for Los Angeles County. The county's 1991 CLUP contains a CNEL of 65 or 70 dB noise exposure contours for each airport in the county. The CLUP "Land Use Compatibility Table" provides guidelines for establishment of particular uses in areas exposed to a CNEL of 60 or more dB noise impacts. The City of Los Angeles noise ordinance emission standards are consistent with the 1991 CLUP guidelines. Revision of the county's CLUP was initiated in 1997.

CITY OF LOS ANGELES

Pursuant to the city's planning and zoning code, aircraft landing fields are allowed by right in the M2 (light industrial) and M3 (heavy industrial) zones. In all other zones they are authorized by conditional use permit issued by the city planning commission (LAMC Section 12.24.B.1) or, on appeal, by the city council. Most heliports are not located in M2 or M3 zones. The three airports within the city boundaries (LAX, VNY and Whiteman) generally are zoned in the M2, M3 or PF (public facilities) zones.

In 1998 Los Angeles World Airports, the city's airport authority, was preparing master plans for LAX and VNY. The plans are limited by the FAA to land use considerations, including intensity of development. However, changes in airport land use must be approved by the FAA. The city is prohibited from closing an airport or reducing the intensity or type of aircraft activity without FAA approval.

Because Whiteman Airport is a county facility, it is legally exempt from municipal zoning laws. However, as a matter of policy, the county attempts to comply with city zoning laws and land use procedures.

SUMMARY

In general: federal authority is over airspace and safety, including aircraft noise standards; state authority is over airports, including airport noise standards, and enforcement of airport safety (except where preempted by federal authority); and local authority is over operations and land use (except where preempted by federal and state authority).

Regulations And Programs

A variety of regulations and programs guide and assist local airport authorities in achieving federal and state noise standards.

ENVIRONMENTAL ASSESSMENT

The 1969 National Environmental Policy Act (NEPA) and 1970 California Environmental Quality Act (CEQA) require that environmental impacts, including noise impacts, be evaluated. NEPA requires

that mitigation measures be considered in project implementation. CEQA requires that mitigation measures be incorporated into the project to avoid or minimize significant impacts to the maximum extent feasible. Proposed new airports, including heliports, are required to submit environmental statements as a part of their permit applications. Master plans, zone changes, reconfiguration of airport uses (including runways) or other significant projects are discretionary actions that trigger the environmental assessment and mitigation procedures. All official environmental review documents are subject to public review and comment.

FEDERAL AVIATION REGULATIONS PART 36 (FAR PART 36)

Congress in 1968 granted the FAA authority to implement and monitor airspace regulations, including regulation of aircraft noise. The FAA in 1969 promulgated "14 Code of Federal Aviation Regulations Part 36" (FAR Part 36) establishing maximum sound emission levels for new aircraft and phasing out of noisier aircraft. Subsequent amendments classified fixed-wing aircraft into three noise impact categories, with Stage 1 applying to the oldest and noisiest aircraft engines and Stage 3 to the newest and quietest engines. New fixed-wing aircraft built in the United States were required to comply with the Stage 3 standards. After January 1, 1986 commercial fixed-wing aircraft were to comply with the Stage 2 standards. Stage 1 aircraft were phased out of use at civilian airports by 1990.

To comply with FAR Part 36, all new commercial passenger airplanes are designed to reduce engine noise to a minimum feasible level. Lighter and stronger composite materials and more streamlined design have reduced needed engine power, thereby reducing engine noise emissions. New technological advances are anticipated to further reduce fixed-wing aircraft engine noise in the future.

CALIFORNIA AIRPORT NOISE STANDARDS

California Airport Noise Standards (California Code of Regulations Title 21, Section 5000 et seq.) were adopted in 1970. They are administered by the Caltrans Aeronautics Program (CAP). Under the standards, civilian airports, including heliports, that are deemed to be a "noise problem airports" are required to meet a community noise equivalent level (CNEL) of 65 dB at airport boundaries by January 1, 1986 (FAR Part 36) or to seek a variance from CAP. Noise problem airports that were unable to eliminate noise incompatibility within the established time frame were permitted to seek and renew variances. Variances provide extensions of time for development of plans for compliance within a reasonable period of time.

CNEL is a noise measurement scale applied over a 24-hour period to all noise events received at the measurement point. It is weighted more heavily for evening and night periods in order to account for the lower tolerance of individuals to noise during those periods. Noise is greater at the source (airport runway) and diminishes as the distance between source and the receptor widens. The CNEL measurement is expressed as a contour line around the noise source.

The California Noise Standards contain procedures for implementing noise and land use compatibility requirements. They establish systematic methods for measuring noise levels and addressing noise problems and define incompatible noise sensitive uses, e.g., residential dwellings (including mobile homes), schools, hospitals, convalescent homes and houses of worship. An interior noise level of a CNEL of 45 dB is the standard for all noise sensitive uses.

Counties are authorized under the noise standards to issue a resolution declaring that a civilian airport within its boundaries is a "noise problem" airport, based upon receipt of noise complaints and other noise impact data. Once so identified, the airport becomes subject to the California Airport Noise Standards, which are enforced by the county. The county is required to validate the noise contours. Airports identified by the county as noise problem airports are to reduce noise problems (i.e., incompatibility) through a variety of suggested strategies, including reconfiguration of airport land use, modification of airport flight paths, rezoning, land ac-

quisition and other abatement measures. The airport's comprehensive land use plan is submitted to the county for review and adoption. The county submits the plan and quarterly reports (documenting the contours and incompatible land uses within the contour areas) to the CAP. The CAP reviews the reports and approves the plans.

Five airports are within or adjoin the city (Exhibit A). The Los Angeles County Board of Supervisors has deemed three of the five, LAX, VNY and Burbank, to be noise problem airports. All three airports submit quarterly reports with contour maps depicting CNEL of 65 dB contours (Exhibits B-D) to the county and prepare noise abatement programs. They currently operate under noise compatibility compliance time extension variances. Santa Monica and Whiteman airports are not considered noise problem airports because significant airport related noise is contained within the airport or surrounding airport-compatible land use (Exhibits E and F).

AIRPORT NOISE AND CAPACITY ACT OF 1990 (FAR PARTS 91 AND 161)

The Airport Noise and Capacity Act of 1990 (14 Code of Federal Regulations [subsequently recodified as 49 U.S.C. 47521 et seq.]) established FAA authority over most airport noise management, preempting state and local authority. The Act sets procedural requirements that must be met before noise regulations can be enacted for an airport. It is implemented by "14 Code of Federal Aviation Regulations Part 161" (FAR Part 161), which establishes a program for reviewing airport noise and access restrictions on the operations of Stage 2 and Stage 3 aircraft. In addition, FAR Part 91 establishes procedures for phasing out of large (over 75,000 pounds) Stage 2 aircraft and for reducing noise emitted by Stage 2 aircraft. The goal is to phase out most Stage 2 commercial fixed-wing aircraft from airports by December 31, 1999. Any proposed new Stage 3 noise mitigation measures must be authorized by the FAA. Prior to 1990, airports could impose more stringent standards than were contained in federal regulations. The Act allows noise ordinances already in effect, such as the Van Nuys Noise Abatement and Curfew Ordinance, to remain in effect, i.e., to be "grandfathered".

FEDERAL AVIATION REGULATIONS PART 150 PROGRAM (FAR PART 150)

In 1979, passage of the Aviation Safety and Noise Abatement Act made matching funds available for noise abatement. "14 Code of Federal Aviation Regulations Part 150" specifies how abatement and prevention measures may become eligible for the funds. The program is popularly known as "FAR 150 program." The Burbank Airport Authority and LAWA are participating in the FAR Part 150 program relative to the LAX, VNY and Burbank airports.

To qualify impacted areas for noise abatement or prevention funds, an airport authority must submit noise exposure contour maps and prepare a noise compatibility program (NCP), as defined by FAR Part 150. The maps are to identify CNEL of 65 dB or greater noise exposure contours for current and projected exposures. The NCP is to include a description of how citizens, local jurisdictions and affected agencies will participate; an airport land use compatibility plan; measures to prevent introduction of additional incompatible uses within the noise exposure areas; and detailed proposals for achieving and maintaining compatibility, e.g., reduction of incompatible land uses, airport reconfiguration, modification of flight procedures, sound proofing or other noise management measures designed to reduce impacts on existing surrounding noise sensitive uses. To guide noise impact assessment and prioritization, FAR Part 150 provides a land use compatibility table. It is comparable to the state guidelines and the guidelines contained in this noise element (Exhibit I). The FAA may deny an NCP or approve eligibility for funding for all or part of a proposed NCP.

The FAR Part 150 program in 1998 began requiring evidence that local authorities are preventing the introduction of new noise sensitive uses within noise impact areas and stopped providing funds for noise abatement for incompatible uses introduced after January 1, 1998. The changes are intended to

encourage promulgation and enforcement of local land use compatibility measures.

CALIFORNIA NOISE INSULATION STANDARDS

The interior noise standard to be achieved by abatement programs is specified by the California Noise Insulation Standards (Building Code Title 24, Section 3501 et seq.). It sets interior noise levels of 45 dB in any habitable room, averaged over a 24-hour period. The standard is applied, per the California Airport Noise Standards, to all "sensitive uses" pursuant to the airport noise compatibility program.

LOCAL NOISE COMPATIBILITY PROGRAMS

In addition to federal noise abatement and prevention funding, local airport authorities may establish their own programs. LAWA has established an abatement program relative to LAX. It is independent of the Part 150 program. In addition, local airports and jurisdictions have sought to reduce through land use changes and other noise management approaches.

Helicopters

PLANNING COMMISSION AND FIRE DEPARTMENT PERMITS

Aircraft, helicopters and heliport noise and safety considerations are within the regulatory authority of the state and federal governments, as described previously. However, cities have authority over certain land use and specific safety considerations.

In the 1960s the Los Angeles City Planning Commission (CPC) was given the responsibility (LAMC Section 12.24) for authorizing heliports, including heliports[1] used only in emergency situations. The permits are conditioned, based on potential impacts identified during the permit review process, including environmental review and public hearings. The conditions define and regulate the use of a specific heliport. If noise or other potential land use related problems appear unsolvable, the CPC can deny the permit. Permits can be revoked if noise impacts prove greater than anticipated or conditions of approval are not observed. The county's airport land use commission is required by state law to confirm the local heliport permit before final authorization can be considered by the Caltrans Aeronautics Program. The FAA determination of conformity of a heliport and its flight paths to FAA guidelines occurs prior to CPC consideration. Therefore, the determination is part of the documentation provided by the applicant to the CPC. If the state, FAA or the city fire department determine that a proposed or existing heliport is unsafe, the CPC's permit becomes moot.

The fire department has the authority to deny or revoke use of a private or public heliport if it determines that a facility does not meet city safety requirements (e.g., failure to maintain a heliport in a safe condition, existence of trees or other obstructions in the landing or departure paths or improper maintenance of wind socks and lighting).

In 1974 all new buildings over 75 feet in height were required by the city to provide emergency helicopter landing facilities (LAMC Section 57.18.11). The authority to approve such uses was assigned to the fire department. The new law resulted in a substantial reduction in the number and type of permits considered by the CPC. Permits for banks and hospitals became the most common requests because banks needed to transfer paper records on a daily basis and hospitals needed heliports for transfer of patients and materials. Requests for commuter and passenger service operations generally were denied by the commission. However, such requests were rare because of the availability of helicopter operations at local airports.

In 1978 the fire department was authorized to approve "infrequent" helicopter landings in any zone (LAMC Section 12.22-A.6). Such landings may occur only twice a year at sites within specified single-family (RA, R1) and commercial (C1, CR) zones. Infrequent landing permits are to accommodate occasional events such as educational programs and movie filming.

Commission hearings for heliports typically generate community concern regarding noise impacts. To minimize noise impacts, the CPC generally limits the use (e.g., bank records transfer only), hours

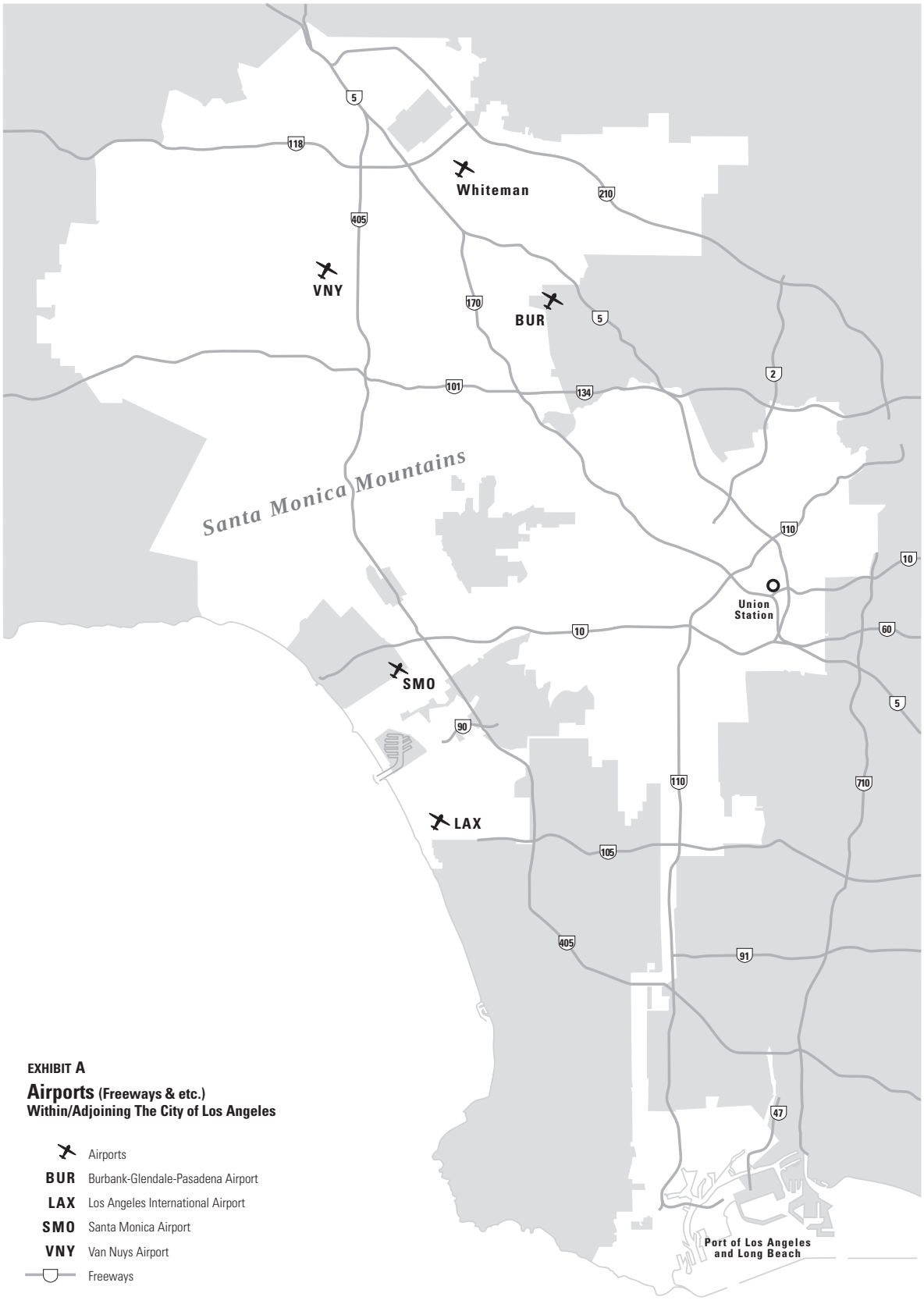

EXHIBIT A

Airports (Freeways & etc.)
Within/Adjoining The City of Los Angeles

- Airports
- **BUR** Burbank-Glendale-Pasadena Airport
- **LAX** Los Angeles International Airport
- **SMO** Santa Monica Airport
- **VNY** Van Nuys Airport
- Freeways

Source: Proposed Transportation Element of the General Plan, Los Angeles City Planning Department, 1997.
Prepared by the Transportation Unit • City of Los Angeles Planning Department • Citywide Graphics • January, 1998

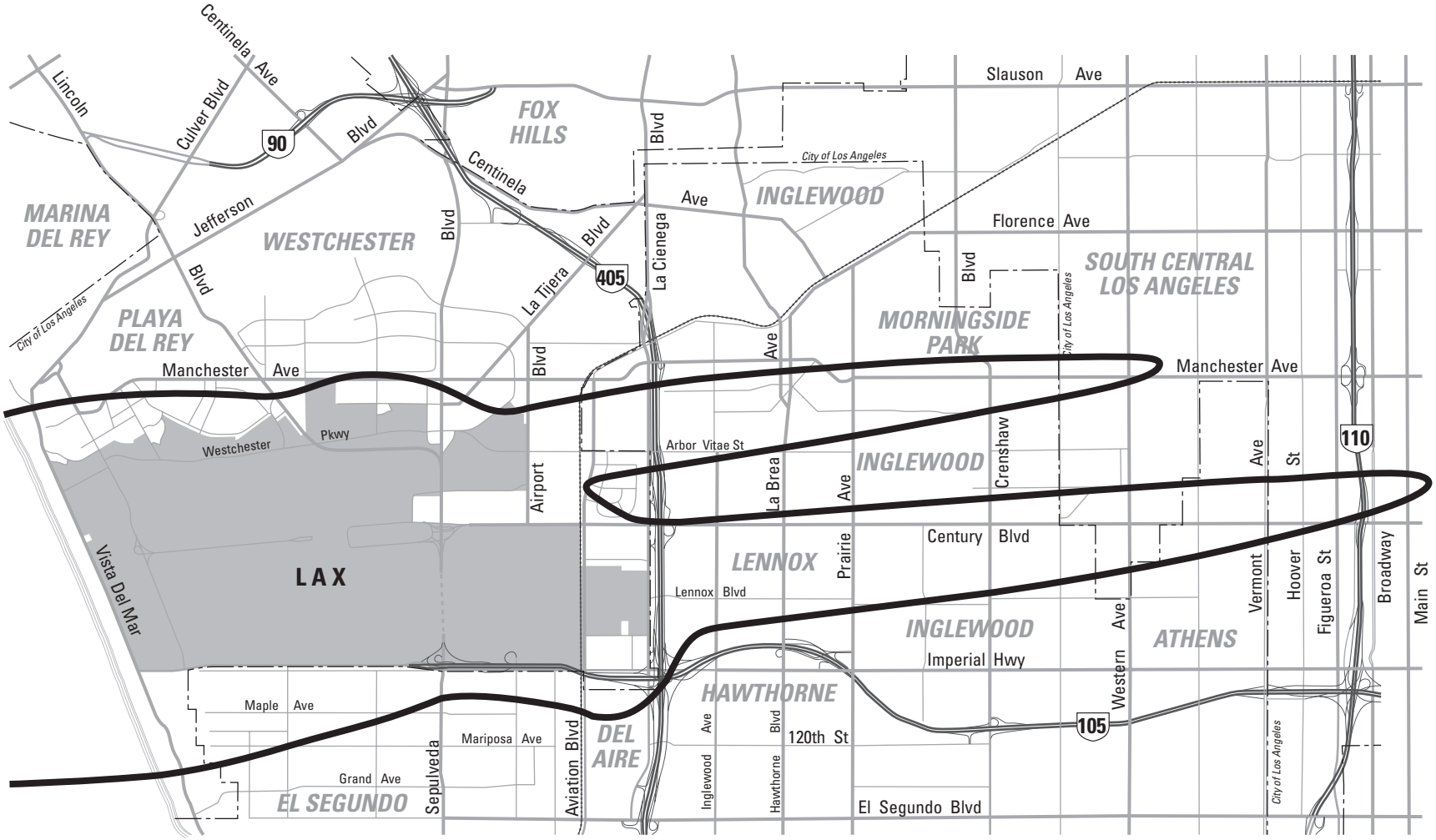

EXHIBIT B

Los Angeles International Airport

Noise Exposure Contour*

Noise Contour (a CNEL of 65 dB)

Airport Boundary

Note: Exhibit is illustrative and is not to scale.
For further information contact Los Angeles World Airports.

*Based on: (1) Fourth Quarter Monitoring Report, Los Angeles World Airports, August 13, 1997
Los Angeles World Airports, April 07, 1997
(2) City Planning Department community plan maps.

Prepared by the Graphics Section • City of Los Angeles Planning Department • Citywide Planning Division • January, 1998

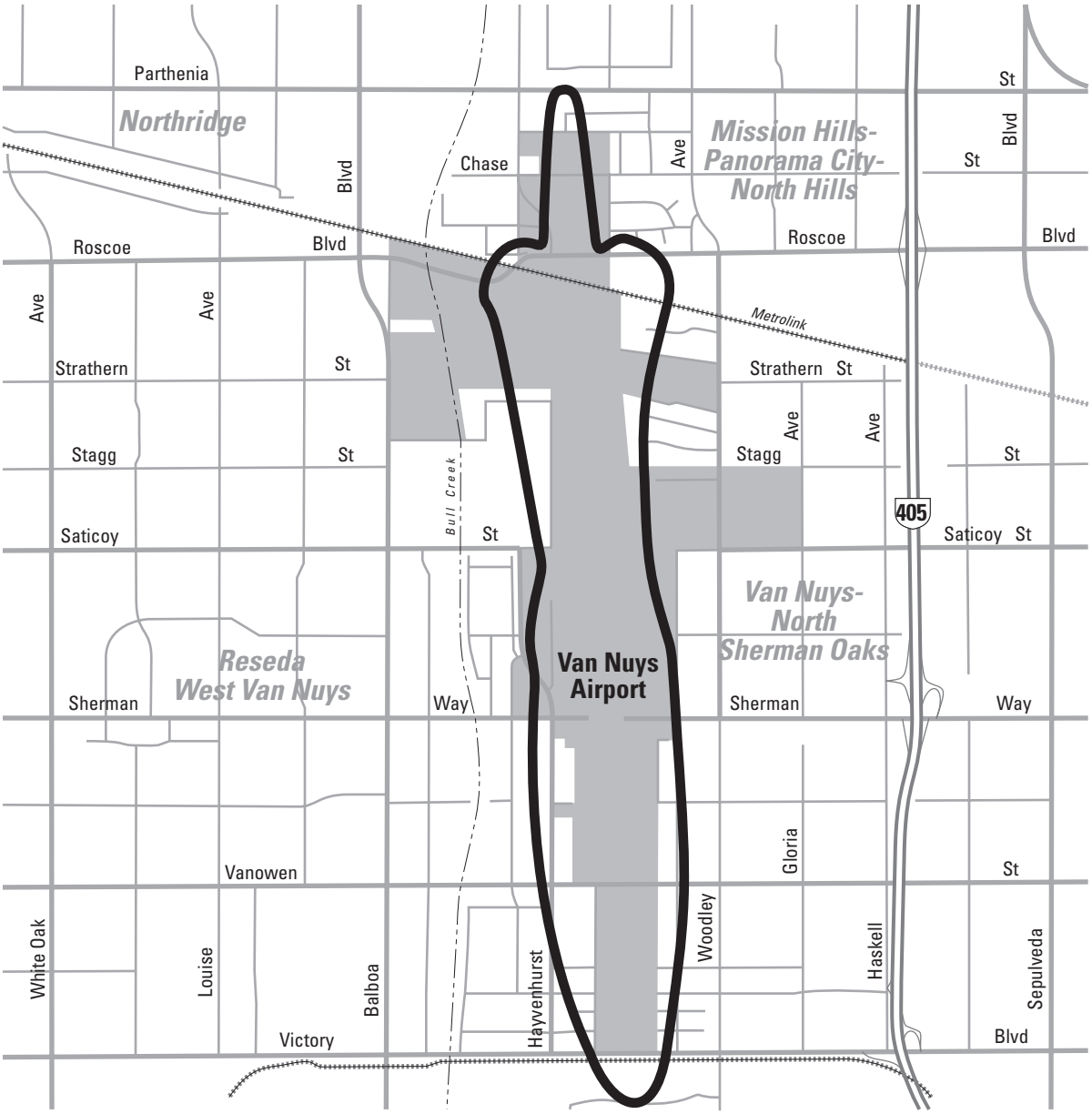

EXHIBIT C

Van Nuys Airport
Noise Exposure Contour*

Noise Contour (a CNEL of 65 dB)

Airport Boundary

Note: Exhibit is illustrative and is not to scale.
For current information contact Los Angeles World Airports.

*Based on : (1) Fourth Quarter Monitoring Report, Los Angeles World Airports, September 8, 1997
(2) City Planning Department community plan maps.

Prepared by the Graphics Section • City of Los Angeles Planning Department • Citywide Planning Division • January, 1998

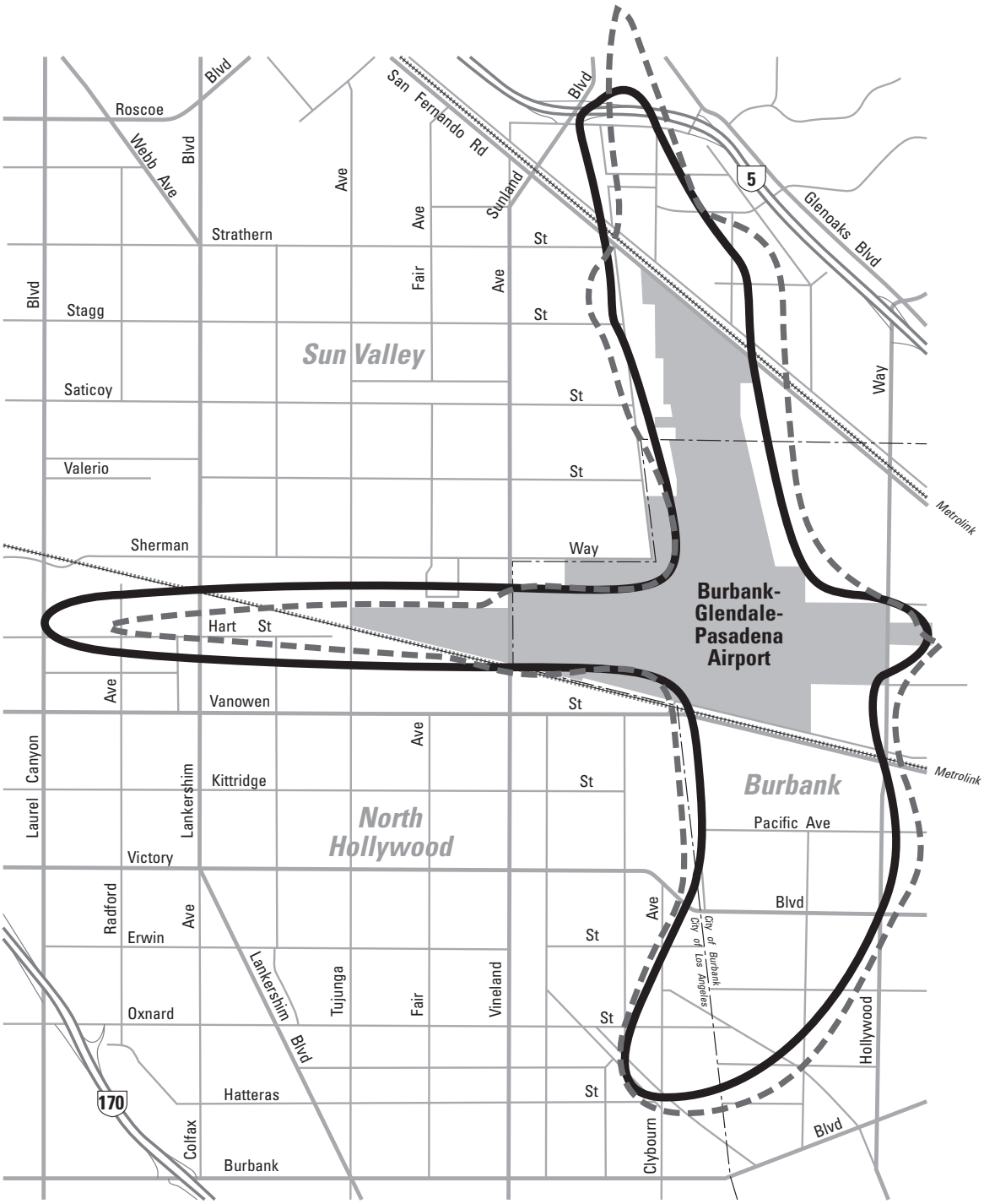

EXHIBIT D

Burbank-Glendale-Pasadena Airport
Noise Exposure Contours

1996 Noise Contour (a CNEL of 65 dB)*

2010 Projected Contour (a CNEL of 65 dB)**

Airport Boundary

*Based on : (1) "Quarterly Noise Monitoring Report, at Burbank Airport, Fourth Quarter 1996", Burbank-Glendale-Pasadena Airport Authority, July 1996.
(2) City Planning Department community plan maps.

**Based on : "Environmental Impact Statement for Land Acquisition and Replacement Terminal Project," Burbank-Glendale-Pasadena Airport Authority, August-1995.

