

**INITIAL STUDY/MITIGATED NEGATIVE
DECLARATION
FRANKLIN D. ROOSEVELT PARK REGIONAL
STORMWATER CAPTURE PROJECT**

PREPARED FOR:

Los Angeles County Department of Public Works
P.O. Box 1460
Alhambra, CA 91802-1460

PREPARED BY:

ICF
1 Ada, Suite 100
Irvine, CA 92618
Contact: Laura Rocha
(949) 333-6613

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Acronyms

µg/m ³	micrograms per cubic meter
µg/L	micrograms per liter
AB	Assembly Bill
ADA	Americans with Disabilities Act
AQMP	air quality management plan
Basin	South Coast Air Basin
bgs	below ground surface
BMPs	best management practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal OSHA	California Division of Occupational Safety and Health
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	CO ₂ equivalents
County	County of Los Angeles
CR	California Register of Historical Resources
CWA	Clean Water Act
dBA	A-weighted sound level
DBH	diameter at breast height
Department	County of Los Angeles Department of Parks and Recreation
DHS	Department of Health Services
DTSC	Department of Toxic Substances Control
EDR	Environmental Data Resources
EIR	environmental impact report
EPA	United States Environmental Protection Agency

ESA	Federal Endangered Species Act
EWMP	enhanced watershed management program
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
GWP	global warming potential
HRI	Historic Resources Inventory
I	Interstate
IS	Initial Study
IS/MND	initial study/mitigated negative declaration
LACDPW	Los Angeles County Department of Public Works
LACoFD	Los Angeles County Fire Department
LAPD	Los Angeles Police Department
LAX	Los Angeles International Airport
L_{eq}	equivalent sound level
LID	low-impact development
L_{max}	maximum sound level
L_{min}	minimum sound level
LST	localized significance threshold
L_{xx}	percentile-exceeded sound level
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MND	mitigated negative declaration
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	negative declaration
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NR	National Register of Historic Places

O ₃	ozone
Park	Franklin D. Roosevelt Park
Pb	lead
PEIR	program environmental impact report
PM	Particulate Matter
PM ₁₀	Respirable Particulate Matter
PM _{2.5}	fine particulate matter
ppb	parts per billion
ppm	parts per million by volume
proposed project	Franklin D. Roosevelt Park Regional Stormwater Capture Project
RCP	reinforced concrete pipe
RCRA	Recovery Act of 1976
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SEAs	Significant Ecological Areas
SO ₂	Sulfur Dioxide
SR	State Route
SRA	Source Receptor Area
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
TMDL	total maximum daily load
U.S.C.	U.S. Government Code
USFWS	U.S. Fish and Wildlife Service
VAPP or proposed project	Venice Auxiliary Pumping Plant
VOC	volatile organic compounds
WRD	Water Replenishment District of Southern California



Draft Mitigated Negative Declaration Summary

County of Los Angeles, Department of Public Works

Project Title: Roosevelt Park Stormwater Capture Project

Lead Agency Name and Address: County of Los Angeles Department of Public Works
P.O. Box 1460, Alhambra, CA 91802-1460

Contact Person and Phone Number: Louis Romero, Project Manager (626) 300-3221

Project Location: The project site is located within the unincorporated area of Florence-Firestone in Los Angeles County at 7600 Graham Avenue, Los Angeles, California 90001 and is approximately 24 acres. The project site located near the Cities of Huntington Park, Los Angeles, and South Gate. The nearest major streets to the project site are Nadeau Street directly to the south, Compton Avenue three blocks to the west, Florence Avenue to the north, and Alameda Street six blocks to east. The project site is directly abutted by Graham Avenue to the west, Nadeau Street to the south, Homes Avenue to the north, and East 76th Place and Whitsett Avenue to the east.

Description of Project: LACDPW is proposing several improvements to Franklin D. Roosevelt Park (Park) to improve water quality, increase water conservation, and provide additional recreation, education, and outreach benefits to Park visitors. The proposed project would improve water quality and increase water conservation by constructing three diversion structures and pipelines to divert dry weather flows and stormwater into three underground infiltration systems with pre-treatment devices in order to provide groundwater recharge to the Central Basin. A number of aboveground improvements to the Park are proposed to provide additional water conservation, recreation, education, and outreach benefits to park users, such as a redesigned soccer field with lighting, skate park, a new and Americans with Disabilities Act (ADA)-accessible healthy court, and an educational garden.

The proposed project would incorporate environmental mitigation measures to ensure protection of Park users. These measures are detailed below.

Proposed Finding: Based on the information contained in the Initial Study, LACDPW finds that there would not be a significant effect on the environment because the mitigation measures described herein would be incorporated as part of the project.

Public Review Period: December 21, 2017 to January 20, 2018

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

MM AES-1: Aboveground structures shall be designed to be consistent with local zoning codes and applicable design guidelines and to minimize features that contrast with neighboring development.

MM AES-2: The construction contractor shall use appropriate screening (i.e., barricades and/or temporary fencing with opaque materials) to buffer views of construction equipment as well as materials and soil in construction staging areas. The visual barrier may be chain link fencing with privacy slats, fencing with windscreen material, a wooden or concrete barrier/soundwall, or other similar barrier. The visual barrier shall be a minimum of 6 feet high to help maintain the privacy of sensitive visual receptors and block long-term ground-level views toward construction activities.

Although this visual barrier would introduce a visual intrusion, it would greatly reduce visual effects associated with visible construction activities.

MM AES-3: LACDPW Design Division shall develop a BMP maintenance plan that shall be approved prior to implementation of the structural BMPs in the Park. The maintenance plan must include measures to ensure functionality of the structural BMPs for the life of the BMP. The maintenance plan may include general maintenance guidelines that apply to a number of smaller distributed BMPs.

MM AES-4 LACDPW shall implement lighting design features to minimize spillover from light and glare. LACDPW shall prepare a site-specific Lighting Plan for the proposed soccer field lighting by a qualified lighting engineer prior to the start of construction to minimize impacts due to light and glare as well as ensure compliance with all applicable policies and regulations. All lighting features shall feature downward facing luminaires and shall be mounted with a narrow beam angle, which would focus light downward onto the field. In addition, each proposed lighting feature shall include a highly efficient reflector to focus light toward the field and visor to reduce the amount of upward light.

MM BIO-1: If construction and vegetation removal is proposed between February 15 and August 31, a qualified biologist shall conduct a pre-construction survey at least 3 days prior to construction for breeding and nesting birds within 200 feet of the construction limits and within 500 feet for raptors. The biologist shall determine and map the location and extent of breeding birds that could be affected by the project. Active nest sites located during the pre-construction surveys shall be avoided until the adults and young are no longer reliant on the nest site for survival as determined by a qualified biologist.

MM BIO-2: Trees will be avoided to the extent feasible. If trees may be impacted by project construction, and if required, a Department of Park and Recreation certified arborist will prepare a tree preservation plan for the construction impact area. The preservation plan shall be approved by planners, construction staff and a Department of Park and Recreation certified arborist or qualified member of the Tree Trimming Division.

MM CR-1: Implement Measures to Protect Previously Unidentified Cultural Resources. Previous activities have obscured surface evidence of cultural resources. However, construction shall be stopped if cultural resources are encountered. If signs of an archeological site, such as stone, bone, shell, ceramic, glass, or metal fragments, are uncovered during grading or other construction activities, work shall be halted within 50 feet of the find, and LACDPW shall be notified immediately. A qualified archeologist shall be consulted for an on-site evaluation and recommendations regarding next steps, such as data recovery, if he or she determines that the site is or appears to be eligible for listing on the CR or NR. Any previously undiscovered resources found during construction shall be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria. Construction work can continue on other parts of the project site while archaeological mitigation takes place.

MM CR-2: Inadvertent Discovery or Disturbance of Human Remains. In the event that human remains are discovered during on-site construction activities, all activity within a 50-foot radius of the find shall be stopped. LACDPW shall notify the Los Angeles County Coroner, who shall then make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission (NAHC) immediately. Once NAHC identifies the most likely descendants, the descendants shall make recommendations regarding proper burial, which shall be implemented in accordance with Section 15064.5(e) of the State CEQA Guidelines.

MM GEO-1: Prior to construction of infiltration BMPs, LACDWP shall conduct a geotechnical investigation to recommend design measures necessary to prevent excessive lateral spreading that could destabilize neighboring structures. LACDPW shall implement these measures in the final project design of the proposed infiltration basins.

MM PR-1: A qualified vertebrate paleontologist shall be retained to determine areas that shall require paleontological monitoring during initial ground disturbance.

- The qualified project paleontologist shall review project excavation and grading plans and determine the location of construction activities, especially excavation of the infiltration systems, drainage features, and utility relocations, likely to encounter subsurface sediments with high paleontological sensitivity. Maps depicting areas requiring monitoring shall be prepared.
- If excavations for the project take place in Quaternary older alluvial deposits these excavations shall be monitored on a fulltime basis by a qualified paleontological monitor under the supervision of the qualified paleontologist. This paleontological resource monitoring shall include inspection of exposed rock units during active excavations within the geologically sensitive sediments. Monitoring may be reduced if some of the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.
- The paleontologic monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor shall have authority to temporarily divert grading away from exposed fossils in order to professionally and efficiently recover the fossil specimens and collect associated data. All efforts to avoid delays in project schedules shall be made. To prevent construction delays, paleontological monitors shall be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis.
- Fossils collected, if any, shall be transported to a paleontological laboratory for processing where they shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility, such as the Natural History Museum of Los Angeles County.
- Following analysis, a Report of Findings with an appended itemized inventory of specimens shall be prepared. The report and inventory, when submitted to the appropriate lead agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, shall signify completion of the program to mitigate impacts on paleontological resources.

MM HAZ-1: LACDPW Design Division shall prepare and implement maintenance practices that include periodic removal and replacement of surface soils and media that may accumulate constituents that could result in further migration of constituents to sub-soils and groundwater. A BMP Maintenance Plan shall be prepared by LACDPW Design Division prior to project construction, that identifies the frequency and procedures for removal and/or replacement of accumulated debris, surface soils and/or media (to depth where constituent concentrations do not represent a hazardous conditions and/or have the potential to migrate further and impact groundwater) to avoid accumulation of hazardous concentrations and the potential to migrate further to sub-soils and groundwater. The BMP Maintenance Plan may consist of a general maintenance guideline that applies to several types of smaller distributed BMPs. Structural BMPs shall be designed to prevent migration of constituents that may impact groundwater.

MM NOISE-1: LACDPW shall implement the following measures during construction as needed:

- Include design measures necessary to reduce the construction noise levels to where feasible. These measures may include noise barriers, curtains, or shields.
- Place noise-generating construction activities (e.g., operation of compressors and generators, cement mixing, general truck idling) as far as possible from the nearest noise-sensitive land uses.
- Locate stationary construction noise sources as far from adjacent noise-sensitive receptors as possible.

- If construction is to occur near a school, the construction contractor shall coordinate with the school administration in order to limit disturbance to the campus. Efforts to limit construction activities to non-school days shall be encouraged.
- Because the BMP project is located adjacent to noise-sensitive land uses, identify a liaison for these off-site sensitive receptors, such as residents and property owners, to contact with concerns regarding construction noise and vibration. The liaison's telephone number(s) shall be prominently displayed at construction locations.
- Because the BMP project is located adjacent to noise-sensitive land uses, notify in writing all landowners and occupants of properties adjacent to the construction area of the anticipated construction schedule at least 2 weeks prior to groundbreaking.

MM PS-1: LACDPW will provide reasonable advance notification about the nature, extent, and duration of construction activities. LACDPW will provide this information to service providers such as fire, police, and emergency medical services as well as to local businesses, homeowners, and other residents adjacent to and within areas potentially affected by the proposed project. Interim updates should be provided to inform them of the status of the construction activities.

MM TRAF-1: LACDPW will require the contractor to prepare a construction traffic control plan for the proposed project. Elements of the plan should include the following:

- Develop circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible.
- To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours.
- Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions. Use flaggers and/or signage to safely direct traffic through construction work zones.
- Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities.

MM TCR-1: Retain a Qualified Archaeological Monitor: To reduce potential impacts on resources identified during project construction that have the potential to be Tribal Cultural Resources, a qualified archaeologist will monitor all proposed ground-disturbing activities of the project site located in native soils in order to minimize disturbance of subsurface archaeological deposits. Specifically, the following measures will be implemented to reduce impacts:

- LACDPW will retain a qualified professional archeologist, meeting the Secretary of the Interior's Professional Qualification Standards in archaeology, as promulgated in Code of Federal Regulations (CFR), Title 36, to oversee all monitoring work and supervise the archaeological monitor.
- The qualified archeologist and the archaeological monitor should have experience working in the Los Angeles basin within the ancestral tribal territory of the Gabrieleno.
- The qualified archeologist shall prepare a Monitoring and Discovery Plan that includes procedures, chain of command, and reporting requirements. The plan will also include a map of the ancestral tribal territory of the Gabrieleno. The Monitoring and Discovery plan shall be provided and reviewed by all parties, including the AB52 consulting tribe, prior to construction.
- The Qualified Archaeologist shall conduct cultural resources awareness training to all project personnel, in cooperation with the Native American Monitor, prior to the start of construction.
- If intact cultural subsurface deposits are identified during construction, the archaeological monitor will coordinate with the LACDPW Inspector to divert construction activities away from the find

(50-foot buffer around the find) and will be given sufficient time and compensation to investigate the find and determine its significance, in cooperation with the Native American monitor. No soil shall be exported, within the 50-foot buffer around the find, until a determination can be made regarding the significance of the resource.

- Recovered items that are determined to NOT be Tribal Cultural Resources will be treated in accordance with current professional standards by being properly provenienced, cleaned, analyzed, researched, reported, and curated in a collection facility meeting the Secretary of the Interior's Standards, as promulgated in 36 CFR 79. The costs for curation will be included in the budget for recovery of the archaeological remains.

A final Cultural Resources Monitoring Report shall be produced, which will discuss the monitoring program and its results and will provide interpretations of any recovered cultural materials. This report will be filed with the LACDPW and with the LA County Parks Department. If cultural material is found, the final records of the findings will be filed with the LACDPW, SCCIC NAHC, and the LA County Parks Department.

MM TCR-2: Retain a Gabrieleno Native American Monitor: To reduce potential impacts on Tribal Cultural Resources, monitoring shall be conducted by a monitor of Gabrieleno ancestry or Gabrieleno Tribal member during ground-disturbing activities in native soils. The role of the Native American monitor would be to work with the project's qualified archaeologist and archaeological monitor, identify potential Native American Tribal Cultural Resources, represent tribal concerns, and communicate concerns and appropriate handling to LACDPW and the Tribal Council. Appropriate representatives would be identified based on consultation between LACDPW and the AB52 consulting tribe. Specifically, the following measures will be implemented to reduce impacts:

- A qualified Native American monitor will be retained either as a subconsultant to the archaeological consultant or directly by the County to provide tribal monitoring services for this project. The Native American monitor shall maintain ongoing collaborative consultation with the archaeological monitor during all ground disturbing activities in native soils.
- The Native American monitor shall conduct cultural resources awareness training to all project personnel, in cooperation with the Qualified Archaeologist, prior to the start of construction.
- Where earth-disturbance activities in native soils occur, it shall be monitored by one Native American monitor having Gabrieleno ancestry or who is a Gabrieleno tribal member.
- Earth-disturbance activities in native soils will include clearing, grubbing, grading, excavation, trenching, and, in certain circumstances, augering work.
- The monitoring of augering activities will be limited to the observation of the native materials that are removed and set aside from the excavation. Monitoring will not be required for augering depths, as designated by the archaeologist, which have no potential for yielding tribal cultural resources.
- Native American monitoring will not be required for work activities that include the demolition and removal of non-native materials such as existing concrete, asphalt pavement, and pavement base layers.
- Native American monitoring will not be required for vacuum-excavation potholing because all materials will be extracted through a vacuum hose that feeds into a truck-mounted tank.
- The Native American Monitor will complete daily monitoring logs that provide descriptions of construction activities, locations, soil, and any cultural materials identified.
- The Native American monitor shall have the ability to notify LACDPW's archaeological monitor, will coordinate with the LACDPW Inspector to temporarily stop work if they find a cultural resource that may require further identification, recordation, and evaluation.

- When a potential Tribal Cultural Resource is discovered, the Archaeological Monitor, in cooperation with the Native American monitor, shall use flagging tape, rope, or some other means, as necessary, to delineate the area of the find plus a 50-foot buffer, within which construction shall halt.
- Native American monitoring shall end when earth-disturbing activities in native soils are completed, or when the Native American monitor, in consultation with the AB52 consulting tribe, have indicated that the area of native soils has a low potential for archeological resources.

MM TCR-3: Discovery of a Potential Tribal Cultural Resource: A Tribal Cultural Resource is a site feature, place, cultural landscape, sacred place or object that is of cultural value to a Tribe AND is either on or eligible for the California Register of Historic Resources or a local historic register, OR the lead agency, at its discretion, chooses to treat the resource as a TCR (See: PRC 21074 (a)(1)(A)-(B)). As per PRC 21074(a)(2), LACDPW will determine if the resource is a Tribal Cultural Resource pursuant to criteria set forth in subdivision (c) of Section 5024.1. If potential Tribal Cultural Resources are discovered during construction, all work must halt within a 50-foot radius of the discovery. The Qualified Archaeologist and archaeological monitor shall have the authority to modify the no-work radius as appropriate, using professional judgment.

- Any discovery is to be kept confidential and secure to prevent any further disturbance. There shall be no publicity regarding any tribal cultural resources recovered. However, discoveries will be documented and included in the confidential cultural resources monitoring report, which will be submitted to LACDPW, Los Angeles County Parks, the South Central Coastal Information Center, the AB52 consulting tribe, and the Native American Heritage Commission.
- All potential Tribal Cultural Resources unearthed by project construction activities shall be evaluated by the Qualified Archaeologist in consultation with the Native American monitor. Native American artifacts and finds suspected to be Native American in nature are to be considered as potential Tribal Cultural Resources until LACDPW has determined otherwise with the consultation of the Qualified Archaeologist and AB52 consulting tribe. The Native American monitor may suggest options for the treatment of cultural finds for consideration.
- Construction shall not take place within the delineated area of the Tribal Cultural Resource until either 1) mitigation measures have been agreed upon between LACDPW and the AB52 consulting tribe, pursuant to PRC Section 21080.3.2, and that mitigation is carried out; or 2) if agreement cannot be reached, one or more of the standard mitigation measures described in PRC Section 21084.3 is carried out.
- If the Qualified Archaeologist determines that the find does not represent a potentially significant cultural resource, work may resume immediately and no agency notifications are required.
- If the find represents a potential Tribal Cultural Resource, LACDPW shall consult on a finding of eligibility and implement appropriate treatment measures. Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determines that the site either: 1) is not eligible for the National Register of Historic Places, California Register of Historic Resources, or local register; or 2) that the site is eligible for the National Register of Historic Places, California Register of Historic Resources, or local register and treatment measures have been completed to their satisfaction.
- If a resource has been determined by LACDPW to be a Tribal Cultural Resource, any and all uncovered Tribal Cultural Resources shall be repatriated to the Tribe for respectful and dignified treatment and shall not be curated.

As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, LACDPW, or its authorized representative, shall immediately notify the Los Angeles County Coroner's office by telephone. All work will stop within a 50-foot radius of the discovery until the coroner determines if the human remains

are those of a Native American. If the remains are determined to be Native American, the procedures described in MM CR-2 will be followed.

MM UTIL-1: LACDPW will encourage the construction contractor to recycle construction materials and divert inert solids (asphalt, brick, concrete, dirt, fines, rock, sand, soil, and stone) from disposal in a landfill, where feasible. Implementing agencies will incentivize construction contractors with waste minimization goals in bid specifications where feasible.

Overview

The County of Los Angeles (County) Department of Public Works (LACDPW), as the lead agency under the California Environmental Quality Act (CEQA), has prepared this Initial Study (IS) and proposed mitigated negative declaration (MND) to evaluate the potential environmental impacts associated with the construction and operation of the Franklin D. Roosevelt Park Regional Stormwater Capture Project (proposed project). As part of the permitting process for LACDPW, the proposed project is required to undergo an environmental review pursuant to CEQA.

Preparation of an Initial Study/Mitigated Negative Declaration

When proposed activities meet the definition of a project under CEQA and are not exempt,¹ the lead agency is required to prepare an environmental impact analysis and disclosure document. The intent of the document is to (1) inform the decision-maker, responsible and trustee agencies, and the general public of the environmental effects of the project and (2) mitigate those effects to the greatest extent feasible.

Unless it is already determined that an environmental impact report (EIR) will be prepared or the proposed project will fall within one of the defined exemption classes,² the lead agency generally starts the documentation process by preparing an IS. Once completed, the IS provides the lead agency with direction on which level of CEQA documentation is appropriate for a given project. For projects where the IS determines that a potentially significant and unavoidable impact would occur, an EIR is appropriate. For projects that would have little to no effect on the environment, either a categorical exemption or negative declaration (ND) is generally appropriate. For projects where mitigation is needed to reduce a potentially significant impact to a less-than-significant level and no significant unavoidable impacts would result, an MND is prepared.

Based on the results of the IS, the County has determined that the proposed project would result in less-than-significant impacts after mitigation is incorporated and no significant unavoidable impacts would occur. Therefore, the appropriate CEQA compliance document is an IS/MND.

Requirements of a Mitigated Negative Declaration

The preparation of an IS/MND is governed by CEQA (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR] Section 15000, et seq.). Specifically, State CEQA Guidelines Section 15063 (“Initial Study”) and Sections 15070–15075

¹ See State CEQA Guidelines Section 15377 (“Private Project”) and Section 15378 (“Project”).

² See State CEQA Guidelines Sections 15250 to 15253 (“Statutory Exemptions”) and Sections 15300 to 15332 (“Categorical Exemptions”).

(“Negative Declaration Process”) guide the process for the preparation of an IS/MND. Where appropriate and supportive to an understanding of the issues, reference is made either to the statute, the State CEQA Guidelines, or appropriate case law.

This IS/MND, as required by State CEQA Guidelines Section 15071, contains (1) a brief description of the project, (2) the project location, (3) a proposed finding that the project will not have a significant effect on the environment, (4) a copy of the IS documenting support for the findings, and (5) all mitigation measures to be implemented.

Environmental Issues Addressed

This IS/MND evaluates the proposed project’s effects on the following resource topics.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Mandatory Findings of Significance

The environmental setting and impact analysis discussion for each of these topics is provided in Chapter 3, *Initial Study Environmental Checklist*.

Document Organization and Content

The content and format of this IS/MND is designed to meet the requirements of CEQA. This report is organized as follows:

- Chapter 1, *Introduction*, identifies the purpose and scope of the IS/MND and the terminology used in the IS/MND.
- Chapter 2, *Project Description*, describes the location, general environmental setting, project background, project components, and the characteristics of the proposed project’s construction and operational phases.
- Chapter 3, *Initial Study Environmental Checklist*, presents the environmental setting and impact analysis for each resource topic. This chapter also includes a discussion of cumulative impacts for each of the environmental resource areas.
- Chapter 4, *References*, identifies all printed references and individuals cited in this IS/MND.
- Chapter 5, *List of Preparers*, identifies the individuals who prepared this report and their areas of technical expertise, as well as the individuals consulted for the preparation of this report.

Project Overview

The Franklin D. Roosevelt Park Regional Stormwater Capture Project (proposed project) is located at the Franklin D. Roosevelt Park (Park) in the unincorporated area of Florence-Firestone in Los Angeles County. The LACDPW proposes several improvements to the Park to increase water conservation, improve water quality, and provide additional recreation, education, and outreach benefits to Park visitors. The Park encompasses approximately 24 acres and lies adjacent to the Glen Avenue Drainage System that discharges into Compton Creek, which is a tributary of the Los Angeles River, both of which are water quality impaired. LACDPW is proposing to divert dry- and wet-weather flows from the Glen Avenue Drainage System and provide pre-treatment of water for infiltration to the groundwater basin. The proposed project would achieve multiple benefits, including water quality improvements, water conservation, Park facility upgrades, and education and outreach signage.

Construction is anticipated to begin in June 2018 and last for approximately 7 months.

Existing Setting

Location and Vicinity

The project site is located within the unincorporated area of Florence-Firestone in Los Angeles County at 7600 Graham Avenue, Los Angeles, California 90001 and is approximately 24 acres. The project site is located near the Cities of Huntington Park, Los Angeles, and South Gate. The nearest major streets to the project site are Nadeau Street directly to the south, Compton Avenue three blocks to the west, Florence Avenue to the north, and Alameda Street six blocks to the east. The project site is directly abutted by Graham Avenue to the west, Nadeau Street to the south, Homes Avenue to the north, and East 76th Place and Whitsett Avenue to the east. **Figure 2-1** shows the regional vicinity and project location map.

Directly abutting the project site to the north and east are residential land uses; west of the project site is Graham Avenue and the Metro train tracks; and south of the project site are commercial and residential land uses across Nadeau Street. The nearest sensitive receptors are single-family residential structures that are directly adjacent to the project site property line to the north and east.

Existing Site Conditions

The Park is one of the oldest parks in Los Angeles County and serves densely populated communities that include residents of the unincorporated areas of Florence-Firestone and Walnut Park and Cities of Huntington Park, Los Angeles, and South Gate. The Park is a heavily used site with a variety of amenities that include basketball courts, tennis courts, a soccer field, baseball fields, children's play areas, fitness zones, a gymnasium, a skate park, picnic areas, and a senior center. The Park offers community programs for youth, adults, and seniors.

The site currently has existing exterior perimeter and recreational activity lighting. Most lighting is located near the playing fields, walkways, gymnasium, senior center, and parking lot. Sports lighting is used on the existing baseball fields.

The site surface generally flows from north-northeast to south-southwest corner of the property with an elevation change of approximately 5-10 feet. Currently, there are ornamental and shade trees located on-site and off-site along the sidewalks associated with Graham Avenue and Nadeau Street.

The Park is located within the Glen Avenue Drainage System that discharges into Compton Creek, which is a tributary of the Los Angeles River. Surface water quality in Los Angeles is largely influenced by the intensive urban land uses of the region. Key sources of surface water contamination include landscape irrigation runoff conveying sediment, nutrients, pesticides, metals, oil and grease, and pathogens to receiving waters. Other dry-weather runoff from industrial activities can add organic compounds and petroleum hydrocarbons. A significant number of waterbodies in Los Angeles County have been identified as impaired for not meeting water quality standards and were listed in Section 303(d) of the Clean Water Act (CWA). A water body is placed on the Section 303d list when the receiving water does not meet applicable water quality standards listed in the Basin Plan and determined not to be supporting the beneficial uses associated with the applicable water quality standard. Once placed on the Section 303d list, the water body or segment is then subject to the development of a total maximum daily load (TMDL). As a result, the Los Angeles Regional Water Quality Control Board (RWQCB) developed TMDLs for a number of pollutants originating from urban and stormwater runoff in the watersheds throughout the County. Among those impaired waterbodies having TMDLs are Compton Creek and Los Angeles River, which would benefit from the proposed project. Compton Creek is listed as impaired by coliform bacteria, copper, lead, trash and pH. Los Angeles River Reach 2 is listed as impaired by ammonia, coliform bacteria, copper, lead, nutrients, trash and oil. Applicable active Los Angeles River TMDLs include those for metals, bacteria, nutrients, toxic pollutants and trash.

Figure 2-2 and **Figure 2-3** show the existing site conditions, including signage, the park, pool facility, and senior center.

Proposed Project

Project Background

LACDPW is covered under a Municipal Separate Storm Sewer System (MS4) Permit for the discharge of urban runoff to waters of the United States, as required by the CWA. The purpose of the MS4 Permit is to achieve and maintain water quality objectives to promote beneficial uses (collectively termed water quality standards) of the receiving waters in the Los Angeles Region.

The 2012 MS4 Permit for Los Angeles County gave permittees the option of implementing an innovative approach to permit compliance through development of an enhanced watershed management program (EWMP), which identifies potential and priority structural and non-structural best management practices (BMPs) within the region's stormwater collection system to improve runoff water quality. The overarching goal of BMPs in the EWMP is to reduce the impact of stormwater and non-stormwater on receiving water quality and address the water quality priorities as defined by the MS4 Permit, which includes TMDLs.