Note: Exhibit is illustrative and is not to scale. For further information contact the Airport Authority

Prepared by the Graphics Section • City of Los Angeles Planning Department • Citywide Planning Division • January, 1998

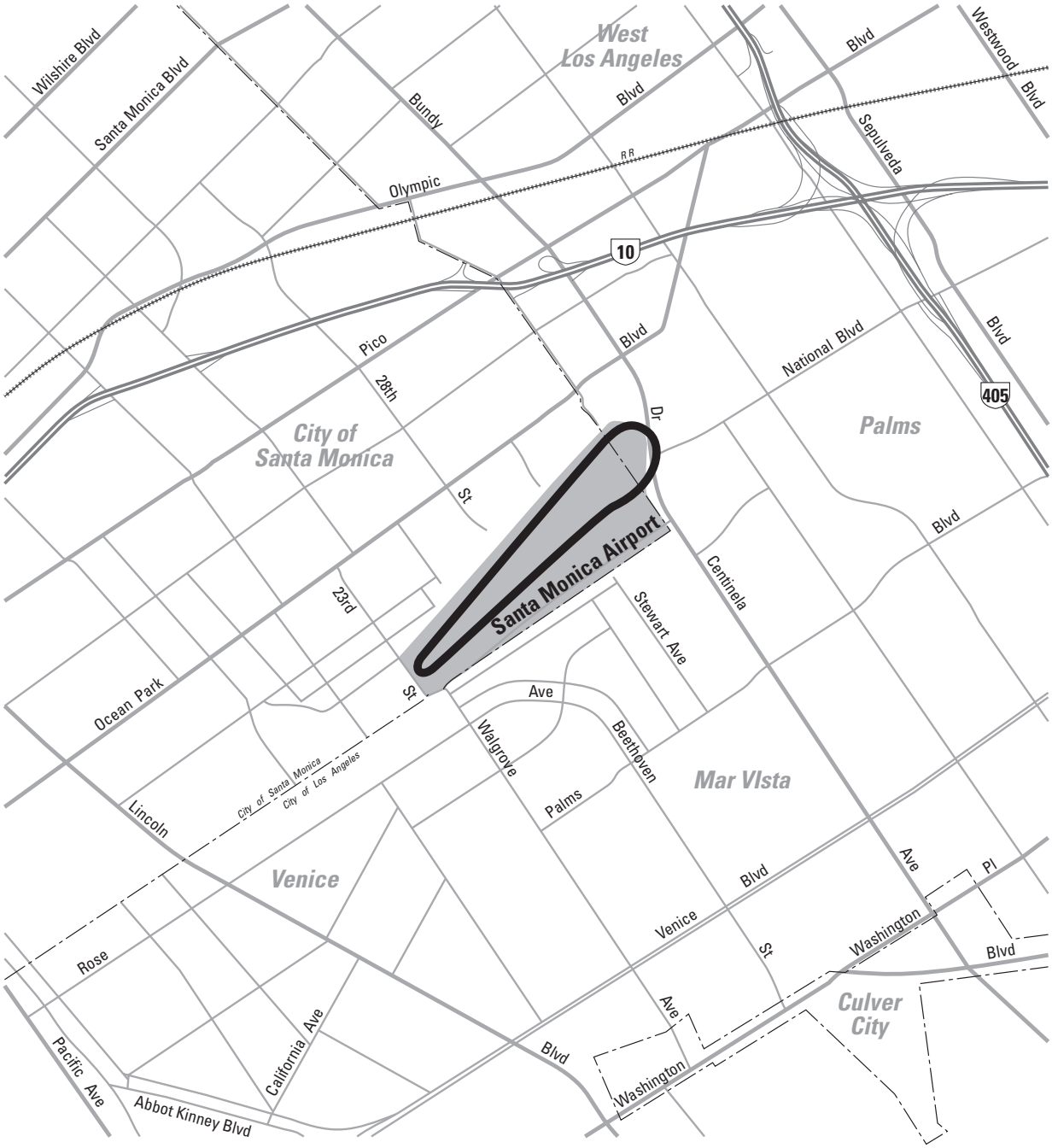

EXHIBIT E

Santa Monica Airport
Noise Exposure Contour*

Noise Contour (a CNEL of 65 dB)

Airport Boundary

Note: Exhibit is Illustrative and is not to scale.
For current information contact the Santa Monica Airport

*Based on : (1) Santa Monica Airport Noise Management Office, 1996.
(2) City Planning Department community plan maps.

Prepared by the Graphics Section • City of Los Angeles Planning Department • Citywide Planning Division • January, 1998



EXHIBIT F

Whiteman Airport
Noise Exposure Contour*

Noise Contour (a CNEL of 65 dB)

Airport Boundary

Note: Exhibit is illustrative and is not to scale.
For current information contact the County Regional Planning Department

* Based on: (1) "Los Angeles County Airport Land Use Plan", adopted 1991, Los Angeles County Airport Land Use Commission.
(2) City Planning Department community plan map.

Prepared by the Graphics Section • City of Los Angeles Planning Department • Citywide Planning Division • January, 1998

of operation and number of flights. It sometimes requires noise barrier walls and imposes landing or departure routes. However, because state and federal authority preempts that of municipalities regarding safety, flight path and noise barrier requirements sometimes have been deemed inoperative by the FAA or CAP if they interfered with flight safety. For many years the CPC imposed helicopter weight limitations because it was assumed that weight could be correlated with the amount of noise generated. It ceased imposing the condition in the early 1980s when it was advised that helicopter weight no longer had any bearing on noise emissions.

Helicopter noise, unlike that of fixed-wing aircraft, is associated with the sound generated by rotor blades slapping against wind currents, not by the aircraft engine. Improvements in rotor systems is the primary means of reducing noise generated by helicopters. By the mid-1980s requests for conditional permits for heliports dwindled to zero, largely due to the building construction recession, electronic transfer of documents, increased popularity of limousine service and increased helicopter use of airports. By then approximately 50 private heliports had been permitted within the city, apart from emergency heliports and at local airports (primarily at Van Nuys and Burbank airports).

In the 1980s noise reduction and concern about crime resulted in the support by many local communities for police surveillance helicopters, causing such use to increase substantially. In Los Angeles, police and fire department helicopters operate from existing heliports that often contain fueling, parking and helicopter maintenance facilities.

HELICOPTER NOISE

Even with noise suppression improvements, helicopter flight at 500 feet creates an audible sound that is especially noticeable at night. National "Fly Neighborly" guidelines are implemented voluntarily by most pilots, thereby reducing noise impacts, especially in the vicinity of residential neighborhoods and noise sensitive uses. For example, voluntary alternate flight routes have been requested by the FAA relative to the Hollywood Bowl and other open air theaters during summer concert seasons. In the 1980s, to reduce noise impacts on adjacent communities, local airport authorities established helicopter operational flight procedures, specific landing and departure routes, use restrictions (e.g., no flight training exercises) and restricted hours of operation. These measures, along with rotor system redesign, significantly reduced noise impacts on neighborhoods. The operational procedures were "grandfathered" as existing procedures when the Aircraft Noise and Capacity Act of 1990 was effectuated (October 1990).

Airports In The Los Angeles Area

Los Angeles International Airport is known by its FAA identifier "LAX." It is one of four airport facilities operated by the Los Angeles Department of Airports. The department adopted the business name of "Los Angeles World Airports" (LAWA) in 1997.[2] LAWA is an independent, fee supported, self-managing city agency governed by a board of airport commissioners who are appointed by the mayor and confirmed by the city council. LAWA establishes rules and regulations governing the operation its four airports.

In 1930 LAX became the city's first airport. LAWA subsequently acquired the Van Nuys (VNY), Ontario and Palmdale airport properties. LAX and VNY are located within the city's borders. Ontario Airport is located 30 miles east of Los Angeles, within the city of Ontario. The Palmdale Regional Airport is located 35 miles northeast of Los Angeles in the Antelope Valley within the Mojave Desert, near the city of Palmdale. A temporary airport terminal is located on U.S. Air Force property adjacent to the city's 17,750 acre future regional airport site. Pending development of that airport, portions of the site are used for agricultural purposes (pistachio nut and fruit orchards, grazing sheep). The Ontario and Palmdale airports are not discussed in this element.

Los Angeles International Airport (LAX)

LAX is located entirely within the City of Los Angeles. It is situated south of the Santa Monica Mountain range, within the Westchester-Playa del Rey community planning area. It bounds the cities of El Segundo and Inglewood, the county community of Lennox and the Pacific Ocean.

The airport was located in the middle of a bean field. It rapidly expanded until today it occupies an approximately 3,500 acre site. It has four lighted runways ranging from 8,925 feet to 12,090 feet in length, each of which can accommodate wide bodied passenger jet aircraft. A major contributor to the local economy, LAX is the fourth busiest airport in the United States and the world. In 1996 it served 763,866 flights and 58 million passengers and its 98 acre "cargo city" handled over 1.89 million tons of goods, 40 percent of which was international freight. Among the facilities located on LAX property are commercial and light manufacturing uses, the Centinela Hospital Airport Medical Clinic, a U.S. Coast Guard Air Station and a 200 acre El Segundo Blue Butterfly habitat preservation area.

LAX ZONING

The majority of the LAX site is classified in the M2 and M3 (manufacturing) zones, which allow airport uses by right. Commercial, light manufacturing and open space zoning around the perimeter of the site has encouraged development and retention of airport compatible uses, which serve as noise buffers between the airport and adjacent noise sensitive uses. A portion of the zoning within the airport is conditioned to limit types of use and intensity of development in order to reduce street traffic impacts and encourage compatibility with surrounding communities. Parcels along the north (Westchester) perimeter generally are required to secure planning commission or planning department site plan approval prior to issuance of building permits. This allows additional public review and ensures compliance with planning commission policy.

LAX NOISE MANAGEMENT

Following the opening of the airfield in 1928, agricultural lands surrounding the airport gradually were converted to urban uses. When jet aircraft were introduced in 1959, residents, merchants and school authorities began complaining about noise, especially noise associated with landings and takeoffs. A Sound Abatement Coordinating Committee comprised of representatives of the air transport industry, LAWA, FAA, the Airline Pilots Association and commercial carriers was formed in July 1959 to address the noise problem. Subsequently LAWA implemented the committee's recommendation that aircraft be required to maintain a straight departure course, not turning until they were over the Pacific Ocean. But noise complaints continued.

As a result of a legal action by Westchester property owners, LAWA, with the assistance of FAA funds, in 1965 began to acquire and remove more than 2,800 homes that were severely impacted by aircraft noise and to relocate approximately 7,000 residents of the homes. The program was completed in the 1980s with many of the homes relocated as a part of an affordable housing program. Twenty of the vacated homes were used for a sound insulation testing program. The program concluded that homes severely impacted by airport noise could not be adequately insulated at a reasonable cost using materials and techniques then available. The study is one of the most systematic investigations of different methods and materials applied to dwellings. It has been used by federal and other agencies for formulating insulation standards and programs.

To achieve compliance with FAA and state noise regulations, LAWA adopted (1972) a five-point program to reduce aircraft noise and diminish greater than CNEL of 65 dB aircraft noise impacts on surrounding communities. The measures included termination of airport use permits for operators who repeatedly violated LAWA's noise regulations. Nighttime noise impacts on residential areas was reduced in 1973 when LAWA instituted a preferential nighttime runway system and rerouted night landing and departures over the ocean. Fol-

lowing a test flight of the Concorde supersonic airplane to LAX in 1974 all supersonic aircraft were prohibited from using LAX until such time as they could meet LAWA noise standards. A 1,500 foot long concrete and landscaped earthen sound barrier was constructed in 1979 along the north side of LAX between Emerson Avenue and the Westchester Golf Course to mitigate noise impacts on the Westchester community. During the 1970s a lawsuit brought against LAWA by local school districts was settled when LAWA agreed to provide funds for insulation of schools impacted by LAX and the school districts agreed to aviation (overflight) easements.

LAX - FAR PART 150 AND LAWA NOISE COMPATIBILITY PROGRAMS[3]

The major program in the 1980s and 1990s to accomplish greater compatibility between airports and their neighbors was the FAR Part 150 noise compatibility program. In 1981, to qualify for FAR Part 150 funds, LAWA instituted a four-part study, "The LAX-Airport Noise Control Land Use Compatibility Study." The study reevaluated the feasibility of achieving acceptable indoor noise levels, the methods and materials to meet the levels and the costs involved. It established new noise identification and mitigation procedures that could be applied to homes within a CNEL of 65 dB contour. The new procedures included an aircraft noise monitoring system, which was installed to detect nighttime engine testing in maintenance areas, and a 24-hour complaint and information phone line to facilitate processing of and response to community complaints.

The study provided documentation that enables thousands of properties in the LAX noise impact area to quality for noise abatement funds. Representatives of the aviation industry, regulatory agencies and communities impacted by noise participated in the study. They assessed noise management techniques in relation to land use and recommended methods for achieving greater compatibility between LAX and its neighbors. Public hearings and workshops were conducted to help identify the scope of the study and to secure information and ideas. Committees explored different issues including helicopter noise, maintenance operations, nighttime impacts, operations of aircraft in flight and on the ground and community specific issues. Using advanced modeling techniques, airfield and aircraft operational strategies were evaluated for both noise reduction and safety. In addition, homeowners in noise impacted communities were invited to participate in a "validation" project to test noise insulation materials and methods. Of the 243 dwellings offer by owners for sound insulation testing, seven apartment buildings and 15 single-family dwellings were selected. Residents were interviewed to determine the effectiveness of insulation techniques and materials.

Data from the study resulted in establishment of geographic boundaries within which impacted jurisdictions and properties could qualify to participate in the FAR Part 150 program. The study provided the information needed to qualify and establish prioritization of properties and jurisdictions for FAR Part 150 funding and led LAWA, in 1987, to establish its own sound insulation funding program to supplement federal funding. Other noise monitoring and reduction benefits resulting from the study include: an ongoing dialogue between the community and airport authority; revision of flight and on-ground aircraft and maintenance operational procedures; acceleration of planning and redevelopment programs to reduce incompatible land uses in surrounding jurisdictions; enactment by LAWA of a requirement that aircraft using the Imperial Boulevard terminal (near the city of El Segundo) be towed between the airfield and the terminal; installation of auxiliary power units at all aircraft parking locations so that aircraft would not have to run their engines in order to maintain air conditioning levels within the aircraft between flights; proposals for redesign of runways, including a plan for maximizing use of interior runways so as to focus noise away from adjacent communities; reaffirmation of LAWA's prohibition of supersonic aircraft from use of LAX; establishment of procedures for improved pilot education concern-

ing flight noise management procedures and new helicopter noise abatement (including requiring a 2,000 foot flight altitude); construction of additional sound barriers in Westchester and El Segundo; and a determination that recent advances in acoustical and thermal insulation materials and techniques had made retrofitting a viable alternative for some noise impacted areas and uses.

LAWA sound insulation funds were made available in 1987 to impacted jurisdictions (Los Angeles city and county, Inglewood and El Segundo). To qualify for LAWA funds a local jurisdiction must be a participant in the FAR Part 150 program. Funding for both the FAR Part 150 and LAWA programs has been expanded to accelerate noise management efforts. An estimated 29,041 uninsulated dwelling units lie within the LAX CNEL of 65 dB noise exposure area (approximately 20,051 multifamily and 8,990 single-family residential units). It is estimated that, by the year 2010, LAWA will spend approximately $245 million to soundproof more than 21,000 dwelling units and $220 million for purchase (for conversion) of incompatible uses. As of 1996, the city of Inglewood had been allocated $8 million to convert noise impacted residential properties to airport compatible uses and school districts had been allocated $21 million for sound insulation.

Between 1981 and 1996 the LAX CNEL of 70 dB noise exposure contour area had shrunk from 2.6-square miles to one-square mile, while the CNEL of 65 dB contour remained at around three-square miles. Noise impacts on surrounding communities were significantly reduced by 1986, primarily due to the phasing out of all Stage 1 aircraft, the noisiest aircraft. Virtually all Stage 2 aircraft were phased out by 1996 and all will be phased out by the year 2000.

LAWA is preparing an exterior sound transmission control ordinance to codify noise exposure contours and establish uniform procedures and requirements for sound insulation of new and existing noise sensitive uses, as defined by the California Airport Noise Standards, based on the contours. LAWA also is continuing its efforts to work with the FAA and pilots to further reduce noise impacts through flight techniques and practices. For example, a LAWA-FAA instrument based procedure recently was developed that enables pilots to readily identify the Pacific shoreline. This enables them to maintain flight paths and turning patterns that are less likely to impact the El Segundo and Playa del Rey communities.

LAX - COMMUNITY PLAN NOISE ISSUES

In spite of all these efforts, airport related noise continues to impact surrounding communities, including the Los Angeles city communities of Westchester-Playa del Rey and South Central, the cities of Inglewood and El Segundo and unincorporated areas of Los Angeles County, especially the community of Lennox. Each jurisdiction is addressing the issue of airport noise compatibility through its general planning and noise management programs.

LAX is located within the community of Westchester. To facilitate preparation of plans for LAX, the airport property was removed from the Westchester-Playa del Rey community plan. In acknowledgment of this action, Objective 7 of the 1974 Westchester-Playa del Rey District Plan calls for coordination of airport and airport related land uses to "provide adequate buffers and transitional uses" between LAX and the community.

LAX PLAN

LAWA is preparing a airport master plan that addresses the first major expansion of LAX since 1984. It will become a part of the city's general plan and, therefore, will be considered for approval and/or adoption by the planning commission, mayor and city council, following public hearings. The primary goal of the plan is to reduce noise impacts on adjacent communities, especially residential neighborhoods, while enabling significant expansion of airport activity. The project also will address ground traffic impacts (both noise and circulation) on surrounding communities. Noise has been a major issue in the project discussions.

Van Nuys Airport (VNY)

Van Nuys Airport is owned and operated by LAWA. It is located wholly within the City of Los Angeles. It is known by its FAA identifier "VNY." VNY is situated in the center of the San Fernando Valley, north of the Santa Monica Mountain range, within the community of West Van Nuys and at the edges of the community plan areas of Mission Hills-Panorama City and Van Nuys-North Sherman Oaks. VNY is a 730-acre general aviation airport (no scheduled air carrier services). It has two lighted runways. The 8,000 foot long runway crosses Sherman Way boulevard via an overpass and can accommodate jet aircraft of up to 210,000 pounds. The 4,000 foot runway can accommodate aircraft of up to 14,000 pounds. In 1996 VNY was the busiest general aviation airport in the world and the seventh busiest civilian airport in the nation, handling over 526,433 annual flights and serving 750 based aircraft (those that lease space at the airport). In addition to airport related uses, VNY property contains a hotel, nine-hole golf course, restaurants, agricultural uses and an office supplies store.

VNY ZONING

The majority of the airport property is classified in the [Q]M2-1VL Zone. The [Q] 'Permanent Qualified' condition limits land use on specified sites to airport and airport related uses. The 1VL Height District designation limits structures to 45-feet in height. Less than 16 acres of the property is classified in the M1 and M2 (light manufacturing) zones. The remaining 59 acres lie within the airport overfly (hazard) area and are classified in the OS-1XL (open space) and A1-1XL (agricultural) zones with structures limited to 30 feet in height by the 1XL Height District classification.

Pending completion of the VNY master plan, the city council in 1993 imposed a two-year interim control ordinance to regulate airport land use changes. Subsequently the time period was extended. The ordinance requires planning department authorization for virtually all changes in use. This is to ensure that new uses will not significantly intensify airport activity, that they will be compatible with the surrounding neighborhood and that they will not preclude airport master plan actions.

VNY NOISE MANAGEMENT[4]

From 1949, when LAWA acquired the airport, to 1971, additional acquisitions led to airport expansion and enabled establishment of peripheral airport related uses to buffer airport noise from adjacent residential neighborhoods. However, continuing complaints from neighboring communities regarding noise, especially during the nighttime hours, prompted the city council in 1981 to adopt a noise abatement and curfew law (Ordinance 155,727). The ordinance prohibited airplanes that exceeded 74 dB from taking off from VNY between the hours of 11 p.m. and 7 a.m. (except as provided by the ordinance, e.g., military aircraft and in the event of an emergency); prohibited repetitive jet pattern flying and training operations; limited propeller driven aircraft activities, engine testing and use of certain runways during nighttime hours; and established penalties for ordinance violations. Fixed-wing aircraft operators subsequently were required to sign a "Quiet Jet Departure Program" agreement. The agreement required pilots to observe flight techniques and procedures designed to reduce noise impacts on surrounding communities, e.g., modification of hours and patterns for landings and departures. With the passage of the federal Airport Noise and Capacity Act of 1990, local governments and airports were prohibited from adopting new noise restrictions without obtaining authorization from the FAA. However the Act grandfathered existing local noise ordinances, including the VNY noise abatement ordinance.

In October 1982, LAWA prohibited scheduled commercial air carrier flights from using VNY. In 1985, in response to community concerns regarding potential airport acquisitions, expansion, safety and noise, LAWA established the VNY citizens advisory council to help assess community concerns and develop noise management strategies. In 1992 it prepared the VNY Part 150 program with the assistance of a steering

committee, which included community representatives. It was not accepted by the FAA because the FAA deemed that the airport noise exposure maps, upon which the program was based, were unacceptable.

Voluntary modified takeoff procedures were requested of jet aircraft by LAWA in 1993 to reduce noise and enable an assessment of the effects of such measures on noise impacts. In 1994 noise monitoring was improved to provide more accurate noise contours on which to base the FAR Part 150 noise compatibility program. By 1996, VNY and FAA noise management strategies, including acquisition of land for airport related uses and phasing out of Stage 1 (the noisiest aircraft), had reduced the CNEL of 65 dB contour to an area almost entirely within the airport boundaries and surrounding industrial properties (Exhibit C). A new FAR Part 150 Steering Committee was established in 1996 to advise LAWA concerning noise issues and to recommend abatement measures.

From 1995 to 1998, in response to continuing complaints from neighbors about noise, LAWA enacted a series of noise management policies, all of which required approval of the FAA before they could be incorporated into the VNY noise abatement ordinance. These included prohibiting issuance of additional leases for Stage 2 based aircraft (July 1995), extending the curfew from 11 p.m. to 10 p.m. (May 1996) and requesting permission to apply the curfew to helicopters (March 1997). The curfew limitations and the nonaddition rule for aircraft with a noise emission level of over 77 dBA (calculated using FAA Advisory Circular No. 36-3) were authorized by the FAA in August 1997. FAA ruled that any proposed new helicopter restrictions must comply with FAR Part 161, following environmental review processes and public hearings, consistent with federal procedures. The new curfew was incorporated into the VNY noise abatement ordinance and became effective in February 1998. The nonaddition rule was under consideration by city decision makers in 1998.

VNY - COMMUNITY PLAN NOISE ISSUES

Some noise from VNY impacts adjacent communities located within the general plan community planning areas of Reseda-West Van Nuys, Mission Hills-Panorama City-Sepulveda and Van Nuys-North Sherman Oaks. The majority of the VNY is located within the Reseda-West Van Nuys community plan area. The plan was adopted in 1986. Its policies call for all new development within VNY to be accomplished under conditional use permit. This enables the planning commission and city council, on appeal, to review use change requests and, if approved, to impose conditions, including noise impact mitigation measures. The community plan designates 650 acres of the plan area for industrial use, most of which is located within or around VNY. The industrial uses provide buffers between the airport and adjacent residential neighborhoods. Some residential uses still exist within the noise contour area. The community plan was being updated in 1998.

The Mission Hills-Panorama City-Sepulveda and Van Nuys-North Sherman Oaks community plans for several decades have designated land immediately adjacent to VNY for industrial uses. By the late 1980s incompatible uses generally had been phased out and an industrial buffer had been created adjacent to the southern and northwestern portions of VNY. Both community plans were being revised in 1998.

VNY PLAN

A master plan for VNY was being prepared by LAWA, in coordination with the VNY citizens' advisory council and other affected and interested parties, in 1998. The master plan will become a part of the city's general plan and, therefore, will be considered for approval and/or adoption by the planning commission, mayor and city council following public hearings. The FAA also must approve the plan. The primary goals of the planning effort are to reconfigure on-site airport land use and modify airport use to make VNY more economically viable while at the same time reducing im-

pacts on adjacent communities. Noise from current as well as potential future airport activities was a major issue in the master plan discussions which were taking place in 1997-98.

Burbank-Glendale-Pasadena Airport (BUR)

The Burbank-Glendale-Pasadena Airport, commonly known as the Burbank Airport and by its FAA identifier "BUR," is not within the jurisdiction of the City of Los Angeles, although a small portion of the airport is located within the city. It is owned and operated by the Burbank-Glendale-Pasadena Airport Authority, which is independent of the three cities for which it is named. Each of the cities appoints representatives to the Authority's board of directors.

BUR is located primarily within the City of Burbank, north of the Santa Monica Mountains. Small portions of BUR are located within the Los Angeles communities of Sun Valley and North Hollywood. The most westerly portion of BUR bounds the Los Angeles planning area of North Hollywood. In 1996, BUR occupied a 480-acre site and had two lighted runways in excess of 6,000 feet in length and capable of supporting 240,000 pound jets. It served over 59,000 passenger air carrier flights with nearly 5 million annual passengers, as well as over 125,000 flights by other types of aircraft (air taxi, cargo, business, private flights and a small number of military flights).

BUR NOISE MANAGEMENT[5]

When the Authority purchased BUR in 1978, incompatible uses within a CNEL of 70 dB noise impact contour totaled 385 acres. At that time, BUR was not a designated "noise problem" airport. However, the FAA and state encouraged civilian airports to reduce airport related noise impacts within their CNEL of 70 dB noise contour areas through such means as changes in land use, installation of sound insulation and changes in airport operations. To achieve this goal, the Authority in 1981 required commercial airlines to phase out their Stage 1 and Stage 2 aircraft and to operate only Stage 3 aircraft, the quietest jet air passenger carriers, by 1989. It also prohibited departures and landings of all general aviation Stage 1 and Stage 2 jet aircraft between the hours of 10 p.m. and 7 a.m. Scheduled air carriers were asked to comply voluntarily with the curfew. Most of the carriers voluntarily complied. Stage 3, freight and other private aircraft did not come under the mandatory or voluntary restrictions. The goal of only-Stage 3 passenger carriers operating at BUR was achieved ahead of schedule, in 1987.

Due to these measures, by 1986 only 83 acres of impacted land (residential and other noise sensitive uses) remained within a CNEL of 70 dB noise contour area. In 1986 the Division of Aeronautics (later called Caltrans Aeronautics Program) changed its noise impact measurement standard from a CNEL of 70 dB to a CNEL of 65 dB. This resulted in an increase in the impact area to 446 acres. By 1994, noise management measures had reduced the number of scheduled commercial airline flights to approximately a dozen during nighttime hours, with only three occurring after 6:30 p.m. In addition to the noise reduction measures, between 1985 and 1996 the total flights associated with BUR declined from 246,000 to 184,000, further reducing noise impacts. By 1996, the impacted area within a CNEL of 65 dB contour had been reduced to 373 acres.

In 1985 the Authority began preparation of its FAR Part 150 noise compatibility program. The FAA approved the program in 1989 and allocated funds that enabled soundproofing of four schools of which two were located within the City of Los Angeles. Within the CNEL of 65 dB noise contour area (Exhibit D) approximately 2,300 dwellings within Los Angeles and Burbank could be eligible for grant assistance, depending upon the availability of money from the Federal Aviation Trust Fund. In 1997 funding became available and was offered for soundproofing of 50 homes.

BUR - COMMUNITY PLAN NOISE ISSUES

In spite of all these efforts, noise from aircraft activity continued to impact Burbank and the Los Angeles community planning areas of Sun Valley,

North Hollywood and the Van Nuys-North Sherman Oaks. Plans for the three planning areas generally designate land immediately adjacent to BUR for industrial uses. By the mid-1980s most of those lands had been improved with industrial uses, thereby creating buffers adjacent to the airport. In addition, revisions to the community plans between 1979 and 1996 called for additional mitigation measures to reduce noise impacts.

BUR PLAN

A final environmental impact report (EIR) for land acquisition and a BUR replacement passenger terminal was approved by the Authority in 1993. The proposed project included acquisition by the Authority of 130 acres of land for construction of a new passenger terminal and conversion of the existing terminal site to airfield related uses. The new terminal site was selected in order to meet FAA terminal and runway separation requirements. The FAA, for safety reasons, requires that a terminal not be closer than 750 feet from the center line of an active air carrier runway. The current terminal is within the runway hazard zone.

In 1993 the City of Los Angeles challenged the adequacy of the EIR. The superior court found in favor of Los Angeles and requested that the Authority prepare a supplemental environmental impact report addressing noise impacts associated with BUR's projected increased aircraft activity. The report was prepared and, in 1995, the court found that the EIR met California Environmental Quality Act (CEQA) requirements. Los Angeles appealed the finding. In 1996 the FAA completed its review of the federally required environmental impact statement (EIS) for the project and deemed that it met the National Environmental Policy Act (NEPA) requirements. In 1996 Los Angeles challenged the adequacy of the EIS. It contended that the project was for the entire airport and would result in increased airport activity and increased impacts on noise sensitive uses within the City of Los Angeles, as indicated on the project's EIS 2010 projected noise contour map (Exhibit D). The Authority contended that the project was for the terminal only and that the increase in flight activity would occur whether or not a new terminal was constructed. Lawsuits also were filed between the Authority and City of Burbank over jurisdictional, noise and other matters. In March 1998 a federal court of appeals upheld the EIS. Other litigation was pending in 1998.

Santa Monica Airport (SMO)

Santa Monica Airport, known by its FAA identifier "SMO," was established in 1919. It is the oldest continuously operated airfield in Los Angeles County. SMO is a general aviation airport (no scheduled air carriers) that is owned and operated by the City of Santa Monica and is located entirely within that city. The site is south of the Santa Monica Mountains, east of the Pacific Ocean and a few miles north of LAX. It adjoins the Los Angeles community planning areas of Venice and Palms-Mar Vista-Del Rey. The 225 acre site has a single 5,000 foot lighted runway that is capable of handling aircraft of up to 105,000 pounds. In 1994 SMO served approximately 550 based aircraft and handled over 208,000 flights annually. It has a capacity for 750 based aircraft. In addition to airport related activities, the site contains conference and meeting facilities and a large aircraft museum that displays vintage, corporate and recreational aircraft.

SMO - COMMUNITY PLAN NOISE ISSUES

In the 1990s, noise from SMO activities was not identified as a significant planning issue by either the Venice or Palms-Mar Vista-Del Rey community plans. The Penmar Golf Course in Venice adjoins SMO at the northeast boundary of the plan area, providing a partial buffer at the west end of the SMO runway. The golf course significantly mitigates noise impacts on Venice. The 1997 revised Palms-Mar Vista-Del Rey plan designates an area between SMO and Centinela Avenue for low density residential use. Footnote No. 4 indicates that the land should not be developed with residential uses as long as the airport is in operation. A portion of the area is developed with residential uses, the remainder with developed with airport related uses.

Until the 1960s SMO primarily served as a testing field for the Douglas Aircraft Company. When the company moved its operations to Long Beach, SMO expanded its operations. By 1966 it rivaled VNY as the busiest general aviation airport in the nation, reaching a peak of 374,000 flights.

With the expansion of SMO and introduction of jet aircraft in the 1960s neighbors began to complain about noise. During the 1970s the volume of flights continued to increase, as did complaints from Santa Monica and Los Angeles neighborhoods that were under or adjacent to the SMO flight paths.

Several lawsuits were filed. The courts determined that the City of Santa Monica had an obligation to take reasonable actions to abate noise impacts. In 1982 the U.S. Department of Justice advised Santa Monica that it intended to file suit, contending that Santa Monica was in violation of federal law and contracts relating to SMO operations. Santa Monica responded that it was obligated to continue airport operations in order to comply with legal commitments to the United States. As part of a preagreement, Santa Monica in 1983 adopted a revised airport master plan and noise ordinance. The ordinance included limitation of flight departures and engine start-ups to weekdays between 7 a.m. and 11 p.m. and weekends between 8 a.m. and 11 p.m. (except for emergencies), limitation of touch-and-go pattern flying operations to daytime and nonholiday hours, prohibition of all aircraft deemed unable to meet a 95 dBA (single-event noise exposure level) standard and prohibition of use of SMO for helicopter flight training. The ordinance set criminal penalties for violations. A 1984 negotiated settlement between Santa Monica and the FAA provided for SMO to operate through July 1, 2015, under certain conditions.