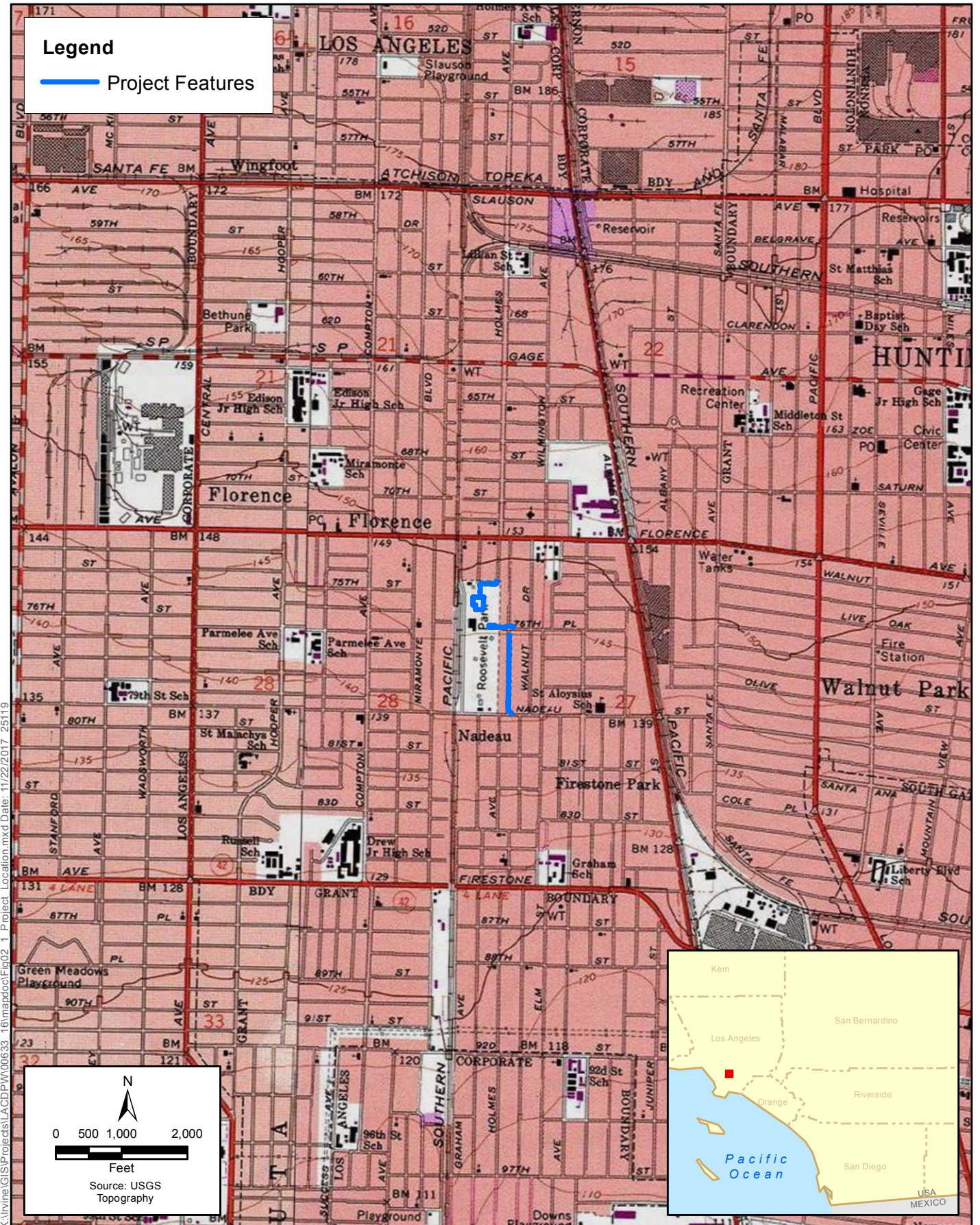


Figure 2-1
Regional Vicinity and Project Location
Roosevelt Park Stormwater Capture Project



Source: ICF.

Figure 2-2
Existing Setting #1
Roosevelt Park Stormwater Capture Project



Source: ICF.

Figure 2-3
Existing Setting #2
Roosevelt Park Stormwater Capture Project

LACDPW, along with participating permittees, opted to exercise this option and prepared 12 separate EWMPs within 12 distinct watershed groups. LACDPW adopted a program EIR (PEIR) that evaluated the implementation of the 12 EWMPs covering the Los Angeles Region in April 2015. The PEIR identified Franklin D. Roosevelt Park as a potential location for a priority project in the Upper Los Angeles River Watershed EWMP. Priority projects were defined as projects targeted for implementation within the first years following the EWMPs approval by the Los Angeles RWQCB. The Upper Los Angeles River Watershed EWMP was submitted to the Los Angeles RWQCB in June 2015 and approved by the Los Angeles RWQCB on April 20, 2016. The Upper Los Angeles River Watershed EWMP identified a suite of institutional and structural control measures, including the proposed project, to address compliance towards TMDLs.

Project Description

LACDPW is proposing several improvements to Franklin D. Roosevelt Park to improve water quality, increase water conservation, and provide additional recreation, education, and outreach benefits to Park visitors. The proposed project would improve water quality in the Upper Los Angeles River Watershed by diverting untreated stormwater from the storm drains on East 71st Street, East 76th Place, and Nadeau Street that currently discharge to Compton Creek and Los Angeles River. The proposed project would reduce the amount of metals, bacteria, nutrients, and trash being discharged into Compton Creek and Los Angeles River. Improving the water quality in Compton Creek and the Los Angeles River would help to address the Los Angeles River and tributaries metals TMDL, Los Angeles River Watershed bacteria TMDL, Los Angeles River nutrients TMDL, Los Angeles River trash TMDL, and Dominguez Channel, Greater Los Angeles, and Long Beach Harbor Waters toxic pollutants TMDL. Of the pollutants being diverted, zinc was identified as a limiting pollutant for the Los Angeles River Watershed, meaning that the structural control measures designed to address zinc will also address other pollutants such as copper, lead, and nutrients. The project site tributary area is estimated to generate a zinc concentration of 706 micrograms per liter ($\mu\text{g/L}$). By capturing the 85th percentile, 24-hour storm event, the proposed project is expected to reduce the zinc concentration from the tributary area and meet the water quality objective for zinc, which is 159 $\mu\text{g/L}$. The proposed project is estimated to reduce the annual zinc load by approximately 71 kilograms and is anticipated to also meet the water quality objectives for copper, lead, and nutrients (Los Angeles County Flood Control District 2013).

Water Quality Improvements

The proposed project would improve water quality and increase water conservation by constructing three diversion structures and pipelines to divert dry weather flows and stormwater into three underground infiltration systems with pre-treatment devices in order to provide groundwater recharge to the Central Basin, as shown on **Figure 2-4**. Two underground infiltration systems would be located within the Park and seven drywells would be located within Whitsett Avenue, collectively termed infiltration systems. Pretreatment devices offer removal of bulk pollutants and reduce the pollutant load from runoff before flows are discharged to the infiltration systems. Infiltration systems further use the natural filtering ability of the soil to remove remaining pollutants in stormwater runoff. Infiltration systems store runoff until it gradually filters through the soil and eventually into the water table. As water migrates through porous soil and rock, pollutant attenuation mechanisms include precipitation, sorption, physical filtration, and bacterial degradation. The proposed project is intended to capture the 85th percentile storm event from a 195-acre drainage area and provide infiltration capacity through two underground infiltration

systems below Park open space and seven underground drywells below the residential street of Whitsett Avenue. Generally, the 85th percentile storm is approximately 0.75 inches over 24 hours. The proposed project would provide approximately 105 acre-feet of stormwater per year (equivalent to 210 households) based on the average annual rainfall from the nearest rain gauge. Upon completion of the construction, the amount of flow diverted to the underground infiltration systems would be measured with flow meters to determine the potential groundwater recharge rate, which is consistent with Los Angeles County Flood Control District's reservoir operations.

The three diversion structures and pipelines would divert flow from existing storm drains on East 71st Street, East 76th Place, and Nadeau Street. The proposed project would also include the construction of two grate inlets adjacent to the existing Park gymnasium in order to address existing ponding/flooding in the area during storm events. The combined design capacity of the underground infiltration systems would be 8.47 acre-feet. Table 2-1 identifies the proposed underground infiltration systems and pipeline design parameters. The proposed infiltration systems within the Park would be approximately 7 feet deep with approximately 6 feet of cover soil on top and 2 feet of gravel below. The depth of each of the underground infiltration systems within the Park is restricted to a maximum of 15 feet with a footprint of no more than 0.6 acres to ensure the performance of the infiltration systems and minimize lateral migration. The drywells would consist of 60 inch diameter reinforced concrete pipe (RCP) and would be approximately 76 feet long/deep. The bottom 25 feet of the drywell sides would have perforations so that water can flow through the sides of the drywell and infiltrate into the surrounding soil. The drywells would be connected via a 45' long, 18" wide RCP.

Table 2-1. Proposed Infiltration Systems Design Parameters

Location	Tributary Area (acres)	Size (square feet)	85 th Percentile Runoff Volume (acre-feet)	85 th Percentile Peak Flow Rate (cfs)	24-inch Diversion Pipe (feet)	24-inch Diversion Pipe (location)
Soccer Field	118	22,000	5.651	12.92	1,442	Holmes Avenue
Adjacent Skate Park	23.6	2,250	0.914	2.86	259	76 th Place
Whitsett Avenue	53.7	170	1.179	3.39	116	Whitsett Avenue
Total	195.3	24,420	7.744		1,817	

Because the proposed project would divert pollutants from entering the Los Angeles River and Compton Creek, pre-treatment of the stormwater flows would be required prior to infiltration. Each infiltration system would include a baffle filtration unit to pretreat the dry weather flows and stormwater flows prior to entering the infiltration systems. The baffle filtration unit is a multi-stage, self-contained treatment train composed of multiple sediment removal chambers, a screening system designed to capture and store solid debris such as foliage and litter in a dry state, and a skimmer system to remove hydrocarbons, as shown in **Figure 2-5**. Each stage protects subsequent stages from clogging and includes: screening, separation, and absorption. Screening is provided by a rectangular basket that is suspended above the standing water level of the sedimentation chambers and captures gross solids including litter and sediments. Separation is provided by three settling chambers that target smaller sediments, larger total settable solids, particulate metals, and

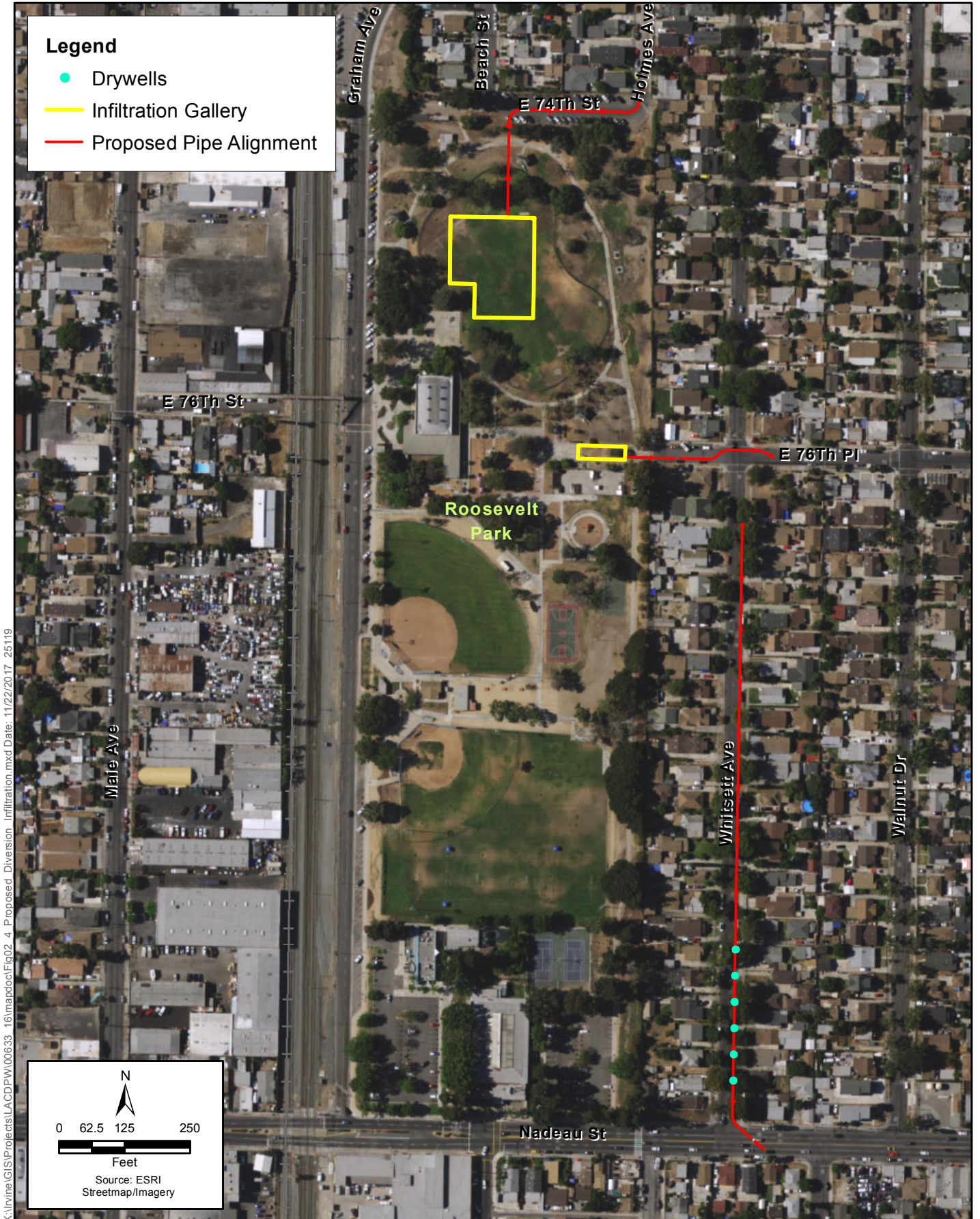
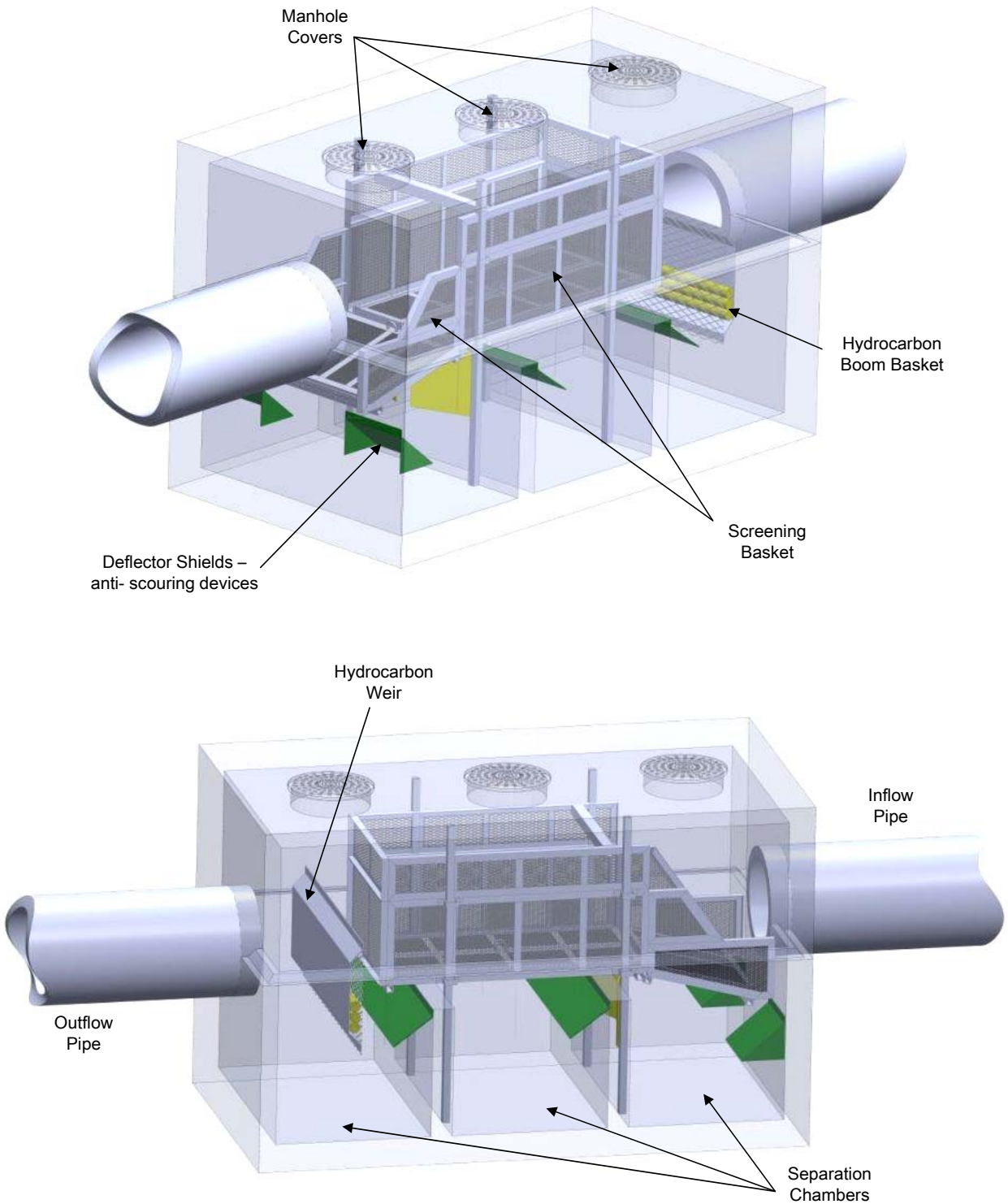


Figure 2-4
Proposed Diversion/Infiltration Layout
Roosevelt Park Stormwater Capture Project



Source: Bio Clean Environmental Services, Inc.

Figure 2-5
Proposed Pre-Treatment Device
Roosevelt Park Stormwater Project

nutrients. Primary absorption is provided by hydrocarbon booms, which removes free-floating and emulsified hydrocarbons from water. An influent and effluent manhole would be equipped with automatic samplers for in-flow and out-flow and upon operation will monitor the pretreatment efficiency.

Recreation, Conservation and Education Features

A number of aboveground improvements to the Park are proposed to provide additional water conservation, recreation, education, and outreach benefits to park users, as shown on **Figure 2-6**. The proposed project would include a redesigned soccer field, skate park, a new and ADA-accessible healthy court and an educational garden as shown in **Figure 2-7**.

The existing soccer field located towards the center of the proposed project site would be redesigned to increase playing capacity and provide new lighting. The redesigned soccer field would replace the natural grass with artificial turf, thereby reducing landscape potable water needs of the Park. The proposed project would include implementation of Astro Play DT which does not use rubber and uses ZeoFill and silica sand for lower field temperatures. The molecular shape allows the ZeoFill to absorb and slowly release water for cooler field temperatures. **Figure 2-8** shows the plan for the redesigned soccer field for the proposed project.

The proposed project would reconstruct the existing metal and concrete pad skate park and ADA accessible ramps which would be located along the southern edge of the proposed project site. The reconstructed concrete ramps would include a refurbished gate for ADA compliance. **Figure 2-9** shows the skate park plan for the proposed project.

The proposed healthy court would be located along the eastern edge of the proposed project site and would include the construction of ADA-accessible exercise equipment, kids' play mounds, picnic areas, and decomposed granite walking path. The healthy court would also feature exercise stations as well as a jogging and walking loop that would extend around the redesigned soccer field and the educational garden. **Figure 2-10** shows the plan for the healthy court for the proposed project.

Furthermore, the proposed project would include the construction of an educational garden featuring low-impact development (LID) elements, such as bioswales or planters, drought-tolerant plants with identification tags, and interpretive signs to educate park users about the sustainable infrastructure. The educational garden would be located at the southeastern corner of the proposed project site. **Figure 2-11** shows the educational garden plan for the proposed project.

Landscaping

In addition to the educational garden, the proposed project would reduce a portion of high water demand turf area and would replace it with a drought-tolerant plant and ornamental grass throughout the proposed project site. The proposed project would remove six ornamental landscape trees (American Sweet Gum, Gold Medallion, and Jacaranda trees) and plant 27 new trees including Gold Medallion, Chitalpa, Brisbane Box, and California Sycamore trees. **Figure 2-6** shows the conceptual landscape plan for the proposed project.

Community Outreach

A community meeting was held on November 16, 2017 at Roosevelt Park to discuss the proposed project with the local community. The meeting was attended by Los Angeles County Department of

Public Works staff and Department of Parks and Recreation staff. In addition, approximately 60 community members were present at the meeting. The attendees' most notable concerns were requests to add lights around the soccer fields and to incorporate a local job training program into the requirements for the construction contractor. Lighting is addressed in Section I, Aesthetics. Local job training is not an environmental concern required to be addressed in this CEQA document. In addition, there were concerns regarding park access during construction, construction on Whitsett Avenue and large equipment conflicts, type of skate park materials being used, construction on Holmes Avenue, local construction jobs, and parking during construction. Construction activities are addressed in Section XVI, Transportation and Traffic. The community was encouraged to visit the project's website, <http://dpw.lacounty.gov/wmd/stwq/Roosevelt.aspx>, and subscribe to the project's email blast to obtain the latest status.

A second community meeting is planned for January 2017 to provide an update of the project, discuss construction impacts, and address previous items discussed.

Project Objectives

The proposed project is intended to meet the following project objectives:

- To reduce the impact of stormwater and non-stormwater on receiving water quality.
- To utilize a multi-pollutant approach that maximizes the retention and use of urban runoff as a resource for groundwater recharge, while also creating additional benefits for the communities in the watershed.
- To implement a signature regional project as identified in the Upper Los Angeles River Watershed EWMP.

Project Construction

All proposed construction of new diversion pipes and underground infiltration systems would occur within or adjacent to the following roadways: 71st Street, Holmes Avenue, Florence Avenue, E 76th Place, Whitsett Avenue, and Nadeau Street. The soccer field and skate park would be temporarily closed for construction activities. Staging of equipment and material laydown would occur on site. The main staging area would occur either within the existing parking lot just north of the soccer field or within the park just south of the parking lot (adjacent to the soccer field).

Construction would disturb over one acre of land and approximately 38,200 cubic yards of soil would be exported off site for reuse or disposal at a local landfill. The material is not anticipated to be reused onsite. No soil would be imported. Excavation and fill work would be performed in the area under the footprint of the proposed infiltration systems and associated piping; this work would vary from 3 feet deep at the footprint of the proposed pipelines to 15 feet deep at the footprint of the proposed infiltration systems within the Park and 76 feet within Whitsett Avenue. The proposed project would result in the removal of six ornamental landscape trees.

Construction would consist of the following phases.

- Staging and mobilization
- Excavation/tree removal (six ornamental landscape trees removed - American Sweet Gum Tree, Gold Medallion Tree, and Jacaranda Tree)

FRANKLIN D. ROOSEVELT PARK REGIONAL STORMWATER CAPTURE PROJECT
PARK CONCEPTUAL LANDSCAPE PLAN

- PICNIC AREA**
- DECOMPOSED GRANITE PAVING
 - PICNIC TABLES

EXISTING SITE CONDITION

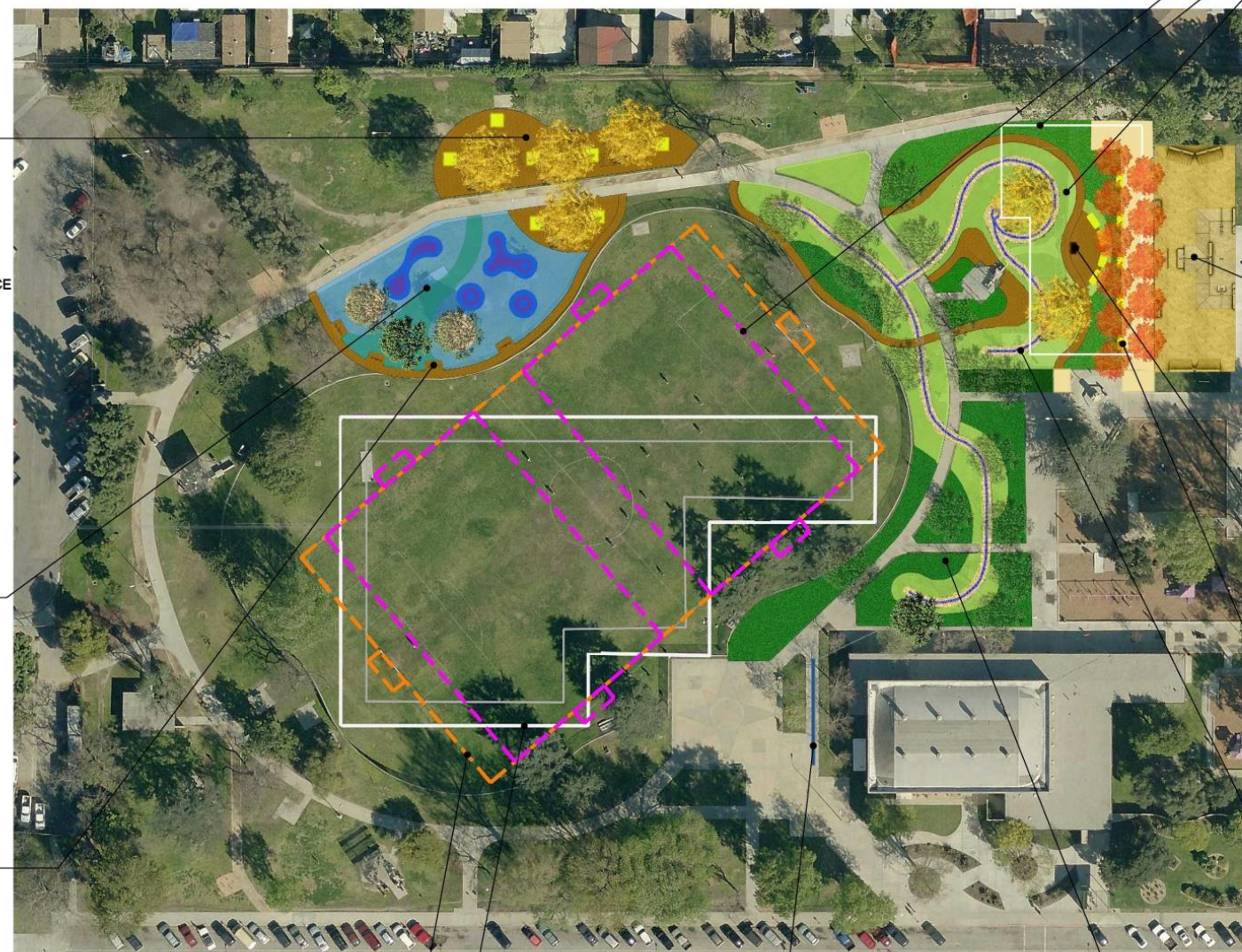


- HEALTHY COURT**
- DECOMPOSED GRANITE
 - JOGGING/WALKING LOOP
 - ADVENTURE KIDS PLAY MOUNDS
 - RESILIENT PAVING SURFACE
 - EXERCISE STATIONS

EXISTING SITE CONDITION



ADA ACCESSIBLE EXERCISE EQUIPMENT



320' X 180' SOCCER FIELD

STORM WATER STORAGE AREA

OVERFLOW TRENCH DRAIN

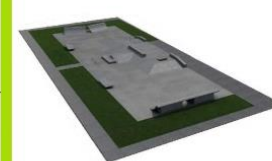
STORM WATER STORAGE SYSTEM

AYSO FIELD OVERLAY (180' X 120')

STORM WATER STORAGE AREA

- EDUCATION GARDEN**
- DROUGHT TOLERANT PLANTS
 - LID FEATURES
 - PLANT IDENTIFICATION
 - INTERPRETIVE SIGNAGE
 - DECOMPOSED GRANITE PATH
 - SEATING
 - STORM WATER STORAGE/RECHARGE SYSTEM

SKATE PARK



EXISTING SKATE PARK CONDITION



INTERPRETIVE SIGNAGE



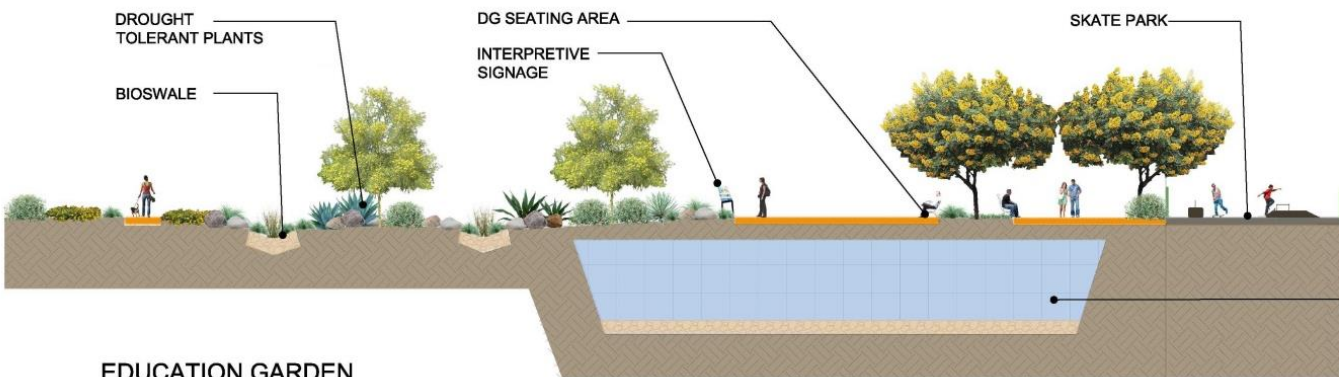
EXISTING SITE CONDITION



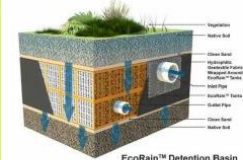
PARK BENCH



LOW IMPACT DEVELOPMENT (LID)



EDUCATION GARDEN



ORNAMENTAL GRASS OR MEADOW SEDGE



NORTH
 NTS
 DATE: 10-01-15

Figure 2-6
Conceptual Landscape Plan
 Roosevelt Park Stormwater Project



ICF Graphics ... 00633316 (6-21-2017)

Source: Los Angeles County Department of Public Works.

Figure 2-7
Proposed Park Redesign
Roosevelt Park Stormwater Capture Project

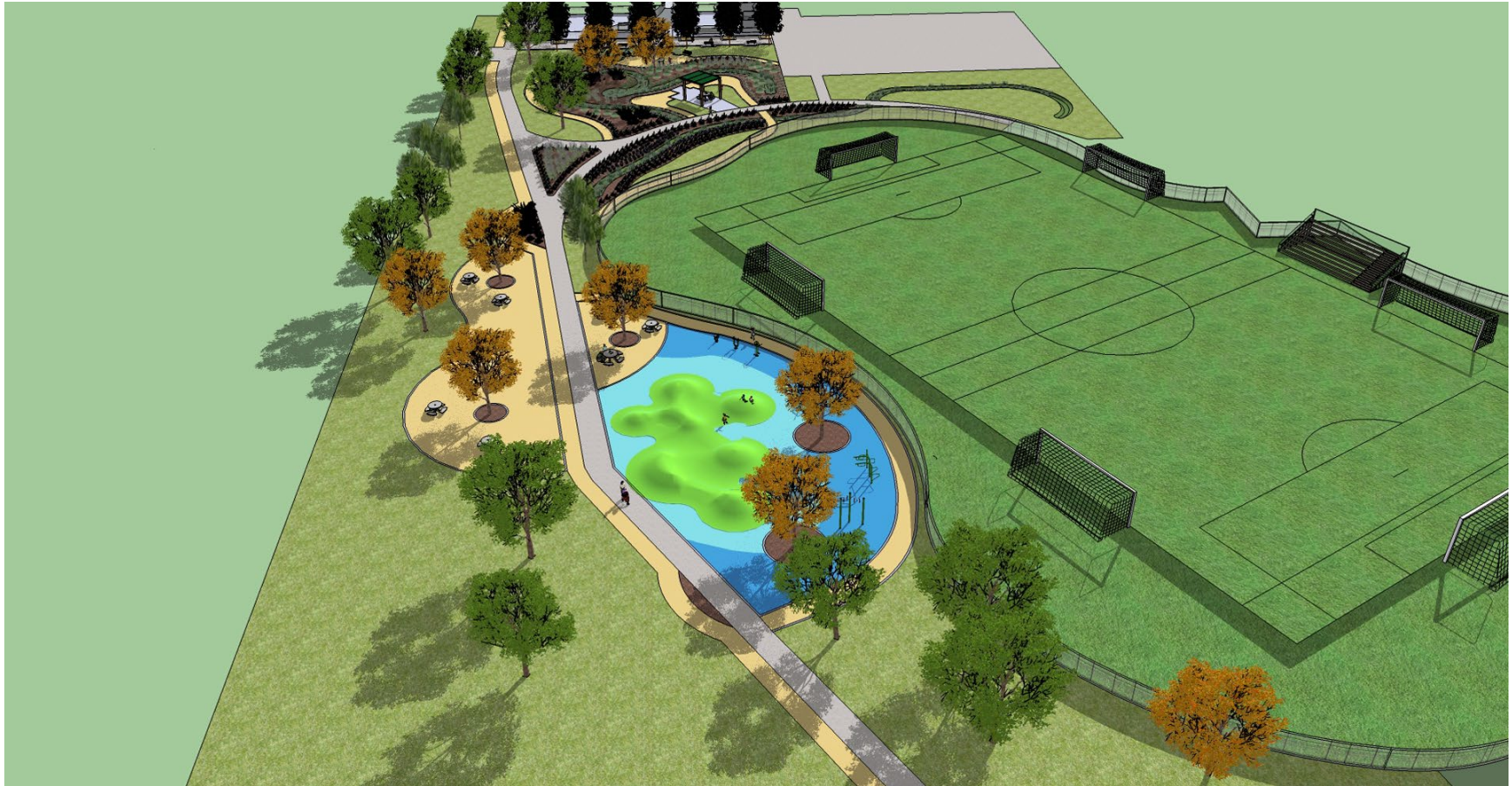
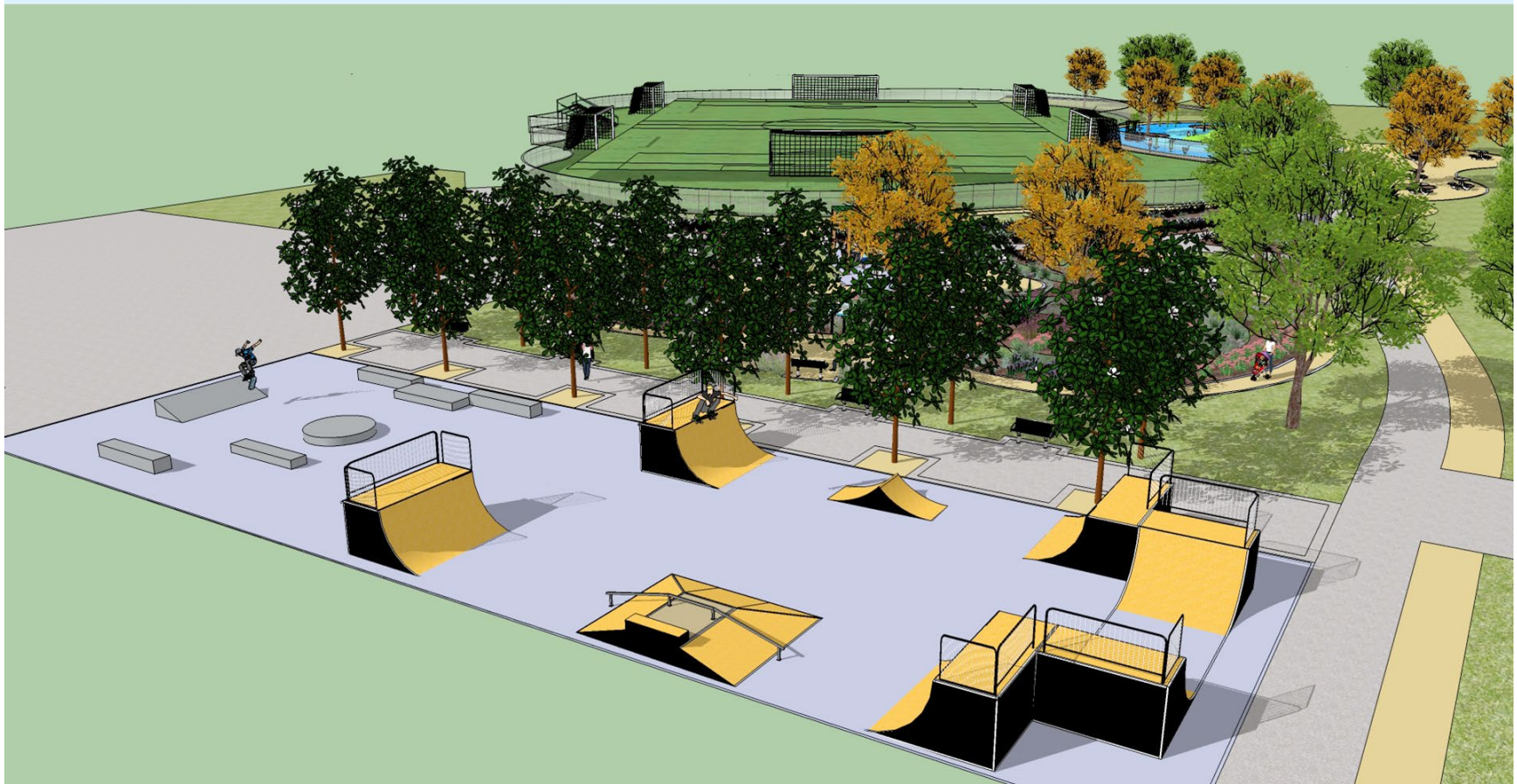


Figure 2-8
Soccer Field
Roosevelt Park Stormwater Capture Project



ICF Graphics ... 00633:16 (6-21-2017)

Source: Los Angeles County Department of Public Works.

Figure 2-9
Skate Park #1
Roosevelt Park Stormwater Capture Project



ICF Graphics ... 00633316 (6-28-2017)

Source: Los Angeles County Department of Public Works.

Figure 2-10
Healthy Court
Roosevelt Park Stormwater Capture Project



ICF Graphics... 00633.16 (5-26-2017)

Source: Los Angeles County Department of Public Works.

Figure 2-11
Educational Garden
Roosevelt Park Stormwater Capture Project

- Installation of infiltration systems and appurtenances in the Park
- Installation of lights for soccer field, recreational improvements, and landscape improvements, including planting 27 new trees (Gold Medallion Tree, Chitalpa, Brisbane Box, and California Sycamore)
- Installation of seven drywells and appurtenances in Whitsett Avenue
- Installation of diversion pipelines

Construction would be carried out using equipment and tools typical of infiltration projects, including the backhoe, excavator, loader, dozer, haul trucks, air compressors, crane, roller, forklift, and generator. Construction vehicles would include workers' commute vehicles, mainly passenger automobiles and/or light trucks, and haul trucks.

Construction would take place between the hours of 7 a.m. and 6 p.m. Monday through Friday and is anticipated to commence in June 2018 and last for approximately 7 months. Any additional work periods would be restricted to emergencies only. During construction of the diversion pipelines and the seven drywells under Whitsett Avenue temporary lane closures would be necessary.

Project Operation

Once constructed, structural BMPs will require periodic maintenance by LACDPW. BMPs would be maintained and operated to meet design performance standards and the efficiencies needed to meet the waste load reductions in accordance with the Upper Los Angeles River EWMP. The proposed underground infiltration systems would not require routine maintenance. However, the pretreatment baffle filtration units would require cleanouts in compliance with the Operations and Maintenance Manual prepared for the proposed project's infiltration systems.

The aboveground park improvements would be maintained by Los Angeles County Department of Parks and Recreation, including the artificial turf, skate park, bioswales, education garden, healthy court, and additional exercise equipment. Upon completion of the construction, infiltration quantities as well as influent/effluent water quality would be monitored.

Related Projects

Cumulative impacts are the project's impacts combined with the impacts of other related past, present, and reasonably foreseeable future projects. As stated in CEQA, Title 14, Section 21083(b), "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable." In addition, as stated in the State CEQA Guidelines, it should be noted that "the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the project's incremental effects are cumulatively considerable" (CCR, Title 14, Division 6, Chapter 3, Section 15064(I)(5)).

According to the State CEQA Guidelines:

Cumulative impacts refer to two or more individual effects that, when considered together, are considerable and compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CCR, Title 14, Division 6, Chapter 3, Section 15355).

As set forth in the State CEQA Guidelines, related projects consist of “closely related past, present, and reasonably foreseeable probable future projects that would be likely to result in similar impacts and be located in the same geographic area” (CCR, Title 14, Division 6, Chapter 3, Section 15355). The cumulative analysis in this initial study/mitigated negative declaration (IS/MND) includes all projects within a 0.5-mile radius of the proposed project. Because the proposed project would not increase the development intensity at the site and most of the effects would be site specific, the 0.5-mile radius was determined to be an adequate distance for encompassing related projects. No other active County projects were identified within a 0.5-mile radius of the proposed project.

For some resource areas, the cumulative discussion does not rely on the related projects but instead uses the plan approach to cumulative impact analysis allowed for in Section 15130 (b)(1)(B) of the CEQA Guidelines, whereby “a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect” is relied upon. For each resource area, the cumulative discussion identifies whether the related projects list or plan approach is followed.

CEQA Finding

Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid project-related significant effects on the environment. Chapter 3, *Initial Study Environmental Checklist*, contains the complete environmental analysis. Proposed mitigation measures are also contained in Chapter 3 and would be provided in a separate Mitigation Monitoring and Reporting Program (MMRP). These mitigation measures were previously summarized in the Draft Mitigated Negative Declaration Summary at the beginning of this document.

Project Review and Approvals

The County is the lead agency under CEQA and responsible for approving and carrying out the project. The following permits and approvals would be required to construct the proposed project:

- County of Los Angeles (lead agency)
 - Approval of the project
 - Adoption of the MND
 - Adoption of the MMRP
 - Implementation and oversight of the MMRP
- Los Angeles County Department of Regional Planning
 - Site Plan Review
 - Issuance of demolition, grading, foundation, and building permits
- Los Angeles RWQCB
 - MS4 Permit and Construction General Permit Compliance

Additional actions as determined to be necessary

Chapter 3

Environmental Analysis

1. **Project Title:** Roosevelt Park Stormwater Capture Project
2. **Lead Agency Name and Address:** County of Los Angeles Department of Public Works
P.O. Box 1460, Alhambra, CA 91802-1460
3. **Contact Person and Phone Number:** Louis Romero, Project Manager
900 South Fremont Avenue 5th Floor
Alhambra, CA 91803
(626) 300-3221
4. **Project Location:** Franklin D. Roosevelt Park
7600 Graham Avenue, Los Angeles, CA 90001
5. **Project Sponsor's Name and Address:** County of Los Angeles Department of Public Works
P.O. Box 1460, Alhambra, CA 91802-1460
6. **General Plan Designation:** OS-PR - Parks and Recreation
7. **Zoning:** O-S - Open space
8. **Description of Project:** Refer to Chapter 2, *Project Description*
9. **Surrounding Land Uses and Setting:** The Metro Blue Line (Public) and Florence Station (Light Industrial) are located to the west of the park across Graham Avenue (Public). Directly abutting the north and east sides of the park are single-family residences (Residential 18). South of the park is Nadau Street (Public) across from which are single-family residences and commercial land uses (both general commercial).
10. **Other Public Agencies Whose Approval is Required:** None Identified
11. **Have California Native American tribes that are traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?** One tribe has formally requested tribal consultation with the Los Angeles County Department of Public Works regarding the first phase of planning under the California Environmental Quality Act (Public Resources Code Section 21080.3.1, subdivisions (b) and (d), and mitigation of potential impacts on tribal, cultural, and environmental resources.

Letters, serving as formal notice of this project, were sent in March and May 2017 to (Appendix D):
 1. Fernandeño Tataviam Band of Mission Indians
 2. Gabrieleno Band of Mission Indians – Kizh Nation
 3. San Gabriel Band of Mission Indians
 4. San Manuel Band of Mission Indians
 5. Tejon Indian Tribe

Environmental Factors Potentially Affected

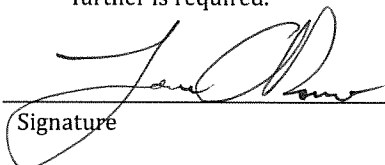
The environmental factors checked below potentially would be affected by the Franklin D. Roosevelt Park Regional Stormwater Capture Project (proposed project) (i.e., the proposed project would involve at least one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology/Water Quality |
| <input checked="" type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input checked="" type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input checked="" type="checkbox"/> Tribal Cultural Resources | <input checked="" type="checkbox"/> Utilities/Service Systems |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | |

Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.



 Signature

12/19/17

 Date

Louis A. Romero

 Printed Name

LA-DPW

 For

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained if it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off site as well as on site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less than Significant with Mitigation Incorporated” applies when the incorporation of mitigation measures has reduced an effect from a “Potentially Significant Impact” to a “Less-than-Significant Impact.” The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level. (Mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced.)
5. Earlier analyses may be used if, pursuant to tiering, PEIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (§ 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where earlier analyses are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Incorporated,” describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, when appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested format, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to a less-than-significant level.

I. Aesthetics	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The existing visual setting at the project site includes the Park, which is mostly surrounded by one to two-story story developments within the proposed project area. The project site is located within a highly urbanized area. Existing development includes tennis courts, baseball fields, basketball courts, soccer field, Skate Park, parking lots, several small recreational use buildings, open space and other manmade features typical of park development. Nadeau Street and Graham Avenue are lightly vegetated and lined with a variety of street trees, providing moderate coverage, as well as some limited scenic relief and visual interest. Parking lot areas within the existing site are also lightly vegetated and contain several street trees. Specifically, vegetation at the site consists of grasses, bushes, and trees, and barren soil areas. Overall, there are no aesthetically significant structures or features on the project area. No special-status species are found to occur on the project site.

The visual character of the immediate vicinity is fairly common to developed urban and suburban areas throughout Los Angeles. The surrounding area is developed with a variety of land uses, including light industrial, general commercial, public and residential. The Metro Blue Line and Florence Station are located to the west of the park across Graham Avenue. Directly abutting the north and east sides of the park are single-family residences and south of the park is Nadau Street across from which are single-family residences and commercial land uses. The site and adjacent properties are relatively flat and contain no significant slopes.

Figures 2-2 and 2-3 depict the visual character of the site and surrounding area. As shown in these figures, the existing site, overall, has no aesthetically significant structures or features on the project area and has fairly common park features. At present, these views are mostly obstructed. No significant visual resources have been identified throughout the project area.

Impact Analysis

Would the project:

a. Have a substantial adverse effect on a scenic vista?

Construction and Operation

Less-than-Significant with Mitigation Incorporated. The term “scenic vista” typically refers to views of an area that are visually or aesthetically pleasing, including, but not limited to, natural lands or developed and undeveloped natural areas. For the purposes of determining significance under CEQA, a scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Scenic vistas typically include undeveloped hillsides, ridgelines, and open space areas that provide a unifying visual backdrop to the urban environment of the Los Angeles Basin. Impacts to scenic vistas can occur when the visible scenic landscape itself is altered or when a new contrasting object is introduced that blocks or obstructs a scenic vista from a particular public vantage point.

The proposed project would be located within an area designated and zoned for parks, recreation, and open space. However, the Park and nearby areas are not designated as a scenic vista; nor is the park considered to be a scenic viewshed since it does not include views of ridgelines, unique rock outcroppings, waterfalls, ocean views or various other unusual or scenic landforms. Construction of the proposed project would include underground and aboveground improvements. Since the proposed aboveground improvements are compatible with the existing park uses, the aboveground structures are anticipated to have a positive aesthetic impact on the Park. For example, the reconstruction of the skate park would result in a similar yet newer and safer facility. In addition, the reconstruction of the soccer field with artificial turf grass would also result in a positive appearance of the field since artificial turf grass would have a vibrant color influence on the landscape. Furthermore, the addition of an educational garden featuring LID elements would result in positive impact on the scenic resources within the Park with the addition of native drought tolerant landscaping. As a result of the implementation of the proposed project, six ornamental trees are proposed to be removed which include American Sweet Gum, Gold Medallion, and Jacaranda trees. However, the trees would be replaced with 27 new trees including Gold Medallion, Chitalpa, Brisbane Box, and California Sycamore trees (refer to Section IV., a-c, Biological Resources, for additional discussion of trees). As a result, the proposed improvements would result in additional trees compared to the existing condition.

To limit the potential for the aboveground improvements to introduce contrasting elements into the Park resulting in potentially significant impacts during construction and operation, implementation of PEIR Mitigation Measure (MM) AES-1 and MM AES-2 as listed below is expected to ensure that impacts would remain at a less-than-significant level.

Mitigation Measures

MM AES-1: Aboveground structures shall be designed to be consistent with local zoning codes and applicable design guidelines and to minimize features that contrast with neighboring development.

MM AES-2: The construction contractor shall use appropriate screening (i.e., barricades and/or temporary fencing with opaque materials) to buffer views of construction equipment as well as

materials and soil in construction staging areas. The visual barrier may be chain link fencing with privacy slats, fencing with windscreen material, a wooden or concrete barrier/soundwall, or other similar barrier. The visual barrier shall be a minimum of 6 feet high to help maintain the privacy of sensitive visual receptors and block long-term ground-level views toward construction activities. Although this visual barrier would introduce a visual intrusion, it would greatly reduce visual effects associated with visible construction activities.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?

Construction and Operation

No Impact. There are no scenic highways in the vicinity of the proposed project nor is the project site visible from a scenic highway. Officially Designated State Scenic Highways within the City and County of Los Angeles include portions of State Route (SR)-1, SR-2, SR-23, SR-27, SR-39, SR-57, SR-118, and SR-126 as well as Interstate (I)-210 and I-110, none of which are in the vicinity of the project site (California Department of Transportation 2015). The closest freeway is I-110, more than 2 miles to the west. Furthermore, the project site is relatively flat and surrounded by an urban environment. As such, no construction- or operation-related impacts on scenic resources, including trees, rock outcroppings, historic buildings, or any other scenic resources along a scenic highway, would occur as a result of the proposed project. Therefore, no impacts would occur.

Mitigation Measures

No potentially significant impacts related to scenic resources would occur as a result of the proposed project. Therefore, no mitigation measures are required.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

Construction

Less-than-Significant Impact. Construction activities associated with the proposed project would require the use of construction equipment and storage of materials on site, thus introducing contrasting features into the visual landscape that would affect the visual quality of the project site and/or its surroundings. Contrasting features would include demolition materials, excavated areas, stockpiled soils, and other materials generated and stored on site during construction. However, adverse effects to the visual character associated with project construction would be temporary and are considered less-than-significant.

Operation

Less-than-Significant with Mitigation Incorporated. Once constructed, the underground features of the proposed project are not expected to have a permanent effect on the visual character at the project site or in the surrounding area. In addition, the overall aesthetic impact for the aboveground features is expected to be positive with development of new and upgraded Park facilities. Development would slightly alter the visual character of the project area, but its development would be consistent with the surrounding park area and features. Aboveground features include a redesigned picnic area, soccer field, skate park, a new and ADA-accessible healthy court, and an educational garden. As shown in **Figure 2-7**, the proposed project would transform the existing park site into an educational, vegetated, and ADA-accessible park with a variety of recreation and

conservation features. The proposed project would remove six ornamental landscape trees (American Sweet Gum, Gold Medallion, and Jacaranda trees) and plant 27 new trees (including Gold Medallion, Chitalpa, Brisbane Box, and California Sycamore trees) which would provide additional shade and vegetation to the existing park site. Because the proposed project is consistent with the existing uses in the area and would not substantially alter the character of the site, impacts would be less than significant.

BMPs would be properly maintained to minimize long-term impacts on aesthetics. Poorly maintained BMPs can potentially result in significant aesthetics impacts including collecting trash and debris, which can result in degradation of the visual character and quality of the project site and its surroundings. With implementation of PEIR MM AES-3 listed below, it is expected that potentially significant impacts would be reduced to a less-than-significant level.

Mitigation Measures

MM AES-3: LACDPW Design Division shall develop a BMP maintenance plan that shall be approved prior to implementation of the structural BMPs in the Park. The maintenance plan must include measures to ensure functionality of the structural BMPs for the life of the BMP. The maintenance plan may include general maintenance guidelines that apply to a number of smaller distributed BMPs.

d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Construction

Less-than-Significant Impact. Construction activities would not occur during nighttime hours. However, temporary security lighting could be installed at the project site during the construction period. Any temporary security lighting, which typically operates 24 hours a day, would be directed downward and toward the site. It would be removed upon completion of construction. Thus, project construction would not adversely affect daytime or nighttime views in the area by introducing a substantial light source that would spill over onto sensitive receptors, nor would the temporary presence of low-level security lighting contribute to a significant increase in illumination levels compared to existing conditions. No source of glare would be introduced as a result of construction of the proposed project. As such, construction impacts related to light and glare would be less than significant.

Operation

Less-than-Significant with Mitigation Incorporated. The proposed project includes the installation of additional permanent outdoor lighting for the expanded soccer field. The proposed lighting would include the construction of six poles approximately 70 feet in height; three poles each on the east and west sides of the soccer field (Musco Lighting 2016). The southern portion of the Park includes the existing baseball fields which have existing sports lighting that would be similar to the proposed lighting for the soccer field. The baseball fields lighting is located approximately 60 feet west of the nearest resident. The existing lighting for the baseball fields was designed to minimize spill over onto adjacent residential properties. As a result, the existing lighting for the baseball fields does not result in significant impacts related to light and glare to adjacent residents. Similarly, the proposed sports lighting as part of the Park soccer field improvements, would be installed approximately 85 feet west of the existing adjacent residences. Although the addition of the

proposed lighting would serve as an extension of use for the outdoor lighting for the Park, the proposed lighting would not result in any overlap of the existing lighting for the baseball field due to distance between the fields and park facilities located between the fields. Furthermore, a preliminary light and glare analyses was conducted to determine the light and glare impacts to adjacent residences and local areas (Musco Lighting 2016). As shown in **Figures 3-1** through **3-3**, the proposed installation of permanent outdoor lighting for the expanded soccer field would not result in significant impacts related to light and glare, as described in more detail below.

Light

The spill of light beyond a property line is referred to as *light trespass*. Light trespass can be measured on the vertical plane (e.g., light shining through a window) and a horizontal plane (e.g., light falling on a bed). The proposed lighting system would be designed to control light to provide maximum useful on-field illumination with minimal destructive off-site glare (Musco Lighting 2016). To estimate the likely spill effects of the athletic field lighting standards, Musco Lighting, Inc., ran a series of models consistent with industry standards to estimate the vertical and horizontal light spill beyond the park property from the proposed lighting standards as shown in **Figure 3-1** and **Figure 3-2**. The soccer field outdoor lighting would be consistent with the existing equipment and would not result in additional light trespass. Additionally, each of the poles would be facing the soccer field and away from the adjacent structures. Additionally, because the proposed soccer field lighting elements would be extinguished by 11:00 p.m. on Monday through Saturday nights and no later than 10:30 p.m. on Sunday nights, there would be no potential for the proposed project to result in adverse effects associated with light trespass. To limit the potential for the proposed lighting to create a new source of substantial light that would adversely affect daytime or nighttime views in the area, resulting in potentially significant impacts during operation, implementation of MM AES-4 as listed below is expected to ensure that impacts would remain at a less-than-significant level.