Provisions of the settlement included conditions that were incorporated into the Santa Monica noise ordinance (restrictions, standards and penalties), required SMO to establish aircraft noise abatement procedures and incorporated features of the new master plan (e.g., runway realignment, relocation of noise generating activities and designation of a heliport site). A main feature of the master plan was relocation of airport uses from the south (adjacent to Los Angeles) to the north side of SMO, creation of buffer zones by converting the southeast (adjacent to Los Angeles) portion of SMO to airport oriented uses (a business park) and converting other land to park and nonresidential uses. Flight patterns were established to contain noise within SMO and the Penmar Golf Course (Exhibit E). In 1990 the final phase of the master plan was implemented by the completion of the business park. Although the federal Airport Noise Capacity Act of 1990 prohibited local authorities from adopting new noise restrictions without obtaining permission from the FAA, it grandfathered existing ordinances, including the 1983 SMO noise ordinance.

In the early 1990s over $6 million in local and federal funds was expended on noise reduction measures, including construction of noise walls. Noise abatement procedures incorporating provisions of the noise ordinance and settlement were provided to aircraft operators and were revised periodically to improve noise abatement and reflect new technology and safety considerations. Procedures included restricted flight operation hours, a minimum altitude of 900 feet over the SMO vicinity for helicopters, compliance with other SMO-FAA established helicopter noise abatement procedures and specific landing and departure routes over the golf course and adjacent freeways. Operators were urged to observe additional voluntary procedures, including increased altitude for landing and departure patterns.

Noise impacts on properties within the Los Angeles and Santa Monica generally were mitigated by the various measures that were implemented following the 1984 settlement. A greater than CNEL of 65 dB noise contour generally is retained within SMO boundaries and adjacent public, industrial and commercial areas.

Whiteman Airport

Whiteman Airport has been owned and operated by the County of Los Angeles since 1970. It is located entirely within the City of Los Angeles community of Pacoima, in the north San Fernando Valley. The 184.4-acre, general aviation airport has one lighted 4,100 foot long runway that is capable of handling aircraft of up to 12,000 pounds. Whiteman primarily serves single engine, fixed-wing, propeller driven aircraft. In 1995 it served 551 based aircraft and handled over 88,000 flights.

WHITEMAN NOISE MANAGEMENT

Noise has not been a major issue relative to Whiteman. This is largely due to the fact that the majority of aircraft operations occur during daytime hours and only propeller (not jet) aircraft use the site. Noise impacts generally are contained within the airport boundaries or adjacent industrial, open space or public lands (Exhibit F).

Much of the airport is separated from residential uses by industrial, open space or public uses. The open space and public uses include county flood control and associated recreational facilities, a county communications center and a county regional fire department headquarters (including a heliport). Hilly terrain to the north of the runway provides a natural buffer.

From the 1970s to the 1990s the economic recession contributed to a reduction in airport activity and concomitant reduction in airport related noise. Flights decreased from 140,900 flights in 1989 to 88,000 in 1995. Based aircraft decreased from 655 in the 1970s to 551 in 1995. The 1991 airport master plan indicates a projected increase to 285,000 annual flights and 930 based aircraft by the year 2010. The increase was taken into account during the updating of the Arleta-Pacoima community plan and airport rezoning (1996).

WHITEMAN - ZONING AND COMMUNITY PLAN LAND CLASSIFICATION

Even though a county can preempt municipal land use law, the county worked closely with the city planning department and neighbors during the Arelta-Pacoima community plan updating project. The county supported rezoning of airport parcels so as to emphasize its desire to maintain the airport in a low intensity use and to provide land use buffers between the community and airport uses. Concurrent with the adoption of the community plan changes in 1996, the airport site was rezoned. The current zoning is mostly in the PF (public facilities) Zone, which permits continuance of the M2 Zone uses, i.e., airport related uses by right. Portions of the property along the northeast boundary are zoned as OS (open space) and [Q]MR2 (restricted light industrial). The [Q] 'Permanent Qualified' conditions limit uses generally to the MR1 (restricted industrial) Zone and require shielding of lights and other measures to protect adjacent residential uses.

Endnotes

No.	Description
1	The term "heliport" applies to all formal heliport or helistop sites. The FAA requires that all airports provide access for helicopters. Since helicopters may land on airport runways, no formal heliport facilities or locations at airports are required.
2	The official (charter) name of the airport is "Department of Airports." However, throughout this element the agency will be referred by its business name, Los Angeles World Airports (LAWA).
3-5	Detailed descriptions of legislation and programs are contained in the Regulations and Programs section of this chapter.

Chapter III — Goals, Objectives and Policies

The following goals, objectives and policies relate to noise management within the city. The "General Plan Guidelines" issued by the Governor's Office of Planning and Research (1990) advises that a general plan should contain goals, objectives, policies, programs and implementation monitoring. Goals are described as a general setting of direction, objectives as intermediate steps in attaining the goal, policies as specific guides to decision making and programs as specific means of achieving the policies. Each policy is to have at least one corresponding implementation measure.

The programs for the noise element are contained in the Chapter IV program implementation listing. Program numbers are referenced in this chapter after each policy with the notation 'P' followed by the program number.

DEFINITION OF NOISE-SENSITIVE USES: For the purposes of implementation of policies and programs contained herein, the following land uses are deemed "noise sensitive" uses: single-family and multi-unit dwellings, long-term care facilities (including convalescent and retirement facilities), dormitories, motels, hotels, transient lodgings and other residential uses; houses of worship; hospitals; libraries; schools; auditoriums; concert halls; outdoor theaters; nature and wildlife preserves, and parks.

Goal

A city where noise does not reduce the quality of urban life.

Objective 1 (Airports and Harbor)

Reduce airport and harbor related noise impacts.

Policy

1.1 Incompatibility of airports declared by Los Angeles County to be "noise problem airports" (LAX, Van Nuys and Burbank) and land uses shall be reduced to achieve zero incompatible uses within a CNEL of 65 dB airport noise exposure area, as required by the California Department of Transportation pursuant to the California Code of Regulations Title 21, Section 5000, et seq., or any amendment thereto. (**P1** through **P4**)

Objective 2 (Nonairport)

Reduce or eliminate nonairport related intrusive noise, especially relative to noise sensitive uses.

Policy

2.2 Enforce and/or implement applicable city, state and federal regulations intended to mitigate proposed noise producing activities, reduce intrusive noise and alleviate noise that is deemed a public nuisance. (**P5** through **P10**)

Objective 3 (Land Use Development)

Reduce or eliminate noise impacts associated with proposed development of land and changes in land use.

Policy

3.1 Develop land use policies and programs that will reduce or eliminate potential and existing noise impacts. (**P11** through **P18**)

Endnotes

No.	Description
6	These standards are consistent with the standards proposed promulgated by the California Department of Health Services and recommended by the Governor's Office and Planning and Research "1990 General Plan Guidelines."

Chapter IV — Implementation

The following programs are intended to implement the policies set forth in Chapter III. All of the programs are ongoing city programs that are funded out of city funds or, as available, from federal, state or other sources.

An asterisk (*) indicates the program lead agency, if any.

DEFINITION OF NOISE-SENSITIVE USES: For the purposes of implementation of policies and programs contained herein, the following land uses are deemed "noise sensitive" uses: single-family and multi-unit dwellings, long-term care facilities (including convalescent and retirement facilities), dormitories, motels, hotels, transient lodgings and other residential uses; houses of worship; hospitals; libraries; schools; auditoriums; concert halls; outdoor theaters; nature and wildlife preserves, and parks.

Airports and Harbor:

P1 Continue to develop and implement noise compatibility ordinances and programs that are designed to abate airport related noise impacts on existing uses, to phase out incompatible uses and to guide the establishment of new uses within a CNEL of 65 dB noise exposure area of the Los Angeles International and Van Nuys airports and within those portions of the city that lie within a CNEL of 65 noise exposure area of the Burbank-Glendale-Pasadena Airport.

Responsible agencies: *Airport, Building and Safety and Planning departments.

P2 Noise abatement, mitigation and compatibility measures shall be incorporated into the city's general plan airport and harbor elements, including, where feasible, sound proofing of impacted sensitive uses, buffering, land use reconfiguration, modification of associated circulation and transportation systems, modification of operational procedures, conversion or phasing out of uses that are incompatible with airport or harbor uses, and/or other measures designed to reduce airport and harbor related noise impacts on adjacent communities.

Responsible agencies: *Airports, *Harbor and *Planning departments.

P3 Continue to incorporate airport and harbor noise compatibility measures into the city's general plan community plan elements for communities that are significantly impacted by airport and harbor related noise, including, where feasible, conversion or phasing out of land uses that are incompatible with airport and harbor uses, reclassification of zones, modification of associated circulation systems and/or other measures designed to reduce airport and harbor related noise impacts on adjacent communities.

Responsible agencies: *Planning, Airports and Harbor departments.

P4 Continue to encourage operators of the Burbank-Glendale-Pasadena, Santa Monica and Whiteman airports to continue implementing and improving noise management measures so as to maintain a CNEL of 65 dB contour within the airport and surrounding compatible use boundaries and so as to maintain or reduce any impacts on noise-sensitive uses located within the City of Los Angeles to a CNEL of 65 dB or lower noise level.

Responsible agencies: City Council and Mayor.

Nonairport:

P5 Continue to enforce, as applicable, city, state and federal regulations intended to abate or eliminate disturbances of the peace and other intrusive noise.

Responsible agencies: Animal Regulation, Building and Safety, Police, and Recreation and Parks departments.

P6 When processing building permits, continue to require appropriate project design and/or insulation measures, in accordance with the California Noise Insulation Standards (Building Code Title 24, Section 3501 et seq.), or any amendments thereto or subsequent related regulations, so as to assure that interior noise levels will not exceed the minimum ambient noise levels, as set forth in the city's noise ordinance (LAMC Section 111 et seq., and any other insulation related code standards or requirements) for a particular zone or noise sensitive use, as defined by the California Noise Insulation Standards.

Responsible agency: Building and Safety Department.

P7 Continue to periodically update city codes and plans that contain noise management provisions so as to address new issues and noise management changes.

Responsible agencies: Animal Regulation, Building and Safety, City Council, Planning, Police, and Recreation and Parks departments.

P8 Continue to periodically update guidelines for California Environmental Quality Act-required land development project review by city agencies.

Responsible agencies: Airports, Community Development, *Environmental Affairs, Harbor, Housing, Planning, Public Works, Recreation and Parks, Transportation, and Water and Power departments and Community Redevelopment Agency.

P9 Continue to operate city equipment, vehicles and facilities in accordance with any applicable city, state or federal regulations.

Responsible agencies: all.

P10 Continue to encourage public transit and rail systems operating within the city's borders, but which are not within the jurisdiction of the city, to be constructed and operated in a manner that will assure compliance with the city's noise ordinance standards.

Responsible agencies: City Council and Mayor.

Land Use Development:

P11 For a proposed development project that is deemed to have a potentially significant noise impact on noise sensitive uses, as defined by this chapter, require mitigation measures, as appropriate, in accordance with California Environmental Quality Act and city procedures.

Examples of mitigation measures to consider:

(a) increase the distance from the noise source and the receptor by providing land use buffers, e.g., parking lots, landscaped setbacks or open areas, utility yards, maintenance facilities, etc.;

(b) orient structures, use berms or sound walls, utilize terrain or use other means to block or deflect noise, provided it is not deflected to other noise-sensitive uses and that the barrier does not create a hiding place for potential criminal activity;

(c) require projects with noise generating components (e.g., auto repair and maintenance facilities) to have no openings in building walls that face sensitive uses;

(d) limit the hours of operation of a noise generating use;

(e) limit the use of the site to prohibit potential noise generating uses that otherwise are allowed by right within the zone classification of the project site;

(f) require that potential noise impacts associated with project construction be minimized by such measures as designating haul routes, requiring less noisy equipment, enclosing or orienting noisy equipment (e.g., electrical generators) away from noise sensitive uses, imposing construction hours that are more restrictive than those set forth in the Los Angeles Municipal Code, requiring vehicle parking and deployment activities to be separated and buffered from sensitive uses; or

(g) determine impacts on noise sensitive uses, such as public school classrooms, which are active primarily during the daytime and evening hours, by weighting the impact measurement to the potential interior noise level (or for exterior uses, e.g., outdoor theaters, to the exterior noise level) over the typical hours of use, instead of using a 24-hour measurement.

(h) other appropriate measures.

Responsible agencies: Airports, Community Development, Environmental Affairs, Harbor, Housing, Planning, Public Works, Recreation and Parks, Transportation, and Water and Power departments and Community Redevelopment Agency.

P12 When issuing discretionary permits for a proposed noise- sensitive use (as defined by this chapter) or a subdivision of four or more detached single-family units and which use is determined to be potentially significantly impacted by existing or proposed noise sources, require mitigation measures, as appropriate, in accordance with procedures set forth in the California Environmental Quality Act so as to achieve an interior noise level of a CNEL of 45 dB, or less, in any habitable room, as required by Los Angeles Municipal Code Section 91.

Examples of mitigation measures to consider:

(a) Impose project orientation and buffering measures similar to those cited in the prior program;

(b) orient the project so as to use structures, terrain or building design features (e.g., windowless walls or nonopening windows facing the noise source) so as to block or reduce noise impacts;

(c) orient interior features of the project to reduce or eliminate noise impacts on particularly noise sensitive portions of the project (e.g., locate bedrooms and balconies away from the noise source);

(d) require insulation and/or design measures, attested to by an acoustical expert, to the satisfaction of the city's Department of Building and Safety, to identify and mitigate potential noise impacts;

(e) determine impacts on noise sensitive uses, such as public school classrooms, which are active primarily during the daytime and evening hours, by weighting the impact measurement to the potential interior noise level (or for exterior uses, e.g., outdoor theaters, to the exterior noise level) over the typical hours of use, instead of using a 24-hour measurement.

(f) other appropriate measures.

Responsible agencies: Planning, Community Development and Housing departments and Community Redevelopment Agency.

P13 Continue to plan, design and construct or oversee construction of public projects, and projects on city owned properties, so as to minimize potential noise impacts on noise

sensitive uses and to maintain or reduce existing ambient noise levels.

Examples of noise management strategies to consider:

(a) site or alignment selection to minimize potential noise incompatibility;

(b) orientation of noise sources away from noise sensitive uses;

(c) placement of structures between noise generators and noise sensitive receptors;

(d) enclosure of noise sources;

(e) erection of sound walls, berms or other noise buffers or deflectors, providing that they do not deflect sound to other noise sensitive uses and that the barrier does not create a hiding place for potential criminal activity;

(f) restricted hours of operation;

(g) modification of noise sources (e.g., utilizing less noisy equipment); or

(h) determine impacts on noise sensitive uses, such as public school classrooms, which are active primarily during the daytime and evening hours, by weighting the impact measurement to the potential interior noise level (or for exterior uses, e.g., outdoor theaters, to the exterior noise level) over the typical hours of use, instead of using a 24-hour measurement.

(i) other appropriate measures.

Responsible agencies: Airport, Community Redevelopment Agency, Harbor, Public Works, Recreation and Parks, Transportation, and Water and Power departments.

P14 Continue to periodically update general plan public facilities and utilities elements, taking into account existing and potential noise impacts.

Responsible agencies: Airport, Harbor, *Planning, Public Works, Recreation and Parks, and Water and Power departments.

P15 Continue to take into consideration, during updating/revision of the city's general plan community plans, noise impacts from freeways, highways, outdoor theaters and other significant noise sources and to incorporate appropriate policies and programs into the plans that will enhance land use compatibility.

Approaches to consider: rezoning, street realignment, site design, recommendations that the mayor and city council request that the California Department of Transportation, or other responsible agencies take reasonable measures to mitigate noise impacts associated with their facilities, etc.

Responsible agency: Planning Department

P16 Use, as appropriate, the "Guidelines for Noise Compatible Land Use" (Exhibit I),[1] or other measures that are acceptable to the city, to guide land use and zoning reclassification, subdivision, conditional use and use variance determinations and environmental assessment considerations, especially relative to sensitive uses, as defined by this chapter, within a CNEL of 65 dB airport noise exposure areas and within a line-of-sight of freeways, major highways, railroads or truck haul routes.

Responsible agencies: City Council, Mayor and *Planning Department.

P17 Continue to encourage the California Department of Transportation, the Los Angeles County Metropolitan Transportation Authority, or their successors, and other responsible agencies, to plan and construct transportation systems so as to reduce potential noise impacts on adjacent land uses, consistent with the standards and guidelines contained in the noise element.

Responsible agencies: City Council and Mayor.

P18 Continue to support the Alameda corridor

project as a means of consolidating rail lines and improving buffering in order to reduce noise impacts on adjacent communities from railroad related uses.

Responsible agencies: City Council, Harbor, Mayor, Planning, Public Works, and Transportation departments.

Endnotes

No.	Description
6	These standards are consistent with the standards proposed promulgated by the California Department of Health Services and recommended by the Governor's Office and Planning and Research "1990 General Plan Guidelines."

Appendix A *(Not Adopted — Information Only)*
Evolution of Transportation Systems in Los Angeles:
A Context for Los Angeles Noise Issues

Automotive Vehicles

Automobile History

The first gasoline powered automobile was produced by Benz in 1885. It was a three-wheeled carriage that used Gottlieb Daimler's 1885 motorbike engine for power. The next year Daimler designed the first four-wheeled carriage. By the start of World War I a variety of gasoline powered vehicles were being produced, including Henry Ford's Model T. The new "horseless carriages" or "tin Lizzies," as they were popularly called, were scoffed at and criticized for being dangerous to horses and people and noisy nuisances. Mass production of automobiles followed Ford's introduction of assembly lines and moving conveyor belts in 1913. During the First World War inexpensive cars became readily available, rapidly displacing the horse and buggy. By 1920 Los Angeles County had become the most motorized metropolitan area in the nation with over 481,500 registered automobiles.

Los Angeles Street System

On September 4, 1781, under the authority of the King of Spain, Governor Felipe de Neve and eleven families founded el Pueblo de la Reina de los Angeles (the Village of the Queen of the Angels). The pueblo was to provide food for Spanish troops traveling between the missions of San Diego and Santa Barbara. Prior to departure de Neve drew up a plan situating the pueblo along Rio El Porciùncula (later renamed the Los Angeles River) and identifying the locations for a plaza, church, homes, farms, an irrigation system and a road connecting the pueblo with the nearby San Gabriel Mission. The pueblo's first named streets were Primavera (later named Spring) and Aliso streets.

The first Los Angeles city land use survey was prepared by U.S. army lieutenant Edward O.C. Ord in 1849, in anticipation of Los Angeles city becoming a city of the new state of California. It was prepared under contract to the city. The plan established boundaries for city-owned lands, dividing the vacant lands west and north of the central plaza into blocks and lots and with a grid street system. That was the city's first formal street map.

In 1870 the city's first engineer, Frank Lecouvreur prepared the first master plan for development of a Los Angeles infrastructure. His plan separated sewers from flood control systems and reoriented new streets in an east-west direction to facilitate the flow of rain water, thereby reducing flooding.

Introduction of motorized vehicles changed the mode of local transportation and street systems. Private cars began displacing the horse drawn vehicles during World War I, resulting in traffic hazards and vehicle conflicts. To address worsening congestion, increasing conflicts between trolleys and automobiles and a rising number of traffic accidents, especially at intersections, the private Los Angeles Traffic Commission prepared the "Major Traffic Street Plan." The plan was drafted by renowned city planners Frederick Law Olmsted, Jr. (Boston), Charles H. Cheney (Redondo Beach) and Harland Bartholomew (St. Louis), with the assistance of planning commissioner/commission secretary, Gordon Whitnall. Whitnall subsequently was appointed the city's first planning director. The plan was approved by city voters in 1924, along with bond issues to pay for a portion of the first 37.5 mile phase. Railroads and the county provided the balance of the funds. The project in-

cluded the city's first bridges to separate train and automobile traffic. This increased safety and the speed of trains by reducing traffic conflicts. The city's first traffic ordinance also was drafted by the commission. It was adopted in 1925, requiring the city's first standard signs and signals.

Until recent times, establishment and construction of integrated and efficient municipal street systems was sporadic. Local governments had difficulty purchasing or exacting land for street rights-of-way. The state Subdivision Map Act of 1907 provided for dedication of land for public purposes but efforts to secure dedications met with opposition. In 1911 the state Improvement Act empowered local governments to use easements, eminent domain, assessment districts and subdivision procedures to secure streets and other infrastructure systems. To give local jurisdictions more leverage, the Map Act was amended in 1921, enabling cities to require easements for public improvements. However, efforts to exact land were challenged. Dedications continued to be voluntary or were secured through purchase following costly, often lengthy condemnation proceedings. Systematic development of the city's street system was slow until the economic depression of the 1930s.

Following the stock market crash of 1929, private financing for public infrastructure systems dwindled. Los Angeles joined other cities in successfully campaigning for a share of the state gas tax to help complete its 1924 street plan. In 1934 the state allocated a share of the gas tax funds to cities for road projects and authorized the state Division of Highways to build and maintain city roads to link rural state highways and to create a state highway system. Cities were responsible for construction and maintenance of urban streets and highways. Federal and state public works programs provided millions of dollars for construction of streets and bridges during the period of the economic depression.

But, not until 1966 did the city gain significant leverage to exact public improvements in conjunction with land development projects. In a landmark decision, *Southern Pacific Railroad versus the City of Los Angeles*, the California Supreme Court upheld the right of Los Angeles to withhold building permits for noncompliance with public dedication requirements. The decision strengthened the ability of all municipalities to secure public facilities in conjunction with new development. Local authority was further strengthened by the 1971 California Environmental Quality Act that required development projects to mitigate potential environmental impacts associated with a project, including anticipated traffic congestion and noise. The combination of regulations (Map Act, environmental and city) enabled Los Angeles to require developers to dedicate land, construct public improvements or set aside funds for improvements. This resulted in more systematic development of the street systems. By 1996, according to the city's department of transportation, there were 6,440.1 miles of streets within the boundaries of the city, including 59.4 miles of unimproved streets, 1,028.4 miles of primary arterials (major and secondary highways), 584 bridges and 652 at-grade railroad crossings.

State Highways And Freeways

The first public road in California, El Camino Real (The Royal Road), was established in 1769 by Spanish priest-explorer Father Junipero Serra and Spain's governor of California Don Gaspar de Portolá to link the California missions. The missions were constructed approximately one day apart by horseback between San Francisco and San Diego. Following California statehood in 1850, General S.H. Marlette was commissioned to "make plans and suggestions or improvements of navigation, construction of roads, railroads and canals, preservation of forests… and surveys of boundaries of the State and counties." Although the legislature failed to allocate funds, Marlette raised money and began the first survey and construction project in 1855. It established the state's first official road, the Emigrant Wagon Toll Road from Placerville, across the Sierra Nevada Mountains to Nevada. Immi-

grants had come streaming into California following the announcement of the discovery of gold in 1849. By 1864 almost all mountain passes were accessible by toll roads that linked mining camps and immigrant routes to towns and cities. The first traffic count in 1864 was along the Lake Tahoe Wagon Road. It recorded 6,667 footmen, 833 horsemen, 3,164 stage passengers, 5,000 pack animals, 2,564 teams and 4,694 cattle.

In the 1870s the state and federal governments began planning a highway system. It was to link federal and state roads and serve the expanding freight traffic created by the land boom following the gold rush and extension of railroads to and within California. Construction was delegated to counties, which levied tolls to pay for the roads. This resulted in a variety of tolls and a disparate road system. Anticipating the popularity of automotive vehicles, the state created the bureau of highways in 1895. The bureau's 1896 highway plan laid the foundation for the California highway system as it exists today, with many of the routes following early mission and immigrant routes. Construction of the first state highway, Route 1, partially along a Pacific coast mission route from San Juan Capistrano, via Los Angeles and Santa Barbara, to San Francisco, began in 1912. Funding for maintenance and construction of state and county roads was provided by the state's first gas tax, a three-cent tax that was approved in 1923. A 1927 one-cent gas tax assured steady revenue for construction of the state road system. In that year the state Division of Highways (DOH) was created to plan, construct and maintain the highway system.

The first California nontoll highway, or "freeway," was the six-mile Arroyo Seco Parkway (later renamed the Pasadena Freeway). It was completed in 1940, connecting downtown Los Angeles with the adjacent city of Pasadena. After World War II, an infusion of state and federal funds enabled the acceleration of highway construction. By the mid-1960s California had an efficient, integrated highway system. But growing opposition to freeway construction, demands for community participation and environmental protection and a period of economic inflation slowed system expansion. People protested that planned freeways would slice through their communities, creating physical divisions, destroying neighborhoods, contributing to unplanned growth, local traffic congestion and noise. In the 1970s public opposition halted the proposed Century Freeway in south Los Angeles, a proposed Beverly Hills Freeway and other freeways and highways in the Los Angeles area. In 1972, to address shifting priorities, the state legislature established the California Department of Transportation (aka Caltrans) to replace the DOH. Caltrans was charged with the responsibility of planning and implementing a multi-modal transportation system, including over 15,000 miles of state highways and freeways. In 1974 a voter approved tax measure for the first time allowed gas tax funds to be used for non-highway system projects and enabled implementation of an integrated transportation program comprised of a variety of transportation systems (multi-modal system), e.g., roads, highways, bus, light rail, aircraft and other transportation modes.

Until the 1970s noise was not a major consideration in transportation system planning. Although manufacturers long had designed vehicles for reduced interior noise for drivers and passengers. Early in the century municipalities began regulating use of horns on city streets and eventually regulations and standards were developed for regulating engine and tailpipe noise levels. In the 1970s, in response to growing opposition of communities to new freeways and to mitigate potential noise impacts freeway and highway system design incorporated noise reduction features. Concurrently the noise abatement programs were instituted to address noise impacts of existing systems on noise sensitive uses.

Fixed Rail Systems

Railroads

Invention of the high pressure steam engine by Richard Trevithick in 1802 revolutionized land

transportation and led to the steam driven turbine engines that were used to power ships. George Stephenson built the first public steam railroad in England in 1825. This ushered in the era of railroad building around the world. Construction of the first transcontinental railroad in North America was completed on May 10, 1869 when the Central Pacific Railroad tracks were connected to the Union Pacific tracks at Promontory Point, Utah. The route linked Chicago and San Francisco by rail, enabling rapid settlement of the western frontier and stimulating a real estate boom in California that triggered construction of additional railroad lines within the state and to points east. In 1872 Los Angeles voters approved funds to help subsidize construction of a railroad between Los Angeles and San Francisco via the San Joaquin Valley. In 1876 a route from Los Angeles to Texas was completed. Southern Pacific decided to bypass Los Angeles by establishing a freight route from its yards in Colton, fifty miles east of Los Angeles, through the Cajon Pass and Palmdale, along a desert route to New Orleans. As late as 1887 railroad companies considered San Francisco a more viable city than Los Angeles as a destination and connection point for both passenger and freight lines. In that year Santa Fe established a passenger line from Chicago, via Santa Fe, New Mexico, to Los Angeles. In spite of the arduous five day trip, Santa Fe's faster trains, with their elegant Fred Harvey dining cars and Harvey Girls hostesses, helped make the Santa Fe Los Angeles line one of the most popular in the nation and to make Southern California a popular destination point for immigrants and tourists from the eastern and Midwestern United States.

By the end of World War II less polluting electric and diesel engines had replaced steam engines on major lines. But the popularity of automobiles and expansion of the trucking industry, along with rising operational costs and higher fares and freight fees, contributed to a sharp decline in the demand for rail services. Railroad companies shifted their priorities to freight services, cut passenger services and eliminated many passenger routes and operations. By the late 1960s the extinction of passenger and freight trains was predicted.

To save passenger service systems, the federal government began subsidizing designated lines. In the 1970s it established the National Rail Passenger Corporation (aka AMTRAK) as a quasi-public agency to take over operation of national passenger services. Public demand for less environmentally damaging transport and for an alternative to automobile and air transport, combined with AMTRAK's passenger train improvement program and its interfacing of passenger rail connections with bus and air transport, revived the passenger train. Concurrently, many freight rail companies formed, merged with or entered into cooperative relationships with trucking and shipping companies. By the late 1970s freight rail service had been revived by improved, more efficient equipment, especially uniform transferable cargo containers. Containers, designed to be carried by ships, trucks or trains, revolutionized the entire shipping industry.

Freight haul and AMTRAK passenger trains continue to use rail lines that cross the city. The hub for rail operations in Los Angeles is centered around Union Station (adjacent to the city's historic plaza) and the east Los Angeles rail yards. Many of the lines in the area have been in existence since the 1870s, including lines connecting the downtown with the harbor and transcontinental lines. In 1996 Union Station served five weekly or daily transcontinental passenger trains and other trains connecting Los Angeles to San Diego, San Francisco and other cities within California.

First Los Angeles Street Cars

In 1874 Judge Robert M. Widney opened the first Los Angeles street car line. It consisted of a two single open cars drawn by horses along a 2.5 mile single track beginning at the Temple Street and zigzagging down Spring to 6th Street (later extended to the Plaza and San Fernando Street). Other enterprising businessmen quickly developed competing short haul lines. One line, the Main Street and Agricultural Park Railroad, offered 308 lots in what is now Exposition Park to attract passengers. By

1885 few horse drawn cars remained. Most had been replaced by cable cars. Electric powered streetcars were introduced in 1887 by Los Angeles Electric Railway. The line went out of business in 1888 when the power plant boiler burst. In 1888 construction in Boston by Frank J. Sprague of first successful electric street car system revolutionized local transportation. Sprague's electrified trolley trains could climb steeper grades, travel faster and, because they could pull multi-cars guided by one motorman, could operate more cheaply and efficiently than conventional street cars.

Between 1890 and 1910 the city's population grew more than sixfold, from 50,395 to 319,198, fostering a period of intense competition between the street car companies. Lines were built, damaged by floods, rebuilt, bought by competitors and expanded. In 1893 General Moses H. Sherman bought out all the Los Angeles cable lines and began converting them to electrical power. Sherman was bought out by Los Angeles Consolidated Electric Railway (LACE) in 1895. In that year LACE inaugurated the first interurban trolley line. It ran between Los Angeles and Pasadena. LACE converted its remaining cable and horse car lines to electric trolley and installed handsome Pullman Company open sided cars. Although its California Car was popular, the company was unable to show a substantial profit.