Glare

The proposed project would introduce new sources of outdoor artificial lighting. The proposed new field lighting would have the potential to result in glare if the main beams of the lighting standards are visible from offsite locations, resulting in excessive brightness. However, the design features of the light fixtures would also minimize glare impacts. The high mounting heights of the light fixtures would allow the light fixtures to be focused downward onto the field. Additionally, each light fixture would be fitted with a highly efficient reflector to focus light toward the field and a visor that would minimize and/or block a direct line of sight to the main beam of the lamp from many offsite locations. As such, the design of the proposed lighting system would ensure that offsite residences and motorists would not be exposed to excessive brightness and glare. Furthermore, the glare analyses identified the proposed lighting would be confined to the soccer field and would not spill onto the adjacent residential structures (Musco Lighting 2016). **Figure 3-3** shows the proposed installation of permanent outdoor lighting for the expanded soccer field would not result in significant impacts related to glare. To limit the potential for the proposed lighting to create a new source of glare that would adversely affect daytime or nighttime views in the area, resulting in potentially significant impacts during operation, implementation of MM AES-4 as listed below is expected to ensure that impacts would remain at a less-than-significant level.

EQUIPMENT LIST FOR AREAS SHOWN								
QTY	Pole			Luminaires				
	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY POLE	THIS GRID	OTHER GRIDS
4	S1, S3-S4	70'	-	70'	TLC-LED-1150	3	3	0
2	S2, S5	70'	-	70'	TLC-LED-1150	4	4	0
6						20	20	0
TOTALS								

Franklin D Roosevelt Park Soccer
Los Angeles, CA

GRID SUMMARY	
Name:	Horizontal Property Spill
Spacing:	30.0'
Height:	3.0' above grade

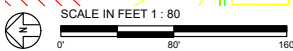
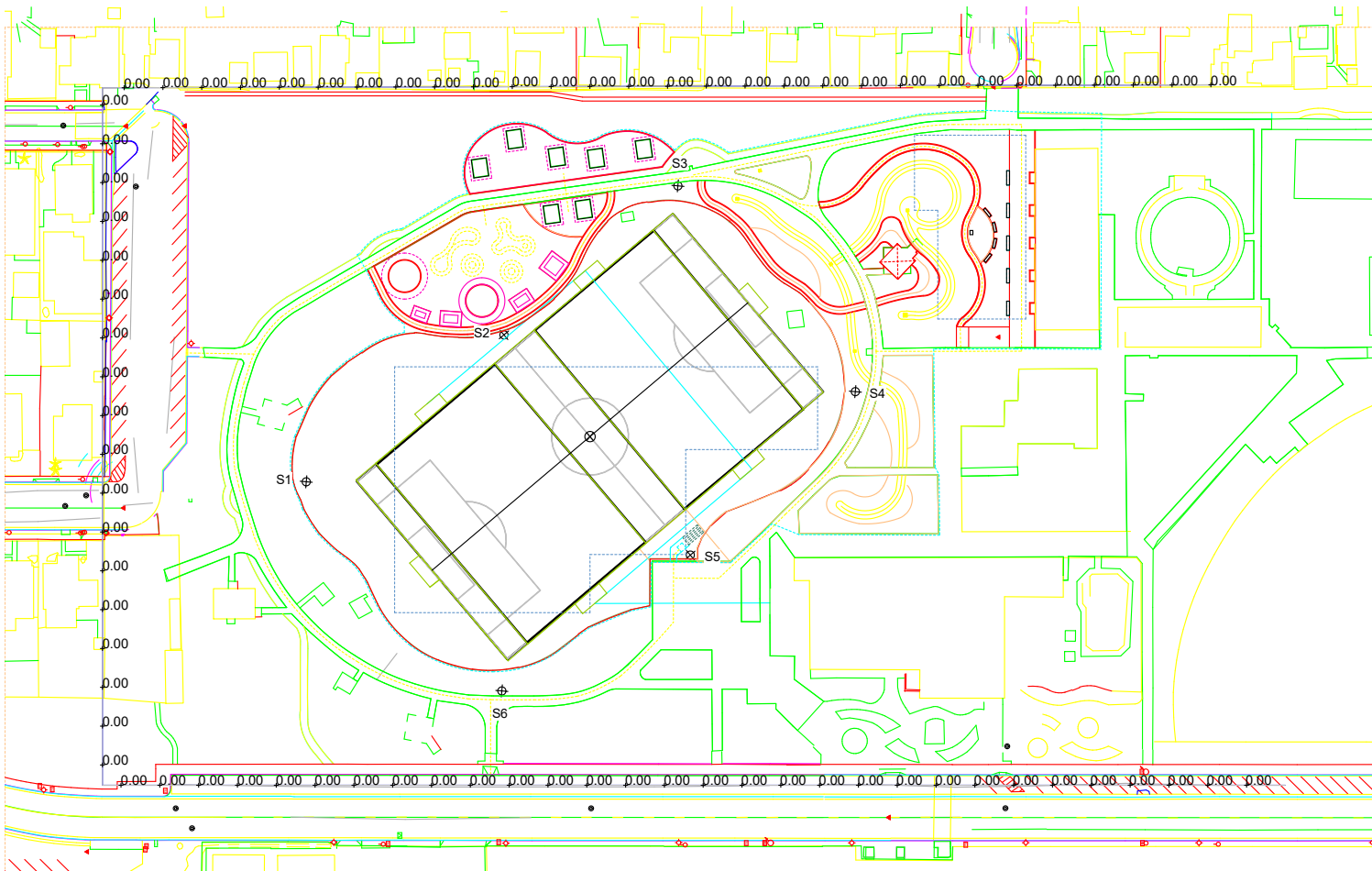
ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOT CANDLES			
Entire Grid			
Scan Average:	0.000		
Maximum:	0.00		
Minimum:	0.00		
No. of Points:	77		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	20		
Total Load:	23.0 kW		
Lumen Maintenance:			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>51,000	>51,000	>51,000
Reported per TM-21-11. See luminaire datasheet for details.			

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



ENGINEERED DESIGN By: Shawn Moyer • File #183480-A • 06-Dec-16

Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗



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ILLUMINATION SUMMARY

Source: Musco Lighting, 2016.

Figure 3-1
Horizontal Property Spill
Roosevelt Park Stormwater Capture Project

EQUIPMENT LIST FOR AREAS SHOWN								
QTY	Pole			Luminaires				
	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY POLE	THIS GRID	OTHER GRIDS
4	S1, S3-S4 S6	70'	-	70'	TLC-LED-1150	3	3	0
2	S2, S5	70'	-	70'	TLC-LED-1150	4	4	0
6	TOTALS					20	20	0

Franklin D Roosevelt Park Soccer
Los Angeles, CA

GRID SUMMARY	
Name:	Vertical Property Spill
Spacing:	30.0'
Height:	5.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED MAX VERTICAL FOOTCANDLES	
Entire Grid	
Scan Average:	0.000
Maximum:	0.00
Minimum:	0.00
No. of Points:	77

LUMINAIRE INFORMATION	
Color / CRI:	5700K - 75 CRI
Luminaire Output:	121,000 lumens
No. of Luminaires:	20
Total Load:	23.0 kW

Luminaire Type	Lumen Maintenance		
	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>51,000	>51,000	>51,000

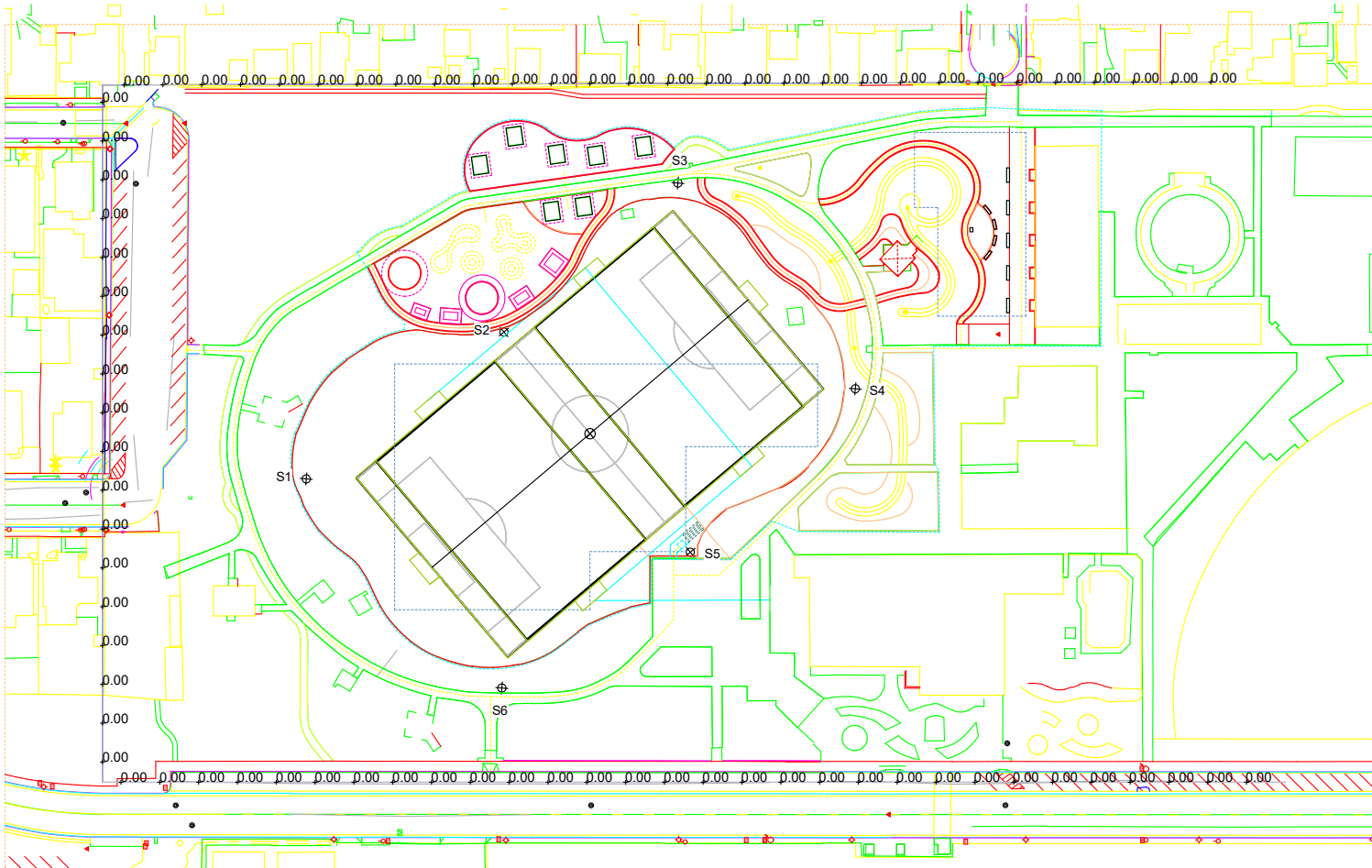
Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗



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ILLUMINATION SUMMARY

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Source: Musco Lighting, 2016.

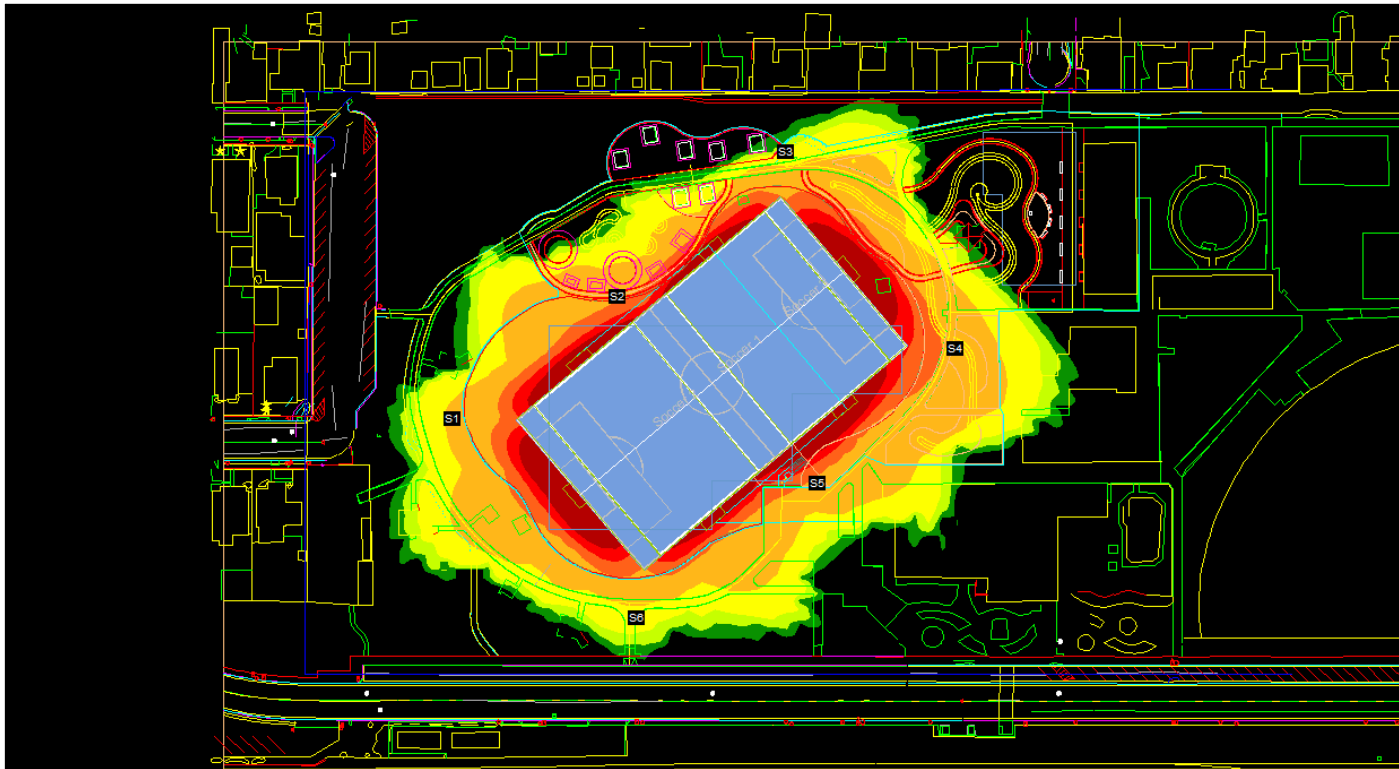
ICF Graphics ... 0063316 (6-23-2017)

Figure 3-2
Vertical Property Spill
Roosevelt Park Stormwater Capture Project

Franklin D Roosevelt Park Soccer
Los Angeles, CA

GLARE IMPACT
Summary
Map indicates the maximum candela an observer would see when facing the brightest light source from any direction.
A well-designed lighting system controls light to provide maximum useful on-field illumination with minimal destructive off-site glare.

GLARE
Candela Levels
High Glare: 150,000 or more candela
Should only occur on or very near the lit area where the light source is in direct view. Care must be taken to minimize high glare zones.
Significant Glare: 25,000 to 75,000 candela
Equivalent to high beam headlights of a car.
Minimal to No Glare: 500 or less candela
Equivalent to 100W incandescent light bulb.



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ENVIRONMENTAL GLARE IMPACT

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Source: Musco Lighting, 2016.

ICF Graphics ... 00633316 (6-23-2017)

Figure 3-3
Glare Impacts
Roosevelt Park Stormwater Capture Project

Mitigation Measure

MM AES-4 LACDPW shall implement lighting design features to minimize spillover from light and glare. LACDPW shall prepare a site-specific Lighting Plan for the proposed soccer field lighting by a qualified lighting engineer prior to the start of construction to minimize impacts due to light and glare as well as ensure compliance with all applicable policies and regulations. All lighting features shall feature downward facing luminaires and shall be mounted with a narrow beam angle, which would focus light downward onto the field. In addition, each proposed lighting feature shall include a highly efficient reflector to focus light toward the field and visor to reduce the amount of upward light.

In addition to MM AES-4 listed above, MM AES-1 and MM AES-3 would also be implemented to reduce potential light and glare impacts to a less-than-significant level.

Cumulative Impacts

There are no related projects within a 0.5-mile radius, as stated in Chapter 2, *Project Description*. Thus, no projects would be within the viewshed of the proposed project.

MM AES-2 would screen equipment during construction, reducing potential visual impacts associated with the presence of construction materials. With implementation of this mitigation measure, visual impacts would be less than significant. Because none of the related projects would occur within viewsheds or views to and from the project site, no combined effect on aesthetics resulting from construction of the related projects and the proposed project are expected to occur. As such, the incremental construction-period effects of the proposed project would not be cumulatively considerable.

No scenic vistas or scenic corridors have been identified within the project viewshed. As discussed above, once operational, the scale and mass of the proposed structure would be visually compatible with surrounding land uses and developed areas and would not substantially degrade the visual character or quality of the surrounding area. The design of the proposed project would include features that would maintain compatibility with the local context and surrounding visual environment. The proposed project would also provide new landscaping that would further complement the surrounding area. Therefore, because the no related projects would occur within the 0.5-mile radius of the site and because there are no significant visual resources throughout the area, the incremental operational effects of the proposed project would not be cumulatively considerable.

II. Agricultural and Forestry Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<p>In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
<p>a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>d. Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The project site is located within the unincorporated area of Florence-Firestone. The project site and surrounding area are not used for agricultural purposes. The California Important Farmland Finder, maintained by the Division of Land Protection, indicates that the project site is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of

Conservation 2015). Additionally, no forestland is found on the project site or in the surrounding area.

Impact Analysis

Would the project:

- a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?*
- c. Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. Result in the loss of forestland or conversion of forestland to non-forest use?*
- e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use?*

Construction and Operation

No Impact. The proposed project would be located at the existing Park, an area designated and zoned for parks, recreation, and open space which does not contain any agricultural uses or areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 2015). The project site and surrounding area is not used for agricultural or forestry purposes. As a result, the proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Therefore, no impact would occur.

Mitigation Measures

No potentially significant impacts related to agricultural or forestry resources would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

As discussed above, the proposed project would not result in any impacts to agriculture and forest resources. The proposed project would not convert, or result in other changes that would convert, Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or forest land to non-agricultural or non-forest uses. Thus, construction and operation of the proposed project would not result in cumulative agricultural and forestry impacts.

III. Air Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The project site is within the South Coast Air Basin (Basin), an area covering approximately 6,745 square miles and bounded by the Pacific Ocean to the west and south and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The terrain and geographical location determine the distinctive climate of the Basin, which is a coastal plain with connecting broad valleys and low hills.

Regulatory Setting

Federal

The Clean Air Act (CAA) was first enacted in 1963 but has been amended numerous times in subsequent years (1967, 1970, 1977, and 1990). The CAA establishes the National Ambient Air Quality Standards (NAAQS) and specifies future dates for achieving compliance. The CAA also mandates that the states submit and implement a State Implementation Plan for local areas that fail to meet those standards. The plans must include pollution control measures that demonstrate how the standards would be met. The project area is within a basin that is designated as a nonattainment area for certain pollutants that are regulated under the CAA.

The 1990 amendments to the CAA identify specific emissions-reduction goals for areas that fail to meet the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or meet interim milestones. The sections of the CAA that would most substantially affect development of the proposed project include Title I (Nonattainment Provisions) and Title II (Mobile-Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for criteria pollutants. Table 3-1 shows the NAAQS currently in effect for each criteria pollutant. The Los Angeles County portion of the Basin fails to meet national standards for ozone (O₃), fine particulate matter (PM_{2.5}), and lead, and therefore is considered a federal nonattainment area for those pollutants. Table 3-2 lists each criteria pollutant and its related attainment status in Los Angeles County.

Table 3-1. Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS ^a	NAAQS ^b
Ozone (O ₃)	1 hour	0.09 ppm	—
	8 hours	0.070 ppm	0.070 ppm
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm
	8 hours	9.0 ppm	9 ppm
Nitrogen Dioxide (NO ₂)	1 hour	0.18 ppm	100 ppb
	Annual arithmetic mean	0.030 ppm	53 ppb
Sulfur Dioxide (SO ₂)	1 hour	0.25 ppm	75 ppb
	24 hours	0.04 ppm	0.14 ppm
Respirable Particulate Matter (PM ₁₀)	24 hours	50 µg/m ³	150 µg/m ³
	Annual arithmetic mean	20 µg/m ³	—
Fine Particulate Matter (PM _{2.5})	24 hours	—	35 µg/m ³
	Annual arithmetic mean	12 µg/m ³	12.0 µg/m ³
Sulfates	24 hours	25 µg/m ³	—
Lead (Pb)	30-day average	1.5 µg/m ³	—
	Calendar quarter	—	1.5 µg/m ³
	Rolling 3-month average	—	0.15 µg/m ³
Hydrogen Sulfide	1 hour	0.03 ppm	—
Vinyl Chloride	24 hours	0.01 ppm	—

Source: California Air Resources Board 2016.

^a The California Ambient Air Quality Standards (CAAQS) for O₃, CO, SO₂ (1 hour and 24 hours), NO₂, PM₁₀, and PM_{2.5} are not to be exceeded. All other California standards shown are not to be equaled or exceeded.

^b The NAAQS, other than O₃ and those based on annual averages, are not to be exceeded more than once a year. The O₃ standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than 1.

ppm = parts per million by volume; ppb = parts per billion; µg/m³ = micrograms per cubic meter

Table 3-2. Federal and State Attainment Status for Los Angeles County Portion of the South Coast Air Basin

Pollutants	Federal Classification	State Classification
Ozone (O ₃) (1-hour standard)	—	Nonattainment
Ozone (O ₃) (8-hour standard)	Nonattainment, Extreme	Nonattainment
Respirable Particulate Matter (PM ₁₀)	Attainment/Maintenance	Nonattainment
Fine Particulate Matter (PM _{2.5})	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment/Maintenance	Attainment
Nitrogen Dioxide (NO ₂)	Attainment/Maintenance	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Lead	Nonattainment	Attainment

Source: California Air Resources Board 2015.

State

The California CAA, signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS incorporate additional standards for most criteria pollutants and set standards for other pollutants that have been recognized by the state. In general, the California standards are more health protective than the corresponding NAAQS. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The Basin is in compliance with these California standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride. Table 3-1, above, details the current NAAQS and CAAQS, and Table 3-2, above, provides the Los Angeles County portion of the Basin's attainment status with respect to NAAQS and CAAQS.

Local

The project lies within the Los Angeles County portion of the Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD has jurisdiction over an area of approximately 10,743 square miles, including all of Orange County; Los Angeles County, except for the Antelope Valley; the non-desert portion of western San Bernardino County; and the western and Coachella Valley portions of Riverside County. The Basin is a sub-region of the SCAQMD jurisdiction. Although air quality in this area has improved, the Basin requires continued diligence to meet air quality standards.

SCAQMD has adopted a series of air quality management plans (AQMPs) to meet the CAAQS and NAAQS. These plans require, among other emissions-reducing activities, control technology for existing sources; control programs for area sources and indirect sources; an SCAQMD permitting system, designed to allow no net increase in emissions from any new or modified (i.e., previously permitted) emissions sources; and transportation control measures. The 2016 AQMP is the most recent plan. The final 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017 (South Coast Air Quality Management District 2017).

SCAQMD published the *CEQA Air Quality Handbook* in November 1993³ to help local governments analyze and mitigate project-specific air quality impacts. This handbook provides standards,

³ Section updates provided on the SCAQMD website.

methodologies, and procedures for conducting air quality analyses as part of CEQA documents prepared within SCAQMD's jurisdiction. SCAQMD has published two additional guidance documents—*Localized Significance Threshold Methodology for CEQA Evaluations* (South Coast Air Quality Management District 2008a) and *Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology* (South Coast Air Quality Management District 2006)—that provide guidance for evaluating localized effects from mass emissions during construction. Both were used in the preparation of this analysis.

Through the attainment planning process, SCAQMD develops rules and regulations to regulate sources of air pollution in the Basin (South Coast Air Quality Management District 2011). Several of these rules may apply to construction or operation of the project. For example, SCAQMD Rule 403 requires implementation of the best available fugitive dust control measures during active operations that could be capable of generating fugitive dust emissions from on-site earthmoving activities, construction/demolition activities, or construction equipment travel on paved and unpaved roads.

Methodology

Appendix G, Section III, of the State CEQA Guidelines states that, where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make determinations regarding air quality impacts.

Criteria Pollutants

Given SCAQMD's regulatory role in the Basin, the significance thresholds and analysis methodologies outlined in its *CEQA Air Quality Handbook*, *Localized Significance Threshold Methodology for CEQA Evaluations* and *Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology* guidance documents were used in evaluating project impacts. Specifically, the SCAQMD construction and operational mass emissions thresholds identified in Table 3-3 were used for the assessment of criteria pollutants. Note that localized significance thresholds (LSTs) are based on the size or total area of the emissions source, the ambient air quality in each Source Receptor Area (SRA) where the emissions source is located, and the distance to the sensitive receptor. The LSTs used here are based on the size of the project area potentially disturbed on any given day (1 acre), the project location (SRA 1), and the distance to the nearest sensitive receptor (25 meters).

Table 3-3. South Coast Air Quality Management District Significance Thresholds (pounds per day)

Pollutant	Regional Emissions Thresholds		Localized Emissions Thresholds ^a	
	Construction	Operation	Construction	Operation
Nitrogen Oxides (NO _x)	100	55	74	74
Volatile Organic Compounds (VOCs)	75	55	N/A	N/A
Suspended Particulate Matter (PM10)	150	150	5	4
Fine Particulate Matter (PM2.5)	55	55	3	2
Sulfur Oxides (SO _x)	150	150	N/A	N/A
Carbon Monoxide (CO)	550	550	680	680
Lead (Pb) ^b	3	3	N/A	N/A

Source: South Coast Air Quality Management District 2008a, 2015.

^a Localized thresholds derived from South Coast Air Quality Management District's most recent localized significance threshold tables are based on the project location (Source Receptor Area 1, Central Los Angeles County), the project area disturbed on any given day (1 acre), and the distance to the nearest sensitive receptor (25 meters). South Coast Air Quality Management District has not developed localized significance thresholds for VOC, SO_x, or lead emissions.

^b The proposed project would result in no lead emissions sources during construction or operations. As such, lead emissions are not evaluated herein.

Impact Analysis

Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?

Construction and Operation

No Impact. The project site lies within the Los Angeles County portion of the Basin, which is under the jurisdiction of the SCAQMD. SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the Basin is in nonattainment. SCAQMD's most recent plan to achieve air quality standards is the 2016 AQMP, although it was adopted by the SCAQMD Governing Board on March 3, 2017, has not yet been found to conform to the State Implementation Plan by the United States Environmental Protection Agency (EPA), the 2012 AQMP remains the currently conforming AQMP.

The 2012 AQMP was adopted by the SCAQMD Governing Board on December 7, 2012. The 2012 AQMP outlines comprehensive control strategies to meet PM 2.5, O₃ and lead (Pb) standards; and maintain carbon monoxide (CO), nitrogen dioxide (NO₂) and PM10 standards (South Coast Air Quality Management District 2013). These strategies are based, in part, on the regional population, housing, and employment projections prepared by the region's cities and counties and adopted by SCAG. As such, projects that 1) propose development that is consistent with the growth anticipated in the relevant land use plans that were used in the formulation of the AQMP, and 2) comply with applicable SCAQMD Rules (e.g., Rule 403 Fugitive Dust), are considered to be consistent with the AQMP. Since the proposed project would contain no growth inducing components and comply with applicable SCAQMD Rules during project construction, there would be no potential for conflict with AQMP growth assumptions.

The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. Therefore, no impact would occur.

Mitigation Measures

No potentially significant impacts related to conflict with or obstruction of implementation of an applicable air quality plan would occur as a result of the proposed project. Therefore, no mitigation measures are required.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction

Less-than-Significant Impact. The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Project-related air emissions are calculated and evaluated for construction.

Regional Emissions

Regional construction-period criteria pollutant emissions were quantified using the Road Construction Emissions Model (version 8.1.0) that was developed using EMFAC2014 on-road emissions factors, OFFROAD2011 off-road emissions factors, and CalEEMod defaults regarding equipment horsepower and utilization assumptions. Construction scheduling, phasing, and equipment assumptions were developed based on data received from LACDPW. Construction-period emissions are shown in Table 3-4.

Table 3-4. Regional Construction Emissions in Pounds per Day

Construction Phase	ROC	CO	NO _x	PM10 ^a	PM2.5 ^a	SO _x
Tree Removals	2	12	11	3	1	<1
Park Infiltration	6	52	31	5	2	<1
Park Lights	1	9	12	3	1	<1
Street Infiltration	2	15	19	4	1	<1
Diversion Pipes	3	25	20	4	2	<1
Landscape Improvements	1	9	19	3	1	<1
Concurrent Phase Activity ^b	11	93	70	12	5	<1
SCAQMD Regional Thresholds	75	550	100	150	55	150
Threshold Exceeded?	No	No	No	No	No	No

Source: Prepared by ICF. Road Construction Emissions Model output provided in Construction Emissions.