Trolley competition was intense. By 1900 an estimated 72 separate trolley companies were operating in the city, carrying passengers and goods. In 1898 Henry E. Huntington, nephew of Southern Pacific railroad owner Hollis Huntington, purchased LACE and began buying up other lines throughout the region. He wanted to develop an interurban system that would compete with his uncle's company. He also was head of the Pacific Light and Power Company, which constructed the Big Creek hydroelectric plant in the Sierra Nevada Mountains in central California to power his Los Angeles Inter-Urban Railway system (L.A. Rail). As a direct challenge to Southern Pacific, he ran some of the L.A. Rail lines parallel to Southern Pacific lines, including the Los Angeles to Long Beach harbor line that opened in 1902. To encourage ridership, he hired engineers to design a new high quality, all-season wooden car with glass windows. The handsome yellow cars built by St. Louis Car Company were popular and set a national standard. Patrons dubbed them the "big yellow cars." In 1903, E. H. Harriman bought a 45% interest in L.A. Rail, eventually taking over management of the Pacific Electric Company (P&E), owner of L.A. Rail. Harriman oversaw the development of Huntington's extensive interurban P&E L.A. Rail system. The system soon was challenged by the versatile gas fueled automobiles. By 1913 the public was complaining that the P&E trolleys were crowded and noisy (compared to rubber tired vehicles), that fares were excessively high, stops inconvenient and that the trolleys were a hazard to automobiles and other vehicles.

Competition And Noise Issues

Jitneys posed the first formidable challenge to P&E's trolleys. Eager citizens purchased automobiles and entered the jitney business, providing flexible service and flexible routes with which the fixed rail system could not compete. By 1915 an estimated 1,000 jitneys plied the city's streets, drastically reducing trolley ridership. P&E reduced fares and lobbied successfully for jitney licensing and regulation, temporarily slowing jitney competition, but not affecting the public's desire for more flexible service.

Future U.S. Senator and 1924 presidential candidate William McAdoo introduced the city's first gasoline fueled buses in 1923, the People's Motor Bus Company. But Harold Huntington, who had taken over the rail company from his father, took Motor Bus to court, driving them out of business with his claim that buses were hazardous. But other bus companies were formed, again causing trolley ridership to drop. The public outcry against the noisy trolleys and their hazardous conflicts with automobiles on narrow streets and at unregulated intersections led to the adoption of the city's first

street (1924) and traffic signal plans (1925) and to construction of grade separated bridge overpasses. P&E continued to add lines. Its big yellow cars experienced a resurgence in the popularity during the economic depression of the 1930s, reaching a peak of 721 operating cars in 1932. But, with an upsurge in the economy and expansion of automobile use, ridership began to decline. To stimulate ridership, P&E in 1937 ordered new, more comfortable, streamlined, stainless steel and chrome cars and painted them red. Only two were delivered before war industry needs intervened, postponing completion of the order until 1943. The shiny new cars were dubbed the "big red cars."

At 1,164 miles of track, serving 125 cities, the P&E system was the largest electric rail system in the world. Its lines emanated from Los Angeles, reaching to Santa Monica and Ventura County (west), Redlands in San Bernardino County (east) and Riverside, Corona and Newport Beach in Riverside and Orange counties (south). The busiest year for the big red cars was in 1945 when thousands of servicemen returned from the war seeking employment opportunity in Southern California. But the era of the trolleys soon was over. Rapid population and economic expansion in all of Southern California, along with construction of the first freeways and increased automobile use created too much competition for P&E. To cut its losses the company in 1946 began eliminating short shuttle lines. Diesel powered, rubber tired buses that could operate on any street further eroded the appeal of the trolleys. The Los Angeles to Long Beach line was converted from yellow cars to red cars in 1960. By then the trolley era was over. P&E continued to close lines until only the Long Beach line remained. It was closed on March 30, 1963, temporarily ending the Los Angeles commuter rail era.

First Los Angeles Subway

A 100 mile per hour elevated, electric powered monorail was proposed by the American Rapid Transit Company in 1907. The company envisioned that the line would run from Pasadena to Santa Monica. The idea did not get beyond the planning stage.

Henry Huntington envisioned a subway system and made it a reality. He purchased the rights-of-way from 4th and Hill Streets to what is now Pico Boulevard and Rimpau Avenue. In 1907 the city council approved Huntington's subway project. By 1909 the Bunker Hill tunnel for the system had been completed. Further work was halted by an economic recession.

To address increasing conflicts between the growing automobile population and the trolley system, a 1915 study for the city proposed construction of either a subway or an elevated system. It strongly recommended a subway, so as to avoid the noise and unsightliness of elevated systems like those that had been or were under construction in New York, Chicago, Philadelphia and Boston.

In 1923, the California Railroad Commission voted to allow Huntington to increase trolley fares if he would construct an underground railroad as a means of reducing trolley and auto conflicts and potential noise. Within two years Huntington inaugurated the first Los Angeles subway, the Hollywood Subway. It had two tracks, each less than a mile in length. It ran from the new subway terminal building at Hill Street (between 4th and 5th Streets), through Crown Hill to Glendale and Beverly Boulevard near First Street. There it emerged as street trolley lines, one serving West Los Angeles and the other serving Echo Park and the cities of Glendale and, eventually, Burbank. The Beverly tunnel was used by P&E until 1955 when the Glendale-Burbank line was discontinued. The Terminal Building and the tunnel still exist as reminders of Huntington's visionary effort.

Construction of an elevated ('El') line from 6th and Main Streets to the Los Angeles River near the city's birthplace, the historic plaza, was begun in 1923. It was halted when the powerful Los Angeles Times newspaper opposed the project. The Times portrayed the El as a "dirty, deafening and hideous" contraption that would destroy the visual appear-

ance of the historic plaza and surrounding environs. To settle the issue, the city council placed two referenda on the May 1926 ballot. Proposition 8, which would have provided funding for the El, was defeated. Proposition 9, backed by the Times, was approved. It endorsed construction of a train station east of the plaza, on the site of Old Chinatown. Union Station opened in 1939.

New Fixed Rail Systems

Various measures were proposed over the next several decades for new commuter train systems but all were defeated, partially due to claims that surface and overhead systems would be noisy and unsightly. In 1959 the Metropolitan Transit Authority (MTA), a regional agency created by the state to evaluate metropolitan transit needs, proposed a new subway system from downtown Los Angeles, running east to the city of El Monte. The idea was rejected by the voters. MTA was reconstituted by the state legislature in 1964 as the Southern California Rapid Transit District (RTD). RTD was charged with the responsibility of planning, constructing and operating a regional public transit system. The system selected was a regional bus system which became one of the largest all-bus systems in the world.

Increasing congestion on highways and a heightening of interest in environmental quality, especially air quality, prompted the state legislature, in 1972, to reconstitute its transportation and highway functions into a new agency, the California Department of Transportation (Caltrans). Caltrans was directed to reduce public dependence on the air polluting, gas guzzling automobile by developing an integrated multi-modal transportation system including buses, fixed rail and aeronautics. Voters in 1974 approved a ballot measure authorizing use of gas tax monies for transportation projects other than highways and freeways. In that same year the federal Urban Mass Transit Administration allocated funds for multimodal regional transit systems. Funds allocated to the RTD enabled preparation of alternative plans for potential rapid transit fixed rail routes.

New Subway And Light Rail Systems

In 1980 Los Angeles County voters approved Proposition A, establishing the county's first tax specifically intended to fund public transportation. The half-cent sales tax was allocated for planning and implementation of a multi-modal county transportation system, including a 150-mile rail system. Additional funds from federal, state, local and private sources, including voter supported bond measures and, in 1990, a second county sales tax, enabled system implementation.

Three new mass transit systems evolved from the initial funding: (1) an urban subway system within the boundaries of the City of Los Angeles, (2) a light rail system within the county and (3) a regional commuter train system. They were designed to interconnect with each other, with bus and shuttle lines and with airport and long distance Amtrak passenger train facilities.

To better integrate planning and management of the vast system, the state in 1992 established the Los Angeles County Metropolitan Transportation Authority (MTA), consolidating the RTD and Los Angeles County Transportation Commission (LACTC). The RTD had been responsible for operating the bus and rail systems, constructing the subway system and operating the new light rail and subway systems. The LACTC had been responsible for constructing new light rail systems. The new MTA began operating on April 1, 1993.

The MTA opened its first Metro Rail Red Line subway in 1993. It was a four-mile line between Union Station (downtown) and Alvarado Street at Wilshire Boulevard (Westlake community). It was extended to Western Avenue at Wilshire (mid-city Wilshire community) in 1996. Another segment is under construction to the Los Angeles community of North Hollywood and others are being planned to serve east and west Los Angeles.

The MTA's Metro Rail Blue Line light rail system between the Los Angeles downtown and the city of Long Beach opened in 1990. In 1991 it was

extended to MTA's subterranean rail station at Flower and Seventh Streets in the city's downtown financial district. The station serves as a transfer point for the subway and Blue Line. The 20-mile east-west Metro Rail Green Line light rail system opened in 1995. Partially to reduce noise impacts, it is constructed largely within the median of the I-105 Glenn Anderson Freeway (formerly the Century Freeway). It runs from the city of Norwalk (east) to Aviation Boulevard, near the Los Angeles International Airport (west), where it becomes a grade-separated system, continuing along a 3.5 mile route to the city of Redondo Beach. Another light rail line is under construction from Union Station to the city of Pasadena.

New Interurban Trains

Concurrently with the development of the subway and light rail systems, the Southern California Regional Rail Authority established the Metrolink regional commuter train system. Metrolink quickly became operational because it used existing rail rights-of-way, thereby eliminating the need to acquire land and construct extensive rail systems. The first Los Angeles line opened in 1990, following purchase of Southern Pacific Railroad rights-of-way along a route roughly paralleling the Pacific Coast, from Union Station to San Juan Capistrano in Orange County. Metrolink lines between Los Angeles and Moorpark (Ventura County), Santa Clarita (Los Angeles County) and Pomona (San Bernardino County) opened in 1992.

Metrolink trains primarily serve commuters, thereby avoiding competition with Amtrak. They operate during weekday peak hours, with some trains operating on Saturday and midday. All Metrolink lines for southern California emanate from Union Station. Today Metrolink serves six southern California counties: Los Angeles, Ventura, San Bernardino, Orange, Riverside and San Diego. It is interconnected with other transit systems throughout the region. During the January 17, 1994 Northridge earthquake, when several freeways collapsed or were structurally damaged. Emergency expansions of Metrolink provided commuter access from Palmdale-Lancaster and other communities north of Los Angeles to areas south of the damaged freeways.

In 1997, in response to a federal mandate that Amtrak recover costs from the fare box or other means to pay for passenger lines, intrastate Amtrak lines were threatened with future closure. In response, regional coalitions were formed to devise means of assuming responsibility for lines serving their regions, including adding lines to the Metrolink system.

Train And Trolley Noise Issues

In the 1800s and the early part of the 20th century, railroad lines were built through expanses of virgin, agricultural and ranch lands. As the population and economy grew, manufacturing uses were established along the majority of rail routes within Los Angeles. Street cars serviced residential and commercial areas, much as buses do today. Noise impacts on passengers, rather than noise impacts on adjacent properties was an issue relative to the trolley system. Noise related to rail systems was a "given" of the urban environment and generally was not the subject of antinoise demands. Operation of trolleys and interurban trains primarily during daytime hours and infrequent passage of freight and passenger trains also contributed to the lack of public complaint about noise associated with railways.

Passengers complained about noise within L.A. Rail's yellow trolley cars, especially after the introduction of quieter rubber tired automobiles and buses. Rubber was installed in the new red cars to reduce noise and vibration experienced by passengers, thereby making them more appealing to riders. In the 1970s, greater public concern about the environment and health prompted promulgation of federal noise mitigation guidelines and standards. This resulted in quieter equipment and sound reducing track design.

Aircraft

Helicopters

Greek mathematician Archimedes developed a heliko or 'screw' machine around 200 B.C. to perform specific tasks. In the 16th Century Leonardo da Vinci applied the concept, using the heliko in his design of a vertical lift flying vehicle. The machine proved infeasible due to inadequate power to lift the craft. In 1907, Frenchmen Paul Cornu and Louis Breguet constructed and flew two vertical lift machines called "helicopters." The 1915 Peteroczy-Karman helicopters, which had to be tethered to the ground and could not maneuver horizontally, were used during World War I to monitor enemy military activities. In 1939 Igor Sikorsky produced the first practical helicopter that could be flown and maneuvered by pilot operated controls. By 1941 he had developed a mechanism that enabled pilots to control a helicopter's pitch and roll, thereby increasing its practical use. The Sikorsky became the first mass produced helicopter, proving its versatility during World War II. Bell Aircraft introduced the first commercial helicopter in 1947. It was powered by piston engines and was slow, noisy and vibrated so badly that it was unpopular for use in passenger travel. The introduction in the 1960s of gas turbine engines suitable for helicopters, enabled construction of lighter machines and a quieter and smoother flight. Until the 1970s the turbine engines proved impractical because they experienced frequent, recurring and expensive maintenance problems. A variety of technological advances in the late 1960s and early 1970s revolutionized helicopter technology, including stability augmentation, which improved the pilot's ability to control and maneuver the craft; solid state avionics, which reduced the size and weight of components (replacing the bulky tube radios with lighter equipment); and more reliable twin turbine engines, which provided power redundance for added safety. The improvements decreased vibration and noise levels, increased passenger comfort, decreased maintenance and reduced noise impacts on the surrounding environment.

With the improvements, use of helicopters for transportation, commercial and other civilian uses increased dramatically. Early application included use of helicopters for rescues, fire fighting and surveillance. In 1962 the Los Angeles City Fire Department acquired its first helicopter. It was used for dropping water and chemicals on targeted brush fire areas. Following the 1963 collapse of the Baldwin Hills Dam, the helicopter was used in dramatic rescues of stranded and endangered victims. The success of the operation convinced the city to purchase of a fleet of helicopters for emergency services. During the 1960s and 1970s emergency and private heliports were established throughout the city. Noise impacts were reduced by siting of facilities, flight path orientation and change in helicopter design.

Airplanes

The first successful flight of a powered, heavier-than-air craft was in 1896 by J.P. Langley whose unmanned Model No. 5 flew three quarters of a mile along the Potomac River. But it was Orville and Wilbur Wright's successful flight of the first piloted plane, a biplane, at Kitty Hawk, North Carolina in 1903 that launched the air age. Publicity flights and establishment of the first flying school by Glenn Curtis in 1907 and flight contests and air races in Europe and North America heightened public interest in flying machines. Aircraft production was accelerated during World War I when the small aircraft were used for surveillance and aerial fighting and began to be used for carrying mail and small amounts of freight, as well as for pleasure and daredevil exhibition flying. Following the war, more powerful gasoline fueled engines enabled construction of planes that could fly faster and greater distances. Soon planes were able to fly what was considered a phenomenal 200 miles per hour.

In 1927 Charles A. Lindbergh, in his Ryan NX-211 monoplane The Spirit of St. Louis, broke the U.S. transcontinental record by flying from San Diego to Long Island in 21 hours and 20 minutes with only one stop. He then flew on to Paris in 33

hours and 39 minutes, the first solo, nonstop flight across the Atlantic. His transatlantic flight caught the imagination of the public and generated increased interest in air travel. By the 1930s biplanes had been replaced for commercial and military uses by larger, faster, more versatile and more aerodynamic monoplanes.

The first jet plane, the Heinkel He-178, was produced in Germany in 1939. However, during World War II conventional propeller or "prop" planes like the DC-3 remained the primary transport and passenger aircraft. Technological advances were accelerated by wartime demands, resulting lighter planes that had greater range and speed and were more efficient and comfortable. By the 1950s jet airliners were being used for commercial flights. Not until the 1960s, with the advent of the jumbo jet with its expanded seating capacity, greater passenger comfort and reduced fares, did air passenger service become popular in the United States. In the interim the turbo props dominated the civilian market with their economical fuel consumption in carrying heavy loads over short hauls and their ability to land in difficult terrain and on short air fields. They were especially popular in rural and Third World areas.

Jet aircraft by the late 1960s had reduced the transatlantic flight time to six hours. The Anglo-French supersonic Concorde cut the time in half with its cruise speed of Mach 2, twice the speed of sound (approximately 1,350 miles per hour). The Concorde's maiden flight was in 1969. It entered commercial service in 1976. As of 1998 the single Concorde craft was the only supersonic plane in service but, due to its noise, it was barred from most airports in the United States. By the 1990s jet planes were the dominant commercial and military craft. Introduction of jet aircraft resulted in noise impacts on surrounding neighborhoods and communities. Smaller piston engine and propeller planes remained popular for private and business use and sports and generated little or no significant noise impacts on adjacent communities.

Most of the airports in the Los Angeles area initially were established within vast expanses of undeveloped or agricultural land. In some cases the airports began as test fields associated with aircraft manufacture. Communities grew up around the sites to provide homes and services for aircraft plant employees who did not complain about airport noise. With the advent of jet aircraft and transformation of surrounding neighborhoods to nonairport related populations, noise began to be considered a nuisance.

Los Angeles International Airport (LAX)

The Los Angeles Chamber of Commerce in the early 1920s recognized that the fragile airplanes, then considered a novelty, were the beginning of a new transportation era. Because federal law at that time prohibited use of federal funds for development of airports, the chamber lobbied the city to establish a municipal airport, publishing a survey (1926) suggesting 13 possible airfield sites. After assessing terrain, wind conditions and other factors of 28 sites, the city selected Mines Field (formerly called the Inglewood Site), a 640-acre bean field that had an emergency dirt air strip. When voters turned down a bond issue for purchase of the land, the city negotiated a ten-year lease, with option to buy, and began preparing three runways for the September 1928 National Air Races. At the conclusion of the races, at which Lindbergh was the main attraction, Los Angeles took over Mines Field and created the Department of Airports (DOA) to manage it.

The airfield was established as a general aviation facility. Its few buildings and a control tower served small, single-engine planes. The first permanent runway was constructed in 1929. It was 2,000 feet long and served as the landing site in August 1929 for the Graf Zeppelin. In 1930 the field was officially dedicated as the Los Angeles Municipal Airport and the lease was extended for 50 years. Voters were reluctant to fund additional improvements since the Glendale Grand Central Airport and Burbank United Terminal (later Lockheed) ap-

peared to provide adequate facilities for what was widely viewed as a passing fad. One disgruntled critic filed a lawsuit demanding that the lease be voided on the grounds that it was illegal to lease an airport without approval of the electorate. The state supreme court upheld the lease.

While the public may have been skeptical, the aircraft industry was not. It quickly established manufacturing facilities near the Municipal and Santa Monica airports. Douglas and Northrop opened plants in 1932. North American and other manufacturers followed. By 1937, 2,300 skilled workers were employed in the aircraft industries in the area. In the meantime air passenger travel had become popular and larger aircraft, such as the Douglas DC-3s, had been developed as passenger planes. Determining that the Glendale and Burbank airfields were not adequate for the new planes, TWA, American, Western and Pan American airlines agreed to make the Los Angeles airport their base if the city would make necessary improvements. Some improvements, including construction of a new runway, were made possible by a federal Emergency Relief Administration grant through the federal Works Progress Administration (WPA). WPA subsequently declined to provide funds because the site was not owned by the city. That problem was resolved when title was acquired in 1937. Between 1937 and 1939, WPA and bond monies enabled construction of runways and other facilities and improvements. The board of airport commissioners was created in 1940 to manage the DOA and in 1941 the name of the field was changed to the Los Angeles Airport.

During World War II the airport was used for military purposes. In 1943 the five major passenger airlines signed leases transferring their operations to the site. In anticipation of passenger air expansion, an airport master plan was prepared in 1944. After the war, southern California emerged as the center of the national aircraft industry with major activity taking place around the Los Angeles and Santa Monica airports. Passage of the city's 1945 airport bond issue by an overwhelming 5-to-1 majority enabled acquisition of 2,000 acres of land and construction of massive terminal facilities and major runways. Airport activity was shifted west of the original site to its present location.

The five airlines began operating at the airport in 1946, making it a major passenger terminal for the region. The following year voters approved a charter amendment making the DOA a self-managing city agency, independent of the mayor and city council and with control over its own finances. The airport commission, appointed by the mayor, quickly acted to create a regional system and to expand the airport into a world class facility. In 1950 the commission renamed the facility the Los Angeles International Airport, better known by its Federal Aviation Administration identifier LAX. The first runway overpass of its kind, the Sepulveda Boulevard overpass, was completed in 1953, enabling the extension of the two main runways above the boulevard to accommodate jet traffic.

In January 1959 American Airlines began the first jet service between New York and Los Angeles. A new terminal and the first permanent passenger facilities for LAX were completed in 1961. With the advent of jet aircraft, significant noise problems began to be experienced by neighboring communities due to jet overflights and increased airport activity. The DOA was made self sufficient by a 1963 charter amendment that allowed it to issue its own revenue bonds without having to secure voter approval. It immediately embarked on a program of diversification and expansion and began to address noise impact issues. In 1965 and 1966 the first air freight terminals were opened to accommodate an increasing demand for freight services. In anticipation of the 1984 Los Angeles Summer Olympic Games, airport passenger facilities were upgraded, new international and domestic terminals were constructed, other terminals were renovated, automobile circulation was enhanced by a new second level roadway and other facilities were added or renovated. The airport department (now calling itself Los Angeles World Airports, or LAWA) in 1998 was preparing a mas-

ter plan for LAX, of which noise management is an important consideration.

Van Nuys Airport (VNY)

Metropolitan Airport was established as a private general aviation field on October 1, 1928. Three factories, six hangers and a control tower were added in 1929. In 1942 it was purchased by the federal government for use as a military base. Los Angeles acquired the airport in 1949 for one dollar with the proviso that the California Air National Guard could remain on the site. With the completion of the Sherman Way overpass in 1957 the city renamed the airport the Van Nuys Airport. The Sherman Way extension provided VNY with a runway that could accommodate jet aircraft. Introduction of jet planes resulted in increased noise impacts on adjacent communities. Acquisitions enabled expansion of airport operations and provision of noise buffers between aircraft activities and adjacent communities. By 1971 VNY had become the busiest general aviation airport in the nation. In 1997 LAWA was preparing a master plan for VNY, in part to address noise issues.

Burbank-Glendale-Pasadena Airport (BUR)

When United Airport opened in 1930 it was the nation's first "multimillion dollar airport," boasting five 3,600-foot runways and related facilities. By 1934 the airport served more than 98,000 passengers a year and was the main terminal for the Los Angeles area. In that year its name was changed to Union Air Terminal. The Lockheed aircraft company, which owned an adjacent manufacturing facility and airfield, purchased the site in 1940, combining the two sites and using them for the production of B-17 bombers, P-8 fighters and Hudson bombers during World War II. The original site had been used by pilots, including North Hollywood resident Amelia Earhart, to test planes purchased from Lockheed. In the 1950s air cargo and commuter flights began using BUR. Subsequently commuter and distance operations were expanded, providing a convenient alternative to LAX. With increased aircraft activity came increased noise impacts on adjacent communities.

When Lockheed announced its intention to sell the airport for conversion to other uses, the state Division of Aeronautics and FAA evaluated the facility and determined that it was important to maintain the site in airport use. To do so, the state legislature in 1976 authorized formation of an airport authority to purchase and operate BUR. The cities of Burbank, Glendale and Pasadena entered into a joint powers agreement to form the authority, which was independent of the three founding cities. Los Angeles and the City of San Fernando declined to join. Each of the three members appointed three representatives to serve on the authority's board of commissioners. The board convened in 1977, formally inaugurating the Airport Authority. In 1978 the Authority purchased the airport from Lockheed with funding from the FAA and from revenue bonds issued by the Authority. The airport was renamed the Burbank-Glendale-Pasadena Airport, retaining its FAA identification call letters of BUR. The Authority's recently approved development plans are under challenge from surrounding jurisdictions, including the City of Los Angeles, in part due to noise impact issues.

Santa Monica Airport (SMO)

In 1919 the City of Santa Monica established Clover Field on a leased a portion of a barley field. Many of the private pilots who used the field were associated with the new Hollywood motion picture industry. The Douglas Aircraft Company moved to Santa Monica in 1922 and began building military aircraft, using the airstrip for test flights. With the increasing demand for airfields and expanding needs of Douglas, Santa Monica purchased 158 acres of land in 1924 for airport expansion. It was at the Santa Monica plant that Douglas began manufacturing its popular DC series of planes. In 1934 the DC-3 became the first successful mass produced plane for commercial passenger service. Growth of jobs at the plant generated a housing boom, resulting in residential development around SMO.

On the eve of World War II, the army leased the airport for army air corps and military purposes, returning it to Santa Monica in 1948. In the late 1950s Douglas shifted its primary manufacturing operations to Long Beach because SMO could not provide a long enough runway to accommodate large jet aircraft. By the 1960s, SMO rivaled VNY as the busiest general aviation airport in the nation, reaching a peak of 374,000 flights in 1966. With increased aircraft activity and surrounding land uses, noise became an increasing issue. Mitigation of impacts has been accomplished by a variety of measures, including changes in flight paths, airport use and configuration and surrounding land uses.

Whiteman Airport

Whiteman Air Park was established in 1946 as a private airfield. It was used primarily for training, business and recreational purposes. The County purchased the site in 1970 and renamed it Whiteman Airport. Noise issues have not been a major issue relative to the airport. Recent land use and zoning changes were made to assure minimal airport impacts on adjacent residential uses.

Note: additional information about history, noise issues and noise management programs is contained in the noise element text.

Exhibit G: Glossary of Terms and Acronyms

ALUC: county airport land use commission.

Ambient noise: background or existing noise level. The composite of noise from all sources near and far in a given environment, exclusive of occasional and transient intrusive noise.

Based aircraft: aircraft having legal contracts with the airport authority for use of airport property for a specific number of days. Typically the contracts are in the form of leases.

BUR: Burbank-Glendale-Pasadena Airport.

Caltrans: California Department of Transportation.

CAP: Caltrans Aeronautics Program, formerly called the Division of Aeronautics. A division of Caltrans.

CEQA: California Environmental Quality Act of 1970.

CLUP: Comprehensive (airport) Land Use Plan of the county Airport Land Use Commission.

CNEL (Community Noise Equivalent Level): a noise measurement scale applied over a 24-hour period to all noise events received at the measurement point. It is weighted more heavily for evening and night periods in order to account for the lower tolerance of individuals to noise during those periods.

CPC: Los Angeles City Planning Commission.

dB: decibel. A decibel is a unit for measuring the relative loudness of sound.

dBA: 'A' measures the level of sound the way sound is received by the human ear. Combined with dB (decibels) it is used to measure decibel level related to human hearing. CNEL is weighted, therefore the 'A' does not appear when CNEL and dB are referenced together.

DOA: Los Angeles Department of Airports. In 1997 the Board of Airports Commissioners, approved the name "Los Angeles World Airports" as the business title of the department. The official (charter) name, DOA, was not changed.

EIR: environmental impact report, a requirement of CEQA.

EIS: environmental impact statement, a requirement of NEPA.

EPA: federal Environmental Protection Agency.

FAA: Federal Aviation Administration.

FAR: Federal Aviation Regulation.

FHA: Federal Highway Administration of the U.S. Department of Transportation.

FTA: Federal Transit Administration of the U.S. Department of Transportation.

Flight: a landing or departure of an aircraft.

General aviation airport: an airport that does not serve scheduled air carriers.

Intermittent noise: periodic noise, as opposed to ambient noise.

Intrusive noise: isolated noise incidents in which the particular noise is greater than the ambient noise level.

LAMC: Los Angeles Municipal Code.

LAWA: Los Angeles World Airports, the business name for the Los Angeles Department of Airports.

LAX: Los Angeles International Airport.

Ldn: average day-night sound level weighted to account for the lower tolerance of people to noise during the night period. Approximately a half a decibel lower than CNEL.

MTA: Los Angeles County Metropolitan Transportation Authority.

NEPA: National Environmental Policy Act of 1969.

Noise contours: mapped lines around a noise source to indicate specific levels of intensity of community exposure to the noise, e.g., an airport.

Noise source: generator of the sound being measured.

SCRRA: Southern California Regional Rail Authority (Metrolink).

SMO: Santa Monica Airport.

VNY: Van Nuys Airport.

Exhibit H: Common Noise Levels

(Caltrans Noise Manual, California Department of Transportation, March 1980)

Noise Level (dBA)	Common Indoor Noise Levels	Common Outdoor Noise Levels
110	Rock Band	
100	Inside Subway Train	Jet Flyover @ 1,000 feet Gas Lawn Mower @ 3 feet
90	Food Blender @ 3 feet	Diesel Truck @ 50 feet Noisy Urban Daytime
80	Garbage Disposal @ 3 feet Shouting @ 3 feet	
70	Vacuum Cleaner @ 10 feet	Gas Lawn Mower @ 100 feet Commercial Area
60	Normal Speech @ 3 feet Large Business Office	Heavy Traffic @ 300 feet
50	Dishwasher next room	Quiet Urban Daytime
40	Small Theater/Conference Room (background)	Quiet Urban Nightime Quiet Suburban Nightime
30	Library Bedroom at Night	
20	Concert Hall (background) Broadcast & Recording Studio	Quiet Rural Nightime
10		
0	Threshold of Hearing	

Exhibit I: Guidelines for Noise Compatible Land Use

(Based on the Governor's Office of Planning and Research, "General Plan Guidelines", 1990. To help guide determination of appropriate land use and mitigation measures vis-a-vis existing or anticipated ambient noise levels)

Land Use Category	Day-Night Average Exterior Sound Level (CNEL dB)						
	50	55	60	65	70	75	80
Residential Single Family, Duplex, Mobile Home	A	C	C	C	N	U	U
Residential Multi-Family	A	A	C	C	N	U	U
Transient Lodging, Motel, Hotel	A	A	C	C	N	U	U
School, Library, Church, Hospital, Nursing Home	A	A	C	C	N	N	U
Auditorium, Concert Hall, Ampitheater	C	C	C	C/N	U	U	U
Sports Arena, Outdoor Spectator Sports	C	C	C	C	C/U	U	U
Playground, Neighborhood Park	A	A	A	A/N	N	N/U	U
Golf Course, Riding Stable, Water Recreation, Cemetery	A	A	A	A	N	A/N	U
Office Building, Business, Commercial, Professional	A	A	A	A/C	C	C/N	N
Agriculture, Industrial, Manufacturing, Utilities	A	A	A	A	A/C	C/N	N

A = Normally acceptable. Specified land use is satisfactory, based upon assumption buildings involved are conventional construction, without any special noise insulation.

C = Conditionally acceptable. New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning normally will suffice.

N = Normally unacceptable. New construction or development generally should be discouraged. A detailed analysis of noise reduction requirements must be made and noise insulation features included in the design of a project.

U = Clearly unacceptable. New construction or development generally should not be undertaken.

City of Los Angeles Municipal Code

CHAPTER XI
NOISE REGULATION

(Added by Ord. No. 144,331, Eff. 3/2/73.)

Article

1 General Provisions

2 Special **Noise** Sources

3 Sanitary Operations

4 Vehicles

5 Amplified Sounds

6 General **Noise**

ARTICLE 1
GENERAL PROVISIONS

Section

111.00 Declaration of Policy.

111.01 Definitions.

111.02 Sound Level Measurement Procedure and Criteria.

111.03 Minimum Ambient **Noise** Level.

111.04 Violations: Additional Remedies, Injunctions.

111.05 Enforcement, Citations.

SEC. 111.00. DECLARATION OF POLICY.

It is hereby declared to be the policy of the City to prohibit unnecessary, excessive and annoying **noises** from all sources subject to its police power. At certain levels **noises** are detrimental to the health and welfare of the citizenry and in the public interests shall be systematically proscribed.

SEC. 111.01. DEFINITIONS.

Unless the context otherwise clearly indicates, the words and phrases used in this chapter are defined as follows:

(a) "**Ambient Noise** " is the composite of **noise** from all sources near and far in a given environment, exclusive of occasional and transient intrusive **noise** sources and of the particular **noise** source or sources to be measured. Ambient **noise** shall be averaged over a period of at least 15 minutes at a location and time of day comparable to that during which the measurement is taken of the particular **noise** source being measured. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(b) "**Commercial Purpose**" is the use, operation, or maintenance of any sound amplifying equipment for the purpose of advertising any business, goods, or services, or for the purpose of attracting the attention of the public to, advertising for, or soliciting patronage or customers to or for any performance, show, entertainment, exhibition, or event, or for the purpose of demonstrating such sound equipment. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(c) "**Decibel**" (dB) is a unit of level which denotes the ratio between two (2) quantities which are proportional to power; the number of decibels corresponding to the ratio of two (2) amounts of power is ten (10) times the logarithm to the base (10) of this ratio. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(d) "**Emergency Work**" is work made necessary to restore property to a safe condition following a public calamity or work required to protect persons or property from an imminent exposure to danger, or work by private or public utilities when restoring utility service. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(e) "**Impulsive Sound**" is sound of short duration, usually less than one second, with an abrupt onset and rapid decay. By way of example "**impulsive sound**" shall include, but shall not be limited to, explosions, musical base drum beats, or the discharge of firearms. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(f) "**Motor Vehicle**" includes, but shall not be limited to, automobiles, trucks, motorcycles, minibikes and go-carts. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(g) "**Noncommercial Purpose**" is the use, operation, or maintenance of any sound equipment for other than a "commercial purpose". "Noncommercial purpose" shall mean and include, but shall not be limited to, philanthropic, political, patriotic, and charitable purposes. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(h) "**Octave Band Noise Analyzer**" is an instrument for measurement of sound levels in octave frequency bands which satisfies the pertinent requirements for Class II octave band analyzers of the American National Standard Specifications for Octave, Half-Octave, and Third-Octave Band Filters, S1.11-1966 or the most recent revision thereof. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(i) "**Person**" is a person, firm, association, co-partnership, joint venture, corporation, or any entity, private or public in nature. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(j) "**Sound Amplifying Equipment**" **(Amended by Ord. No. 156,363, Eff. 3/29/82.)** is any machine or device for the amplification of the human voice, music or any other sound, but shall not include:

1. Automobile radios, stereo players or television receivers when used and heard only by the occupants of the vehicle in which the same is installed.

2. Radio, stereo players, phonographs or television receivers used in any house or apartment within any residential zone or within 500 feet thereof.

3. Warning devices on emergency vehicles.

4. Horns or other warning devices authorized by law on any vehicle when used for traffic purposes.

(k) "**Sound Level**" (**Noise** level) in decibels (dB) is the sound measured with the "A" weighting and slow responses by a sound level meter; except for impulsive or rapidly varying sounds, the fast response shall be used. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(l) "**Sound Level Meter**" is an instrument including a microphone, an amplifier, an output meter, and "A" frequency weighting network for the measurement of sound levels which satisfies the pertinent requirements for Type S2A meters in American Standard Specifications for sound level meters in S1.4-1971 or the most recent revision thereof. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(m) "**Sound Truck**" is any motor vehicle, or any other vehicle regardless of motive power, whether in motion or stationary, which carries, is equipped with, or which has mounted thereon, or attached thereto, any sound amplifying equipment. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

(n) **Supplementary Definitions of Technical Terms**. Definitions of technical terms not defined herein shall be obtained from American Standard Acoustical Terminology S1-1-1971 or the most recent revision thereof. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

SEC. 111.02. SOUND LEVEL MEASUREMENT PROCEDURE AND CRITERIA.

(Title amended by Ord. No. 156,363, Eff. 3/29/82.)

(a) **(Amended by Ord. No. 156,363, Eff. 3/29/82.)** Any sound level measurement made pursuant to the provisions of this chapter shall be measured with a sound level meter using the "A" weighting and response as indicated in Section 111.01(k) of this article.

Except when impractical, the microphone shall be located four to five feet above the ground and ten feet or more from the nearest reflective surface. However, in those cases where another elevation is deemed appropriated, the latter shall be utilized.

Interior sound level measurements shall be made at a point at least four feet from the wall, ceiling, or floor nearest the **noise** source.

Calibration of the sound level meter, utilizing an acoustic calibrator shall be performed immediately prior to recording any sound level data. The ambient **noise** level and the level of a particular **noise** being measured shall be the numerical average of **noise** measurements taken at a given location during a given time period.

(b) **(Amended by Ord. No. 156,363, Eff. 3/29/82.)** Where the sound alleged to be offending is of a type or character set forth below, the following values shall be added to the sound level measurement of the offending **noise** :

1. Except for **noise** emanating from any electrical transformer or gas metering and pressure control equipment existing and installed prior to the effective date of the ordinance enacting this chapter, any steady tone with audible fundamental frequency or overtones have 200 Hz +5

2. Repeated impulsive **noise** +5

3. **Noise** occurring more than 5 but less than 15 minutes in any period of 60 consecutive minutes between the hours of 7:00 a.m. and 10:00 p.m. of any day -5

4. **Noise** occurring five minutes or less in any period of 60 consecutive minutes, between the hours of 7:00 a.m. and 10:00 p.m. of any day -5

(Amended by Ord. No. 161,574, Eff. 9/8/86.)

(c) For those cases where an objectionable **noise** is clearly audible, but where the level of ambient **noise** does not permit direct quantative sound level "A" measurements of the objectionable **noise** , sound measurements may be performed utilizing an octave band sound analyzer to determine sound level "A" limits as indicated in the Table I below. This table is used to convert the sound pressure level meter readings in dB for each band to SPL in dB(A) for each band.

TABLE I

OCTAVE BAND NOISE VALUES CORRESPONDING TO SOUND LEVEL "A" VALUES

Sound Level	**Octave Band Sound Pressure Level, dB re .0002 dyne/cm^2** **Octave Band Center Frequency in Hz**								
"A"	31.5	63	125	250	500	1000	2000	4000	8000
35	58	50	42	35	32	29	26	23	20
40	61	54	46	40	37	34	31	28	25
45	64	58	51	45	42	39	36	33	30

50	67	61	55	50	47	44	41	38	35
55	70	64	60	55	52	49	46	43	40
60	73	68	64	60	57	54	51	48	45
65	76	72	68	65	62	59	56	53	50
70	79	76	73	70	67	64	61	58	55
75	84	81	78	75	72	69	66	63	60

(d) For those cases where a sound level measurement has been made pursuant to the provisions of this chapter and two or more provisions of this chapter apply, the provision establishing the lower or lowest **noise** level, respectively, shall be used. **(Added by Ord. No. 156,363, Eff. 3/29/82.)**

SEC. 111.03. MINIMUM AMBIENT NOISE LEVEL.

(Amended by Ord. No. 156,363, Eff. 3/29/82.)

Where the ambient **noise** level is less than the presumed ambient **noise** level designated in this section, the presumed ambient **noise** level in this section shall be deemed to be the minimum ambient **noise** level for purposes of this chapter.

TABLE II

SOUND LEVEL "A" DECIBELS

(In this chart, daytime levels are to be used from 7:00 a.m. to 10:00 p.m. and nighttime levels from 10:00 p.m. to 7:00 a.m.)

	PRESUMED AMBIENT NOISE LEVEL (dB(A))	
ZONE	**DAY**	**NIGHT**
A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, and R5	50	40
P, PB, CR, C1, C1.5, C2, C4, C5, and CM	60	55
M1, MR1, and MR2	60	55

M2 and M3	65	65

At the boundary line between two zones, the presumed ambient **noise** level of the quieter zone shall be used.

SEC. 111.04. VIOLATIONS: ADDITIONAL REMEDIES, INJUNCTIONS.

As an additional remedy, the operation or maintenance of any device, instrument, vehicle, or machinery in violation of any provision of this chapter, which operation or maintenance causes discomfort or annoyance to reasonable persons or which endangers the comfort, repose, health, or peace of residents in the area, shall be deemed and is declared to be.a public nuisance and may be subject to abatement summarily by a restraining order or injunction issued by a court order of competent jurisdiction. **(Amended by Ord. No. 156,363, Eff. 3/29/82.)**

SEC. 111.05. ENFORCEMENT, CITATIONS.

(Added by Ord. No. 156,363, Eff. 3/29/82.)

(a) The Department of Building and Safety shall have the power and duty to enforce the following **noise** control provisions of this Code: Section 12.14A-6(h), Section 12.19A-4(b)(1), Section 112.02 and Section 112.04(c). **(Amended by Ord. No. 172,086, Eff. 7/30/98.)**

(b) The Police Department shall have the power and duty to enforce the following **noise** control provisions of this Code: Section 41.32, Section 41.40, Section 41.42, Section 41.44, Section 41.57, Section 63.51(m), Section 112.01, Section 112.04, Section 112.05, Section 112.06, Section 113.01, Section 114.01 through Section 114.05, inclusive, Section 115.02, and Section 116.01. **(Amended by Ord. No. 161,574, Eff. 9/8/86.)**

(c) Any Building Mechanical Inspector assigned to **noise** enforcement inspection shall have the power, authority and immunity of a public officer and employee, as set forth in the Penal Code of the State of California, Section 836.5, to make arrests without a warrant whenever such employee has reasonable cause to believe that the person to be arrested has committed a misdemeanor in his presence which is a violation of any provision set forth in Section 111.05(a) of this chapter. The provisions of said Penal Code section regarding issuance of a written promise to appear shall be applicable to arrests authorized herein.

ARTICLE 2
SPECIAL NOISE SOURCES

Section

112.01 Radios, Television Sets, and Similar Devices.

112.02 Air Conditioning, Refrigeration, Heating, Pumping, Filtering Equipment.

112.03 Construction **Noise** .

112.04 Powered Equipment Intended for Repetitive Use in Residential Areas and Other Machinery, Equipment, and Devices.

112.05 Maximum **Noise** Level of Powered Equipment or Powered Hand Tools.

112.06 Places of Public Entertainment.

SEC. 112.01. RADIOS, TELEVISION SETS, AND SIMILAR DEVICES.

(Amended by Ord. No. 156,363, Eff. 3/29/82.)

(a) It shall be unlawful for any person within any zone of the City to use or operate any radio, musical instrument, phonograph, television receiver, or other machine or device for the producing, reproducing or amplification of the human voice, music, or any other sound, in such a manner, as to disturb the peace, quiet, and comfort of neighbor occupants or any reasonable person residing or working in the area.

(b) Any **noise** level caused by such use or operation which is audible to the human ear at a distance in excess of 150 feet from the property line of the **noise** source, within any residential zone of the City or within 500 feet thereof, shall be a violation of the provisions of this section.

(c) Any **noise** level caused by such use or operation which exceeds the ambient **noise** level on the premises of any other occupied property, or if a condominium, apartment house, duplex, or attached business, within any adjoining unit, by more than five (5) decibels shall be a violation of the provisions of this section.

SEC. 112.02. AIR CONDITIONING, REFRIGERATION, HEATING, PUMPING, FILTERING EQUIPMENT.

(Amended by Ord. No. 156,363, Eff. 3/29/82.)

(a) It shall be unlawful for any person, within any zone of the city to operate any air conditioning, refrigeration or heating equipment for any residence or other structure or to operate any pumping, filtering or heating equipment for any pool or reservoir in such manner as to create any **noise** which would cause the **noise** level on the premises of any other occupied property or if a condominium,

apartment house, duplex, or attached business, within any adjoining unit.to exceed the ambient **noise** level by more than five (5) decibels

(b) This section shall not be applicable to emergency work as defined in Section 111.01(c) of this chapter, or to periodic maintenance or testing of such equipment reasonably necessary to maintain such equipment in good working order.

SEC. 112.03. CONSTRUCTION NOISE .

Noise due to construction or repair work shall be regulated as provided by Section 41.40 of this Code. **(Amended by Ord. No. 161,574, Eff. 9/8/86.)**

SEC. 41.40. NOISE DUE TO CONSTRUCTION, EXCAVATION WORK – WHEN PROHIBITED.

(a) No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power driven drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and wilfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code. **(Amended by Ord. No. 158,587, Eff. 1/29/84.)**

(b) The provisions of Subsection (a) shall not apply to any person who performs the construction, repair or excavation work involved pursuant to the express written permission of the Board of Police Commissioners through its Executive Director. The Executive Director, on behalf of the Board, may grant this permission, upon application in writing, where the work proposed to be done is in the public interest, or where hardship or injustice, or unreasonable delay would result from its interruption during the hours mentioned above, or where the building or structure involved is devoted or intended to be devoted to a use immediately related to public defense. The provisions of this section shall not in any event apply to construction, repair or excavation work done within any district zoned for manufacturing or industrial uses under the provisions of Chapter I of this Code, nor to emergency work necessitated by any flood, fire or other catastrophe. **(Amended by Ord. No. 178,160, Eff. 2/12/07.)**

(c) **(Amended by Ord. No. 166,170, Eff. 9/29/90.)** No person, other than an individual homeowner engaged in the repair or construction of his single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any

building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specified. The provisions of this subsection shall not apply to persons engaged in the emergency repair of:

1. Any building or structure.
2. Earth supporting or endangering any building or structure.
3. Any public utility.
4. Any public way or adjacent earth.

(d) The provisions of Subsection (c) shall not apply to construction work done on the Metro Rail Project and the tunnel-station portions of the Los Angeles-Long Beach Rail Project between Sixth to Twelfth Streets, provided however that this construction work shall not include the utilization of soldier pile drilling, vibrating hammer driving, blasting, or any construction activities that will exceed the ambient noise levels as provided in the action of the Police Commission, pursuant to Subsection (b) above, granting a variance for this work. In addition, this construction work will be subject to all the conditions of the conditional variance granted by the Board through its Executive Director. This section shall have no force or effect upon completion of the construction work described here. **(Amended by Ord. No. 178,160, Eff. 2/12/07.)**

(e) The provisions of this section shall not apply to construction work done by CALTRANS to repair the collapsed sections of the Santa Monica Freeway within a one mile radius of the intersection of Interstate 10 and Fairfax Avenue. This section shall have no force and effect upon completion of the construction work herein described. **(Added by Ord. No. 169,669, Eff. 5/13/94.)**

(f) The provisions of this section shall not apply to construction work done by the County of Los Angeles in connection with Phases 2 and 3 of Unit 5 of the Hollyhills Storm Drain Project, including the installation of temporary bridges and any other structures necessary to regulate or direct traffic because of the storm drain construction. Unit 5 construction is within the area bounded by Beverly Boulevard, 3rd Street, La Cienega Boulevard and San Vicente Boulevard. Phases 2 and 3 involve several underground concrete structures to be built in and around the intersection of La Cienega and San Vicente Boulevards. This section shall have no force and effect upon completion of the construction work herein specified. **(Added by Ord. No. 172, 091, Eff. 7/3/98.)**

(g) The provisions of Subsection (c) shall not apply to construction work undertaken from March 31, 2000 to August 20, 2000 that must be done prior to the Democratic National Convention, provided however that such construction work will be subject to all conditions established by the Los Angeles Police Department Noise Enforcement Team, in 1) the downtown area bounded by Union Street on the west, Washington on the south, San Pedro on the east, and 101 Freeway on the North, including but not limited to work undertaken in compliance with construction permits issued by the Bureau of Engineering, water line improvements/installation, sewer construction, fiber optic installation, and street paving or is associated with the Convention such as installation and removal of security barriers and fencing and 2) the Windward Plaza area of Venice Beach, between 18th Place and Horizon Avenue from the western border of Ocean Front Walk to the beach, for the Venice Beach Ocean Front Walk Refurbishment Project under the direction of the City of Los Angeles Department of Recreation and Parks Department. This section shall have no force and effect after August 20, 2000. **(Added by Ord. No. 173,154, Eff. 4/30/00.)**

(h) The provisions of Subsection (c) shall not apply to the construction work done by the City of Los Angeles in connection with the portion of the Stone-Hollywood Trunk Line from Stone Canyon Reservoir service area to the Hollywood Reservoir service area as part of the Hollywood Water Quality Improvement Project undertaken on Pico Boulevard, including all structures and operations necessary for construction and/or to regulate or direct traffic due to construction activities. This section shall have no force and effect upon completion of the construction work herein specified. **(Added by Ord. No. 173,746, Eff. 1/23/01.)**

[(i) None.]

(j) As determined by the Executive Director of the Board, the provisions of Subsection (c) shall not apply to major public works construction by the City of Los Angeles and its proprietary Departments, including all structures and operations necessary to regulate or direct traffic due to construction activities. The Board, through its Executive Director, pursuant to Subsection (b) will grant a variance for this work and construction activities will be subject to all conditions of the variance as granted. Concurrent with the request for a variance, the City Department that will conduct the construction work will notify each affected Council district office and established Neighborhood Council of projects where proposed Sunday and/or Holiday work will occur. **(Amended by Ord. No. 178,160, Eff. 2/12/07.)**

(k) **Noise Variance Application Fee.** Any application to the Board for a noise variance under Subsection (b) shall be accompanied by payment of an application fee of $252.00. **(Amended by Ord. No. 184,481, Eff. 10/17/16.).)**

SEC. 112.04. POWERED EQUIPMENT INTENDED FOR REPETITIVE USE IN RESIDENTIAL AREAS AND OTHER MACHINERY, EQUIPMENT, AND DEVICES.

(Title and Section Amended by Ord. No. 161,574, Eff 9/8/86.)

(a) Between the hours of 10:00 p.m and. 7:00 a.m. of the following day, no person shall operate any lawn mower, backpack blower, lawn edger, riding tractor, or any other machinery, equipment, or other mechanical or electrical device, or any hand tool which creates a loud, raucous or impulsive sound, within any residential zone or within 500 feet of a residence.

(b) Except as to the equipment and operations specifically mentioned and related elsewhere in this Chapter or for emergency work as that term is defined in Section 111.01(d), and except as to aircraft, tow tractors, aircraft auxiliary power units, trains and motor vehicles in their respective operations governed by State or federal regulations, no person shall operate or cause to be operated any machinery, equipment, tools, or other mechanical or electrical device, or engage in any other activity in such manner as to create any **noise** which would cause the **noise** level on the premises of any other occupied property, or, if a condominium, apartment house, duplex, or attached business, within any adjoining unit, to exceed the ambient **noise** level by more than five (5) decibels.

(c) Notwithstanding the provisions of Subsection (a) above, no gas powered blower shall be used within 500 feet of a residence at anytime. Both the user of such a blower as well as the individual who contracted for the services of the user, if any, shall be subject to the requirements of and penalty provisions for this ordinance. Violation of the provisions of this subsection shall be punishable as an infraction in an amount not to exceed One Hundred Dollars ($100.00), notwithstanding the graduated fines set forth in L.A.M.C. § 11.00(m). **(Amended by Ord. No. 171,890, Eff. 2/13/98.)**

SEC. 112.05. MAXIMUM NOISE LEVEL OF POWERED EQUIPMENT OR POWERED HAND TOOLS.

(Amended by Ord. No. 161,574, Eff. 9/8/86.)

Between the hours of 7:00 a.m. and 10:00 p.m., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum **noise** level exceeding the following **noise** limits at a distance of 50 feet therefrom:

(a) 75dB(A) for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;

(b) 75dB(A) for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;

(c) 65dB(A) for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors;

The **noise** limits for particular equipment listed above in (a), (b) and (c) shall be deemed to be superseded and replaced by **noise** limits for such equipment from and after their establishment by final regulations adopted by the Federal Environmental Protection Agency and published in the Federal Register.

Said **noise** limitations shall not apply where compliance therewith is technically infeasible The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said **noise** limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other **noise** reduction device or techniques during the operation of the equipment.

SEC. 112.06. PLACES OF PUBLIC ENTERTAINMENT.

It shall be unlawful for any person to operate, play, or to permit the operation or playing of any radio, television receiver, phonograph, musical instrument, sound amplifying equipment, or similar device which produces, reproduces, or amplifies sound in any place of public entertainment at a sound level greater than 95dB(A) at any point that is normally occupied by a customer, unless a conspicuous and legible sign is located outside such place, near each public entrance, stating:

"WARNING: SOUND LEVELS WITHIN MAY CAUSE HEARING IMPAIRMENT."

(Added by Ord. No. 156,363, Eff. 3/29/82.)

ARTICLE 3
SANITARY OPERATION

Section

113.01 Rubbish and Garbage Collection and Disposal.

SEC. 113.01. RUBBISH AND GARBAGE COLLECTION AND DISPOSAL.

(Amended by Ord. No. 161,574, Eff. 9/8/86.)

It shall be unlawful for any person engaged in the business of collecting or disposing of rubbish or garbage to operate any refuse disposal truck, parking lot sweeper, or vacuum truck, or to collect, load, pick up, transfer, unload, dump, discard, sweep, vacuum, or dispose of any rubbish or garbage, as such terms are defined in Section 66.00 of this Code, within 200 feet of any residential building between the

hours of 9:00 p.m. and 6:00 a.m. of the following day, unless a permit therefore has been duly obtained beforehand from the Board of Police Commissioners.

The standards which shall be considered in determining whether a permit shall be granted are the following:

(a) Whether the work to be done is in the public interest, or

(b) Whether the applicant would suffer hardship, injustice or delay if the permit were not granted, or

(c) Whether fuel conservation would result if the permit were issued.

No permit shall be required to perform emergency work as defined in Sec. 111.01(c) of this chapter.

ARTICLE 4
VEHICLES

Section

114.01 Vehicle Repairs.

114.02 Motor Driven Vehicles.

114.03 Vehicles – Loading and Unloading.

114.04 Audible Signaling Devices.

114.05 Audible Advertising Devices – Commercial Food Vendors.

114.06 Vehicle Theft Alarm Systems.

114.07 Audible Status Indicator

SEC. 114.01. VEHICLE REPAIRS.

(Amended by Ord. No. 156,363, Eff. 3/29/82.)

It shall be unlawful for any person, within any residential property located within any residential zone of the City or within 500 feet thereof, to repair, rebuild, reconstruct or dismantle any motor vehicle between the hours of 8:00 p.m. of one day and 8:00 a.m. of the next day in such manner:

(a) That a reasonable person residing in the area is caused discomfort or annoyance;

(d) That such activity is audible to the human ear at a distance in excess of 150 feet from the property line of the **noise** source;

(c) As to create any **noise** which would cause the **noise** level on the premises of any occupied residential property, or if a condominium, apartment house or duplex, within any adjoining unit, to exceed the ambient **noise** level by more than five (5) decibels.

SEC. 114.02. MOTOR DRIVEN VEHICLES.

(Amended by Ord. No. 156,363, Eff. 3/29/82.)

(a) It shall be unlawful for any person to unreasonably operate any motor driven vehicle upon any property within the City or to unreasonably accelerate the engine of any vehicle, or unreasonably sound, blow or operate the horn or other warning device of such vehicle in such manner:

1. As to disturb the peace, quiet and comfort of any neighborhood or of any reasonable person residing in such area

2. That such activity is audible to the human ear at a distance in excess of 150 feet from the property line of the **noise** source;

3. As to create any **noise** which would cause the **noise** level on the premises of any occupied residential property, or if a condominium, apartment house or duplex, within any adjoining unit, to exceed the ambient **noise** level by more than five (5) decibels.

(b) This section shall not be applicable to any vehicle which is operated upon any public highway, street or right-of-way or to the operation of any off-highway vehicle to the extent it is regulated in the Vehicle Code.

SEC. 114.03. VEHICLES – LOADING AND UNLOADING.

(Amended by Ord. No. 166,514, Eff. 1/24/91.)

(a) It shall be unlawful for any person, between the hours of 10:00 p.m. and 7:00 a.m. of the following day, to load or unload any vehicle, or operate any dollies, carts, forklifts, or other wheeled equipment, which causes any impulsive sound, raucous or unnecessary **noise** within 200 feet of any residential building.

(b) Irrespective of the provisions of Subsection (a), loading or unloading of vehicles of the type of activity referred to in Subsection (a) may occur between the hours of 6:00 a.m. to 11:00 p.m. of the same day pursuant to a permit issued by the Department of Transportation in accordance with a business program as defined by said department. This permit program would be limited to the area bounded by Western Avenue, Santa Monica Freeway, Central Avenue, and the San Diego Freeway, within the limits of the City of Los Angeles. Such permits will not be issued to high-**noise** businesses such as trash pickup.

SEC. 114.04. AUDIBLE SIGNALING DEVICES.

(Added by Ord. No. 161,574, Eff. 9/8/86.)

It shall be unlawful for any person, within any residential zone of the City or within 500 feet thereof, to sound, blow, or operate any audible signaling device, including sequential airhorns or electronically operated vehicular loud speaker music devices, which can be heard for a distance greater than 200 feet for any purpose. Violation of this section shall constitute an infraction This section does not address horn or warning devices regulated in Article 1 of Chapter 5 of Division 12 of the Vehicle Code of the State of California, commencing at Section 27000. **(Last sentence amended by Ord. No. 165.191, Eff. 10/23/89.)**

SEC. 114.05. AUDIBLE ADVERTISING DEVICES – COMMERCIAL FOOD VENDORS.

(Added by Ord. No. 164,532, Eff. 4/20/89.)

Notwithstanding the provisions of Section 114.04, it shall be unlawful for any person, to sound, blow or operate any music, chimes or bells, or any similar sound device, amplified or otherwise, within 200 feet of any residential building between the hours of 9:00 p.m. and 7:00 a.m. the next day while operating a catering truck, as that term is defined in Section 80.73 of the Municipal Code.

SEC. 114.06. VEHICLE THEFT ALARM SYSTEMS.

(Former Sec. 114.05, Renumbered by Ord. No. 164,532, Eff. 4/20/89.)

It shall be unlawful for any person to install, operate or use any vehicle theft alarm system that emits or causes the emission of an audible sound, which is not, or does not become, automatically and completely silenced within five minutes. The time period shall be calculated based upon the emission of the first audible sound and shall end five minutes thereafter notwithstanding any variation or stoppage in the emissions of audible sound. Violation of this section shall constitute an infraction.

SEC. 114.07. AUDIBLE STATUS INDICATOR.

(Added by Ord. No. 169,785, Eff. 6/9/94.)

It shall be unlawful for any person to install, operate, use or maintain any vehicle theft alarm system which utilizes an audible status indicator emitting or causing the emission of an audible sound for a duration of more than one minute. The time period shall be calculated from the point in time of the

emission of the first audible sound used in calculation and shall end one minute thereafter, notwithstanding any variation or temporary stoppage in the emission of audible sound.

As used in this section, an audible status indicator is a component of a vehicle theft alarm system which emits sound audible outside the vehicle for the purpose of warning that a vehicle theft alarm system is installed and armed or operational. The term "**audible status indicator**" shall include any device which emits a chirp, voice message or other sound when an approaching person is within a certain distance of the vehicle in which the device is installed.

In the event enforcement of a violation occurs under this section, no enforcement shall be taken under Section 80.75.l of the Municipal Code for the same violation.

Violation of any provision of this section shall constitute an infraction.

ARTICLE 5
AMPLIFIED SOUND

Section

115.01 Purpose.

115.02 Prohibition and Regulations.

SEC. 115.01. PURPOSE.

The Council enacts this legislation for the sole purpose of securing and promoting the public health, comfort, safety, and welfare of its citizenry. While recognizing that certain uses of sound amplifying equipment are protected by the constitutional rights of freedom of speech and assembly, the Council nevertheless feels obligated to reasonably regulate the use of sound amplifying equipment in order to protect the correlative constitutional rights of the citizens of this community to privacy and freedom from public nuisance of loud and unnecessary **noise** .

SEC. 115.02. PROHIBITION AND REGULATIONS.

It shall be unlawful for any person, other than personnel of law enforcement or governmental agencies, or permittees duly authorized to use the same pursuant to Sec. 103.111 of this Code, to install, use, or operate within the City a loudspeaker or sound amplifying equipment in a fixed or movable position or mounted upon any sound truck for the purposes of giving instructions, directions, talks, addresses, lectures, or transmitting music to any persons or assemblages of persons in or upon any

public street, alley, sidewalk, park or place, or other public property except when installed, used or operated in compliance with the following provisions:

(a) In all residential zones and within 500 feet thereof, no sound amplifying equipment shall be installed, operated or used for commercial purposes at any time.

(b) The operation or use of sound amplifying equipment for noncommercial purposes in all residential zones and within 500 feet thereof, except when used for regularly scheduled operative functions by any school or for the usual and customary purposes of any church, is prohibited between the hours of 4:30 p.m. and 9:00 a.m. of the following day.

(c) In all other zones, except such portions thereof as may be included within 500 feet of any residential zone, the operation or use of sound amplifying equipment for commercial purposes is prohibited between the hours of 9:00 p.m. and 8:00 a.m. of the following day.

(d) In all other zones, except such portions thereof as may be included within 500 feet of any residential zone, the operation or use of sound amplifying equipment for noncommercial purposes is prohibited between the hours of 10:00 p.m. and 7:00 a.m. of the following day.

(e) The only sounds permitted shall be either music, human speech, or both.

(f) Sound emanating from sound amplifying equipment shall be limited in volume, tone and intensity as follows:

1. The sound shall not be audible at a distance in excess of 200 feet from the sound equipment.

2. In no event shall the sound be loud and raucous or unreasonably jarring, disturbing, annoying or a nuisance to reasonable persons of normal sensitiveness within the area of audibility.

(g) Except as provided in (b) above, no sound amplifying equipment shall be operated upon any property adjacent to and within 200 feet of any hospital grounds or any school or church building while in use.

(h) **(Amended by Ord. No. 145,691, Eff. 5/2/74.)** The operation or use of any sound amplifying equipment installed, mounted, attached or carried in or by any sound truck is further prohibited:

1. Within the Central Traffic district at any time;

2. Upon Hollywood Boulevard between Vermont Avenue and La Brea at any time;

3. Upon Wilshire Boulevard at any time;

4. Upon Sunset Boulevard at any time;

5. Upon Vine Street at any time;

6. Upon any street between the hours of 4:30 p.m. and 9:00 a.m. of the following day;

7. Upon any street on any Sunday.

ARTICLE 6
GENERAL NOISE

Section

116.01 Loud, Unnecessary and Unusual **Noise** .

SEC. 116.01. LOUD, UNNECESSARY AND UNUSUAL NOISE .