^a PM10 and PM2.5 emissions take into account compliance with SCAQMD Rule 403.

^b "Concurrent Phase Activity" assumes concurrent periods of Park Infiltration, Street Infiltration and Diversion Pipes construction activity. Any apparent calculation error is due to rounding to whole number.

CO = carbon monoxide; NO_x = nitrogen oxides; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; ROC = reactive organic compounds; SCAQMD = South Coast Air Quality Management District; SO_x = sulfur oxides

As shown in Table 3-4, regional criteria pollutant emissions during construction are not expected to exceed SCAQMD regional significance thresholds. As such, impacts to regional air quality would be less than significant. No mitigation measures are necessary.

Localized Emissions

Project construction would emit localized pollutants through the on-site use of heavy-duty construction equipment as well as fugitive dust from site disturbance activities. These localized emissions could expose nearby sensitive receptors to substantial pollutant concentrations.

Consistent with SCAQMD LST guidelines, emissions related to haul truck and employee commuting activity during construction are not considered in the evaluation of localized impacts.

While reviewing Table 3-5 below, it is important to understand the notion of “localized” in terms of emissions and affected receptors. For example, the localized receptors affected by Park Infiltration construction activity would be different from the localized receptors that would be affected by Street Infiltration construction activity. Unlike the evaluation of regional emissions, for localized emissions, it is not appropriate to consider cumulative emissions from concurrent construction activities.

Table 3-5. Localized Construction Emissions in Pounds per Day

Construction Phase	CO	NOX	PM10 ^a	PM2.5 ^a
Tree Removals	12	11	3	1
Park Infiltration	52	31	5	2
Park Lights	9	12	3	1
Street Infiltration	15	19	4	1
Diversion Pipes	25	20	4	2
Landscape Improvements	9	19	3	1
Maximum Emissions ^b	52	31	5	2
SCAQMD Localized Thresholds ^c	680	74	5	3
Threshold Exceeded?	No	No	No	No

Source: Prepared by ICF. Road Construction Emissions Model output provided in Construction Emissions.

^a PM10 and PM2.5 emissions take into account compliance with SCAQMD Rule 403.

^b Maximum emissions from any of the six phases presented above.

^c Per SCAQMD Source Receptor Area 1, 1-acre site, 25-meter receptor distance.

CO = carbon monoxide; NO_x = nitrogen oxides; PM2.5 = particulate matter less than 2.5 microns in size; PM10 = particulate matter less than 10 microns in size; SCAQMD = South Coast Air Quality Management District

As shown in Table 3-5, maximum daily estimates of on-site emissions would not exceed applicable LSTs. As such, impacts would be less than significant and no mitigation measures are necessary.

Operation

No Impact. There would be no operations-phase emissions because the proposed project would not result in the operation of equipment that emits emissions (such as pumps or generators). In addition, the proposed structural BMPs would not generate daily vehicle-exhaust emissions by the motor vehicles traveling to and from the project site. Therefore, no impact would occur.

Mitigation Measures

No potentially significant impacts related to violating an air quality standard would occur as a result of the proposed project. Therefore, no mitigation measures are required.

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Less-than-Significant Impact. Projects that exceed project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. The study area for cumulative effects on air quality is the entire Basin. The Basin experiences chronic exceedances of state and federal ambient air quality standards as a consequence of past and present projects, and is subject to continued nonattainment status by reasonably foreseeable future projects. These nonattainment conditions within the region are considered cumulatively significant. The SCAQMD has prepared, and periodically updates, the Basin's regional AQMP that sets forth a comprehensive and integrated program that would lead the Basin into compliance with the federal and state air quality standards.

As previously discussed under Section III. c., Air Quality, the proposed project would be consistent with the AQMP, which is intended to bring the Basin into attainment for all criteria pollutants.⁴ Furthermore, the proposed project would comply with SCAQMD rules and regulations, including Rule 403 (Fugitive Dust Control) and Rule 1108 (Cutback Asphalt), during construction as well as all other adopted AQMP emissions control measures to minimize impacts on nearby sensitive receptors. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on all projects Basin-wide, which would include all nearby projects.

For these reasons identified above, the project would not result in a cumulatively considerable impact: it is consistent with the AQMP; it would result in less than significant project emissions; it is

⁴ CEQA Guidelines Section 15064(h)(3) states "A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding that the project complies with the specified plan or mitigation program addressing the cumulative problem, an EIR must be prepared for the project."

in compliance with SCAQMD Rules; CEQA requirements that related projects mitigate impacts; and the project emissions would not be cumulatively considerable.

Mitigation Measures

No potentially significant impacts related to a cumulatively considerable net increase of a criteria pollutant would occur as a result of the proposed project. Therefore, no mitigation measures are required.

d. Expose sensitive receptors to substantial pollutant concentrations?

Less-than-Significant Impact. SCAQMD defines sensitive receptor locations as residential, commercial, and industrial land use areas as well as other locations where sensitive populations may be located. Other sensitive receptor locations include schools, hospitals, convalescent homes, day care centers, and other locations where children, chronically ill individuals, or other sensitive persons could be exposed (South Coast Air Quality Management District 2005). Sensitive receptors within the project vicinity include nearby residential uses. With respect to criteria pollutant emissions, Table 3-5 demonstrates that SCAQMD localized thresholds would not be exceeded during project construction. Additionally, the diesel particulate matter emissions from construction equipment would be sporadic, transitory, and short term in nature (i.e., less than 16 weeks at any one location). Therefore, the proposed project would not expose receptors to significant localized criteria pollutant emissions, nor a level of toxic air contaminant emissions that could result in acute and/or chronically hazardous effects. Thus, construction and operational impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to exposing sensitive receptors to substantial pollutant concentrations would occur as a result of the proposed project. Therefore, no mitigation measures are required.

e. Create objectionable odors affecting a substantial number of people?

Construction

Less-than-Significant Impact. According to the California Air Resources Board and SCAQMD, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (South Coast Air Quality Management District 1993, California Air Resources Board 2005).

The proposed project does not include any uses identified by the California Air Resources Board or SCAQMD as being associated with odors and therefore would not produce objectionable odors. Odors resulting from construction of the proposed project are not likely to affect a substantial number of people because construction activities usually do not emit offensive odors. Potential odor emitters during construction activities include asphalt paving. SCAQMD Rule 1108 limits the amount of volatile organic compounds (VOCs) emissions from cutback asphalt. Given mandatory compliance with SCAQMD rules, no construction activities or materials are proposed that would create a significant level of objectionable odors. As such, potential impacts during short-term construction would be less than significant. No mitigation measures are required.

Operation

No Impact. Once operational, the proposed project would not include any odor-emitting uses; thus, there would be no operational impacts related to objectionable odors. No impact would occur.

Mitigation Measures

No potentially significant impacts related to objectionable odors would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

With the exception of odors, the cumulative discussion for air quality follows the 2016 AQMP that has been developed by SCAQMD to ensure the Basin's attainment of state and federal ambient air quality standards. Because the project would not conflict with the implementation of the 2016 AQMP, the incremental effects of the proposed project would not be cumulatively considerable.

The SCAQMD significance thresholds were developed, in part, based on the provisions of the federal Clean Air Act (South Coast Air Quality Management District 1993:6-1). Because the proposed project would not conflict with implementation of the 2016 AQMP or exceed the regional mass emissions thresholds for construction and operation, the incremental effects of the proposed project would not be cumulatively considerable.

The SCAQMD LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and were developed based on the ambient concentrations of that pollutant for each source receptor area (South Coast Air Quality Management District 2008a:1-1). Because the project would not exceed the LSTs for construction or operation and the project would not conflict with implementation of the AQMP, the incremental effects of the proposed project would not be cumulatively considerable related to sensitive receptors in the vicinity of the proposed project. No other related projects would occur within a 0.5-mile radius of the proposed project site. Therefore, the incremental effects of the proposed project related to odors would not be cumulatively considerable.

IV. Biological Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ICF biologists conducted a comprehensive literature review to identify the project setting and potential special-status biological resources that may be found on the project site or within the project vicinity (Appendix A). The literature review was conducted on November 2, 2016. Pertinent sources reviewed were:

- California Natural Diversity Database (California Department of Fish and Wildlife 2016).
- California Native Plant Society Inventory of Rare and Endangered Plants (California Native Plant Society 2016).
- U.S. Fish and Wildlife Service (USFWS) (U.S. Fish and Wildlife Service 2016a), Carlsbad office GIS database search.

- USFWS critical habitat maps (U.S. Fish and Wildlife Service 2016b).
- USFWS National Wetlands Inventory (U.S. Fish and Wildlife Service 2016c).
- USFWS Information for Planning and Conservation species list (U.S. Fish and Wildlife Service 2016d).
- U.S. Department of Agriculture Natural Resources Conservation Service Soil Survey Geographic Database (U.S. Department of Agriculture 2017).
- U.S. Geological Survey Hollywood, Inglewood, Los Angeles, and South Gate 7.5-minute Topographic Maps (U.S. Geological Survey 2015).
- Aerial photography dated October 18, 2015 (Google Inc. 2015).

Environmental Setting

The project site encompasses approximately 24 acres and is located at an elevation of 147 feet above mean sea level (U.S. Geological Survey 2015). No known jurisdictional wetlands or natural drainages have been previously identified on the project site. The project footprint within the Park consists primarily of a maintained grassy field with ornamental shrubs and trees and concrete walkways. The associated alignment passes through an asphalt parking lot and residential streets. Residential and commercial land uses surround the project site and Metro train tracks are located to the west.

Soils

Soils at the project site are mapped as Urban land-Hueneme, drained San Emigido complex, 0 to 2% slopes and Urban-land Biscailuz-Hueneme, drained complex, 0 to 5% slopes (U.S. Department of Agriculture 2017).

Biological Resources

Vegetation

The project site is mostly developed with maintained ornamental vegetation, concrete walkways, and paved asphalt roads and lots. Vegetated areas are covered with maintained grassy fields and ornamental vegetation, including 18 trees and shrubs. The total vegetated area covers approximately 5,500 square feet. The primary vegetation consists of nonnative species, including Mexican fan palm (*Washingtonia robusta*), juniper (*Juniperus* sp.), eucalyptus (*Eucalyptus* sp.), and pine (*Pinus* sp.)

Special-Status Species

No current observations (<30 years) of special-status species have been made on the project site or in adjacent areas, as determined by the literature search.

Nesting Birds

The project site has mature trees, shrubs, and hedges located throughout. These have the potential to host nesting birds, including raptors.

Regulatory Setting

Federal

Federal Endangered Species Act

The federal Endangered Species Act (ESA) (U.S. Government Code [U.S.C.] Title 16, Section 1530 et seq.) protects fish and wildlife species that have been identified by USFWS as threatened or endangered as well as their habitats. *Endangered* refers to species, subspecies, or distinct population segments that are in danger of extinction through all or a significant portion of their range; *threatened* refers to species, subspecies, or distinct population segments that are likely to become endangered in the near future.

USFWS regulates “take” (i.e., killing, harassing, or destroying habitat) of federally listed species through Section 9 of the ESA. Take of listed species can be authorized through either the ESA Section 7 consultation process, for actions by federal agencies, or the ESA Section 10 permit process, for actions by nonfederal agencies.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703–712) enacts the provisions of treaties between the United States, Great Britain, Mexico, Canada, and Japan and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 U.S.C. 703; 50 Code of Federal Regulations [CFR] 10 21). Most actions that result in taking or permanent or temporary possession of a protected species constitute violations of the MBTA. Examples of permitted actions that do not violate the MBTA include hunting specific game birds, engaging in legitimate research activities, displaying birds in zoological gardens, banding birds, or conducting other similar activities. USFWS is responsible for overseeing compliance with the MBTA, and the U.S. Department of Agriculture Animal Damage Control Officer makes recommendations regarding related animal protection issues.

Clean Water Act

The CWA is the primary federal law that protects the quality of surface waters that are 1) traditionally navigable waters, 2) tributary or adjacent to traditionally navigable waters, or 3) interstate waters. Waters that are under the jurisdiction of the CWA are referred to as “waters of the United States.” The U.S. Army Corps of Engineers regulates fill in waters of the United States under Section 404 of the CWA. Point discharges to waters of the United States are regulated under Section 402 of the CWA through National Pollutant Discharge Elimination System (NPDES) permits. In California, the RWQCBs have been delegated the authority to issue NPDES permits. Under Section 401 of the CWA, state agencies review permits issued by the U.S. Army Corps of Engineers to determine effects on water quality. In general, the U.S. Army Corps of Engineers takes jurisdiction over traditionally navigable waters, waters that drain to a traditionally navigable water, or waters that are adjacent to traditionally navigable waters or have a significant nexus.

State

The state laws and regulations listed below were considered during the evaluation of biological resources in the study area. Note that this is not an exhaustive list of all state laws and regulations that may be considered.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050–2097) is administered by CDFW. It prohibits the take of plant and animal species that have been designated by CDFW as either threatened or endangered in the state of California. “Take” in the context of the CESA means to hunt, pursue, kill, or capture a listed species; it also refers to actions that may result in adverse impacts when an attempt is made to take individuals of a listed species.

Sections 2091 and 2081 of the CESA allow CDFW to authorize exceptions to the state’s prohibition against take of a listed species. Section 2091 allows state lead agencies that have formally consulted with CDFW to take a listed species if the take is incidental to carrying out an otherwise lawful project that has been approved under CEQA. Section 2081 allows CDFW to authorize take of a listed species for educational, scientific, or management purposes. Private developers whose projects do not involve a state lead agency may not take a listed species without formally consulting with CDFW and agreeing to strict measures and standards for managing the listed species.

Porter-Cologne Water Quality Control Act of 1969

The Porter-Cologne Water Quality Control Act established the State Water Resources Control Board (SWRCB) and divided the state into nine regional basins, each with a RWQCB. The SWRCB is the primary state agency with responsibility for protecting the quality of the state’s surface water and groundwater supplies; the regional boards are responsible for developing and enforcing water quality objectives and implementation plans. This act is relevant to biological resources that may be affected in state waters because the SWRCB regulates discharges, including discharges of construction runoff and sediment, into state waters, including groundwater. This includes waters that may be outside federal jurisdiction under the CWA.

California Department of Fish and Wildlife Regulations

Protected Species in the Fish and Game Code

The California Fish and Game Code provides protection from take for a variety of species, referred to as *fully protected species*. Section 5050 lists fully protected amphibians and reptiles and prohibits the take of such species, except as provided in Sections 2081.7 or 2835. Section 5515 prohibits take of fully protected fish species, except as provided in Sections 2081.7 or 2835. Fully protected birds are listed under Section 3511, and fully protected mammals are listed under Section 4700; both of these sections prohibit take, except as provided in Sections 2081.7 and 2835. Except for take related to scientific research, all take of fully protected species is prohibited.

Nesting Bird Protections in the California Fish and Game Code

Similar to the federal MBTA, Section 3503 of the California Fish and Game Code prohibits take as well as the possession or destruction of eggs and nests of all birds, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 prohibits the killing of raptor species and the destruction of raptor nests. Take or possession of any migratory nongame bird, as

designated in the MBTA, is prohibited under Sections 3513 and 3800. As defined under Section 86 of the California Fish and Game Code, take means to “hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill.”

Streambed Alteration Agreements

CDFW has jurisdictional authority over rivers, streams, and lakes under California Fish and Game Code Section 1602. CDFW has the authority to regulate all work under the jurisdiction of California that would substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. In practice, CDFW marks its jurisdictional limit at the top of the stream or lake or at the bank or the outer edge of riparian vegetation, where present; sometimes, it extends its jurisdiction to the edge of the 100-year floodplain. Because riparian habitats do not always support wetland hydrology or hydric soils, wetland boundaries, as defined by CWA Section 404, sometimes include only portions of the riparian habitat adjacent to a river, stream, or lake. Therefore, jurisdictional boundaries under Section 1602 may encompass areas that are greater than those regulated under CWA Section 404.

When CDFW enters into a streambed alteration agreement with an applicant, it can request conditions that will ensure that no net loss of wetland values or acreage will be incurred. The streambed or lakebed alteration agreement is not a permit but, rather, a mutual agreement between CDFW and the applicant.

Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Sections 1900–1913) and the Natural Community Conservation Planning Act provide guidance regarding the preservation of plant resources; these two acts underlie the language and intent of Section 15380(d) of the State CEQA Guidelines, which states that a species does not have to be listed to be considered endangered, rare, or threatened if the species can be shown to exist in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens or if the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Local

Los Angeles County Protected Native Tree Ordinance

It is the intent of Los Angeles County Protected Tree Ordinance No. 177404 (Chapter I, Articles 2 and 7; Chapter IV, Article 6; and Section 96.303.5 of the Los Angeles County Municipal Code) to preserve and maintain populations of all indigenous species of oak (*Quercus* sp.), with the exception of scrub oak (*Quercus dumosa*), Southern California black walnut (*Juglans californica* var. *californica*), western sycamore (*Platanus racemosa*), and California bay (*Umbellularia californica*). These trees are legally protected from damage or removal during the course of a development project, unless the developer first obtains a permit.

- The Los Angeles County Protected Tree Ordinance regulates the following trees (County of Los Angeles 2014):
- All native oaks with a cumulative trunk diameter at breast height (DBH) of 4 inches or more.
- Southern California black walnut with a cumulative trunk DBH of 4 inches or more.

- Western sycamore with a cumulative trunk DBH of 4 inches or more.
- California Bay with a cumulative trunk DBH of 4 inches or more.

Los Angeles County General Plan

The County of Los Angeles (2014), through its general plan, established 61 Significant Ecological Areas (SEAs), representing a wide variety of biological communities within the county. The SEAs function to preserve this variety and provide a level of protection to the resources within them. These living laboratories contain examples of the county's diverse ecological heritage and are intended to be preserved in an ecologically viable condition for the purposes of public education, research, and non-disruptive outdoor uses. However, this does not preclude limited compatible development. The County General Plan outlines a process to regulate land uses in these areas and creates an advisory committee of scientists who are appointed to oversee regulation.

A Conditional Use Permit is required for development in SEAs, thereby protecting resources contained in the SEAs from incompatible development that may result in environmental degradation. A biological constraints analysis is required to describe, in a general manner, the extent, location, and sensitivities of the ecological resources within the SEA.

The project site is located outside of any SEA. The Ballona Wetlands SEA is the closest SEA; however, it is more than 10 miles from the project site.

County of Los Angeles Department of Parks and Recreation Urban Forestry Program

The Los Angeles County Planning and Development Agency operates with a "no net loss" of trees in County Parks, which is enforced by the County of Los Angeles Department of Parks and Recreation (Department) (County of Los Angeles Department of Parks and Recreation 2011). Trees that are removed due to irreparable damage, disease, hazardous conditions, or development are reported to the respective field Agency for eventual replacement by at least a 1:1 ratio. Prior to the commencement of a development project within County Parks, a tree preservation plan that includes clearly identified tree protection zones, must be prepared and agreed upon by planners, construction staff, and a Department-certified arborist or qualified member of the Tree Trimming Division. A Tree Protection and Preservation Plan should include a site plan, protective tree fencing and signage, soil compaction and damage preventative measures, and a tree maintenance schedule. In addition, contracted personnel may not prune trees within a construction zone without prior consultation with a Department-certified arborist or qualified member of the Tree Trimming Division.

Impact Analysis

Would the project:

- a. *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- b. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- c. *Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.), through direct removal, filling, hydrological interruption, or other means?*

Construction

No Impact. A literature search conducted for the proposed project consisted of queries of the CDFW CNDDDB and the California Native Plant Society Electronic Inventory for the Hollywood, Inglewood, Los Angeles, and South Gate 7.5-minute U.S. Geological Survey topographic quadrangles. Additionally, a USFWS official species list was generated from the Information for Planning and Conservation Trust Resources for the project site. The purpose of this literature search was to compile a list of special-status species and sensitive natural habitats with the potential to occur within or adjacent to the project site (Appendix A).

Based on the literature search and review of aerial imagery, there would be no substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by CDFW or USFWS. The project site has no native habitat for sensitive species and the surrounding region is urbanized and devoid of open spaces and native habitats. Furthermore, no current or historical (i.e., within the past 30 years) observations of special-status species within 5 miles of the project site were identified during the literature search. Thus, there is no potential for special-status species to occur within the vicinity. Therefore, no impacts would occur.

No substantial adverse effects on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS are expected to occur during project implementation. Aerial imagery shows the project site and adjacent areas to be completely urbanized with no native habitat or open spaces other than landscaped ornamental vegetation associated with the Park and surrounding infrastructure. Landscape ornamental vegetation mainly includes various species of trees along the perimeter of the site and grass turf soccer and baseball play fields. No riparian habitat or other sensitive natural communities were identified as occurring within 0.5 mile of the project site. As a result of the implementation of the proposed project, six ornamental trees are proposed to be removed which include American Sweet Gum, Gold Medallion, and Jacaranda trees. However, it is anticipated that the trees would be replaced with 27 new trees including Gold Medallion, Chitalpa, Brisbane Box, and California Sycamore trees. Therefore, no impact would occur.

No adverse effects on federally protected wetlands as defined by Section 404 of the Clean Water Act (including marshes, vernal pools, coastal wetlands) through direct removal, filling, hydrological interruption, or other means are expected to occur during project implementation. Based on the literature search and review of aerial imagery, it was determined that there are no wetlands or other waters of the U.S. or state present in or near the project vicinity. Therefore, no impact would occur.

Operation

No Impact. Similar to the discussion described above for the proposed construction, no impacts would occur under operation of the proposed project, and no mitigation measures would be required.

Mitigation Measures

No potentially significant impacts related to special-status species, riparian habitat, sensitive natural communities, or wetlands would occur as a result of the proposed project. Therefore, no mitigation measures are required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?

Construction

Less-than-Significant with Mitigation Incorporated. Based on the literature search and review of aerial imagery, no substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors is expected. However, the landscape vegetation in the project site and surrounding areas provide habitat for migratory birds protected by the MBTA and the California Fish and Game Code. The proposed project would include implementation of PEIR MM BIO-1, which is a mitigation measure to conduct nesting bird surveys during the construction phase that overlaps with the nesting bird season (generally defined as February 15 through August 31). The proposed project is not expected to impede the use of native wildlife nursery sites. Although the Park, which is part of the project site, is an open area with some ornamental vegetation, it is completely surrounded by urban development and has limited opportunity for wildlife movements between off site habitats. Therefore, there is no linkage between the Park and other areas that may support wildlife species movement. Therefore, impacts would be less than significant with mitigation incorporated.

Operation

No Impact. No impacts related to the movement of resident or migratory fish or wildlife species would occur under operation of the proposed project, and no mitigation measures would be required.

Mitigation Measures

MM BIO-1: If construction or vegetation removal is proposed between February 15 and August 31, a qualified biologist shall conduct a pre-construction survey at least 3 days prior to construction for breeding and nesting birds within 200 feet of the construction limits and within 500 feet for raptors. The biologist shall determine and map the location and extent of breeding

birds that could be affected by the project. Active nest sites located during the pre-construction surveys shall be avoided until the adults and young are no longer reliant on the nest site for survival as determined by a qualified biologist.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction

Less-than-Significant with Mitigation Incorporated. A review of aerial imagery has confirmed that trees are present within the project site. The proposed project would result in removal of up to six trees, which are American Sweet Gum Tree, Gold Medallion Tree, and Jacaranda Tree. Implementation of the proposed project is not anticipated to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The Los Angeles County Oak Tree Ordinance requires an oak tree permit to be obtained to cut, destroy, remove, relocate, inflict damage, or encroach upon a protected oak tree or its protected zone. No oak trees would be removed as part of the proposed project. However, the Planning and Development Agency operate with a “no net loss” of trees in County parks (County of Los Angeles Department of Parks and Recreation 2011). Trees that are removed due to irreparable damage, disease, hazardous conditions or development are reported to the respective field Agency for eventual replacement (County of Los Angeles Department of Parks and Recreation 2011). Prior to the commencement of a development project, a tree preservation plan including clearly identified tree protection zones, must be prepared (County of Los Angeles Department of Parks and Recreation 2011). However, it is anticipated the trees would be replaced at the Park, including planting 27 new trees of species including Gold Medallion Tree, Chitalpa, Brisbane Box, and California Sycamore trees. This impact is anticipated to be less than significant with the incorporation of PEIR MM BIO-2, which requires preparation and approval of tree preservation plan or written concurrence that no plan is required. Therefore, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance would be less than significant with MM BIO-2 incorporated.

Operation

No Impact. No impacts would occur under operation of the proposed project, and no mitigation measures for operation would be required.

Mitigation Measures

MM BIO-2: Trees will be avoided to the extent feasible. If trees may be impacted by project construction, and if required, a Department of Park and Recreation certified arborist will prepare a tree preservation plan for the construction impact area. The preservation plan shall be approved by planners, construction staff and a Department of Park and Recreation certified arborist or qualified member of the Tree Trimming Division.

f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

Construction and Operation

No Impact. This project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. As confirmed in the literature search, there are no approved conservation plans

for the area encompassing the project site. Therefore, there is no impact and no further analysis is required.

Mitigation Measures

No potentially significant impacts related to adopted conservation plans would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

There are no related projects within a 0.5-mile radius, as identified in Chapter 2, *Project Description*. The project area lacks suitable habitat for special-status plant and wildlife species, sensitive habitats (including riparian habitat), fish habitat, protected trees, and potential jurisdictional drainages. Furthermore, the project would not conflict with local ordinances. Because each of the related projects within a 0.5-mile radius would occur within the same urban context as the proposed project and would not result in the loss of suitable habitat, impacts of the related projects would not be substantial. Therefore, the incremental effect of the proposed project related to special-status plant and wildlife species, sensitive habitats (including riparian habitat), fish habitat, protected trees, and potential jurisdictional drainages would not be cumulatively considerable.

With respect to nesting birds, the proposed project would be subject to the MBTA and the California Fish and Game Code and be required to avoid potential impacts on nesting birds. Therefore, the incremental effect of the proposed project would not be cumulatively considerable.

V. Cultural Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Historic Resources

The evaluation of historical resources in the study area included a review of existing sources of information and a field survey. The project site is located in the unincorporated Los Angeles County community of Florence-Firestone. The project site encompasses approximately 24 acres and is located at an elevation of 147 feet above mean sea level. The proposed project is located within the existing Franklin D. Roosevelt Park.

The park is bounded on the south by Nadeau Street, on the north by 74th Street, and on the east by Holmes Avenue. The route of the Metro Blue Line is on the west side of Graham Avenue. The channelized course of the Los Angeles River is more than 3 miles to the east. The project site has been subjected to grading and its surface is virtually level. Previous grading, paving, and landscaping and construction of buildings and playing fields have removed all traces of native vegetation (Wells 1996).

Records Search

A cultural resources records search was conducted at the South Central Coastal Information Center of the California Historical Resources Information System on November 10, 2016. The records search included the project area and a 0.5-mile buffer around the project area.

ICF consulted historic property information sources, including the California Historic Resources Inventory (HRI), the National Register of Historic Places (NR), the California Register of Historical Resources (CR), California Historical Landmarks (California Office of Historic Preservation 1996), and the California Points of Historical Interest (California Office of Historic Preservation 1992). The property is not identified in any of the mentioned sources.

The records search results indicate that no previously recorded archaeological sites have been recorded in the project area or within the 0.5-mile buffer area. The records search results indicate that the project area has been previously surveyed for cultural resources (Wells 1996) and that no previously recorded archaeological or built architectural resources occur in or adjacent to the project area.

Field Survey

On November 23, 2016, Archaeologist Sydni Kitchel conducted an intensive pedestrian survey of the project area. The field survey consisted of walking in parallel transects spaced at no more than 10-meter intervals over the open ground of the project site. The results of the pedestrian survey indicate that most of the project area has been previously developed with buildings, parking lots, cement walkways, play equipment, and baseball fields. No evidence of cultural resources, such as artifacts or ecofacts, was observed during the field survey.

Archaeological Resources

A cultural resources review was performed in support of this IS/MND. It included a review of the regulatory and environmental settings, known cultural resources within the project site and the 0.5-mile buffer, and survey results as well as a discussion of the sensitivity of the project site and immediate vicinity. Negative results were provided by the NAHC request, records search, and intensive pedestrian survey. A previous study (Wells 1996), completed more than 10 years earlier, likewise failed to identify any resources in the project site.

Impact Analysis

Would the project:

- a. Cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5?*

Construction and Operation

No Impact. No historical resources were identified in the study area that would be eligible for NR, CR, or local listing (Section 15064.5(a), State CEQA Guidelines). Because no historical resources were identified in the project study area, there would be no construction or operational impacts on historical resources resulting from work associated with the proposed project.

Mitigation Measures

No potentially significant impacts related to historical resources would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- b. Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5?*

Construction and Operation

Less-than-Significant Impact with Mitigation Incorporated. The cultural resources review determined that there would be no impact on previously identified cultural resources. The potential to encounter unrecorded archaeological resources during project implementation would be low. No archaeological resources have been recorded within the project site or within a 0.5-mile radius. Although no archaeological resources have been identified within the project site or the 0.5 mile search radius, and environmental conditions (such as landform type and proximity to water sources) do not suggest an elevated sensitivity for the presence of unrecorded archaeological resources, there remains the potential, though remote, that previously unrecorded archaeological resources could be identified as a result of project-related activities. Although there are no known

archaeological resources in or directly adjacent to the project area, the potential remains for proposed construction and operation of the project to result in the exposure or destruction of as yet undiscovered archaeological resources. If any archaeological resources are encountered during construction, the damage to, or destruction of, the resource would be a potentially significant impact. Implementation of MM CR-1 would reduce this impact to a less-than-significant level. As such, impacts on archaeological resources would be considered less-than-significant with mitigation incorporated.

Mitigation Measures

MM CR-1: Implement Measures to Protect Previously Unidentified Cultural Resources. Previous activities have obscured surface evidence of cultural resources. However, construction shall be stopped if cultural resources are encountered. If signs of an archeological site, such as stone, bone, shell, ceramic, glass, or metal fragments, are uncovered during grading or other construction activities, work shall be halted within 50 feet of the find, and LACDPW shall be notified immediately. A qualified archeologist shall be consulted for an on-site evaluation and recommendations regarding next steps, such as data recovery, if he or she determines that the site is or appears to be eligible for listing on the CR or NR. Any previously undiscovered resources found during construction shall be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria. Construction work can continue on other parts of the project site while archaeological mitigation takes place.

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

Construction and Operation

Less-than-Significant Impact with Mitigation Incorporated. No known human remains are present on the project site or in the immediate vicinity. However, ground disturbance related to development projects have, in the past, resulted in the inadvertent discovery of previously unrecorded human remains. Although not anticipated, human remains could be identified during site-preparation and grading activities, which could result in a significant impact. Implementation of MM CR-2 would reduce potential adverse impacts on human remains to a less-than-significant level. As such, impacts on human remains would be considered less-than-significant with mitigation incorporated.

Mitigation Measures

MM CR-2: Inadvertent Discovery or Disturbance of Human Remains. In the event that human remains are discovered during on-site construction activities, all activity within a 50-foot radius of the find shall be stopped. LACDPW shall notify the Los Angeles County Coroner, who shall then make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the coroner shall notify the NAHC immediately. Once NAHC identifies the most likely descendants, the descendants shall make recommendations regarding proper burial, which shall be implemented in accordance with Section 15064.5(e) of the State CEQA Guidelines.

Cumulative Impacts

The cumulative discussion for cultural resources considers the related projects within a 0.5-mile radius. There are no related projects within a 0.5-mile radius, as identified in Chapter 2, *Project Description*. Because no construction or operational impacts on historical resources are expected to occur as a result of the proposed project, there would be no cumulative impacts on historical resources. Thus, the project would have no incremental effect related to historical resources, and impacts would not be cumulatively considerable.

There are no known archaeological resources on the project site or in immediate vicinity. However, should previously unreported archaeological resources be identified during project implementation, project-related construction activities could contribute to the incremental loss of these resources. The proposed project, including future operations, in conjunction with other projects in the vicinity, could result in a cumulative impact on archaeological resources. However, the above-referenced mitigation measure (MM CR-1) would reduce the proposed project's cumulative impacts to less than significant. Therefore, the incremental effect of the proposed project related to archaeological resources would not be cumulatively considerable.

There are no known human remains within the project site or immediate vicinity; however, in the event that previously unreported human remains are identified during project implementation, project-related construction activities could contribute to the incremental loss of these resources. The proposed project, in conjunction with other projects in the vicinity, could therefore result in a cumulative impact on human remains as well as formal and/or informal cemeteries. However, the above-referenced mitigation measure (MM CR-2) would reduce the project's impacts to less than significant. Therefore, the effect of the proposed project would not be cumulatively considerable.

VI. Geology and Soils	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Portions of the *Report of Infiltration Study, Low Impact Development, Roosevelt Park 7600 Graham Avenue* prepared by Kleinfelder on March 21, 2014 and Final Report of Roosevelt Park Infiltration Study prepared by Kleinfelder on August 24, 2017 were used in support of the analysis presented below (both reports included in Appendix B).

Geologic Setting

The proposed project is located in the City of Los Angeles within the Los Angeles Basin, south of the Transverse Range geomorphic province and northwest of the Peninsular Range geomorphic province's northern boundary (R.F. Yerkes, et al. 1971). The Los Angeles Basin is a northwest-trending alleviated lowland plain about 50 miles long and 20 miles wide and is bounded on the north by the Santa Monica Mountains, the Elysian, Repetto, and Puente Hills and on the east and southeast by the Santa Ana Mountains and San Joaquin Hills (California Department of Conservation 2002).

According to the Seismic Hazard Zone Report for the South Gate 7.5-minute Quadrangle Los Angeles County, California; the project area is covered by alluvial sediments of Quaternary age. Older alluvial fan sediments of Pleistocene age are associated with the Montebello Hills and Dominguez Hills. Elsewhere across most of the quadrangle are the younger alluvial fan sediments of Holocene and late Pleistocene age. These deposits consist of varying proportions of sand, gravel, silt, and clay.

Onsite Soils

According to the Kleinfelder infiltration study, subsurface soils in the proposed project area consist predominantly of silty sand and clay to a depth of approximately 12 to 14 feet, sand and silty sand to an approximate depth of 24 to 26 feet, and clay, silt, and silty sand to total depth explored - approximately 50 feet below ground surface (bgs).

Faults

There are no active faults in the vicinity of the proposed project. The Potrero fault is the closest fault to the project site and is located approximately 4 miles to the southwest. The Potrero fault is part of the Newport-Inglewood-Rose Canyon fault zone.

Liquefaction

According to the State of California Division of Mines and Geology Seismic Hazard Zones Map - South Gate Quadrangle, the proposed project is located in an area where the historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacement (California Division of Mines and Geology 1998).

Paleontological Resources

Sediments exposed at the ground surface in the proposed project area are of younger Quaternary Alluvium deposited as floodplain deposits from the Los Angeles River, and drainage into Compton Creek, a tributary of the Los Angeles River.

These younger Quaternary Alluvium sediments are too young to contain fossil resources, but they are underlain at varying depths by older Quaternary Alluvium, which does have the potential to encompass significant fossil resources. Valley floor sediments in the Los Angeles Basin typically are sensitive for fossil resources at depths of 5 to 10 feet below the ground surface, while the younger sediments above these depths are not sensitive. However, the thickness and boundaries of these deposits varies, due to river channel movement over time.

A fossil localities search was requested from the Natural History Museum of Los Angeles County for the project area (McLeod 2017). The Natural History Museum of Los Angeles County responded on

May 24, 2017 that they had no recorded fossil localities in the project footprint or adjacent areas. Based on this locality records search, no paleontological resources are known to be present in the project footprint.

However, south-southwest of the project area, older Quaternary Alluvium yielded fossil specimens of mammoth, *Mammuthus*, (LACM 1225) at a depth of 15-20 feet below the ground surface. Further south, fossil localities LACM 1295 and LACM 4206 produced a Pleistocene fauna at 11 to 34 feet below grade that included specimens of extinct animals--mammoth, *Mammuthus*, dire wolf, *Canis dirus*, fossil horse, *Equus*, ground sloth, *Paramylodon*, as well as fossil ungulate, rodent, and bird specimens.

To the west of the park, fossil localities LACM 7701-7702 produced fossil specimens of rabbit, *Sylvilagus*, snake, *Colubridea*, lizard, *Lacertilia*, salamander, *Batrachoseps*, pocket mouse, *Microtus*, harvest mouse, *Reithrodontomys*, and pocket gopher, *Thomomys*, as well as a fish specimen, threespine stickleback, *Gasterosteus aculeatus*, at depths of 11 to 34 feet below the modern ground surface. The sediments that contained these finds are the same as those in the project area, younger Quaternary Alluvium at the ground surface overlying older Quaternary Alluvium at depths greater than 5 feet.

The project area is considered highly sensitive for paleontological resources at depths of five feet or more below the ground surface. Excavations in the area of younger Quaternary Alluvium to depth's exceeding 5 feet have a high potential to encounter older Quaternary Alluvium, which as noted above, is considered to be highly sensitive for paleontological resources.

Regulatory Setting

Federal

Alquist-Priolo Act

The primary purpose of the Alquist-Priolo Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. The law requires the state geologist to establish regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults and issue locational maps to all affected cities, counties, and state agencies for their use in safe construction. Before a project may be permitted, a geologic investigation is required to demonstrate that proposed buildings would not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet).

Seismic Hazards Mapping Act of 1990

The California State Seismic Hazards Mapping Act of 1990 addresses earthquake hazards other than surface fault rupture, including liquefaction and seismically induced landslides. The state establishes city, county, and state agency responsibilities for identifying and mapping seismic hazard zones and mitigating seismic hazards to protect public health and safety. The act requires the California Department of Conservation, Division of Mines and Geology, to map seismic hazards and establishes specific criteria for project approval that apply within seismic hazard zones, including the requirement for a geological technical report.

State

California Building Code

The California Code of Regulations, Title 24 (California Building Code) applies to all applications for building permits. The California Building Code (also called the California Building Standards Code) has incorporated the International Building Code, which was first enacted by the International Conference of Building Officials in 1927 and which has been updated approximately every 3 years since that time. The current version of the California Building Code (2013) became effective on January 1, 2014.

Local agencies must ensure that development in their jurisdictions comply with guidelines contained in the California Building Code. Cities and counties can, however, adopt building standards beyond those provided in the code.

Local

County of Los Angeles Building Code

The 2014 County of Los Angeles Building Code, as amended, came into effect January 1, 2014, with Title 26, Building Code, adopting the California Building Code, 2013 Edition (Part 2 of Title 24 of the California Code of Regulations). The County of Los Angeles Building Code addresses issues related to site grading, cut and fill slope design, soil expansion, geotechnical investigations before and during construction, slope stability, allowable bearing pressures and settlement below footings, effects of adjacent slopes on foundations, retaining walls, basement walls, shoring of adjacent properties, and potential primary and secondary seismic effects. The County of Los Angeles Department of Public Works Building and Safety Division is responsible for implementing the provisions of the Building Code. The County's primary seismic regulatory document is the Safety Element of the County of Los Angeles General Plan, adopted in 1996.

Impact Analysis

Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- 1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

Construction and Operation

Less-than-Significant Impact. According to the Department of Conservation Fault Activity Map of California (California Department of Conservation 2016), no active faults are in the vicinity of the proposed project; thus, fault rupture is unlikely to occur during project implementation. Additionally, the project area is not located within a State of California Alquist-Priolo Earthquake Fault Hazard Zone. The Potrero fault is the fault nearest to the project site—approximately 4 miles to the southwest. As such, people or structures would not be exposed to substantial adverse effects from a rupture of a known earthquake fault. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to earthquake fault rupture would occur as a result of the proposed project. Therefore, no mitigation measures are required.

2. Strong seismic ground shaking?

Construction and Operation

Less-than-Significant Impact. The Potrero fault is the closest fault to the project site—approximately 4 miles to the southwest. It is part of the Newport-Inglewood-Rose Canyon fault zone. Additionally, Los Angeles is located in Seismic Zone 4, which is a designation previously used in the Uniform Building Code to denote the areas of the highest risk to earthquake ground motion. As a result, the proposed project could be subject to future seismic shaking and strong ground motion resulting from seismic activity. Completion of a comprehensive design-level geotechnical investigation, adherence to the current California Building Code, and local ordinances and laws regulating construction, and the application of proven seismic design criteria as standard engineering practice would ensure the proposed project structures are designed to withstand seismic events without sustaining substantial damage or collapsing. Implementation of the proposed project would not result in a greater risk of seismic ground shaking at the project site and thus, the potential for seismic ground shaking at the project site would remain unchanged. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to seismic ground shaking would occur as a result of the proposed project. Therefore, no mitigation measures are required.

3. Seismic-related ground failure, including liquefaction?

Construction and Operation

Less-than-Significant with Mitigation Incorporated. Liquefaction occurs when saturated, low-density, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. The increase in pressure is caused by strong ground motion from an earthquake. Liquefaction more often occurs in areas underlain by silts and fine sands and where shallow groundwater exists. The proposed project is located in an area where the historic occurrence of liquefaction, or local geological, geotechnical, and groundwater conditions, indicate a potential for permanent ground displacement. As a result, infiltration of water to the underlying soil can result in an increased potential for soil instability and liquefaction. Seismic ground shaking and seismically induced liquefaction could result in structural damage to facilities, which, in turn, could affect operation of related systems. All of the proposed facilities would be uninhabitable. However, damage to facilities could result in threats to the safety. The proposed project design includes valves to be installed on the upstream end of each infiltration system that can be closed to prevent excess volume from entering the systems. These valves would be operated in accordance the project's Operation and Maintenance Manual. Monitoring wells would also be installed at various locations near the infiltration systems to monitor saturation levels and to determine when the valves require operation. In addition, the PEIR identified MM GEO-1, listed below, which requires the proposed project to conduct a design-level geotechnical investigation. The geotechnical evaluation would identify the potential for geologic hazards and would recommend

site-specific design criteria to abate geologic hazards, including liquefaction. Implementing the design requirements in the California Building Code and County ordinances and recommendations of the site-specific geotechnical investigation would ensure that all structures are constructed in compliance with the applicable laws, regulations, and policies. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM GEO-1: Prior to construction of infiltration BMPs, LACDWP shall conduct a geotechnical investigation to recommend design measures necessary to prevent excessive lateral spreading that could destabilize neighboring structures. LACDPW shall implement these measures in the final project design of the proposed infiltration basins.

4. Landslides?

Construction and Operation

No Impact. According to the Seismic Hazard Zone Report for the South Gate 7.5 Minute Quadrangle, Los Angeles County, California, there are no areas designated as “zones of required investigation for earthquake-induced landslides” within the South Gate Quadrangle. Thus, construction and operational impacts are not expected and no impact would occur

Mitigation Measures

No impacts related to landslides would occur as a result of the proposed project. Therefore, no mitigation measures are required.

b. Result in substantial soil erosion or the loss of topsoil?

Construction and Operation

Less-than-Significant Impact. Erosion is a condition that could adversely affect development on any site. Construction activities could exacerbate erosion conditions by exposing soils and adding water to the soil from stormwater runoff that could erode the material offsite. The proposed project would be subject to NPDES Construction General Permit and storm water pollution prevention plan (SWPPP) requirements, and would implement measures to minimize and contain erosion and sedimentation, minimize runoff flows into storm drains. The SWPPP would include a number of BMPs to ensure impacts from erosion and sediment, non-stormwater discharges and hazardous spills are minimized and in compliance with applicable laws. In addition, the proposed project would function as a LID measure that would filter out sediment and other pollutants from runoff and prevent it from being discharged into other outlets. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to erosion or loss of topsoil would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

Construction and Operation

Less-than-Significant with Mitigation Incorporated. On-site soils consist of silty sand and clay to approximately 14 feet bgs and sand and silty sand to approximately 24 feet bgs, and according to Section VI.a.3., Geology and Soils, there is a potential for seismically induced liquefaction in the project area. Proposed project features are expected to reach a depth of 15 feet bgs and, thus, could be impacted by soil instability as a result of seismically induced liquefaction. As identified in Section VI.a.3., Geology and Soils, the geotechnical evaluation MM GEO-1 would identify the potential for geologic hazards and would recommend site-specific design criteria to abate geologic hazards, such as liquefaction. Moreover, none of the proposed project features include habitable structures and would not put people at risk. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM GEO-1 would be implemented to reduce potential impacts related to landslides, lateral spreading, subsidence, liquefaction, and collapse to less-than-significant.

- d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

Construction and Operation

Less-than-Significant with Mitigation Incorporated. Expansive soils are fine-grained soils (generally high-plasticity clays) that can undergo a significant increase in volume with an increase in water content as well as a significant decrease in volume with a decrease in water content. Changes in the water content of highly expansive soils can result in severe distress for structures constructed on or against the soils. As mentioned under Section VI.c., Geology and Soils, on-site soils consist of silty sand with clay and medium dense poorly graded sand with silt; thus, the likelihood of potential impacts to the proposed project related to expansive soils is considered low (as clay is not a primary component of onsite soils). Furthermore, implementation of MM GEO-1 would further characterize onsite soils and identify the potential for geologic hazards, including expansion potential. In the unlikely event that the geotechnical evaluation identifies a potential impact due to expansive soils, site-specific design criteria to abate potential impacts would be recommended. Moreover, none of the proposed project features include habitable structures or would put people at risk. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM GEO-1 would be implemented to reduce potential impacts related to expansive soil to less-than-significant.

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?*

Construction and Operation

No Impact. No septic tanks or alternative wastewater disposal systems are proposed as part of the proposed project. Therefore, no impacts would occur.

Mitigation Measures

No impacts related to the use of septic tanks or alternative wastewater disposal systems would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less-than-Significant with Mitigation Incorporated. The project area is considered highly sensitive for paleontological resources at depths of five feet or more below the ground surface. Excavations in the area of younger Quaternary Alluvium to depths exceeding 5 feet have a high potential to encounter older Quaternary Alluvium, which as noted above, is considered to be highly sensitive for paleontological resources. Disturbance of significant paleontological resources would result in a significant impact under CEQA. To mitigate this potential impact, construction monitoring will be required for grading and excavation in undisturbed high sensitivity sediments. For this project, sensitive sediments are likely to exist at five feet deep or deeper, and are unlikely to be disturbed by shallow grading and excavation. However, deeper excavations for activities such as excavation of the diversion structures and pipelines, and the underground infiltration systems, could encounter significant paleontological resources. Destruction of significant paleontological resources could result in a significant impact. Implementation of MM PR-1 as described below would mitigate these impacts to a less-than-significant level.

The Los Angeles County General Plan Conservation Element requires that a paleontologist be retained to mitigate potential impacts to nonrenewable paleontological resources. However, significant paleontological resources can be uncovered even in areas of low sensitivity, and it is possible that ground-disturbing construction activities associated with implementation of the proposed project could result in the inadvertent discovery of paleontological resources, which could be a significant impact. Implementation of MM PR-1, listed below, would reduce the impacts to less-than-significant levels.

Mitigation Measures

MM PR-1: A qualified vertebrate paleontologist shall be retained to determine areas that shall require paleontological monitoring during initial ground disturbance.

- The qualified project paleontologist shall review project excavation and grading plans and determine the location of construction activities, especially excavation of the infiltration systems, drainage features, and utility relocations, likely to encounter subsurface sediments with high paleontological sensitivity. Maps depicted areas requiring monitoring shall be prepared.
- If excavations for the project take place in Quaternary older alluvial deposits these excavations shall be monitored on a fulltime basis by a qualified paleontological monitor

under the supervision of the qualified paleontologist. This paleontological resource monitoring shall include inspection of exposed rock units during active excavations within the geologically sensitive sediments. Monitoring may be reduced if some of the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.

- The paleontologic monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor shall have authority to temporarily divert grading away from exposed fossils in order to professionally and efficiently recover the fossil specimens and collect associated data. All efforts to avoid delays in project schedules shall be made. To prevent construction delays, paleontological monitors shall be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis.
- Fossils collected, if any, shall be transported to a paleontological laboratory for processing where they shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility, such as the Natural History Museum of Los Angeles County.
- Following analysis, a Report of Findings with an appended itemized inventory of specimens shall be prepared. The report and inventory, when submitted to the appropriate lead agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, shall signify completion of the program to mitigate impacts on paleontological resources.

Cumulative Impacts

There are no related projects within a 0.5-mile radius, as identified in Chapter 2, *Project Description*. As discussed above, no impacts related to earthquake fault rupture and landslides would occur. Potential seismic shaking impacts would be less than significant. However, potentially adverse effects associated with seismic hazards and soil erosion associated with the proposed project would be site-specific, and would be addressed on-site. Therefore, the incremental effect of the proposed project would not be cumulatively considerable.

VII. Greenhouse Gas Emissions	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

According to EPA, a greenhouse gas (GHG) is any gas that absorbs infrared radiation in the atmosphere. This absorption traps heat within the atmosphere, maintaining the Earth’s surface temperature at a level higher than would be the case in the absence of GHGs. Increasing levels of GHGs resulting from human activities have increased levels of most of these naturally occurring gases in the atmosphere, which has and would continue to result in an increase in the temperature of the Earth’s lower atmosphere, a phenomenon that is commonly referred to as *global warming*. Warming of the Earth’s lower atmosphere induces a suite of additional changes, including changes in global precipitation patterns; ocean circulation, temperature, and acidity; global mean sea level; species distribution and diversity; and the timing of biological processes. These large-scale changes are collectively referred to as *global climate change*.

The GHGs listed by the Intergovernmental Panel on Climate Change include carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (Intergovernmental Panel on Climate Change 2007). California law and the State CEQA Guidelines contain a similar definition of GHGs (Health and Safety Code Section 38505(g); 14 CCR Section 15364.5). Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic (human-made) sources.

To simplify reporting and analysis, GHGs are commonly defined in terms of a global warming potential (GWP). The Intergovernmental Panel on Climate Change defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO₂ equivalents (CO₂e). The GWP of CO₂ is, by definition, 1. GHG emissions are quantified and presented in terms of metric tons of CO₂e emitted per year.

Regulatory Setting

Los Angeles County has prepared a Municipal Climate Action Plan to reduce GHG emissions from municipal activities, which includes various programs to reduce municipal GHG emissions to 15% below current levels. Emissions addressed in the Municipal Climate Action Plan include those from building energy; cogeneration facilities; vehicle fleet; owned landfills; refrigerants; wastewater treatment plants; street and outdoor lighting; water pumps; water conveyance; waste generation; employee commute; and miscellaneous direct emissions.

The State CEQA Guidelines do not provide numeric or qualitative thresholds of significance for evaluating GHG emissions. While SCAQMD has not adopted a threshold for assessing the significance

of GHG emissions for land use development projects, SCAQMD has suggested that it would be appropriate for a lead agency to use a threshold of 3,000 metric tons of CO_{2e} per year (South Coast Air Quality Management District 2008b).

Impact Analysis

Would the project:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Construction and Operation

Less-than-Significant Impact. The proposed project would generate approximately 908 metric tons of GHG emissions during construction of the proposed improvements at the Park. Construction-related GHG emissions associated with the proposed project would be short-term in nature and limited to the period of time when construction activity is taking place. The proposed project would not generate significant additional vehicle trips to the Park, and as such, GHG emissions generated by motor vehicles traveling to and from the site on a daily basis would be negligible. As it is anticipated that only periodic trips throughout the year would be required for inspection and maintenance activities, the mobile GHG emissions generated by these worker trips would also be negligible. The SCAQMD's recommended threshold for non-industrial projects is 3,000 metric tons of carbon dioxide equivalent per year. Additionally, SCAQMD recommends that the total construction emissions for a project be amortized over 30 years and added to its operational emission estimates. Total construction GHG emissions of 908 metric tons amortized over 30 years would be approximately 30 metric tons per year. This level of GHG emissions would be well below the SCAQMD recommended threshold of 3,000 metric tons per year. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to GHG emissions would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Construction and Operation

Less-than-Significant Impact. The proposed project would serve to capture, treat, and manage stormwater runoff in the project site drainage area and would implement Park upgrades. The proposed project would result in infiltration of stormwater to the groundwater basin and would reduce potable water use associated with the grass fields to be replaced with artificial turf. These conservation measures are consistent with the applicable actions and measures of the County's Community Climate Action Plan. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

The cumulative discussion for GHG emissions follows the SCAQMD interim GHG thresholds, County Municipal Climate Action Plan, and California's 2017 Climate Change Scoping Plan Update that have been developed to achieve statewide GHG reduction targets. GHG emissions and climate change are exclusively cumulative impacts; there are no non-cumulative GHG emissions impacts from a climate change perspective, as climate change is the result of cumulative global emissions. No single project, when considered in isolation, can cause climate change because a single project's emissions are not enough to change the radiative balance of the atmosphere. Because climate change is the result of GHG emissions and GHGs are emitted by innumerable sources worldwide, global climate change would have a significant cumulative impact on the natural environment as well as human development and activity. As such, GHGs and climate change are cumulatively considerable, even though the contribution may be individually limited (South Coast Air Quality Management District 2008b). SCAQMD methodology and thresholds are thus cumulative in nature.

As discussed above, the project would not exceed the threshold of significance and would be consistent with adopted plans and regulations that aim to reduce GHG emissions. Because project-related emissions would not exceed the interim threshold established by SCAQMD, the intent of which was "to establish a performance standard or target GHG reduction objective that would ultimately contribute to reducing GHG emissions to stabilize climate change," (South Coast Air Quality Management District 2008b) no substantial contribution to cumulative impacts related GHG emissions would occur. Furthermore, the GHG emissions that would be generated by the proposed project would be subject to the Los Angeles County Municipal Climate Action Plan, which has a goal of reducing emissions from the County's municipal activities. Overall, the proposed project's contribution to a cumulative GHG impact would be minor.

VIII. Hazards and Hazardous Materials	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The proposed project site is located within the unincorporated area of Florence-Firestone in Los Angeles County. Directly abutting the project site to the north and east are residential land uses; west of the project site is Graham Avenue and the Metro train tracks; and south of the project site are commercial and residential land uses across Nadeau Street.

Hazardous Materials Records

Onsite

A review of a site-specific Environmental Data Resources (EDR) Radius Map Report (Environmental Data Resources 2016) identified the project footprint within two databases. It was identified in the HAZNET (Facility and Manifest data) and Los Angeles County HMS (Industrial Waste Sites). The listings were associated with permits for household hazardous materials collection events conducted at the Park by the County of Los Angeles. No violations were noted associated with these listings.

Nearby Properties

Multiple hazardous materials sites were listed in the EDR as being located within 0.25 mile of the proposed project. Table 3-6 summarizes sites identified within 0.12 mile of the proposed project and includes their address, location, and distance from the proposed project, database(s) it was identified in as well as the site's status.

Table 3-6. Properties within 0.12 mile

Site	Address	Distance from the project	Databases	Site Status Summary
NDC Distributors Inc.	1650 E Nadeau Street	0.085 mile to the SSW	RCRA-SQG, HIST UST, EMI, Los Angeles County Industrial Waste Sites (LA Co. HMS). LUST. HIST Cortese.	Historic UST site. Two USTs installed in 1979. One for diesel fuel and the other for gasoline. Diesel release to soil in 4/1991. Case closed by LA RWQCB on 12/1992. No other violations associated with site.
Edwards Container	7766 Maie Avenue	0.028 mile to the SSW	LUST. HIST Cortese.	Gasoline impacted soil only. Case closed by LA RWQCB Regional Water Quality Control Board on 12/1990. Case originally opened in 7/1990. No other violations associated with listing.
Mitchell Investors/Union Batteries and Auto Electric Inc./Waymire Drum Company	7702 Maie Avenue	0.079 mile to the WSW	Envirostor, Haznet, RCRA-SQG, SLIC, UST, EMI, ENF, EnviroStor Permitted Facilities Listing (HWP), NPDES, LA Co. Site Mitigation, EDR Historic Auto, RCRA Non Generators - No Longer Regulated (NonGen/NLR) FINDS	Impacted groundwater and soil from former drum reconditioning and recycling facility. Contaminants of concern include volatile organic compounds, semi-volatile organic compounds, heavy metals, petroleum hydrocarbons, and other potential contaminants. Most recently, the LACoFD recorded a leak in an onsite underground storage tank which identified gasoline, diesel and waste oil impacts to soils. According to DTSC, there are no records of

Site	Address	Distance from the project	Databases	Site Status Summary
				remedial activities having been conducted at the site.
L&B Industries Inc./Dynamic Air Engineering	7412 Maie Avenue	0.076 mile to the NW	RCRA-SQG, FINDS, ECHO, LUST, Envirostor, Haznet, HIST Cortese.	At 7412 Maie Avenue, soil contamination was found onsite beginning in the late 1980s. According to an inquiry made with the DTSC; subsequent to some remedial activities conducted onsite, the LACoFD concluded that no further mitigation was necessary and subsequently issued site closure for current uses, with exception of 'Oversight Area 6'. Oversight of this area is currently under the purview of the RWQCB and sampling data suggests that contamination is concentrated in a defined area and is limited to soil only. According to DTSC, contaminants appear to be petroleum based and are located between 25–35 feet below ground surface.