Notwithstanding any other provisions of this chapter and in addition thereto, it shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary, and unusual **noise** which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The standard which may be considered in determining whether a violation of the provisions of this section exists may include, but not be limited to, the following:

(a) The level of **noise** ;

(b) Whether the nature of the **noise** is usual or unusual;

(c) Whether the origin of the **noise** is natural or unnatural;

(d) The level and intensity of the background **noise** , if any;

(e) The proximity of the **noise** to residential sleeping facilities;

(f) The nature and zoning of the area within which the **noise** emanates;

(g) The density of the inhabitation of the area within which the **noise** emanates;

(h) The time of the day and night the **noise** occurs;

(i) The duration of the **noise** ;

(j) Whether the **noise** is recurrent, intermittent, or constant; and

(k) Whether the **noise** is produced by a commercial or noncommercial activity.

Reference #	Topic	Trigger for Compliance	Implementation Phase	Standard Conditions	Project Triggers Compliance?
SC-HWQ-5	Flood Hazards	Site acquisition	During project design	Where placing the project outside the floodplain is impractical, the school or project structure shall be protected from flooding by containment and control of flood flows (e.g., elevating lowest floors at least one foot above the expected 100-year flood level).	No.
SC-HWQ-6	Tsunami Hazards	Place new classrooms or outdoor play areas within 0.62 mile of the coast, and less than 100 feet above mean sea level	Prior to classroom occupation	LAUSD shall evaluate tsunami hazards to determine if the project site is within a tsunami inundation zone as delineated by CalEMA or NOAA. If the project site is within a tsunami hazard zone LAUSD shall prepare and implement a tsunami awareness program and evacuation plan. This plan shall comply with the provisions of the LAUSD Emergency Operations Plan.	No.
SC-HWQ-7	Debris Flow	Place new classrooms or outdoor play areas in areas subject to potentially damaging debris flow	During project design	LAUSD shall consult with the Los Angeles County Department of Public Works, and/or local city officials, as appropriate, regarding the debris flow potential near the mouth of or in natural canyons and feasible mitigation measures shall be developed to reduce any potential risk. Potential debris flow hazards shall be reduced by one or more of the following: adequate building setbacks from natural slopes, construction of debris control facilities in upstream areas, monitoring and maintaining potential debris flow areas and basins. In addition, potential loss shall be minimized by establishing an evacuation plan, and elevated awareness and early warning of pending events.	No.
NOISE					
SC-AQ-2	Construction Noise	Requires large construction equipment	During project construction	LAUSD's construction contractor shall ensure that construction equipment is properly tuned and maintained in accordance with manufacturer's specifications, to ensure excessive noise is not generated by unmaintained equipment.	Yes.
SC-N-1	Exterior Campus Noise	Exterior noise levels are or would be greater than 70 dBA L_{10} or 67 dBA L_{eq}	During project design	The LAUSD shall include features such as sound walls, building configuration, and other design features in order to attenuate exterior noise levels on a school campus to less than 70 dBA L_{10} or 67 dBA L_{eq}.	No. existing campus.
SC-N-2	Interior Classroom Noise	Interior classroom noise levels would be greater than 55 dBA L_{10} or 45 dBA L_{eq}	During project design	The LAUSD shall analyze the acoustical environment of the site (such as traffic) and the characteristics of planned building components (such as heating, ventilation, and air conditioning [HVAC]), and design to achieve interior classroom noise levels of less than 55 dBA L_{10} or 45 dBA L_{eq} with maximum (unoccupied) reverberation times of 0.6 seconds. Noise reduction methods shall include, but are not limited to, sound walls, building and/or classroom insulation, HVAC modifications, double-paned windows, and other design features in order to achieve the noise standards. • The District should acknowledge the ANSI (American National Standards Institute) S12 standard as a District goal that may presently not be achievable in all cases. • Where economically feasible, new school design should achieve classroom acoustical quality consistent with the ANSI standard and in no event exceed the current CHPS (California High Performance Schools) standard of 45 dBA. • Where economically feasible, new HVAC (Heating, Ventilating, and Air Conditioning) installations should be designed to achieve the lowest possible noise level consistent	No. existing campus.

Standard Conditions of Approval

Reference #	Topic	Trigger for Compliance	Implementation Phase	Standard Conditions	Project Triggers Compliance?
				with the ANSI standard. In no event should these installations exceed the current CHPS standard of 45 dBA. • To promote the development of lower noise emitting HVAC units, the District's purchase of new units should give preference to manufacturers producing the lowest noise level at the lowest cost. • Existing HVAC units operating in excess of 50 dBA should be modified.	
SC-N-3	Traffic Noise	Project-related traffic noise level exceeds local noise standards, policies, or ordinances	Prior to project approval	LAUSD shall require an acoustical analysis to identify feasible measures to reduce traffic noise increases to 3 dBA CNEL or less at the noise-sensitive land use. LAUSD shall implement recommended measures to reduce noise.	No. existing campus.
SC-N-4	Operational Noise	Operational noise levels exceeds local noise standards, policies, or ordinances at noise-sensitive land uses	During project design and construction	LAUSD shall incorporate long-term permanent noise attenuation measures between playgrounds, stadiums, and other noise-generating facilities and noise-sensitive land uses, to reduce noise levels to meet jurisdictional standards or an increase of 3 dB or less over ambient. Operational noise attenuation measures include, but are not limited to: • buffer zones • berms • sound barriers: – buildings – masonry walls – enclosed bleacher foot wells – other site-specific project design features.	No. existing campus.
SC-N-5	Construction Noise and Vibration (Annoyance)	Construction on an existing school campus	Prior to construction	LAUSD Facilities Division or its construction contractor shall consult and coordinate with the school principal or site administrator, and other nearby noise sensitive land uses prior to construction to schedule high noise or vibration producing activities to minimize disruption. Coordination between the school, nearby land uses and the construction contractor shall continue on an as-needed basis throughout the construction phase of the project to reduce school and other noise sensitive land use disruptions.	Yes.
SC-N-6	Vibration (Structural Damage)	Rock blasting or demolition activities	During construction	The LAUSD shall require the construction contractor to minimize blasting for all construction and demolition activities, where feasible. If demolition is necessary adjacent to residential uses or fragile structures, the LAUSD shall require the construction contractor to avoid using impact tools. Alternatives that shall be considered include mechanical methods using hydraulic crushers or deconstruction techniques.	Yes.

Reference #	Topic	Trigger for Compliance	Implementation Phase	Standard Conditions	Project Triggers Compliance?
SC-N-7	Vibration (Structural Damage)	Pile driving or heavy vibration activities	During construction	For projects where pile driving activities are required within 150 feet of a structure, a detailed vibration assessment shall be provided by an acoustical engineer to analyze potential impacts related to vibration to nearby structures and to determine feasible mitigation measures to eliminate potential risk of architectural damage.	No.
SC-N-8	Vibration (Structural Damage)	Vibration intensive activities are planned within 25 feet of a historic building or structure	Prior to and during demolition and construction	LAUSD shall meet with the construction contractor to discuss alternative methods of demolition and construction for activities within 25 feet of a historic building to reduce vibration impacts. During the preconstruction meeting, the construction contractor shall identify demolition methods not involving vibration-intensive construction equipment or activities. For example: sawing into sections that can be loaded onto trucks results in lower vibration levels than demolition by hydraulic hammers. • Prior to construction activities, the construction contractor shall inspect and report on the current foundation and structural condition of the historic building. • The construction contractor shall implement alternative methods identified in the preconstruction meeting during demolition, excavation, and construction for work done within 25 feet of the historic building. • The construction contractor shall avoid use of vibratory rollers and packers adjacent to a historic building. • During demolition the construction contractor shall not phase any ground-impacting operations near a historic building to occur at the same time as any ground impacting operation associated with demolition and construction of a new building. • During demolition and construction, if any vibration levels cause cosmetic or structural damage to a historic building the District shall issue “stop-work” orders to the construction contractor immediately to prevent further damage. Work shall not restart until the building is stabilized and/or preventive measures to relieve further damage to the building are implemented.	No. but can include to protect adjacent older buildings.
SC-N-9	Construction Noise	Exterior construction and the use of large, heavy or noisy construction equipment	During construction	LAUSD shall prepare a noise assessment. If site-specific review of a school construction project identifies potentially significant adverse construction noise impacts, then LAUSD shall implement all feasible measures to reduce below applicable noise ordinances. Exterior construction noise levels exceed local noise standards, policies, or ordinances at noise-sensitive receptors. LAUSD shall mandate that construction bid contracts include the measures identified in the noise assessment. Specific noise reduction measures include, but are not limited to, the following: <u>Source Controls</u> • Time Constraints – prohibiting work during sensitive nighttime hours • Scheduling – performing noisy work during less sensitive time periods (on operating campus: delay the loudest noise generation until class instruction at the nearest classrooms has ended; residential: only between 7:00 AM and 7:00 PM)	Yes.

Standard Conditions of Approval

Reference #	Topic	Trigger for Compliance	Implementation Phase	Standard Conditions	Project Triggers Compliance?
				• Equipment Restrictions – restricting the type of equipment used • Noise Restrictions – specifying stringent noise limits • Substitute Methods – using quieter methods and/or equipment • Exhaust Mufflers – ensuring equipment have quality mufflers installed • Lubrication & Maintenance – well maintained equipment is quieter • Reduced Power Operation – use only necessary size and power • Limit Equipment On-Site – only have necessary equipment on-site • Noise Compliance Monitoring – technician on site to ensure compliance • Quieter Backup Alarms – manually-adjustable or ambient sensitive types <u>Path Controls</u> • Noise Barriers – semi-permanent or portable wooden or concrete barriers • Noise Curtains – flexible intervening curtain systems hung from supports • Enclosures – encasing localized and stationary noise sources • Increased Distance – perform noisy activities farther away from receptors, including operation of portable equipment, storage and maintenance of equipment <u>Receptor Controls</u> • Window Treatments – reinforcing the building's noise reduction ability • Community Participation – open dialog to involve affected residents • Noise Complaint Process – ability to log and respond to noise complaints. Advance notice of the start of construction shall be delivered to all noise sensitive receptors adjacent to the project area. The notice shall state specifically where and when construction activities will occur, and provide contact information for filing noise complaints with the contractor and the District. In the event of noise complaints the LAUSD shall monitor noise from the construction activity to ensure that construction noise does not exceed limits specified in the noise ordinance. • Temporary Relocation – in extreme otherwise unmitigatable cases. Temporarily move residents or students to facilities away from the construction activity.	
PEDESTRIAN SAFETY					
SC-PED-1	Pedestrian Safety Analysis	Increase student capacity by more than 25% or 10 classrooms	During project design	Caltrans SRTS program. The LAUSD is a participant in the SRTS program administered by Caltrans and local law enforcement and transportation agencies. OEHS provides pedestrian safety evaluations as a component of traffic studies conducted for new school projects. This pedestrian safety evaluation includes a determination of whether adequate walkways and sidewalks are provided along the perimeter of, across from, and adjacent to a proposed school site and along the paths of identified pedestrian routes within a 0.25-mile radius of a proposed school site. The purpose of this review is to ensure that	No. existing campus.

Construction Generated Vibration

Vibration Annoyance Criteria

$VdB = ref - 20*Log_{10}(dist/25)$

VdB = average vibration level experienced at the receptor

ref = FTA reference vibration level at 25 ft

dist = distance from the center of activity to the receptor

	Distance that exceeds annoyance threshold
Vibratory Roller	90
Large Bulldozer	50

Receptor: **Average Vibration Level - Homes to the Southeast** **Average Distance (feet):** **575**

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	53
Caisson Drill	87	46
Large bulldozer	87	46
Small bulldozer	58	17
Jackhammer	79	38
Loaded trucks	86	45
	Criteria	**78**

Receptor: **Average Vibration Level - Homes Adjacent to the East** **Average Distance (feet):** **675**

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	51
Caisson Drill	87	44
Large bulldozer	87	44
Small bulldozer	58	15
Jackhammer	79	36
Loaded trucks	86	43
	Criteria	**78**

Receptor: **Average Vibration Levels - Byrd Middle School** **Average Distance (feet):** **775**

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	49
Caisson Drill	87	42
Large bulldozer	87	42
Small bulldozer	58	13
Jackhammer	79	34
Loaded trucks	86	41
	Criteria	**78**

Receptor: **Average Vibration Levels - Homes to the NE across Sharp** **Average Distance (feet):** **900**

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Vibratory Roller	94	47
Caisson Drill	87	40
Large bulldozer	87	40
Small bulldozer	58	11
Jackhammer	79	32
Loaded trucks	86	39

Construction Generated Vibration

Structural Damage Criteria

RMS = ref*(25/dist)$^{1.5}$

RMS = maximum vibration level experienced at the receptor (PPV in/sec)
ref = FTA reference vibration level at 25 ft
dist = distance from the boundary of activity to the receptor

	Distance that exceeds damage threshold
Vibratory Roller	30
Large Bulldozer	15

Receptor:	Maximum Vibration Levels - Homes Adjacent to the East	Closest Distance (feet):	60

Equipment	Approximate RMS a Velocity at 25 ft, inch/second	Approximate RMS Velocity Level, inch/second
Vibratory Roller	0.210	0.056
Caisson Drill	0.089	0.024
Large bulldozer	0.089	0.024
Small bulldozer	0.003	0.001
Jackhammer	0.035	0.009
Loaded trucks	0.076	0.020
	Criteria	0.200

Receptor:	Maximum Vibration Levels - Homes to the SE across Peoria S	Closest Distance (feet):	85

Equipment	Approximate RMS a Velocity at 25 ft, inch/second	Approximate RMS Velocity Level, inch/second
Vibratory Roller	0.210	0.033
Caisson Drill	0.089	0.014
Large bulldozer	0.089	0.014
Small bulldozer	0.003	0.000
Jackhammer	0.035	0.006
Loaded trucks	0.076	0.012
	Criteria	0.200

Receptor:	Maximum Vibration Levels - Byrd Middle School	Closest Distance (feet):	130

Equipment	Approximate RMS a Velocity at 25 ft, inch/second	Approximate RMS Velocity Level, inch/second
Vibratory Roller	0.210	0.018
Caisson Drill	0.089	0.008
Large bulldozer	0.089	0.008
Small bulldozer	0.003	0.000
Jackhammer	0.035	0.003
Loaded trucks	0.076	0.006
	Criteria	0.200

Receptor:	Maximum Vibration Levels - Homes to the South across Rosc	Closest Distance (feet):	130

Equipment	Approximate RMS a Velocity at 25 ft, inch/second	Approximate RMS Velocity Level, inch/second
Vibratory Roller	0.210	0.018
Caisson Drill	0.089	0.008
Large bulldozer	0.089	0.008
Small bulldozer	0.003	0.000
Jackhammer	0.035	0.003
Loaded trucks	0.076	0.006
	Criteria	0.200

[1] Determined based on use of jackhammers or pneumatic hammers that may be used for pavement demolition at a distance of 25 feet

Notes: RMS velocity calculated from vibration level (VdB) using the reference of one microinch/second.

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (2006).

Noise Levels During Construction

Reference Levels: Construction Noise at 50 Feet (dBA Leq)[1]			Drop Off hard=0; soft=0.5
Construction Phase	Distance: Receptor to center of activity	Average Level (dBA Leq)[2]	
BBN Aggregate Noise Level	50	89	0

Construction Noise at Homes to the Southeast		
Construction Phase	Distance: Receptor to center of activity	Average Level (dBA Leq)[2]
BBN Aggregate Noise Level	575	67

Construction Noise at Homes Adjacent to the East		
Construction Phase	Distance: Receptor to center of activity	Average Level (dBA Leq)[2]
BBN Aggregate Noise Level	675	66

Construction Noise at Byrd Middle School		
Construction Phase	Distance: Receptor to center of activity	Average Level (dBA Leq)[2]
BBN Aggregate Noise Level	775	65

Construction Noise at Homes to the NE across Sharp Ave		
Construction Phase	Distance: Receptor to center of activity	Average Level (dBA Leq)[2]
BBN Aggregate Noise Level	900	64

[1] Calculations based on Bolt, Beranek & Newman, 1971. Reference level of 88 dBA Leq to be used for residential construction; 89 dBA Leq for all other types.

[2] Average daily noise level including all equipment in use simultaneously considering utilization factors.

Appendices

G.
Traffic Modeling Worksheets

Appendices

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Poly High School

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Report File: \...\Existing AM.pdf

Scenario 1 EX AM
8/18/2017

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
2	Driveway 1	Two-way stop	HCM 2010	WB Left	0.063	27.4	D
5	Driveway 2	Two-way stop	HCM 2010	EB Left	0.012	12.6	B
6	Peoria Street at Sharp Avenue	All-way stop	HCM 2010	EB Thru	0.311	9.8	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 2: Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	27.4
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.063

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	660	106	43	470	11	32
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	660	106	43	470	11	32
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	165	27	11	118	3	8
Total Analysis Volume [veh/h]	660	106	43	470	11	32
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.05	0.00	0.06	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	9.48	0.00	27.39	15.15
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh]	0.00	0.00	1.28	0.64	0.47	0.47
95th-Percentile Queue Length [ft]	0.00	0.00	32.00	16.00	11.74	11.74
d_A, Approach Delay [s/veh]	0.00		0.79		18.28	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.90					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	12.6
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	22	198	277	21	6	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	198	277	21	6	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	50	69	5	2	10
Total Analysis Volume [veh/h]	22	198	277	21	6	40
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.01	0.05
d_M, Delay for Movement [s/veh]	7.90	0.00	0.00	0.00	12.56	10.15
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh]	0.63	0.63	0.00	0.00	0.21	0.21
95th-Percentile Queue Length [ft]	15.74	15.74	0.00	0.00	5.22	5.22
d_A, Approach Delay [s/veh]	0.79		0.00		10.46	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.16					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Peoria Street at Sharp Avenue

Control Type:	All-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.311

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	50	33	38	57	34	76	28	178	19	18	151	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	33	38	57	34	76	28	178	19	18	151	55
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	8	10	14	9	19	7	45	5	5	38	14
Total Analysis Volume [veh/h]	50	33	38	57	34	76	28	178	19	18	151	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

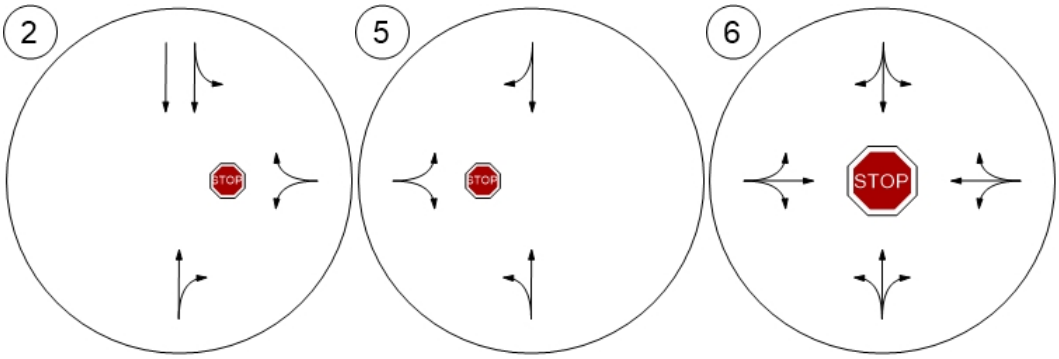
Capacity per Entry Lane [veh/h]	691	714	724	739
Degree of Utilization, x	0.18	0.23	0.31	0.30

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.63	0.90	1.32	1.28
95th-Percentile Queue Length [ft]	15.78	22.60	33.11	32.01
Approach Delay [s/veh]	9.31	9.57	10.20	9.98
Approach LOS	A	A	B	A
Intersection Delay [s/veh]	9.85			
Intersection LOS	A			

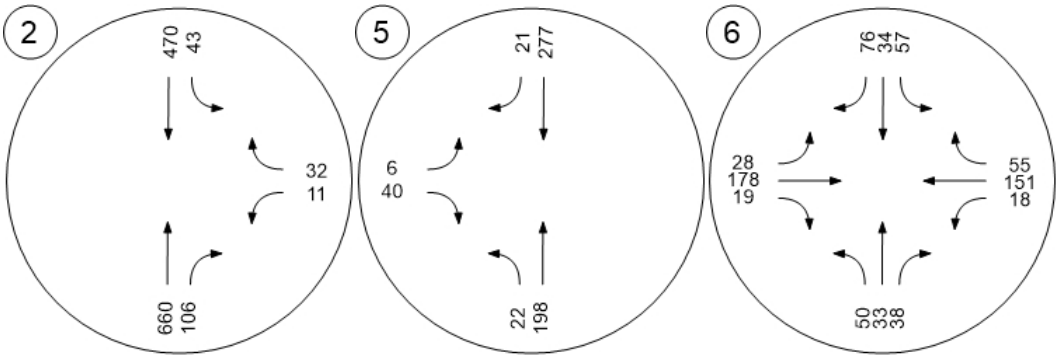
Lane Configuration and Traffic Control





Traffic Volume - Future Total Volume





Poly High School

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Report File: \...\Existing PM.pdf

Scenario 2 EX PM
8/18/2017

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
2	Driveway 1	Two-way stop	HCM 2010	WB Left	0.092	19.0	C
5	Driveway 2	Two-way stop	HCM 2010	EB Left	0.018	10.6	B
6	Peoria Street at Sharp Avenue	All-way stop	HCM 2010	WB Thru	0.228	8.7	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 2: Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	19.0
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.092

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	571	29	7	306	28	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	571	29	7	306	28	56
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	143	7	2	77	7	14
Total Analysis Volume [veh/h]	571	29	7	306	28	56
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.00	0.09	0.11
d_M, Delay for Movement [s/veh]	0.00	0.00	8.71	0.00	19.00	14.22
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh]	0.00	0.00	0.57	0.28	0.74	0.74
95th-Percentile Queue Length [ft]	0.00	0.00	14.23	7.11	18.62	18.62
d_A, Approach Delay [s/veh]	0.00		0.19		15.81	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.39					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 5: Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.018

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	3	144	165	16	12	34
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	144	165	16	12	34
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	36	41	4	3	9
Total Analysis Volume [veh/h]	3	144	165	16	12	34
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.04
d_M, Delay for Movement [s/veh]	7.59	0.00	0.00	0.00	10.65	9.40
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.35	0.35	0.00	0.00	0.18	0.18
95th-Percentile Queue Length [ft]	8.82	8.82	0.00	0.00	4.52	4.52
d_A, Approach Delay [s/veh]	0.15		0.00		9.73	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.26					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Peoria Street at Sharp Avenue

Control Type:	All-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.228

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	71	21	55	14	86	43	26	20	31	24	142	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	71	21	55	14	86	43	26	20	31	24	142	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	5	14	4	22	11	7	5	8	6	36	2
Total Analysis Volume [veh/h]	71	21	55	14	86	43	26	20	31	24	142	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

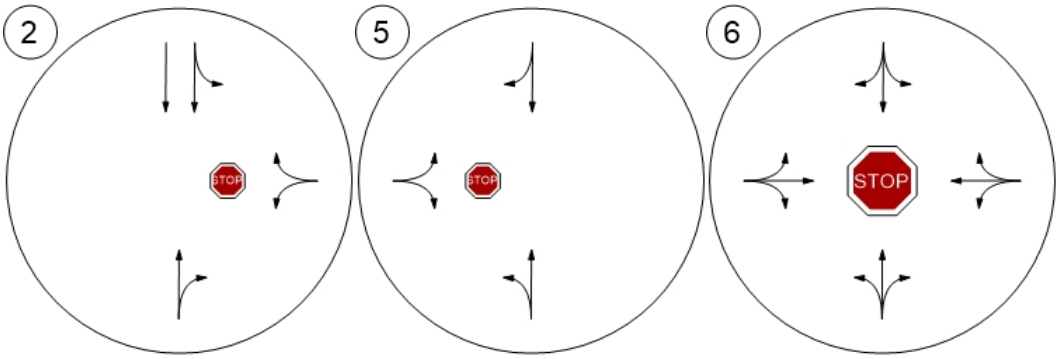
Capacity per Entry Lane [veh/h]	783	787	769	762
Degree of Utilization, x	0.19	0.18	0.10	0.23

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.69	0.66	0.33	0.88
95th-Percentile Queue Length [ft]	17.20	16.51	8.31	21.93
Approach Delay [s/veh]	8.66	8.59	8.20	9.12
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.72			
Intersection LOS	A			

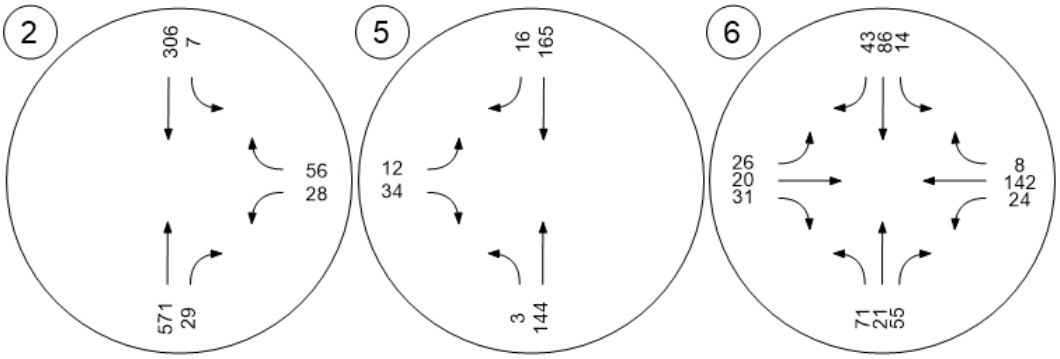
Lane Configuration and Traffic Control





Traffic Volume - Future Total Volume





Poly High School

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Report File: \...\Option 1 AM.pdf

Scenario 3 Option 1 AM
8/18/2017

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
2	Driveway 1	Two-way stop	HCM 2010	WB Left	0.103	31.4	D
5	Driveway 2	Two-way stop	HCM 2010	EB Left	0.019	13.1	B
6	Peoria Street at Sharp Avenue	All-way stop	HCM 2010	EB Thru	0.313	9.9	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 2: Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	31.4
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.103

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	660	153	62	470	16	46
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	660	153	62	470	16	46
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	165	38	16	118	4	12
Total Analysis Volume [veh/h]	660	153	62	470	16	46
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.08	0.00	0.10	0.11
d_M, Delay for Movement [s/veh]	0.00	0.00	9.79	0.00	31.45	16.91
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh]	0.00	0.00	1.43	0.71	0.79	0.79
95th-Percentile Queue Length [ft]	0.00	0.00	35.68	17.84	19.72	19.72
d_A, Approach Delay [s/veh]	0.00		1.14		20.66	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	1.34					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	13.1
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	32	198	277	30	9	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	198	277	30	9	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	50	69	8	2	15
Total Analysis Volume [veh/h]	32	198	277	30	9	58
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.02	0.08
d_M, Delay for Movement [s/veh]	7.95	0.00	0.00	0.00	13.06	10.37
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh]	0.67	0.67	0.00	0.00	0.32	0.32
95th-Percentile Queue Length [ft]	16.76	16.76	0.00	0.00	7.97	7.97
d_A, Approach Delay [s/veh]	1.11		0.00		10.73	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.61					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Peoria Street at Sharp Avenue

Control Type:	All-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.313

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	50	36	38	57	43	76	28	178	19	18	151	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	36	38	57	43	76	28	178	19	18	151	55
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	9	10	14	11	19	7	45	5	5	38	14
Total Analysis Volume [veh/h]	50	36	38	57	43	76	28	178	19	18	151	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

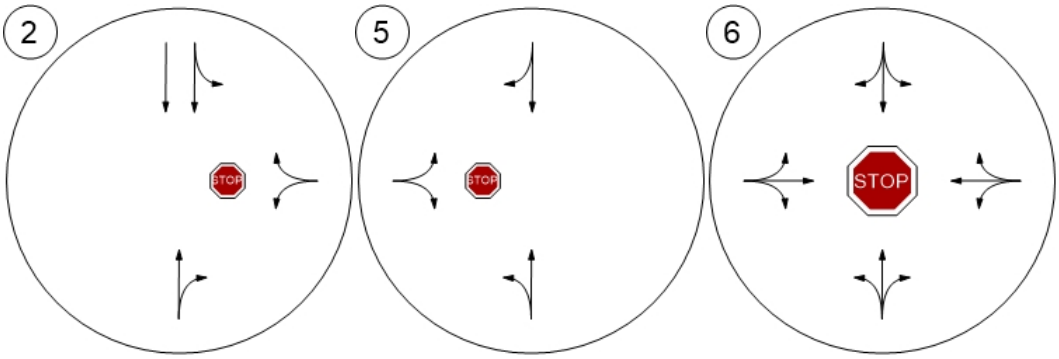
Capacity per Entry Lane [veh/h]	687	711	719	733
Degree of Utilization, x	0.18	0.25	0.31	0.31

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.65	0.97	1.34	1.29
95th-Percentile Queue Length [ft]	16.35	24.34	33.48	32.36
Approach Delay [s/veh]	9.39	9.73	10.28	10.06
Approach LOS	A	A	B	B
Intersection Delay [s/veh]	9.94			
Intersection LOS	A			

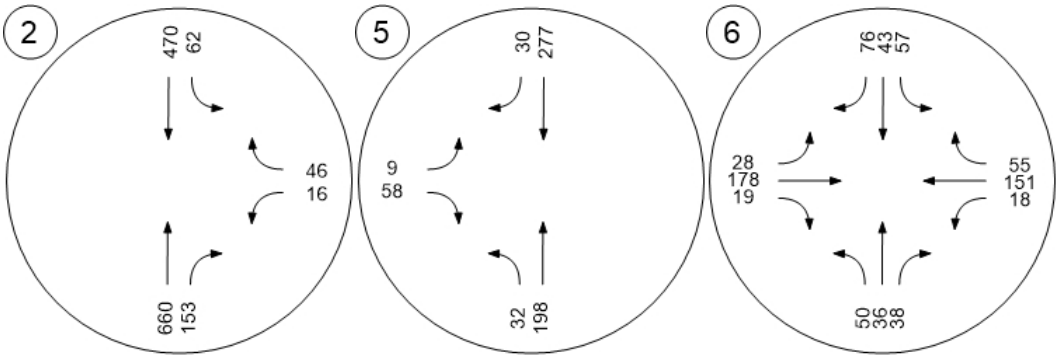
Lane Configuration and Traffic Control





Traffic Volume - Future Total Volume





Poly High School

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Report File: \...\Option 1 PM.pdf

Scenario 4 Option 1 PM
8/18/2017

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
2	Driveway 1	Two-way stop	HCM 2010	WB Left	0.134	20.7	C
5	Driveway 2	Two-way stop	HCM 2010	EB Left	0.026	10.8	B
6	Peoria Street at Sharp Avenue	All-way stop	HCM 2010	WB Thru	0.230	8.8	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 2: Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	20.7
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.134