DTSC = Department of Toxic Substances Control; ECHO = Enforcement & Compliance History Information; EMI = Emissions Inventory data; ENF = Enforcement Action Listing; FINDS = Facility Index System/Facility Registry System; Haznet = Facility and Manifest Data; HIST = historic; LA = Los Angeles; LACoFD = Los Angeles County Fire Department; LUST = leaking underground storage tank; NPDES = National Pollutant Discharge Elimination System; RCRA = Resource Conservation and Recovery Act of 1976; RWQCB = Regional Water Quality Control Board; SLIC = Spills, Leaks, Investigations and Cleanup; SQG = small quantity generator; UST = underground storage tank

In addition to the sites above, there were 15 listings in the EDR Historic Auto (historic auto maintenance facilities) and 3 listings in the EDR Historic Cleaner databases (historic dry cleaner facilities) within 0.12 mile. There were no violations associated with any of those listings.

Table 3-7 summarizes sites identified within 0.12 and 0.25 mile of the proposed project and includes their address, location, and distance from the proposed project, database(s) it was identified in as well as the site's status:

Table 3-7. Properties within 0.12 and 0.25 mile

Site	Address	Distance from the project	Databases	Site Status Summary
Rite Aid No. 5423	1534 E Florence Avenue	0.202 mile to the NW	RCRA-LQG	Large quantity hazardous waste generator site. No violations associated with listing.

Site	Address	Distance from the project	Databases	Site Status Summary
Los Angeles Unified School District – Mann Junior High	7001 S Street Andrews Place	0.242 mile to the N	RCRA-LQG	Large quantity hazardous waste generator site. No violations associated with listing.
World Oil	1935 E Florence Avenue	0.222 mile to the NE	HIST UST, HIST Cortese, UST, LUST, SWEEPS UST, CA FID UST	Gasoline impacted soil only under LUST. Case closed by LA Regional Water Quality Control Board on 1/2005. Case originally opened in 11/1997. Onsite remediation included over-excavation and soil vapor extraction. No other violations associated with site were noted.
Rich Steel Pickling	8019 Beach Street	0.158 mile to the S	SWEEPS UST, RCRA-SQG, LUST, UST, HIST UST, FINDS, Haznet, ECHO	Contaminated media and contaminant(s) not available. Case closed by LA County on 10/2008. Case originally opened in 7/2008. No other violations associated with site were noted.
Atlas Plating & Grinding Inc.	1543 Nadeau Street	0.195 mile to the SW	RCRA-SQG, FINDS, EMI, Haznet, ECHO	Facility received a violation under RCRA in 3/1994. Violation described as 'general'. No other details provided. Compliance was achieved in 3/1999. No other violations associated with site were noted.
Florence Car Wash	1662 Florence Avenue E	0.148 mile to the NNW	LUST, HIST Cortese, SWEEPS UST	Aviation fuel impacted soil only under LUST. Case closed by LA County on 7/1998. Case originally opened in 7/1998. No other violations associated with site were noted.
Goodyear Industrial Tract	Slauson, Central, Florence and Avalon Avenues	0.141 mile to the NNW	US Brownfields	Part of EPA's listing of Brownfields properties. Listed as having received 'assessment' grant. Impacts to property not disclosed.
Seals Investment Inc.	8119 Beach Street	0.218 mile to the S	EMI, HIST Cortese	Site permitted under South Coast Air Quality Management District for regulated air emissions. No violations associated with the site.

CA FID = Facility Inventory Database; ECHO = Enforcement & Compliance History Information; EMI = Emissions Inventory data; EPA = Environmental Protection Agency; FINDS = Facility Index System/Facility Registry System; Haznet = Facility and Manifest Data; HIST = historic; LA = Los Angeles; LQG = large quantity generator; LUST = leaking underground storage tank; RCRA = Resource Conservation and Recovery Act of 1976; SQG = small quantity generator; SWEEPS = Statewide Environmental Evaluation and Planning System; UST = underground storage tank

Schools

Florence Avenue Elementary School is the closest school to the proposed project site and is located approximately 0.10 mile to the northeast. Other schools in the area include the Animo Pat Brown Charter High School, located 0.35 mile to the south and Miramonte Elementary School, located approximately 0.40 mile to the northwest of the proposed project site.

Regulatory Setting

Federal

Federal Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established an EPA-administered program to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the “cradle to grave” system of regulating hazardous.

Cortese List

U.S. Code 65962.5 (commonly referred to as the Cortese List) includes Department of Toxic Substances Control (DTSC)-listed hazardous waste facilities and sites, Department of Health Services lists of contaminated drinking water wells, sites listed by the SWRCB as having underground storage tank leaks or a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites with a known migration of hazardous waste/material.

Department of Transportation Hazardous Materials Regulations (49 CFR 100–185)

U.S. Department of Transportation Hazardous Materials Regulations covers all aspects of hazardous materials packaging, handling, and transportation. Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), 177 (Highway Transportation), would all apply to the Proposed Project and/or surrounding uses.

State

California Health and Safety Code

DTSC, a department of Cal/EPA, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous waste primarily under the authority of the Federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Division 20, Chapter 6.5 of the California Health and Safety Code deals with hazardous waste control through regulations pertaining to transportation, treatment, recycling, disposal, enforcement, and permitting of hazardous waste. Division 20, Chapter 6.10 contains regulations applicable to the cleanup of hazardous materials releases. Title 22, Division 4.5 contains the environmental health standards for the management of hazardous waste. This includes standards for identification of hazardous waste (Chapter 11) and standards applicable to transporters of hazardous waste (Chapter 13).

California Code of Regulations, Title 8—Industrial Relations

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal OSHA) and the federal Occupational Safety and Health Administration are the agencies responsible for assuring worker safety in the workplace. Cal OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. These standards would be applicable to both construction and operation of the project. The standards included in the Cal OSHA's Title 8 include regulations pertaining to hazard control (including administrative and engineering controls), hazardous chemical labeling and training requirements, hazardous exposure prevention, hazardous material management, and hazardous waste operations.

California Labor Code (Division 5, Parts 1, and 7)

The California Labor Code is a collection of regulations that include the regulation of the workplace to ensure appropriate training on the use and handling of hazardous materials and the operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5 ensures employees that are in charge of the handling of hazardous materials are appropriately trained on, and informed of, the materials they are handling. Division 5, Part 7 ensures employees who work with volatile flammable liquids are outfitted in appropriate safety gear and clothing.

Local

Operational Area Emergency Response Plan

Under the County of Los Angeles Office of Emergency Management, the Operational Area Emergency Response Plan addresses how the County of Los Angeles carries out centralized emergency management should an emergency go beyond day-to-day response capabilities. It ensures the successful coordination of the response and the initiation of recovery operations among County departments in response to incidents in the unincorporated areas and/or the incorporated areas of the County Operational Area. The Operational Area Emergency Response Plan also addresses interagency coordination of information, operations, and aid among the local governments within the Operational Area.

Impact Analysis

Would the project:

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Construction and Operation

Less-than-Significant Impact. Construction of the proposed project is expected to involve excavation, grading, trenching, and similar activities, during which time routine transport, use, and disposal of hazardous materials such as fuel, solvents, paints, oils, and grease would occur. Additionally, post-construction maintenance activities would also require the use of small amounts of fuels and oil (for maintenance equipment operation), however, no hazardous material on-site storage is required. Furthermore, materials used in construction and in maintenance of the

proposed project are not expected to represent the handling of acutely hazardous materials, and transport, use, and disposal must be compliant with applicable regulations as described under the regulatory setting section above. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to the routine transport, use, or disposal of hazardous materials would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***
- d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?***

Construction and Operation

Less-than-Significant with Mitigation Incorporated. As mentioned in the Environmental Setting above, a review of a site-specific EDR Radius Map Report identified the project footprint within two databases. The listings were associated with permits for household hazardous materials collection events conducted by the County of Los Angeles. No violations were noted associated with these listings. In addition to listings within the project footprint, multiple hazardous materials sites were listed in the EDR as being located within 0.25 mile of the proposed project (a summary of these sites is included in the Environmental Setting). Two sites were identified in the EDR as active contamination sites in the vicinity of the project site (within 0.12 mile of the proposed project) with the potential to affect the project. The two sites are 7702 and 7412 Maie Avenue, and located approximately 420 and 400 feet to the west and northwest, respectively from the project footprint, both with the potential to impact groundwater and soil. Review of details found in the SWRCB's Geotracker database revealed that the 7412 Maie Avenue site does not appear to have contributed to local groundwater contamination. At 7412 Maie Avenue, soil contamination was found onsite beginning in the late 80s (SWRCB 2015). According to DTSC, subsequent to some remedial activities conducted onsite, the Los Angeles County Fire Department (LACoFD) concluded that no further mitigation was necessary and subsequently issued site closure for current uses, with exception of 'Oversight Area 6'. Oversight of this area is currently under the purview of the RWQCB and sampling data suggests that contamination is concentrated in a defined area and is limited to soil only. According to DTSC, contaminants appear to be petroleum based and are located between 25–35 feet bgs.

SWRCB details regarding the 7702 Maie Avenue site indicates the site appears to have contributed to local groundwater contamination. 7702 Maie Avenue is located outside the park footprint at a distance of approximately 800 feet southeast from the nearest proposed BMP. Review of details found in the California SWRCB's Geotracker database revealed that deep groundwater flow direction is currently southwest and away from the project site and shallow groundwater flow direction is to the northeast with some variation. Because deep groundwater flow is toward the southwest, it is unlikely that contaminated groundwater from the aforementioned site would have reached the project site. The Department of Toxic Substances Control was contacted in an effort to obtain additional information regarding the vertical and lateral extent of soil and groundwater

contamination; however, DTSC was not able to provide details regarding extent of contamination because a full site characterization has not been conducted. Beginning in the 1990s, sampling conducted onsite has identified heavy metals, VOCs, and semi-volatile organic compounds in soils. A sampling event conducted in 1995 detected elevated levels of Trichloroethylene and chlorinated degradation compounds in both soil and groundwater. A subsequent sampling event conducted by the Los Angeles RWQCB in 2000 reported Trichloroethylene up to 2400 µg/L and Tetrachloroethylene up to 230 µg/L, along with other degraded chlorinated compounds. Most recently, the LACoFD recorded a leak in an onsite underground storage tank which identified gasoline, diesel, and waste oil impacts to soils. DTSC stated that there were no records of remedial activities having been conducted at the site.

Upon review of EDR data for the remaining sites listed within 0.25 mile of the proposed project site, none are considered to have a high likelihood of having impacted the project site.

In 2014, Kleinfelder conducted infiltration study to evaluate the feasibility of design and construction of the proposed project at the Roosevelt Park location (Appendix B). During completion of the infiltration study, soil samples were collected at one of the boring locations (B-2) and submitted to a laboratory for environmental testing. A total of 10 samples (one at each 5-foot interval up to 50 feet) were collected from boring B-2. B-2 is located within the park baseball field, between the contaminated site and the nearest proposed BMP. Soil samples were analyzed for total petroleum hydrocarbons, VOCs, and Title 22 metals. Analytical results did not result in total petroleum hydrocarbons and VOCs detections, and 22 metals were found at concentrations less than California Human Health Screening Levels. Historical information reviewed and available via EDR report as well as analytical results of soils samples collected from B-2, suggest uncontaminated on-site soils. Additional soil sampling was conducted at the proposed BMP locations in 2017 by Kleinfelder to further evaluate potential onsite contamination, along with stormwater infiltration rates at Roosevelt Park during the design 85th percentile storm event to determine whether the proposed project would create pollutant mobilization of contaminated soil or groundwater from the 7702 Maie Ave site. The results of the additional testing reveal no potential for the project to result in pollutant mobilization of contaminated soil or groundwater. Thus, operational impacts associated with the infiltration of water to the groundwater basin are anticipated to be less-than-significant with the implementation of PEIR MM HAZ-1, listed below. The proposed project includes replacement of existing natural grass with artificial turf. Artificial turf in some instances is known to overheat and become temporary unusable for athletes and can also emit rubber odors, resulting in a negative perception. Artificial turf typically uses silica sand or crumb rubber for top fill on their artificial grass.

Concerns have been raised by the public about the safety of recycled tire crumb used in playing fields and playgrounds in the United States. Limited studies have not shown an elevated health risk from playing on fields with tire crumb, but the existing studies do not comprehensively evaluate the concerns about health risks from exposure to tire crumb (Environmental Protection Agency 2016). On February 12, 2016 the EPA, the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry, and the U.S. Consumer Product Safety Commission launched a multi-agency action plan to study key environmental human health questions (Environmental Protection Agency 2016). The agencies will conduct several activities to better understand potential exposures that may occur when individuals frequently use artificial turf fields. Scientists will identify various exposure scenarios (ways in which people may be exposed based on their activities on the fields) and then design and conduct a pilot-scale exposure study to characterize people's exposures on these fields (Environmental Protection Agency 2016). This work will consider possible

ways that one may be exposed—including by breathing, accidentally ingesting, or physical contact with tire crumb (Environmental Protection Agency 2016). However, the results of this study are not yet available; the anticipated timeline was late 2016.

The California Office of Environmental Health Hazard Assessment is also conducting a study of the potential health effects associated with the chemicals that can be released from synthetic turf and playground mats containing recycled waste tires; the study will be completed by mid-2019 (California Office of Environmental Health Hazard Assessment 2016). The study is assessing the potential health impacts associated with playing on synthetic turf fields and playground mats. It is examining athletic fields and playground mats made from crumb rubber derived from recycled waste tires (California Office of Environmental Health Hazard Assessment 2016). The information generated in the study will enable the California Office of Environmental Health Hazard Assessment to determine the types and concentrations of chemicals individuals are exposed to when playing on synthetic turf and playground mats, estimate the level of exposures associated with various activities, and assess whether these exposures pose potential health risks (California Office of Environmental Health Hazard Assessment 2016).

The proposed project would include implementation of AstroPlay DT which does not use rubber for top fill. No crumb rubber eliminates the potential for rubber odors to emit and lowers the associated health risk associated with crumb rubber for top fill. The proposed project would use ZeoFill for turf infill, which is composed of zeolite. Zeolite is a rock composed of aluminum, silicon, and oxygen and occurs naturally in several regions of the world where prehistoric volcanic activity has happened near water, or the water has been present for millennia since the eruption (Environmental Protection Agency 1998). There are several types of zeolites and one zeolite is not exactly like another (Environmental Protection Agency 1998); both natural and synthesized. Zeolites molecular shape allows the ZeoFill to absorb and slowly release water for cooler field temperatures. The use of ZeoFill over crumb rubber would lower the associated unknown human health risk. As a result, the proposed project would eliminate the crumb rubber exposure from the artificial turf and impacts would be less than significant.

Mitigation Measures

MM HAZ-1: LACDPW Design Division shall prepare and implement maintenance practices that include periodic removal and replacement of surface soils and media that may accumulate constituents that could result in further migration of constituents to sub-soils and groundwater. A BMP Maintenance Plan shall be prepared by LACDPW Design Division prior to project construction, that identifies the frequency and procedures for removal and/or replacement of accumulated debris, surface soils and/or media (to depth where constituent concentrations do not represent a hazardous conditions and/or have the potential to migrate further and impact groundwater) to avoid accumulation of hazardous concentrations and the potential to migrate further to sub-soils and groundwater. The BMP Maintenance Plan may consist of a general maintenance guideline that applies to several types of smaller distributed BMPs. Structural BMPs shall be designed to prevent migration of constituents that may impact groundwater.

- c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?***

Construction and Operation

Less-than-Significant Impact. The closest school to the project site, Florence Avenue Elementary School, is located within 0.25 mile (approximately 0.10 mile to the northeast). As stated in Section VIII.a., Hazards and Hazardous Materials, hazardous materials used in construction and in operation maintenance of the proposed project are not expected to represent the handling of acutely hazardous materials, and transport, use, and disposal of any hazardous materials would be compliant with applicable regulations as described in the threshold for Section VIII.a., Hazards and Hazardous Materials. Therefore, construction and operational impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- e. Be located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and result in a safety hazard for people residing or working in the project area?***

- f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?***

Construction and Operation

No Impact. The proposed project is not located within an airport land use plan, within 2 miles of a public airport or public use airport, or in the vicinity of a private airstrip. The closest airport to the project site is the Compton/Woodley Airport, located approximately 5.3 miles south. The Hawthorne Municipal Airport is the next closest airport to the proposed project area, located 5.7 miles southwest. Therefore, no impacts would occur.

Mitigation Measures

No potentially significant impacts related to public airport safety hazards would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Construction

Less-than-Significant with Mitigation Incorporated. The proposed project is not expected to result in any substantial traffic queuing along Graham Avenue, Holmes Avenue, or Nadeau Street, but does include characteristics (e.g., temporary road and lane closures) that could physically impair or otherwise interfere with emergency response or evacuation in the project vicinity. However, the proposed project would be required to adhere to the County's Operational Area Emergency Response Plan, and the potential impacts would occur under a temporary basis and only during

project construction. The proposed project would implement MM PS-1, listed below, to reduce potential impacts to a less-than-significant level.

Operation

No impact. No impacts would occur under operation of the proposed project, and no mitigation measures for operation would be required.

Mitigation Measures

MM PS-1: LACDPW will provide reasonable advance notification to service providers such as fire, police, and emergency medical services as well as to local businesses, homeowners, and other residents adjacent to and within areas potentially affected by the proposed project about the nature, extent, and duration of construction activities. Interim updates should be provided to inform them of the status of the construction activities.

- h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including in areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands***

Construction and Operation

No Impact. The proposed project area is located in a densely developed area of Los Angeles County and is not located within or in the vicinity of wildland area. According to information obtained from the California Department of Forestry and Fire Protection, the proposed project site does not exist within a California Department of Forestry and Fire Protection Very High Fire Hazard Severity Zones. Therefore, no impacts would occur.

Mitigation Measures

No impacts related to wildland fires would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

There are no related projects within a 0.5-mile radius, as identified in Chapter 2, *Project Description*. As discussed above, project-level potential impacts resulting from the routine transport, use, or disposal of hazardous materials would be less than significant, and no active releases of hazardous materials were identified in the project vicinity. Although the proposed project would likely involve the use of fuels, solvents, and other hazardous materials in support of short-term construction activities, the potentially adverse environmental effects associated with the release of hazardous materials usually are site-specific, remediated on-site and generally do not combine with similar effects that could occur with other projects in the vicinity. Thus, the incremental effect of the proposed project related to the routine transport, use, disposal, and accidental release of hazardous materials would not be cumulatively considerable.

No project-level impacts related to private airstrips impacts, interference of an adopted emergency response plan or emergency evacuation plan, or wildland fire impacts were identified. Thus, the project would have no incremental effect related to private airstrips, emergency response plans, or wildland fires, and impacts would not be cumulatively considerable.

IX. Hydrology and Water Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Contribute to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Hydrology

The project site is located in the Los Angeles River Watershed. The existing site has approximately 55% impervious surfaces and the remaining 45% of pervious surfaces are comprised of landscaping and grass fields. Stormwater runoff generated at the project site sheet flows over asphalt pavement and concrete gutters to curb opening inlets located in the adjacent streets. The project site would discharge to Compton Creek and Los Angeles River.

Floodplains

Per Federal Emergency Management Agency's (FEMA) National Flood Insurance Rate Map, the project site is not located within a 100-year flood hazard area (Federal Emergency Management Agency 2017). The project site is mapped as being within "Zone X," which is defined as an area outside the 0.2% annual chance floodplain, or areas of minimal flood hazards.

Water Quality

Under section 303(d) of the Clean Water Act, the SWRCB is required to submit lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet water quality standards. The law requires that the states establish priority rankings for waters on the lists and develop TMDLs for these waters. The project site drains to Compton Creek and Los Angeles River, which are listed as impaired by the SWRCB (State Water Resources Control Board 2012).

Impact Analysis

Would the project?

a. Violate any water quality standards or waste discharge requirements?

Construction

Less-than-Significant Impact. Project construction activities, such as excavation, site clearing and grading, and landscaping could temporarily affect water quality into receiving waters or other water bodies. Contaminants from construction vehicles and equipment and sediment from soil erosion could increase the pollutant load in runoff being transported to storm drains or receiving waters during construction, which would be a potentially significant impact. Construction stormwater discharges in Los Angeles County are regulated under a SWRCB Water Quality Adopted Order 2009-0009-DWQ (As amended by 2010-0014-DWQ and 2012-006-DWQ (Construction General Permit). The proposed project would be subject to the Construction General Permit and SWPPP requirements, and would implement measures to minimize and contain erosion and sedimentation, minimize runoff flows into storm drains. The SWPPP would include a number of BMPs to ensure impacts from erosion and sediment, non-stormwater discharges and hazardous spills are minimized and in compliance with applicable laws. Standard BMPs would be followed during construction to avoid the spill or leakage of fuels from construction equipment into storm drains, receiving waters, and potential infiltration to groundwater. In addition, LACDPW would implement a SWPPP to ensure project construction would not violate any water quality standards or waste discharge requirements. Accordingly, the proposed project is not anticipated to violate water quality

standards or waste discharge requirements, or otherwise degrade water quality. Therefore, construction of the proposed project would result in less-than-significant impacts.

Operation

Less-than-Significant with Mitigation Incorporated. Operation of the proposed project is subject to the State Water Board Phase I MS4 permit (NPDES Order No. R4-2012-0175 as amended by State Water Board Order Water Quality 2015-0075 NPDES Permit No. CAS004001). The proposed project would not result in an increase in impervious surfaces on the existing project site and would not be considered a priority development project. However, the proposed project would comply with the County's LID Ordinance. The most significant water quality benefit of the proposed LID improvements (educational garden with bioswales) is removal of stormwater runoff from the storm drain system or receiving waters. The first flush of stormwater runoff during a rainfall event typically contains higher concentrations of pollutants than later rainfall. By directing this runoff through LID features and providing retention, infiltration into the various layers of the LID feature and/or the native soils below the LID, and evapotranspiration, the pollutants do not reach the receiving body of water. Other pollutant removal processes achieved through LID include physical, chemical, and biological processes. Physical processes include filtering of sediment and pollutants, such as metals absorbed to the sediment. Degradation of fecal coliform bacteria also occurs by drying out and exposure to ultraviolet light from sun exposure. Biological processes include bioremediation and biodegradation. For example, hydrocarbons may be broken down by soil microorganisms. The water quality benefits of LID are well documented with regards to total settleable solids, fecal coliform bacteria, metals, hydrocarbons, and other pollutants. LID is also effective at removing nutrients (N and P) provided that background levels in the native soil and growing media are not excessive. The actual pollutant removal performance varies with pollutant loading, contributing drainage area, magnitude of rainfall event, antecedent moisture conditions, and specific design. Implementation of the LID features is anticipated to result in a positive impact on water quality standards and waste discharge requirements.

Infiltration of stormwater into the project site is not a regulated activity by the SWRCB or RWQCBs. As such, there is no applicable regulatory permit to obtain or comply with in order to operate the facility. However, the SWRCB Resolution No. 2009-0011 (Policy for Water Quality Control for Recycled Water) identified the goal for California to increase the use of storm water over use in 2007 by at least 500,000 acre-feet/year by 2020, and by at least one million acre-feet/year by 2030 (State Water Resources Control Board 2016). In 2016, the SWRCB adopted a Storm Water Strategy, STORMS to further develop innovative regulatory and management approaches to maximize opportunities to use storm water as a resource. The overarching intent of the Storm Water Strategy is to establish the value of storm water as a resource in California and encourage its application to beneficial uses. With the focus on storm water as a resource, newer low impact development and green infrastructure techniques can implement opportunities to capture storm water runoff and use it for local landscape and agricultural irrigation, and groundwater recharge.

The proposed project would reduce the amount of metals, bacteria, nutrients, and trash being discharged into Compton Creek and Los Angeles River. Of the pollutants being diverted, zinc was identified as a limiting pollutant for the Los Angeles River Watershed, meaning that the structural control measures designed to address zinc would also address other pollutants such as copper, lead, and nutrients. The project site tributary area is estimated to generate a zinc concentration of 706 µg/L. By capturing the 85th percentile, 24-hour storm event, the proposed project is expected to reduce the zinc concentration from the tributary area and meet the water quality objective for zinc,

which is 159 µg/L. The proposed project is estimated to reduce the annual zinc load by approximately 71 kilograms and is anticipated to also meet the water quality objectives for copper, lead, and nutrients. Because the proposed project would divert pollutants from entering the Los Angeles River and Compton Creek, pre-treatment of the stormwater flows would be required prior to infiltration. Each infiltration systems would include a baffle filtration unit to pretreat the dry weather flows and stormwater flows prior to entering the infiltration systems. The proposed project would include automated pollutant samplers to track inflow and outflow for an effectiveness study. The nutrient separation baffle box is designed to capture a wide variety of pollutants including total settleable solids, sediment, debris, organic material, hydrocarbons, and trash. With implementation of PEIR MM HAZ-1, which requires a BMP maintenance plan be prepared that identifies the frequency and procedures for removal and/or replacement of accumulated debris and surface soils (to depth where constituent concentrations do not represent a hazardous conditions and/or have the potential to migrate further and impact groundwater), the potential for accumulation of hazardous concentrations and the potential to migrate further to sub-soils and groundwater is anticipated to be reduced. Therefore, impacts would be less than significant with mitigation.

Also of concern are existing groundwater contamination and vectors. Groundwater contamination is being addressed in Section VIII.b., Hazards and Hazardous Waste. BMPs have the potential to create suitable habitat for a variety of organisms including those classified as vectors. Mosquitoes in particular are highly opportunistic insect vectors that will colonize any source of standing water provided that there is some organic content from which larvae can derive sustenance (Department of Health Services (DHS) 2001). BMPs designed to drain rapidly (i.e., biofiltration swales and strips, sand media filters, infiltration basins and trenches, drain inlet inserts, extended detention basins and the oil/water separator) provided less suitable habitats for vectors (DHS 2001). Infiltration basins have the potential to create mosquito habitat if water entering these structures remains above ground before it percolates into the soil. To control disease vectors (e.g., mosquitoes), the infiltration BMPs would be designed to remove water from above ground and drain completely within 72 hours of the last storm with a factor of safety to account for slowing of infiltration rates over time and between maintenance cycles. The proposed underground infiltration systems will be sized based both on the runoff from the design storm and the measured percolation rate. In addition, as part of the BMP maintenance program (MM HAZ-1), routine mosquito abatement practices would be implemented as needed. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM HAZ-1 as identified in Section VIII., Hazards and Hazardous Materials, would be implemented in order to reduce impacts related to water quality standards or waste discharge requirements to a less than significant level.

- b. *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?***

Construction and Operation

Less-than-Significant. The Central Basin covers approximately 270 square miles and is divided into four sections: Los Angeles Forebay; Montebello Forebay; Whittier Area; and Pressure Area. The two

forebays represent areas of unconfined aquifers (water table aquifers) that allow percolation of surface water down into the deeper aquifers to replenish the basins. The Whittier Area and the Pressure Area are confined aquifer systems that receive relatively minimal recharge from surface water. They are replenished from the upgradient forebay areas and adjacent groundwater basins (Water Replenishment District 2005). The amount of potable water production (includes groundwater) for Central Basin service area in FY 2014/15 was approximately 217,000 acre feet (an acre-foot of water is approximately 326,000 gallons, enough to meet the water needs of two average-sized families for one year)(Central Basin 2015). In an average year, the proposed project would divert up to 105 acre-feet of stormwater, which is less than 0.05% of the total potable water production.