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	571	42	10	306	40	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	571	42	10	306	40	81
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	143	11	3	77	10	20
Total Analysis Volume [veh/h]	571	42	10	306	40	81
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.00	0.13	0.16
d_M, Delay for Movement [s/veh]	0.00	0.00	8.76	0.00	20.68	15.72
Movement LOS	A	A	A	A	C	C
95th-Percentile Queue Length [veh]	0.00	0.00	0.58	0.29	1.21	1.21
95th-Percentile Queue Length [ft]	0.00	0.00	14.58	7.29	30.25	30.25
d_A, Approach Delay [s/veh]	0.00		0.28		17.36	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	2.08					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 5: Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	4	144	165	23	17	49
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	144	165	23	17	49
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	36	41	6	4	12
Total Analysis Volume [veh/h]	4	144	165	23	17	49
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.06
d_M, Delay for Movement [s/veh]	7.60	0.00	0.00	0.00	10.82	9.55
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.36	0.36	0.00	0.00	0.27	0.27
95th-Percentile Queue Length [ft]	8.94	8.94	0.00	0.00	6.69	6.69
d_A, Approach Delay [s/veh]	0.21		0.00		9.88	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.70					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Peoria Street at Sharp Avenue

Control Type:	All-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.230

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	71	26	55	14	93	43	26	20	31	24	142	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	71	26	55	14	93	43	26	20	31	24	142	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	7	14	4	23	11	7	5	8	6	36	2
Total Analysis Volume [veh/h]	71	26	55	14	93	43	26	20	31	24	142	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

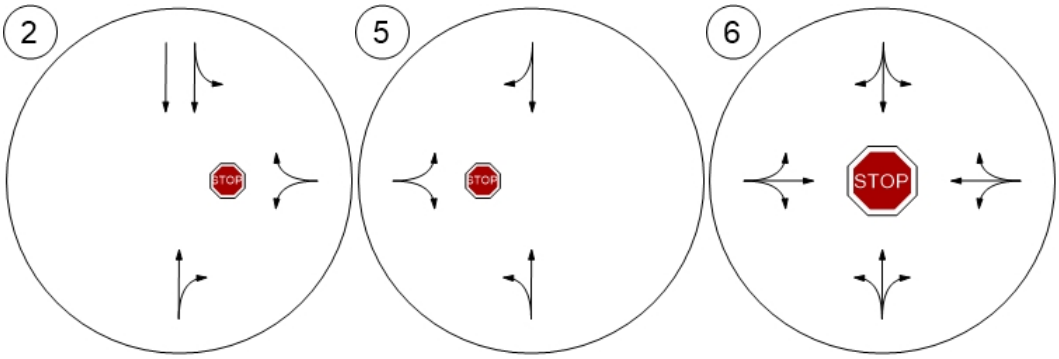
Capacity per Entry Lane [veh/h]	779	784	764	757
Degree of Utilization, x	0.19	0.19	0.10	0.23

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.72	0.70	0.33	0.88
95th-Percentile Queue Length [ft]	18.00	17.59	8.37	22.11
Approach Delay [s/veh]	8.73	8.68	8.24	9.17
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.79			
Intersection LOS	A			

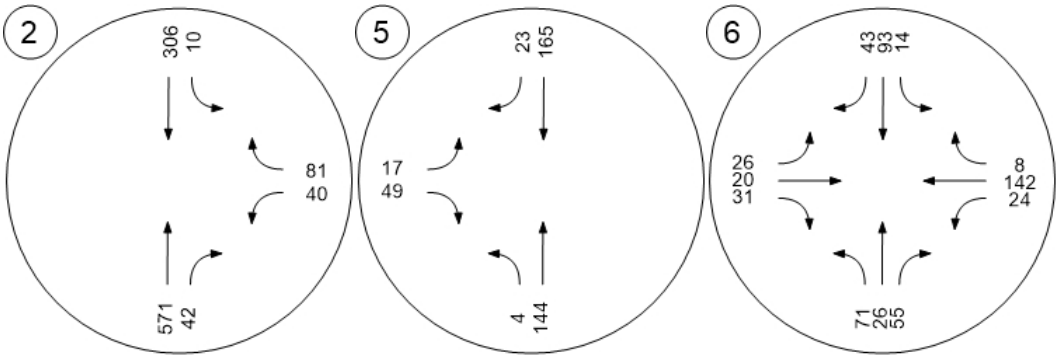
Lane Configuration and Traffic Control





Traffic Volume - Future Total Volume





Poly High School

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Report File: \...\Option 3 AM.pdf

Scenario 5 Option 3 AM
8/18/2017

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
2	Driveway 1	Two-way stop	HCM 2010	WB Left	0.557	66.7	F
5	Driveway 2	Two-way stop	HCM 2010	EB Left	0.000	11.6	B
6	Peoria Street at Sharp Avenue	All-way stop	HCM 2010	EB Thru	0.305	9.7	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 2: Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	66.7
Analysis Method:	HCM 2010	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.557

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	660	185	92	470	74	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	660	185	92	470	74	55
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	165	46	23	118	19	14
Total Analysis Volume [veh/h]	660	185	92	470	74	55
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.12	0.00	0.56	0.13
d_M, Delay for Movement [s/veh]	0.00	0.00	10.14	0.00	66.72	48.39
Movement LOS	A	A	B	A	F	E
95th-Percentile Queue Length [veh]	0.00	0.00	1.61	0.81	4.23	4.23
95th-Percentile Queue Length [ft]	0.00	0.00	40.26	20.13	105.82	105.82
d_A, Approach Delay [s/veh]	0.00		1.66		58.91	
Approach LOS	A		A		F	
d_I, Intersection Delay [s/veh]	5.55					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	198	277	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	198	277	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	50	69	0	0	0
Total Analysis Volume [veh/h]	0	198	277	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.80	0.00	0.00	0.00	11.57	9.73
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		10.65	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Peoria Street at Sharp Avenue

Control Type:	All-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.305

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	50	27	38	57	13	76	28	178	19	18	151	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	27	38	57	13	76	28	178	19	18	151	55
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	7	10	14	3	19	7	45	5	5	38	14
Total Analysis Volume [veh/h]	50	27	38	57	13	76	28	178	19	18	151	55
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

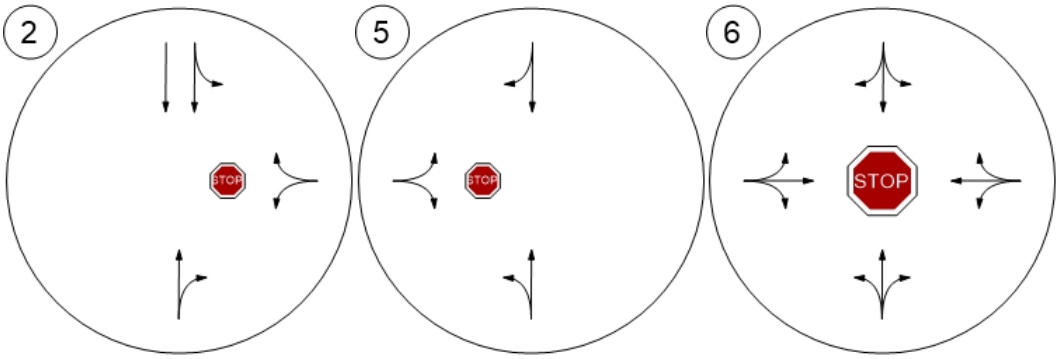
Capacity per Entry Lane [veh/h]	699	722	737	752
Degree of Utilization, x	0.16	0.20	0.31	0.30

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.59	0.75	1.29	1.25
95th-Percentile Queue Length [ft]	14.65	18.79	32.31	31.22
Approach Delay [s/veh]	9.16	9.24	10.02	9.80
Approach LOS	A	A	B	A
Intersection Delay [s/veh]	9.65			
Intersection LOS	A			

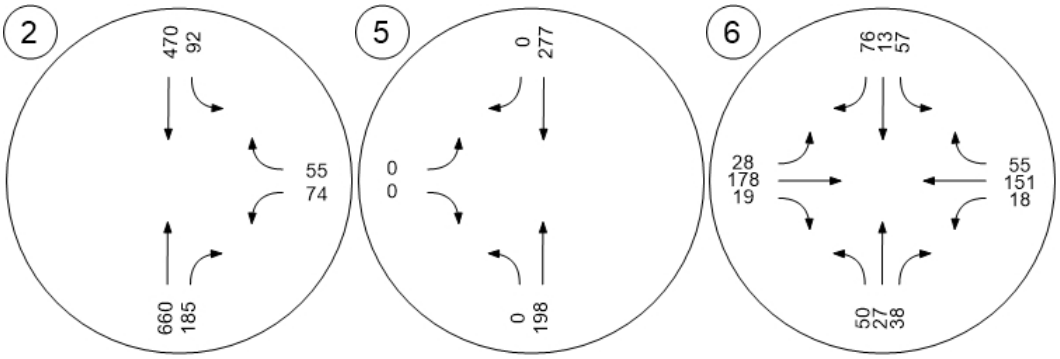
Lane Configuration and Traffic Control





Traffic Volume - Future Total Volume





Poly High School

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Report File: \...\Option 3 PM.pdf

Scenario 6 Option 3 PM
8/18/2017

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
2	Driveway 1	Two-way stop	HCM 2010	WB Left	0.334	29.6	D
5	Driveway 2	Two-way stop	HCM 2010	EB Left	0.000	10.3	B
6	Peoria Street at Sharp Avenue	All-way stop	HCM 2010	WB Thru	0.225	8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 2: Driveway 1

Control Type:	Two-way stop	Delay (sec / veh):	29.6
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.334

Intersection Setup

Name						
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	571	74	33	306	89	98
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	571	74	33	306	89	98
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	143	19	8	77	22	25
Total Analysis Volume [veh/h]	571	74	33	306	89	98
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.04	0.00	0.33	0.20
d_M, Delay for Movement [s/veh]	0.00	0.00	8.97	0.00	29.56	23.31
Movement LOS	A	A	A	A	D	C
95th-Percentile Queue Length [veh]	0.00	0.00	0.66	0.33	2.98	2.98
95th-Percentile Queue Length [ft]	0.00	0.00	16.38	8.19	74.42	74.42
d_A, Approach Delay [s/veh]	0.00		0.87		26.29	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	4.45					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Driveway 2

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	144	165	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	144	165	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	36	41	0	0	0
Total Analysis Volume [veh/h]	0	144	165	0	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane	No	No	No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No	No	No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.55	0.00	0.00	0.00	10.27	9.09
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		9.68	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: Peoria Street at Sharp Avenue

Control Type:	All-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.225

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	71	9	55	14	70	43	26	20	31	24	142	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	71	9	55	14	70	43	26	20	31	24	142	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	2	14	4	18	11	7	5	8	6	36	2
Total Analysis Volume [veh/h]	71	9	55	14	70	43	26	20	31	24	142	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

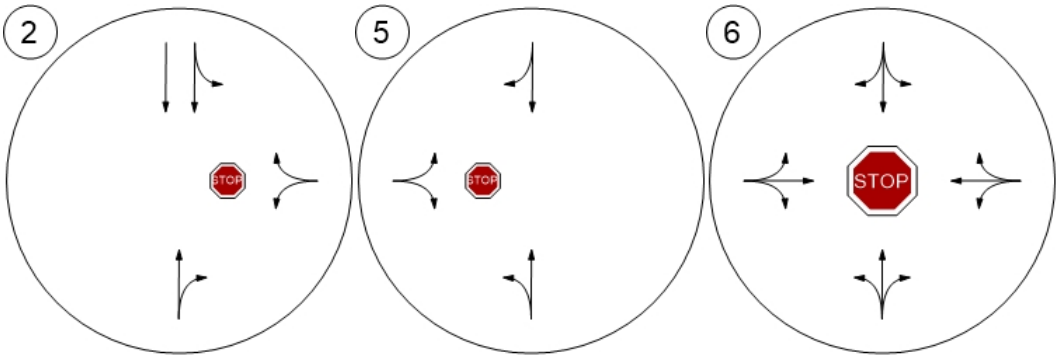
Capacity per Entry Lane [veh/h]	790	795	783	775
Degree of Utilization, x	0.17	0.16	0.10	0.22

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.61	0.57	0.33	0.86
95th-Percentile Queue Length [ft]	15.35	14.16	8.15	21.49
Approach Delay [s/veh]	8.50	8.39	8.10	8.99
Approach LOS	A	A	A	A
Intersection Delay [s/veh]	8.58			
Intersection LOS	A			

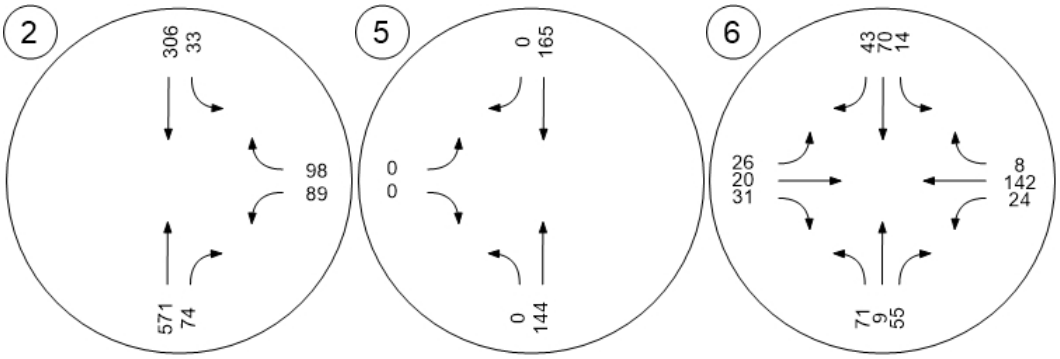
Lane Configuration and Traffic Control





Traffic Volume - Future Total Volume





Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Arleta Avenue	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
1	East-West Street:	Wicks Street	Projection Year:	2017	Peak Hour:	AM	Reviewed by:		Project:	

No. of Phases			3			3			3			3			3			3	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			0			0			0			0			0			0	
Override Capacity			0			0			0			0			0			0	

MOVEMENT		EXISTING CONDITION			Option 1			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	154	1	**154**	0	154	**154**	0	154	1	**154**	0	154	1	**154**	0	154	1	**154**
	Left-Through		0							0				0				0	
	Through	574	2	287	3	577	289	0	574	2	287	0	574	2	287	0	574	2	287
	Through-Right		0							0				0				0	
	Right	220	1	170	0	220	170	0	220	1	170	0	220	1	170	0	220	1	170
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	84	1	84	0	84	84	0	84	1	84	0	84	1	84	0	84	1	84
	Left-Through		0							0				0				0	
	Through	662	2	**331**	19	681	**341**	0	662	2	**331**	0	662	2	**331**	0	662	2	**331**
	Through-Right		0							0				0				0	
	Right	147	1	142	0	147	142	0	147	1	142	0	147	1	142	0	147	1	142
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	10	1	**10**	0	10	**10**	0	10	1	**10**	0	10	1	**10**	0	10	1	**10**
	Left-Through		0							0				0				0	
	Through	10	0	22	0	10	22	0	10	0	22	0	10	0	22	0	10	0	22
	Through-Right		1							1				1				1	
	Right	12	0	0	0	12	0	0	12	0	0	0	12	0	0	0	12	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	101	1	101	0	101	101	0	101	1	101	0	101	1	101	0	101	1	101
	Left-Through		0							0				0				0	
	Through	103	0	**244**	0	103	**244**	0	103	0	**244**	0	103	0	**244**	0	103	0	**244**
	Through-Right		1							1				1				1	
	Right	141	0	0	0	141	0	0	141	0	0	0	141	0	0	0	141	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		485	*North-South:*		495		*North-South:*		485		*North-South:*		485		*North-South:*		485
		East-West:		254	*East-West:*		254		*East-West:*		254		*East-West:*		254		*East-West:*		254
		SUM:		739	*SUM:*		749		*SUM:*		739		*SUM:*		739		*SUM:*		739
VOLUME/CAPACITY *(V/C)* RATIO:				0.519			0.526				0.519				0.519				0.519
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.519			0.526				0.519				0.519				0.519
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Arleta Avenue	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
1	East-West Street:	Wicks Street	Projection Year:	2017	Peak Hour:	PM	Reviewed by:		Project:	

	EXISTING CONDITION			Option 1			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			3			3				3				3				3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0	SB--	0	NB-- 0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0
	EB-- 0	WB--	0	EB-- 0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			0			0				0				0				0
Override Capacity			0			0				0				0				0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	91	1	91	0	91	91	0	91	1	91	0	91	1	91	0	91	1	91
	Left-Through		0							0				0				0	
	Through	546	2	273	25	571	286	0	546	2	273	0	546	2	273	0	546	2	273
	Through-Right		0							0				0				0	
	Right	137	1	104	0	137	104	0	137	1	104	0	137	1	104	0	137	1	104
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	76	1	76	0	76	76	0	76	1	76	0	76	1	76	0	76	1	76
	Left-Through		0							0				0				0	
	Through	320	2	160	3	323	162	0	320	2	160	0	320	2	160	0	320	2	160
	Through-Right		0							0				0				0	
	Right	63	1	24	0	63	24	0	63	1	24	0	63	1	24	0	63	1	24
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	78	1	78	0	78	78	0	78	1	78	0	78	1	78	0	78	1	78
	Left-Through		0							0				0				0	
	Through	32	0	119	0	32	119	0	32	0	119	0	32	0	119	0	32	0	119
	Through-Right		1							1				1				1	
	Right	87	0	0	0	87	0	0	87	0	0	0	87	0	0	0	87	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	67	1	67	0	67	67	0	67	1	67	0	67	1	67	0	67	1	67
	Left-Through		0							0				0				0	
	Through	35	0	144	0	35	144	0	35	0	144	0	35	0	144	0	35	0	144
	Through-Right		1							1				1				1	
	Right	109	0	0	0	109	0	0	109	0	0	0	109	0	0	0	109	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		349	North-South:		362	North-South:			349	North-South:			349	North-South:			349
		East-West:		222	East-West:		222	East-West:			222	East-West:			222	East-West:			222
		SUM:		571	SUM:		584	SUM:			571	SUM:			571	SUM:			571
VOLUME/CAPACITY (V/C) RATIO:				0.401			0.410				0.401				0.401				0.401
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.401			0.410				0.401				0.401				0.401
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.000 | Δ*v/c* after mitigation: 0.000

Significant impacted? NO | Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Arleta Avenue	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
1	East-West Street:	Wicks Street	Projection Year:	2017	Peak Hour:	AM	Reviewed by:		Project:	

		Option 1			Option 3			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases		3			3			3				3				3		
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0			0				0				0		
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--	0		NB-- 0 SB--	0		NB-- 0 SB--	0			NB-- 0 SB--	0			NB-- 0 SB--	0		
		EB-- 0 WB--	0		EB-- 0 WB--	0		EB-- 0 WB--	0			EB-- 0 WB--	0			EB-- 0 WB--	0		
	ATSAC-1 or ATSAC+ATCS-2?		0			0			0				0				0		
	Override Capacity		0			0			0				0				0		
NORTHBOUND	Left	154	1	**154**	0	154	**154**	0	154	1	**154**	0	154	1	**154**	0	154	1	**154**
	Left-Through		0							0				0				0	
	Through	577	2	289	9	586	293	0	577	2	289	0	577	2	289	0	577	2	289
	Through-Right		0							0				0				0	
	Right	220	1	170	0	220	170	0	220	1	170	0	220	1	170	0	220	1	170
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	84	1	84	0	84	84	0	84	1	84	0	84	1	84	0	84	1	84
	Left-Through		0							0				0				0	
	Through	681	2	**341**	30	711	**356**	0	681	2	**341**	0	681	2	**341**	0	681	2	**341**
	Through-Right		0							0				0				0	
	Right	147	1	142	0	147	142	0	147	1	142	0	147	1	142	0	147	1	142
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	10	1	**10**	0	10	**10**	0	10	1	**10**	0	10	1	**10**	0	10	1	**10**
	Left-Through		0							0				0				0	
	Through	10	0	22	0	10	22	0	10	0	22	0	10	0	22	0	10	0	22
	Through-Right		1							1				1				1	
	Right	12	0	0	0	12	0	0	12	0	0	0	12	0	0	0	12	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	101	1	101	0	101	101	0	101	1	101	0	101	1	101	0	101	1	101
	Left-Through		0							0				0				0	
	Through	103	0	**244**	0	103	**244**	0	103	0	**244**	0	103	0	**244**	0	103	0	**244**
	Through-Right		1							1				1				1	
	Right	141	0	0	0	141	0	0	141	0	0	0	141	0	0	0	141	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		495	*North-South:*		510	*North-South:*			495	*North-South:*			495	*North-South:*			495
		East-West:		254	*East-West:*		254	*East-West:*			254	*East-West:*			254	*East-West:*			254
		SUM:		749	*SUM:*		764	*SUM:*			749	*SUM:*			749	*SUM:*			749
	VOLUME/CAPACITY *(V/C)* RATIO:			0.526			0.536				0.526				0.526				0.526
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.526			0.536				0.526				0.526				0.526
	LEVEL OF SERVICE (LOS):			A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Arleta Avenue	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
1	East-West Street:	Wicks Street	Projection Year:	2017	Peak Hour:	PM	Reviewed by:		Project:	

		Option 1			Option 3			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			3			3			3				3					3
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			0			0			0				0					0
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	91	1	91	0	91	91	0	91	1	91	0	91	1	91	0	91	1	91
	Left-Through		0							0				0				0	
	Through	571	2	286	17	588	294	0	571	2	286	0	571	2	286	0	571	2	286
	Through-Right		0							0				0				0	
	Right	137	1	104	0	137	104	0	137	1	104	0	137	1	104	0	137	1	104
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	76	1	76	0	76	76	0	76	1	76	0	76	1	76	0	76	1	76
	Left-Through		0							0				0				0	
	Through	323	2	162	23	346	173	0	323	2	162	0	323	2	162	0	323	2	162
	Through-Right		0							0				0				0	
	Right	63	1	24	0	63	24	0	63	1	24	0	63	1	24	0	63	1	24
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	78	1	78	0	78	78	0	78	1	78	0	78	1	78	0	78	1	78
	Left-Through		0							0				0				0	
	Through	32	0	119	0	32	119	0	32	0	119	0	32	0	119	0	32	0	119
	Through-Right		1							1				1				1	
	Right	87	0	0	0	87	0	0	87	0	0	0	87	0	0	0	87	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	67	1	67	0	67	67	0	67	1	67	0	67	1	67	0	67	1	67
	Left-Through		0							0				0				0	
	Through	35	0	144	0	35	144	0	35	0	144	0	35	0	144	0	35	0	144
	Through-Right		1							1				1				1	
	Right	109	0	0	0	109	0	0	109	0	0	0	109	0	0	0	109	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		362	North-South:		370	North-South:			362	North-South:			362	North-South:			362
		East-West:		222	East-West:		222	East-West:			222	East-West:			222	East-West:			222
		SUM:		584	SUM:		592	SUM:			584	SUM:			584	SUM:			584
	VOLUME/CAPACITY (V/C) RATIO:			0.410			0.415				0.410				0.410				0.410
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.410			0.415				0.410				0.410				0.410
	LEVEL OF SERVICE (LOS):			A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Arleta Avenue	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
3	East-West Street:	Roscoe Boulevard	Projection Year:	2017	Peak Hour:	AM	Reviewed by:		Project:	

		EXISTING CONDITION			Option 1			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			4			4			4				4					4
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB--		3	NB-- 3 SB--		3	NB-- 3 SB--		3		NB-- 3 SB--		3		NB-- 3 SB--		3	
		EB-- 0 WB--		3	EB-- 0 WB--		3	EB-- 0 WB--		3		EB-- 0 WB--		3		EB-- 0 WB--		3	
	ATSAC-1 or ATSAC+ATCS-2?			0			0			0				0					0
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	180	1	180	0	180	180	0	180	1	180	0	180	1	180	0	180	1	180
	Left-Through		0							0				0				0	
	Through	548	2	274	24	572	286	0	548	2	274	0	548	2	274	0	548	2	274
	Through-Right		0							0				0				0	
	Right	122	1	0	0	122	0	0	122	1	0	0	122	1	0	0	122	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	258	1	258	1	259	259	0	258	1	258	0	258	1	258	0	258	1	258
	Left-Through		0							0				0				0	
	Through	514	2	257	3	517	259	0	514	2	257	0	514	2	257	0	514	2	257
	Through-Right		0							0				0				0	
	Right	260	1	126	1	261	121	0	260	1	126	0	260	1	126	0	260	1	126
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	244	2	134	11	255	140	0	244	2	134	0	244	2	134	0	244	2	134
	Left-Through		0							0				0				0	
	Through	833	2	417	0	833	417	0	833	2	417	0	833	2	417	0	833	2	417
	Through-Right		0							0				0				0	
	Right	127	1	37	0	127	37	0	127	1	37	0	127	1	37	0	127	1	37
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	156	1	156	0	156	156	0	156	1	156	0	156	1	156	0	156	1	156
	Left-Through		0							0				0				0	
	Through	814	2	407	0	814	407	0	814	2	407	0	814	2	407	0	814	2	407
	Through-Right		0							0				0				0	
	Right	279	1	21	12	291	32	0	279	1	21	0	279	1	21	0	279	1	21
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		532	North-South:		545	North-South:			532	North-South:			532	North-South:			532
		East-West:		573	East-West:		573	East-West:			573	East-West:			573	East-West:			573
		SUM:		1105	SUM:		1118	SUM:			1105	SUM:			1105	SUM:			1105
	VOLUME/CAPACITY (V/C) RATIO:			0.804			0.813				0.804				0.804				0.804
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.804			0.813				0.804				0.804				0.804
	LEVEL OF SERVICE (LOS):			D			D				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Arleta Avenue	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
3	East-West Street:	Roscoe Boulevard	Projection Year:	2017	Peak Hour:	PM	Reviewed by:		Project:	

		EXISTING CONDITION			Option 1			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			4			4			4				4					4
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB--		3	NB-- 3 SB--		3	NB-- 3 SB--		3		NB-- 3 SB--		3		NB-- 3 SB--		3	
		EB-- 0 WB--		3	EB-- 0 WB--		3	EB-- 0 WB--		3		EB-- 0 WB--		3		EB-- 0 WB--		3	
	ATSAC-1 or ATSAC+ATCS-2?			0			0			0				0					0
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	126	1	126	0	126	126	0	126	1	126	0	126	1	126	0	126	1	126
	Left-Through		0							0				0				0	
	Through	349	2	**175**	7	356	**178**	0	349	2	**175**	0	349	2	**175**	0	349	2	**175**
	Through-Right		0							0				0				0	
	Right	186	1	91	0	186	91	0	186	1	91	0	186	1	91	0	186	1	91
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	187	1	**187**	4	191	**191**	0	187	1	**187**	0	187	1	**187**	0	187	1	**187**
	Left-Through		0							0				0				0	
	Through	268	2	134	5	273	137	0	268	2	134	0	268	2	134	0	268	2	134
	Through-Right		0							0				0				0	
	Right	171	1	96	3	174	98	0	171	1	96	0	171	1	96	0	171	1	96
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	136	2	75	3	139	76	0	136	2	75	0	136	2	75	0	136	2	75
	Left-Through		0							0				0				0	
	Through	909	2	**455**	0	909	**455**	0	909	2	**455**	0	909	2	**455**	0	909	2	**455**
	Through-Right		0							0				0				0	
	Right	138	1	75	0	138	75	0	138	1	75	0	138	1	75	0	138	1	75
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	95	1	**95**	0	95	**95**	0	95	1	**95**	0	95	1	**95**	0	95	1	**95**
	Left-Through		0							0				0				0	
	Through	853	2	427	0	853	427	0	853	2	427	0	853	2	427	0	853	2	427
	Through-Right		0							0				0				0	
	Right	185	1	0	3	188	0	0	185	1	0	0	185	1	0	0	185	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		362	*North-South:*		369		*North-South:*		362		*North-South:*		362		*North-South:*		362
		East-West:		550	*East-West:*		550		*East-West:*		550		*East-West:*		550		*East-West:*		550
		SUM:		912	*SUM:*		919		*SUM:*		912		*SUM:*		912		*SUM:*		912
	VOLUME/CAPACITY *(V/C)* RATIO:			0.663			0.668				0.663				0.663				0.663
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.663			0.668				0.663				0.663				0.663
	LEVEL OF SERVICE (LOS):			B			B				B				B				B

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Arleta Avenue	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
3	East-West Street:	Roscoe Boulevard	Projection Year:	2017	Peak Hour:	AM	Reviewed by:		Project:	

		Option 1			Option 3			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			4			4			4				4				4	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3 SB--		3	NB-- 3 SB--		3	NB-- 3 SB--		3		NB-- 3 SB--		3		NB-- 3 SB--		3	
		EB-- 0 WB--		3	EB-- 0 WB--		3	EB-- 0 WB--		3		EB-- 0 WB--		3		EB-- 0 WB--		3	
	ATSAC-1 or ATSAC+ATCS-2?			0			0			0				0				0	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	180	1	180	0	180	180	0	180	1	180	0	180	1	180	0	180	1	180
	Left-Through		0							0				0				0	
	Through	572	2	286	0	572	286	0	572	2	286	0	572	2	286	0	572	2	286
	Through-Right		0							0				0				0	
	Right	122	1	0	0	122	0	0	122	1	0	0	122	1	0	0	122	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	259	1	259	8	267	267	0	259	1	259	0	259	1	259	0	259	1	259
	Left-Through		0							0				0				0	
	Through	517	2	259	26	543	272	0	517	2	259	0	517	2	259	0	517	2	259
	Through-Right		0							0				0				0	
	Right	261	1	121	24	285	141	0	261	1	121	0	261	1	121	0	261	1	121
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	255	2	140	6	261	144	0	255	2	140	0	255	2	140	0	255	2	140
	Left-Through		0							0				0				0	
	Through	833	2	417	0	833	417	0	833	2	417	0	833	2	417	0	833	2	417
	Through-Right		0							0				0				0	
	Right	127	1	37	0	127	37	0	127	1	37	0	127	1	37	0	127	1	37
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	156	1	156	0	156	156	0	156	1	156	0	156	1	156	0	156	1	156
	Left-Through		0							0				0				0	
	Through	814	2	407	0	814	407	0	814	2	407	0	814	2	407	0	814	2	407
	Through-Right		0							0				0				0	
	Right	291	1	32	26	317	50	0	291	1	32	0	291	1	32	0	291	1	32
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		545	North-South:		553	North-South:			545	North-South:			545	North-South:			545
		East-West:		573	East-West:		573	East-West:			573	East-West:			573	East-West:			573
		SUM:		1118	SUM:		1126	SUM:			1118	SUM:			1118	SUM:			1118
	VOLUME/CAPACITY (V/C) RATIO:			0.813			0.819				0.813				0.813				0.813
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.813			0.819				0.813				0.813				0.813
	LEVEL OF SERVICE (LOS):			D			D				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.000 | Δ*v/c* after mitigation: 0.000

Significant impacted? NO | Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Arleta Avenue	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
3	East-West Street:	Roscoe Boulevard	Projection Year:	2017	Peak Hour:	PM	Reviewed by:		Project:	

	Option 1			Option 3			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
No. of Phases			4			4				4				4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0				0				0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 3	SB-- 3	3	NB-- 3	SB-- 3	3	NB-- 3	SB-- 3		3	NB-- 3	SB-- 3		3	NB-- 3	SB-- 3		3
	EB-- 0	WB-- 3	3	EB-- 0	WB-- 3	3	EB-- 0	WB-- 3		3	EB-- 0	WB-- 3		3	EB-- 0	WB-- 3		3
ATSAC-1 or ATSAC+ATCS-2?			0			0				0				0				0
Override Capacity			0			0				0				0				0

	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	126	1	126	0	126	126	0	126	1	126	0	126	1	126	0	126	1	126
	Left-Through		0							0				0				0	
	Through	356	2	178	0	356	178	0	356	2	178	0	356	2	178	0	356	2	178
	Through-Right		0							0				0				0	
	Right	186	1	91	0	186	91	0	186	1	91	0	186	1	91	0	186	1	91
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	191	1	191	7	198	198	0	191	1	191	0	191	1	191	0	191	1	191
	Left-Through		0							0				0				0	
	Through	273	2	137	0	273	137	0	273	2	137	0	273	2	137	0	273	2	137
	Through-Right		0							0				0				0	
	Right	174	1	98	42	216	140	0	174	1	98	0	174	1	98	0	174	1	98
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	139	2	76	0	139	76	0	139	2	76	0	139	2	76	0	139	2	76
	Left-Through		0							0				0				0	
	Through	909	2	455	0	909	455	0	909	2	455	0	909	2	455	0	909	2	455
	Through-Right		0							0				0				0	
	Right	138	1	75	0	138	75	0	138	1	75	0	138	1	75	0	138	1	75
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	95	1	95	0	95	95	0	95	1	95	0	95	1	95	0	95	1	95
	Left-Through		0							0				0				0	
	Through	853	2	427	0	853	427	0	853	2	427	0	853	2	427	0	853	2	427
	Through-Right		0							0				0				0	
	Right	188	1	0	1	189	0	0	188	1	0	0	188	1	0	0	188	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		369	North-South:		376	North-South:			369	North-South:			369	North-South:			369
		East-West:		550	East-West:		550	East-West:			550	East-West:			550	East-West:			550
		SUM:		919	SUM:		926	SUM:			919	SUM:			919	SUM:			919
VOLUME/CAPACITY (V/C) RATIO:				0.668			0.673				0.668				0.668				0.668
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.668			0.673				0.668				0.668				0.668
LEVEL OF SERVICE (LOS):				B			B				B				B				B

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.000 | Δ*v/c* after mitigation: 0.000

Significant impacted? NO | Fully mitigated? N/A

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Peoria Street	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
4	East-West Street:	Roscoe Boulevard	Projection Year:	2017	Peak Hour:	AM	Reviewed by:		Project:	

		EXISTING CONDITION			Option 1			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2					2
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0					0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			0			0			0				0					0
	Override Capacity			0			0			0				0					0
NORTHBOUND	Left	94	0	94	0	94	94	0	94	0	94	0	94	0	94	0	94	0	94
	Left-Through		0							0				0				0	
	Through	16	0	328	3	19	331	0	16	0	328	0	16	0	328	0	16	0	328
	Through-Right		0							0				0				0	
	Right	218	0	0	0	218	0	0	218	0	0	0	218	0	0	0	218	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	13	0	13	2	15	15	0	13	0	13	0	13	0	13	0	13	0	13
	Left-Through		0							0				0				0	
	Through	44	0	97	8	52	115	0	44	0	97	0	44	0	97	0	44	0	97
	Through-Right		0							0				0				0	
	Right	40	0	0	8	48	0	0	40	0	0	0	40	0	0	0	40	0	0
	Left-Through-Right		1							1				1				1	
	Left-Right		0							0				0				0	
EASTBOUND	Left	12	1	12	2	14	14	0	12	1	12	0	12	1	12	0	12	1	12
	Left-Through		0							0				0				0	
	Through	1026	2	513	0	1026	513	0	1026	2	513	0	1026	2	513	0	1026	2	513
	Through-Right		0							0				0				0	
	Right	111	1	111	0	111	111	0	111	1	111	0	111	1	111	0	111	1	111
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	86	1	86	0	86	86	0	86	1	86	0	86	1	86	0	86	1	86
	Left-Through		0							0				0				0	
	Through	1106	2	553	0	1106	553	0	1106	2	553	0	1106	2	553	0	1106	2	553
	Through-Right		0							0				0				0	
	Right	34	1	34	5	39	39	0	34	1	34	0	34	1	34	0	34	1	34
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		341	North-South:		346	North-South:		341		North-South:		341		North-South:		341	
		East-West:		599	East-West:		599	East-West:		599		East-West:		599		East-West:		599	
		SUM:		940	SUM:		945	SUM:		940		SUM:		940		SUM:		940	
	VOLUME/CAPACITY (V/C) RATIO:			0.627			0.630			0.627				0.627					0.627
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.627			0.630			0.627				0.627					0.627
	LEVEL OF SERVICE (LOS):			B			B			B				B					B

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Peoria Street	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
4	East-West Street:	Roscoe Boulevard	Projection Year:	2017	Peak Hour:	PM	Reviewed by:		Project:	

	EXISTING CONDITION			Option 1			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
No. of Phases			2			2			2				2				2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
	EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
ATSAC-1 or ATSAC+ATCS-2?			0			0			0				0				0	
Override Capacity			0			0			0				0				0	
NORTHBOUND																		
Left	1	0	**1**	0	1	**1**	0	1	0	**1**	0	1	0	**1**	0	1	0	**1**
Left-Through		0							0				0				0	
Through	4	0	20	0	4	20	0	4	0	20	0	4	0	20	0	4	0	20
Through-Right		0							0				0				0	
Right	15	0	0	0	15	0	0	15	0	0	0	15	0	0	0	15	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	14	0	14	2	16	16	0	14	0	14	0	14	0	14	0	14	0	14
Left-Through		0							0				0				0	
Through	1	0	**100**	0	1	**115**	0	1	0	**100**	0	1	0	**100**	0	1	0	**100**
Through-Right		0							0				0				0	
Right	85	0	0	13	98	0	0	85	0	0	0	85	0	0	0	85	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	98	1	**98**	1	99	**99**	0	98	1	**98**	0	98	1	**98**	0	98	1	**98**
Left-Through		0							0				0				0	
Through	1098	2	549	0	1098	549	0	1098	2	549	0	1098	2	549	0	1098	2	549
Through-Right		0							0				0				0	
Right	19	1	19	0	19	19	0	19	1	19	0	19	1	19	0	19	1	19
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	18	1	18	0	18	18	0	18	1	18	0	18	1	18	0	18	1	18
Left-Through		0							0				0				0	
Through	1033	2	**517**	0	1033	**517**	0	1033	2	**517**	0	1033	2	**517**	0	1033	2	**517**
Through-Right		0							0				0				0	
Right	18	1	18	0	18	18	0	18	1	18	0	18	1	18	0	18	1	18
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		101	*North-South:*		116			*North-South:*	101			*North-South:*	101			*North-South:*	101
	East-West:		615	*East-West:*		616			*East-West:*	615			*East-West:*	615			*East-West:*	615
	SUM:		716	*SUM:*		732			*SUM:*	716			*SUM:*	716			*SUM:*	716
VOLUME/CAPACITY *(V/C)* RATIO:			0.477			0.488				0.477				0.477				0.477
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.477			0.488				0.477				0.477				0.477
LEVEL OF SERVICE (LOS):			A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Peoria Street	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
4	East-West Street:	Roscoe Boulevard	Projection Year:	2017	Peak Hour:	AM	Reviewed by:		Project:	

No. of Phases			2			2			2			2			2			2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0			0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	
ATSAC-1 or ATSAC+ATCS-2?			0			0			0			0			0			0	
Override Capacity			0			0			0			0			0			0	

MOVEMENT	EXISTING CONDITION			Option 3			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	94	0	94	0	94	94	0	94	0	94	0	94	0	94	0	94	0	94
Left-Through		0							0				0				0	
Through	16	0	328	-8	8	320	0	16	0	328	0	16	0	328	0	16	0	328
Through-Right		0							0				0				0	
Right	218	0	0	0	218	0	0	218	0	0	0	218	0	0	0	218	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	13	0	13	-8	5	5	0	13	0	13	0	13	0	13	0	13	0	13
Left-Through		0							0				0				0	
Through	44	0	97	-26	18	39	0	44	0	97	0	44	0	97	0	44	0	97
Through-Right		0							0				0				0	
Right	40	0	0	-24	16	0	0	40	0	0	0	40	0	0	0	40	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	12	1	12	-6	6	6	0	12	1	12	0	12	1	12	0	12	1	12
Left-Through		0							0				0				0	
Through	1026	2	513	0	1026	513	0	1026	2	513	0	1026	2	513	0	1026	2	513
Through-Right		0							0				0				0	
Right	111	1	111	0	111	111	0	111	1	111	0	111	1	111	0	111	1	111
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	86	1	86	0	86	86	0	86	1	86	0	86	1	86	0	86	1	86
Left-Through		0							0				0				0	
Through	1106	2	553	0	1106	553	0	1106	2	553	0	1106	2	553	0	1106	2	553
Through-Right		0							0				0				0	
Right	34	1	34	-18	16	16	0	34	1	34	0	34	1	34	0	34	1	34
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	North-South:		341	North-South:		325	North-South:			341	North-South:			341	North-South:			341
	East-West:		599	East-West:		599	East-West:			599	East-West:			599	East-West:			599
	SUM:		940	SUM:		924	SUM:			940	SUM:			940	SUM:			940
VOLUME/CAPACITY (*V/C*) RATIO:			0.627			0.616				0.627				0.627				0.627
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.627			0.616				0.627				0.627				0.627
LEVEL OF SERVICE (LOS):			B			B				B				B				B

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Peoria Street	Year of Count:	2017	Ambient Growth: (%):	0	Conducted by:		Date:	
4	East-West Street:	Roscoe Boulevard	Projection Year:	2017	Peak Hour:	PM	Reviewed by:		Project:	

	EXISTING CONDITION			Option 3			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
No. of Phases			2			2			2				2				2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
	EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
ATSAC-1 or ATSAC+ATCS-2?			0			0			0				0				0	
Override Capacity			0			0			0				0				0	
NORTHBOUND																		
Left	1	0	**1**	0	1	**1**	0	1	0	**1**	0	1	0	**1**	0	1	0	**1**
Left-Through		0							0				0				0	
Through	4	0	20	0	4	20	0	4	0	20	0	4	0	20	0	4	0	20
Through-Right		0							0				0				0	
Right	15	0	0	0	15	0	0	15	0	0	0	15	0	0	0	15	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	14	0	14	-7	7	7	0	14	0	14	0	14	0	14	0	14	0	14
Left-Through		0							0				0				0	
Through	1	0	**100**	0	1	**51**	0	1	0	**100**	0	1	0	**100**	0	1	0	**100**
Through-Right		0							0				0				0	
Right	85	0	0	-42	43	0	0	85	0	0	0	85	0	0	0	85	0	0
Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	98	1	**98**	-3	95	**95**	0	98	1	**98**	0	98	1	**98**	0	98	1	**98**
Left-Through		0							0				0				0	
Through	1098	2	549	0	1098	549	0	1098	2	549	0	1098	2	549	0	1098	2	549
Through-Right		0							0				0				0	
Right	19	1	19	0	19	19	0	19	1	19	0	19	1	19	0	19	1	19
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	18	1	18	0	18	18	0	18	1	18	0	18	1	18	0	18	1	18
Left-Through		0							0				0				0	
Through	1033	2	**517**	0	1033	**517**	0	1033	2	**517**	0	1033	2	**517**	0	1033	2	**517**
Through-Right		0							0				0				0	
Right	18	1	18	-1	17	17	0	18	1	18	0	18	1	18	0	18	1	18
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		101	*North-South:*		52			*North-South:*	101			*North-South:*	101			*North-South:*	101
	East-West:		615	*East-West:*		612			*East-West:*	615			*East-West:*	615			*East-West:*	615
	SUM:		716	*SUM:*		664			*SUM:*	716			*SUM:*	716			*SUM:*	716
VOLUME/CAPACITY *(V/C)* RATIO:			0.477			0.443				0.477				0.477				0.477
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.477			0.443				0.477				0.477				0.477
LEVEL OF SERVICE (LOS):			A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.000	Δ*v/c* after mitigation:	0.000
Significant impacted?	NO	Fully mitigated?	N/A

Appendices

H.
Response to Comments

Appendices

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February 2018 | Response to Comments

JOHN H. FRANCIS POLYTECHNIC SENIOR HIGH SCHOOL COMPREHENSIVE MODERNIZATION

Prepared for:

Los Angeles Unified School District
Office of Environmental Health and Safety
Contact: Will Meade, Environmental Planning Specialist
333 South Beaudry Avenue, 21st Floor
Los Angeles, California 90017
213.241.3432

Prepared by:

PlaceWorks
3 MacArthur Place, Suite 1100
Santa Ana, California 92707
714.966.9220

PLACEWORKS

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Table of Contents

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1. Introduction

1.1 INTRODUCTION

This document includes a compilation of the public comments received on the John H. Francis Polytechnic Senior High School Comprehensive Modernization Project (Project) Negative Declaration and supporting Initial Study (ND) and Los Angeles Unified School District's (LAUSD) responses to the comments.

Under the California Environmental Quality Act (CEQA), a lead agency has no affirmative duty to prepare formal responses to comments on an ND. The lead agency, however, should have adequate information on the record explaining why the comments do not affect the conclusion of the ND. In the spirit of public disclosure and engagement, the LAUSD—as the lead agency for the proposed Project—has responded to all written comments submitted during the 30-day ND public review period, which began November 20, 2017, and closed December 20, 2017.

1.2 DOCUMENT FORMAT

This document is organized as follows:

Section 1, *Introduction.* This section describes CEQA requirements and content of this document.

Section 2, *Response to Comments.* This section provides a list of agencies and interested persons commenting on the ND, copies of comment letters received during the public review period, and individual responses to written comments. To facilitate review of the responses, each comment letter has been reproduced and assigned a number. Individual comments have been numbered for each letter, and the letter is followed by responses with references to the corresponding comment number.

1.3 CEQA REQUIREMENTS REGARDING COMMENTS AND RESPONSES

CEQA Guidelines Section 15204 (b) outlines parameters for submitting comments on negative declarations, and reminds persons and public agencies that the focus of review and comment of NDs should be "on the proposed findings that the project will not have a significant effect on the environment. If the commenter believes that the project may have a significant effect, it should: (1) Identify the specific effect, (2) Explain why they believe the effect would occur, and (3) Explain why they believe the effect would be significant.

Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of a ND is determined in terms of what is reasonably feasible. CEQA Guidelines Section 15204 (c) advises, "Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion

1. Introduction

supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence."

Section 15204 (d) also states, "Each responsible agency and trustee agency shall focus its comments on environmental information germane to that agency's statutory responsibility." Section 15204 (e) states, "This section shall not be used to restrict the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by this section."

Finally, CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. Written responses to comments are not required for NDs; however, it is LAUSD's standard practice to respond in writing to all comments. When responding to comments, lead agencies need only respond to potentially significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the environmental document.

2. Response to Comments

This section provides all written comments received on the circulated ND and supporting Initial Study and the District's response to each comment. Many of these comments address issues beyond the adequacy of the CEQA document; however, the District has responded.

Letter Reference	Commenting Person / Agency	Date of Comment	Page Number
A	California Department of Transportation	December 15, 2017	2-3
B	Gary Aggas, Sun Valley Area Neighborhood Council	Submitted at December 6, 2017 Public Meeting	10

2. Response to Comments

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LETTER A – California Department of Transportation (3pages)

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7-OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-0067
FAX (213) 897-1337
www.dot.ca.gov

Serious drought.
Help save water!

December 15, 2017

Mr. Will Meade
Los Angeles Unified School District
333 South Beaudry Avenue, 21st Floor
Los Angeles, CA, 90017

RE: Poly High School
Comprehensive Modernization
Vic: LA-170 / PM: 19.709
GTS# 07-LA-2017-01228
SCH# 2017111060

Dear Mr. Meade:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The project consists of a comprehensive modernization of Poly High School to facilitate a safe and secure campus that better aligns with current instructional program. Project involves demolition and construction of buildings, as well as other site upgrades.

Upon reviewing the Negative Declaration (ND), Caltrans has the following comments:

State policies and goals related to sustainable transportation seek to reduce the number of trips made by driving, reduce transportation-related greenhouse gas emissions, and encourage alternative modes of travel. Caltrans' Strategic Management Plan has set a target of tripling trips made by bicycling, as well as doubling trips made by walking and public transit by 2020. The Strategic Plan also seeks to achieve a 15% reduction in statewide per capita vehicle miles traveled by 2020. Similar ambitious goals are embedded in the California Transportation Plan 2040. Statewide legislation such as AB 32 and SB 375, as well as Governor Executive Orders S-3-05 and B-16-12, further echo the need to pursue more sustainable development and transportation patterns. These climate change and sustainable transportation policy goals can only be achieved with active support from local agency partners such as LAUSD. A-1

LAUSD shares similar policies related to promoting sustainable transportation, including:

- In September 2015, the LAUSD School Board adopted Resolution 025-16/17 supporting Safe Routes to School, Vision Zero, and Walk to School Day. All three of these initiatives promote active transportation and elevate pedestrian safety. The resolution language reflects a commitment to help remove barriers to walking and bicycling and offers positive re-enforcement to promote sustainable and healthy transport habits.

- In October 2003, the LAUSD Board passed its Resolution on Sustainability and Design of

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

2. Response to Comments

Mr. Will Meade
December 15, 2017
Page 2

High Performance Schools, directing staff to continue efforts to ensure modernization projects in the District incorporate Collaborative for High Performance Schools to the extent possible and practical. This includes enhancing student and staff health and minimizing the impact of District operations on the environment. The two aforementioned resolutions, though indirectly, complement each other and can be implemented in tandem to promote more sustainable, active transportation through this school modernization project. A-1 Cont'd

- In March 2017, LAUSD released its "High Performance Strategies for Major Repair and Modernization Projects" document, which is intended to serve as a tool to help incorporate High Performance/Sustainable design principles into modernization projects. Among the strategies included in the document are efforts to increase tree shade, pervious paving in parking lots, and coordinating installation of bicycle parking. It is unclear if these elements will be included in this project. A-2

We strongly encourage including quality bicycle/skateboard parking and active transportation amenities as part of the project design. Providing such amenities would be consistent with State level policies as well as local LAUSD initiatives. In the absence of such active transportation amenities, site users (including students, facility and staff) may be unable, unpermitted, or discouraged from using alternate modes and the project would be inconsistent with its own policies aimed at promoting active transportation and reducing transportation-related greenhouse gas emissions. A-3

Although LAUSD has a limited role in shaping transportation habits, the design of the school (pedestrian-oriented vs automobile-oriented) and amenities it provides (greenspace, car parking, bicycle parking, etc) can influence how site users go to and from the school and this should be considered. Site design that omits or makes needs of active transportation modes secondary would be inconsistent with desired State goals of promoting sustainable transportation and reducing greenhouse gas emissions. Design elements such as providing quality and inviting amenities for active transportation are especially opportune because children are more likely to walk, bicycle, skateboard, or take other active modes than the general population.

As such, Caltrans would like to see the Negative Declaration updated to include consideration of, and provisions for, both car and bicycle parking, not just car parking. A strategy included in LAUSD's "High Performance Strategies for Major Repair and Modernization Projects" recommends identifying a designated area for bicycle and skateboard storage and coordinating site installation with school administrator. Ideally, such a discussion of car and bicycle parking would be complemented with diagrams indicating more precise location, type, and quantity of parking for both modes instead of just one.

Further, the Negative Declaration should include consideration of how driveway modifications or A-4

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

closures would affect pedestrian travel. The Negative Declaration weighs the prospect of modifying or closing existing driveways. While this discussion goes into great deal of how it affects car travel, it omits consideration for how such modifications or closures could mitigate or eliminate conflicts with pedestrians. A-4 Cont'd

Also, the Negative Declaration states a curb ramp will be reconstructed at the corner of Wickes Street and Arleta Avenue to comply with ADA standards. Reconstructing the curb at this location is an opportunity to incorporate a curb extension to enhance the safety and comfort of pedestrians, including children walking to and from the school. A-5

Finally, as a reminder any transportation of heavy construction equipment and/or materials requiring use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. Caltrans recommends that large size truck trips be limited to off-peak commute periods. Also, storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Be mindful that the project needs to be designed to discharge clean run-off water. The completed project could incorporate green design elements that can capture storm water. Incorporating permeable pavement, landscaping, and trees to reduce urban water run-off should be considered. A-6

If you have any questions regarding these comments, please contact project coordinator Severin Martinez, at (213)-897-0067 or severin.martinez@dot.ca.gov and refer to GTS# LA-2017-01228.

Sincerely,

MIYA EDMONSON
Acting IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

2. Response to Comments

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A. Response to Comments from California Department of Transportation, dated December 15, 2016

A-1 Comment acknowledged. Caltrans and the Los Angeles Unified School District have both adopted policies that promote sustainable active-transportation through the promotion of alternative modes of travel.

A-2 The proposed Project would modernize existing facilities at Poly HS and would not increase student capacity. Though these modernization improvements respond to the greatest needs of the school, LAUSD will consider the existing conditions of bicycle/scooter/skateboard storage and provide improvements as feasible and in line with LAUSD's "High Performance Strategies for Major Repair and Modernization Projects."

LAUSD continues to support non-motorized alternatives for students, faculty, and staff travelling to and from school. Per Standard Condition of Approval SC-AQ-5, LAUSD encourages ride-sharing programs for students and teachers, as well as riding bicycles to school. As project design progresses toward plan review, LAUSD will coordinate with Poly HS to address potential improvements to existing bicycle parking and storage for skateboards and scooters.

A-3 See response to Comment A-2.

A-4 LAUSD is fully committed to the safety of students, faculty, and staff travelling to and from school. Sidewalks, cross walks and fencing are used to direct pedestrians and to reduce conflicts with driveway traffic. The proposed Project analyzed three options for traffic circulation improvements: Option 1: Both driveways operate as they currently do, with right and left turns in and out; Option 2: The driveway on Arleta Avenue is restricted to right turn in only and right turn out only, and the driveway on Peoria Street would remain unchanged; and Option 3: The driveway on Peoria Street is removed so all traffic in and out of the parking lot uses the driveway on Arleta Avenue.

Closing the driveway on Peoria Street would eliminate one potential pedestrian/vehicle conflict location and would be an improvement to existing conditions. The other options would largely leave conditions as they currently are. None of the options would increase the number of locations where there would be the potential for conflicts between pedestrians and vehicles.

Additionally, LAUSD has added a separate CEQA checklist item, XIII. PEDESTRIAN SAFETY (see page 119 of the Initial Study), specifically to analyze Project-related impacts to pedestrians.

A-5 Comment acknowledged. The Los Angeles Unified School District Board of Education will consider all comments prior to making a decision on the Project.

A-6 **Construction Traffic.** LAUSD will comply with all applicable Caltrans requirements and permits. If oversized-transport vehicles need to use State highways to transport heavy construction equipment or materials, the construction contractor will obtain a Caltrans transportation permit.

LAUSD's Standard Conditions of Approval (SC-AQ-4), as identified on page 57 of the Initial Study, requires that construction activities that affect traffic flow be scheduled during off-peak

2. Response to Comments

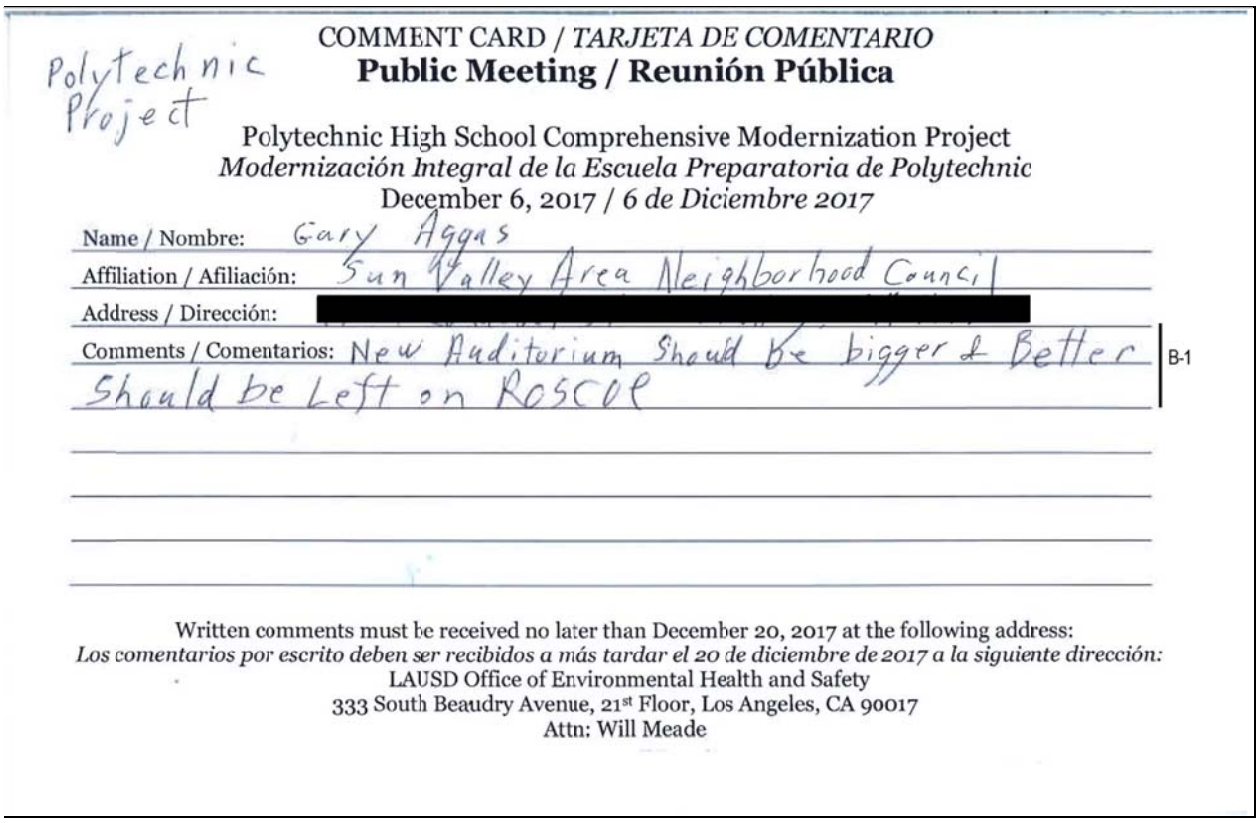
hours (e.g. between 10:00 AM and 3:00 PM); that truck deliveries be consolidated to limit the number of haul trips per day; and that construction trucks do not travel on congested streets. Additionally, SC-T-4 requires contractors to "submit a construction worksite traffic control plan to the local City or County jurisdiction for review prior to construction. The plan shall show the location of any haul routes, hours of operation, protective devices, warning signs, and access to abutting properties. LAUSD shall encourage its contractor to limit construction-related trucks to off-peak commute periods. As required by Caltrans, applicable transportation related safety measures shall be implemented during construction."

Stormwater Quality. The Project would be constructed in an area that is already developed and already producing nonpoint-source pollutants. Currently, stormwater is collected by engineered storm drains and directed toward Roscoe Boulevard, which empties into the Tujunga Wash and ultimately to the Los Angeles River, which flows south and discharges into the Pacific Ocean at Long Beach.

As stated in the Initial Study, Section IX, *Hydrology and Water Quality*, LAUSD would implement Standard Condition of Approval SC-HWQ-1, which requires compliance with LAUSD's Stormwater Technical Manual and the District's General Construction Activity Permit. LAUSD standards also include a requirement to prepare and implement a sediment and erosion control plan that follows the Best Management Practices outlined in the State Water Resources Control Board to comply with a Construction General Permit, including the development of a Storm Water Pollution Prevention Plan, as required by the Regional Water Quality Control Board's National Pollutant Discharge Elimination System. The proposed Project will not discharge stormwater to State highway facilities. Additionally, LAUSD would implement SC-HWQ-2 (Compliance Checklist for Storm Water Requirements at Construction Sites), which also requires stormwater control measures. These requirements include provisions for erosion and pollution control measures to ensure water quality in stormwater runoff.

The Project would also comply with the Low Impact Development Standards Manual (LID Standards Manual) issued by the County of Los Angeles Department of Public Works. The LID Standards Manual in turn is pursuant to the Municipal Stormwater Permit for coastal watersheds of Los Angeles County, Order No. R4-2012-0175, issued by the Los Angeles Regional Water Quality Control Board. Compliance would reduce urban water run-off from the campus.

LETTER B – Gary Aggas, Sun Valley Area Neighborhood Counci1 (1page)



Polytechnic Project

COMMENT CARD / *TARJETA DE COMENTARIO*
Public Meeting / Reunión Pública

Polytechnic High School Comprehensive Modernization Project
Modernización Integral de la Escuela Preparatoria de Polytechnic
December 6, 2017 / *6 de Diciembre 2017*

Name / Nombre: Gary Aggas
Affiliation / Afiliación: Sun Valley Area Neighborhood Council
Address / Dirección: [redacted]
Comments / Comentarios: New Auditorium Should Be bigger & Better Should be Left on Roscoe

B-1

Written comments must be received no later than December 20, 2017 at the following address:
Los comentarios por escrito deben ser recibidos a más tardar el 20 de diciembre de 2017 a la siguiente dirección:
LAUSD Office of Environmental Health and Safety
333 South Beaudry Avenue, 21st Floor, Los Angeles, CA 90017
Attn: Will Meade

2. Response to Comments

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B. Response to Comments from Gary Aggas, Sun Valley Area Neighborhood Counci1, submitted at December 6, 2017 Public Meeting

B-1 Comment regarding the location for the proposed Auditorium/Performing Arts building is acknowledged. The Los Angeles Unified School District Board of Education will consider all comments prior to making a decision on the Project.

Although the Auditorium building will be moved, the proposed arrangement of buildings would respect the overall layout of the existing campus by clustering non-classroom buildings, such as the proposed Auditorium/Performing Arts building, according to function.

2. Response to Comments

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