Groundwater is a major component of the water supply in the Los Angeles metropolitan area. Due to insufficient natural recharge and to offset groundwater overdraft, recycled and imported water are used as sources of artificial replenishment through managed aquifer recharge in the Central and West Coast Groundwater Basins. The proposed project would include underground infiltration systems to provide groundwater recharge and potentially augment the Central Basin water supply. Landscaping surrounding the proposed project including an educational garden featuring LID elements, such as bioswales or planters would also allow for an increase in groundwater recharge. The proposed site is more than 100 feet from any groundwater wells used for drinking water. Historical high groundwater at the project site is 25 feet bgs, and groundwater was not observed during the LID Feasibility Geotechnical Investigation for the proposed project (County of Los Angeles Department of Public Works 2013). The maximum depth anticipated for the underground infiltration systems is 15 feet bgs, with 6 feet of soil cover above, and 2 feet of aggregate or gravel below (CH2M 2016). The depth of each of the underground infiltration systems is restricted to a maximum of 15 feet with a footprint of no more than 0.6 acre to ensure the performance of the infiltration system and minimize lateral migration. Furthermore, LACDPW coordinated with the Water Replenishment District of Southern California (WRD) regarding BMP siting efforts to ensure the underground infiltration systems are located appropriately and would increase water supplies as designed. The WRD determined that due to the fact that no meter would be installed to claim credit for water infiltrated into the groundwater basin, no additional coordination is required with the groundwater basin managers. Therefore, the proposed project would not interfere substantially with groundwater recharge and would benefit groundwater supplies.

The proposed project would not use groundwater resources during operation and dewatering during construction is not anticipated due to the fact that construction of the proposed project would take place approximately 15 feet bgs. Water supply for construction activities (e.g., dust control, concrete mixing, material washing) would come from nearby hydrants or existing surface supplies to the project site and/or be trucked to the site. Therefore, the proposed project would not deplete groundwater supplies and this impact on groundwater would be less than significant.

Mitigation Measures

No potentially significant impacts related to groundwater supplies or groundwater recharge would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- c. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?***

Construction and Operation

Less-than-Significant Impact. The proposed project would not substantially alter the existing drainage pattern in the project area. The project site is in an existing park and construction of the underground infiltration systems and other improvements would result in only minor alterations to the overall drainage pattern. The project site drains to the south through the existing storm drain network. The project site includes stormwater infrastructure, such as catch basins and inlets, which connect to the existing storm drain network. The project site would remain generally level, similar to existing conditions. No new impervious surfaces are anticipated at the project site; the existing pervious surfaces would remain. Existing and new stormwater infrastructure would receive storm flows from the surrounding areas to capture the 85th percentile storm and provide infiltration to the groundwater basin. A slight improvement over existing conditions is anticipated because stormwater runoff would be diverted from the surrounding areas, reducing the potential for stormwater to result in substantial erosion or siltation on site or off site. Construction of the proposed project would not involve work within surface waters and, thus, would not alter the course of an existing stream or river because these features do not exist on site. Project construction activities could temporarily alter existing drainage patterns and could result in local (on site) and temporary erosion and siltation. However, erosion control BMPs would be implemented during the construction phase to minimize temporary impacts of erosion and siltation associated with construction. The BMPs shall conform to the requirements of the LACDPW "Storm Water Pollution Prevention Plan (SWPPP) Preparation Manual" (SWPPP Preparation Manual), and "Construction Site Best Management Practices (BMPs) Manual" (BMP Manual). As identified in this Section IX. a., Hydrology and Water Quality, LACDPW would implement measures during construction according to the Construction General Permit and SWPPP requirements to minimize and contain erosion and sedimentation. Implementation of the proposed project is not anticipated to substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial on- or off-site erosion or siltation. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to existing drainage patterns would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- d. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?***

Construction and Operation

Less-than-Significant Impact. Implementation of the proposed project would not substantially alter the drainage pattern of the site nor would it increase the amount of paved surfaces. It is anticipated that the proposed project would result in improvements to the existing drainage. Additionally, implementation of the proposed project would reduce the volume and rate of stormwater runoff reaching the existing stormwater drain network. As discussed above in Section IX. c., Hydrology and Water Quality, an improvement over existing drainage conditions would occur because stormwater runoff would be diverted into the underground infiltration systems, as well as

LID features, such as bioswales or planters. These features would further minimize surface runoff rates and volumes and the potential for ponding and other drainage issues on site. The proposed project also includes construction of two grate inlets to address ponding around the gymnasium. The proposed stormwater drain network is designed to accommodate anticipated flows and would not result in flooding on or off site. Obtaining coverage under the Construction General Permit and implementing a SWPPP would ensure that the proposed project would not substantially alter the drainage pattern that would result in flooding. Implementation of stormwater features and park improvements ultimately would reduce the potential for moderate localized flooding and ponding in areas throughout the project site and, therefore, is not expected to substantially alter the rate or amount of surface runoff on the project site such that on- or off-site flooding would occur. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to existing drainage patterns would occur as a result of the proposed project. Therefore, no mitigation measures are required.

e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction and Operation

Less-than-Significant Impact. Of particular concern is the infiltration ability of soils, such that the proposed infiltration does not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. According to the geotechnical investigation LID feasibility analysis conducted for the proposed project, the proposed site contains a low to moderate potential for infiltration. The soils encountered 15 to 25 feet bgs consisted of predominately sand, classified in Hydrologic Group B, which is considered to have moderate rate of water transmission. Water movement through the soil group (15 to 25 feet bgs) where the infiltration systems would be constructed, is considered unimpeded, based on grain size and soil type. The estimated range of the infiltration rate in the sand layer is 0.01 to 1.0 inches per hour. The geotechnical investigation LID feasibility analysis recommended additional subsurface investigations be conducted, including percolation testing to model the duration and quantity of water to be infiltrated during operation of the proposed project. Following on the LID feasibility analyses, Kleinfelder conducted an infiltration study at the project site.

Based on the infiltration study results, the soils encountered at a depth of approximately 15 feet bgs generally exhibit a short-term, non-factored infiltration rate of 15.1 inches per hour (Kleinfelder 2014). The resulting long-term infiltration rate for design of a system could be considered to be on the order of 1.5 inches per hour. Because the proposed project would implement stormwater infiltration facilities onsite, the proposed project is not anticipated to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems.

The 85th percentile runoff volume for the project site is 7.74 acre-feet. The combined design capacity of the three underground infiltration systems would be 8.47 acre-feet, which provides some additional capacity for larger storm events or reduced efficiency over time. Table 2-1 identifies the proposed underground infiltration systems and pipeline design parameters. The baffle separation box would filter pollutants while the infiltration systems would capture and infiltrate stormwater. Bio-swales, planters, or other vegetated areas would provide biological treatment of stormwater, including stormwater runoff and retard its discharge from the site. As a result, no substantial

additional pollution load would be added to the storm drain network. Implementation of the bio-swales or planters would further reduce the rate and amount of surface runoff from the project site. The proposed project is not anticipated to create or contribute runoff water and is not anticipated to have an adverse effect on the capacity of existing stormwater drainage systems or provide additional sources of polluted runoff. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to contributing runoff water that would exceed the capacity of existing or planned stormwater drainage systems or providing substantial additional sources of polluted runoff would occur as a result of the proposed project. Therefore, no mitigation measures are required.

f. Otherwise substantially degrade water quality?

Construction and Operation

Less-than-Significant Impact. The proposed project's objective is to improve regional water quality through implementation of several BMPs within the Park and surrounding area. After construction, the proposed project is anticipated to improve stormwater quality in the project area. Implementation of the proposed project is anticipated to reduce existing impacts to water quality and aid in meeting TMDL compliance; no other activities associated with the proposed project would contribute to additional water quality impacts. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to water quality would occur as a result of the proposed project. Therefore, no mitigation measures are required.

g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Construction and Operation

No Impact. The project site is not within the FEMA 100-year floodplain, and lies outside of the FEMA Special Flood Hazard Area (Federal Emergency Management Agency 2008). The project site is within Flood Zone X (unshaded), which is outside the 500-year floodplain. No housing is proposed as part of the propose project. Therefore, no impact would occur.

Mitigation Measures

No potentially significant impacts related to flood hazard areas would occur as a result of the proposed project. Therefore, no mitigation measures are required.

h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

Construction and Operation

No Impact. As previously discussed, the project site is not located within a 100-year floodplain. The structures that would be constructed as part of the proposed project would be subterranean and

would not impede or substantially redirect flood flows. The proposed project ultimately would improve on-site drainage capabilities, would result in little to no change in the amount of impervious surface area, and include additional landscaped areas and bio-swales or planters. Therefore, the proposed project would not impede or redirect potential flood flows. Therefore, no impact would occur.

Mitigation Measures

No potentially significant impacts related to flood flows would occur as a result of the proposed project. Therefore, no mitigation measures are required.

i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

Construction and Operation

No Impact. As indicated above, the proposed project site is located outside of the 100-year flood zone and dam inundation areas. No impacts related to flooding are anticipated. Therefore, the proposed project would not expose people or structures to a risk of loss, injury, or death involving flooding as a result of levee or dam failure. No impact would occur and no further analyses is required.

Mitigation Measures

No potentially significant impacts related to flooding as a result of the failure of a levee or dam would occur as a result of the proposed project. Therefore, no mitigation measures are required.

j. Contribute to inundation by seiche, tsunami, or mudflow?

Construction and Operation

No Impact. According to the Inundation and Tsunami Hazard Areas map (Exhibit G) of the Safety Element of the Los Angeles City General Plan (adopted by City Council November 26, 1996) and inundation areas as depicted on the Tsunami Inundation Map for Emergency Planning prepared by the California Emergency Management Agency and California Geological Survey (2016), the project site is not located within a potential tsunami hazard area (City of Los Angeles 1996). The project site is located approximately 11 miles east of the Pacific Ocean and, therefore, not subject to flooding from tsunami (i.e., a tidal wave) or seiche (i.e., standing waves resulting from oscillations/seismic shaking in enclosed bodies of water). The project site and project area are generally level and are not located near slopes that would be subject to mudflows and not subject to landslides (Exhibit C of the Safety Element of the Los Angeles City General Plan, Landslide Inventory and Hillside Areas Map). Therefore, the proposed project would not be subject to inundation due to seiche, tsunami, or mudflows. Thus, no impact would occur.

Mitigation Measures

No potentially significant impacts related to inundation by seiche, tsunami, or mudflow would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

The cumulative discussion for hydrology and water quality considers the related projects within a 0.5-mile radius. The geographic scope for cumulative impacts on hydrology and water quality includes the Los Angeles River Watershed. Implementation of the proposed project would include compliance with all required laws, permits, ordinances and plans, such as the MS4 Permit and Construction General Permit requirements, which would reduce incremental effects to hydrology and water quality. The proposed project would not result in an increase of impervious surfaces within the watershed and is required to include pervious surfaces to retain storm water drainage on-site.

The proposed project would implement post construction BMPs as required by the MS4 Permit, which would reduce surface runoff and pollutant loadings compared to the existing condition. After construction, the proposed project is anticipated to improve stormwater quality in the project area. Implementation of the proposed project is anticipated to reduce existing impacts to water quality and aid in meeting TMDL compliance. As a result, the proposed project would have a positive net benefit to hydrology and water quality.

The areas surrounding the proposed project area are of similar urban pervious nature, and any future development would also include compliance with of all required laws, permits, ordinances and plans, such as the MS4 Permit and Construction General Permit requirements in order to meet runoff requirements. The majority of the future development projects would occur within already developed areas and would not significantly contribute to increased runoff as result of increases in impervious surfaces. Other future developments within the urban and developed watershed would have similar effects as the proposed project. However, the past, current, and reasonably foreseeable future projects in the watershed would be required to implement similar measures when obtaining relevant permits, including compliance with the MS4 Permit requirements and implementation of minimum BMPs during construction. This would help reduce impacts to water quality and retain runoff, and to ensure that the incremental effects of individual projects do not result.

Overall, potential impacts to hydrology and water quality associated with future development in the watershed and the region would not be cumulatively considerable with compliance with all applicable laws, permits, ordinances and plans. Furthermore, implementation of the proposed project would result in a reduction to cumulative impacts associated with pollutant loading in the watershed due to the fact that the proposed project would implement BMPs that would be maintained and operated to meet design performance standards and the efficiencies needed to help meet the waste load reductions in accordance with the Upper Los Angeles River EWMP. Therefore, the incremental effect of the proposed project related to hydrology and water quality would not be cumulatively considerable.

X. Land Use and Planning	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The project site is located in an urbanized area in the community of Florence-Firestone. The surrounding area is developed with a variety of land uses, including public, light industrial, residential and general commercial uses. The Metro Blue Line and Florence Station are located to the west of the park across Graham Avenue. Directly abutting the north and east sides of the park are single family residences. South of the park is Nadau Street across from which are single-family residences and commercial land uses. According to the Los Angeles County General Plan Land Use map, the project site is zoned for Open Space (O-S) uses (County of Los Angeles 2015).

Impact Analysis

Would the project:

- a. *Physically divide an established community?*

Construction and Operation

No Impact. The proposed project would be located at Roosevelt Park, an area designated and zoned for parks, recreation and open space. The proposed project would not physically divide an established community. Therefore, no impacts would occur.

Mitigation Measures

No potentially significant impacts related to the physical divide of an established community would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?***

Construction and Operation

Less-than-Significant with Mitigation Incorporated. The proposed project is expected to comply with all land use plans, policies, and regulations. No oak trees would be removed as part of the proposed project. However, the Planning and Development Agency operate with a “no net loss” of trees in County parks (County of Los Angeles Department of Parks and Recreation 2011). Trees that are removed due to irreparable damage, disease, hazardous conditions or development are reported to the respective field Agency for eventual replacement (County of Los Angeles Department of Parks and Recreation 2011). Prior to the commencement of a development project, a tree preservation plan including clearly identified tree protection zones, must be prepared (County of Los Angeles Department of Parks and Recreation 2011). However, it is anticipated the trees would be replaced at the Park, including planting 27 new trees of species including Gold Medallion, Chitalpa, Brisbane Box, and California Sycamore trees. The proposed project would implement PEIR MM BIO-2, which requires preparation and approval of tree preservation plan or written concurrence that no plan is required. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM BIO-2 would be implemented in order to reduce impacts related to conflicts with adopted plans to a less than significant level.

- c. Conflict with any applicable habitat conservation plan or natural community conservation plan?***

Construction and Operation

No Impact. No habitat conservation plans and/or natural community conservation plans have been adopted in the vicinity of the project site. Thus, the proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. Thus, no impacts would occur and no further analyses is required.

Mitigation Measures

No potentially significant impacts related to conflict with any applicable habitat conservation plan or natural community conservation plan would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

As discussed above, the proposed project would have no potentially significant impacts related to land use. No project-level impacts would occur related to the physical division of an established community; potential conflict with land use plans, policies, or regulations; or potential conflict with an applicable habitat conservation plan or natural community conservation plan. Thus, the proposed project would have no incremental effect related to land use and planning, and impacts would not be cumulatively considerable.

XI. Mineral Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The Florence-Firestone Community Plan does not identify any mineral resource zones within the vicinity of the proposed project site. The project site does is not used for mineral extraction. According to the California Department of Conservation’s Division of Mines and Geology, the project site is not located within a Mineral Resource Zone, which indicates the inclusion of known mineral deposits (Miller 1994).

Impact Analysis

Would the project:

- a. *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

Construction and Operation

No Impact. The Surface Mining and Reclamation Act of 1975 required the State Geologist to initiate mineral land classification to help identify and protect mineral resources in areas within the state. In accordance with guidelines established by the State Mining and Geology Board, mineral deposits in Los Angeles County have been classified into MRZ. According to the Los Angeles County General Plan 2035 (County of Los Angeles 2015), the project site and surrounding area is not used for mineral resources. In addition, the proposed project is not located within a locally important mineral resource discovery zone. Thus, construction and operation of the proposed project would not result in the loss of a locally important mineral resource recovery site, as delineated on a local general plan, specific plan, or other land use plan. No construction or operational impact related to the loss of availability of a locally important mineral resource recovery site delineated in a general plan would occur. Therefore, no impacts would occur.

Mitigation Measures

No potentially significant impacts related to the loss of availability of a known mineral resource nor would implementation of the proposed project result in potentially significant impacts related

to the loss of availability of a locally important mineral resource recovery site. Therefore, no mitigation measures are required.

Cumulative Impacts

As discussed above, the proposed project would have no impacts related to mineral resources. No project-level impacts would occur related to the loss of availability of mineral resources of value locally, regionally, or to the state. Thus, the proposed project would have no incremental effect related to land use and planning, and impacts would not be cumulatively considerable.

XII. Noise	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Existing Noise Environment

The main project site is within the Franklin D. Roosevelt Park, which is bounded on the north and east by existing homes; on the south by Roosevelt Pool and Nadeau Street; and on the west by Graham Avenue and a multi-track railroad, beyond which is a mix of industrial and residential properties. The railroad serves both commuter (Metrolink) and freight (Union Pacific) trains and includes at-grade crossings at East Florence Avenue to the north and Nadeau Street to the south. Proposed pipelines extend beyond the park along Holmes Avenue to the north, along East 76th Place to the east, and along Whitsett Avenue to the south. The closest freeway is I-110, more than 2 miles to the west. Los Angeles International Airport (LAX) is approximately 8.5 miles to the west. The closest noise-sensitive receptors to the project site are homes north and east of the park, as well as along the streets adjacent to the proposed pipelines. The primary source of noise affecting the project vicinity is commercial air traffic associated with LAX. Other notable sources include traffic on the surrounding streets, trains on the nearby railroad, barking dogs, landscaping activities, and singing birds.

Noise Monitoring

In order to document the existing noise environment, noise monitoring was conducted at five locations in the project vicinity between May 3 and May 5, 2017. Long-term noise monitoring was conducted at one location, designated LT1; this automated (unattended) measurement was conducted for a period of approximately 47 hours using a Piccolo SLM-P3 Type 2 sound level meter. Short-term noise monitoring was conducted at four locations, designated ST1 through ST4; these measurements were attended by a noise analysts and conducted for a period of 20 to 25 minutes each using a Larson Davis Model 831 Type 1 sound level meter. The sound level meters used for all noise monitoring were field-calibrated prior to each measurement to ensure accuracy, using a Larson Davis CAL200 acoustical calibrator; the calibration was also re-checked at the conclusion of each measurement. All measurement locations are indicated on **Figure 3-4**. Additional details and a summary of the measurement results are provided in Table 3-8.

The dominant noise source observed during all of the attended short-term measurements was air traffic, with frequent jet aircraft overflights consistently producing the maximum measured noise levels. Singing birds were also an ongoing source of noise. Other noticeable noise sources included distant barking dogs, traffic, and landscaping activities. It should be noted that the dominant noise sources during the measurements (jet aircraft and singing birds) are not sources that would be subject to the noise standards of the County code. Therefore, any ambient noise levels that are above the County limits do not necessarily indicate a specific failure to comply with the standards. Nonetheless, it is informative to compare measured ambient noise levels to the limits provided by the local code. Data from LT1 and ST3 represent the noise levels close to the boundary between the park and the neighboring residences. Comparing these noise levels to the standards that would apply at the homes (see Table 3-10), the ST3 noise levels were all below the standards. The hourly LT1 data included a range of noise levels with some hours experiencing noise levels below the standards and some hours experiencing noise levels above the standards. At all of the other short-term measurement locations (ST1, ST2, and ST4), noise levels were consistently above the residential daytime noise standards by approximately 0.5 to 7 dBA.

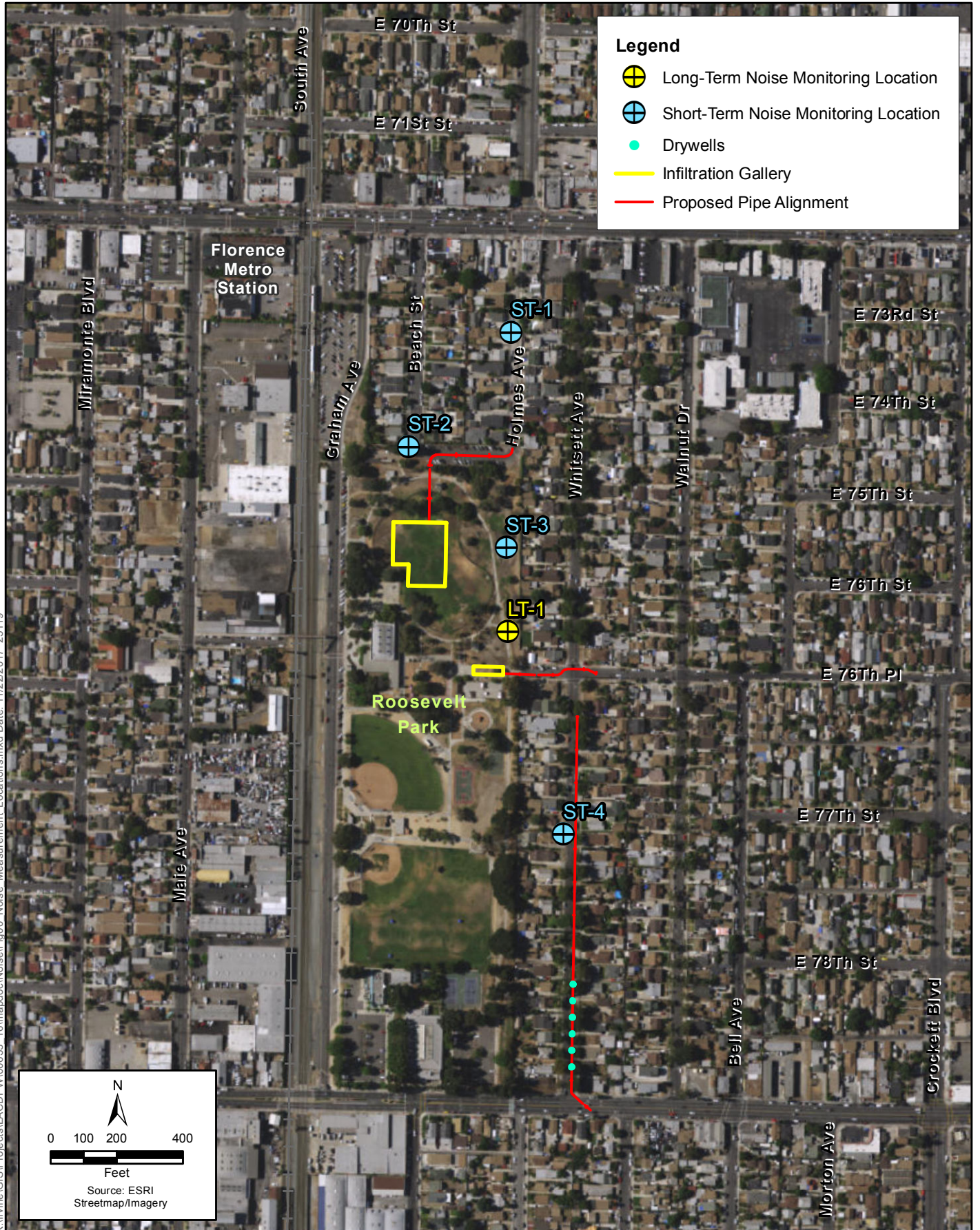


Figure 3-4
Ambient Noise Measurement Locations
Roosevelt Park Stormwater Capture Project

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Table 3-8. Summary of Noise Measurements

Location Number, Description (date, time)	Measured Noise Levels, dBA								
	Leq	Lmax	L1.67	L8.33	L25	L50	L90	Lmin	
LT1: In Roosevelt Park, approximately 32 feet west of 7619 Whitsett Avenue (10:00 a.m. 5/3/2017 to 9:00 a.m. 5/5/2017)	<i>Daytime (7:00 a.m. to 7:00 p.m.)</i>								
	Range ¹ :	58-66	71-89	66-74	63-69	58-66	53-63	48-58	44-53
	Average ² :	62	82	69	65	61	57	52	48
	<i>Evening (7:00 p.m. to 10:00 p.m.)</i>								
	Range ¹ :	61-65	76-89	69-72	66-68	61-65	54-63	48-58	46-53
	Average ² :	63	85	70	67	62	59	54	50
	<i>Nighttime (10:00 p.m. to 7:00 a.m.)</i>								
	Range ¹ :	47-64	67-92	52-71	48-67	45-61	43-55	41-49	38-46
	Average ² :	59	82	68	62	55	50	45	43
ST1: In front of 7303 Holmes Avenue (5/3/2017, 10:57 a.m.–11:21 a.m.)	60.2	73.5	70.6	64.5	59.0	54.7	50.8	47.7	
ST2: In front of 7411 Beach Street (5/3/2017, 10:28 a.m.–10:49 a.m.)	60.3	70.4	67.4	64.5	61.1	57.9	53.3	46.2	
ST3: In Roosevelt Park, approximately 45 feet west of 7519 and 7521 Whitsett Avenue (5/3/2017, 10:01 a.m.–10:21 a.m.)	56.8	68.5	65.9	61.9	56.4	51.1	46.8	44.8	
ST4: In front of 7701 Whitsett Avenue (5/3/2017, 11:33 a.m.–11:55 p.m.)	61.5	75.6	71.1	65.6	61.9	56.0	48.3	43.0	

Notes:

1. Range of hourly noise levels measured over the entire long-term measurement.
2. Energy averaged noise level of all hourly values.

LT= long-term; ST= short-term; dBA = A-weighted sound level, the sound pressure level in decibels as measured using the A weighting filter network, which de-emphasizes the very low- and very high-frequency components of the sound in a manner similar to the frequency response of the human ear; Leq = equivalent sound level, the average of the sound energy occurring over the measurement period; Lmax = maximum sound level; Lmin = minimum sound level; Lxx = percentile-exceeded sound level, the sound level exceeded for a given percentage of a specified period (e.g., L25 is the sound level exceeded 25% of the time, and L50 is the sound level exceeded 50% of the time)

Regulatory Setting

Federal Regulations

No federal regulations are applicable to the CEQA analysis for the proposed Project.

State Regulations

California requires each local government entity to perform noise studies and implement a noise element as part of its general plan. The purpose of the noise element is to limit the exposure of the community to excessive noise levels; the noise element must be used to guide decisions concerning land use. The State provides guidelines for evaluating the compatibility of various land uses as a function of community noise exposure.

Local (County) Regulations

Operational Noise

Exterior noise standards for community noise (i.e., noise generated on one property and propagating to another) are provided in Section 12.08.390 of the Los Angeles County code. The noise limits depend on a number of factors, including the noise zone of the receptor, the time of day, and the duration of the noise. The standards are summarized in Table 3-9.

Table 3-9. County of Los Angeles Exterior Noise Standards

Noise Zone Land Use of Receptor Property	Time of Day	Noise Level (dBA) that May Not Be Exceeded for More than...				
		30 min/ hour (L ₅₀)	15 min/ hour (L ₂₅)	5 min/ hour (L _{8.3})	1 min/ hour (L _{1.7})	Anytime (L _{max})
Noise Zone I— Noise-sensitive areas	Anytime	45	50	55	60	65
Noise Zone II— Residential properties	7 a.m. to 10 p.m. (daytime)	50	55	60	65	70
	10 p.m. to 7 a.m. (nighttime)	45	50	55	60	65
Noise Zone III— Commercial properties	7 a.m. to 10 p.m. (daytime)	60	65	70	75	80
	10 p.m. to 7 a.m. (nighttime)	55	60	65	70	75
Noise Zone IV— Industrial properties	Anytime	70	75	80	85	90

Notes:

1. In the event that the corresponding ambient noise level (L₅₀, L₂₅, etc.) exceeds the specified standard, then the ambient noise level becomes the noise standard.
 2. If the measurement location is on a boundary property between two different zones, the exterior noise standard will be the arithmetic mean of the standards of the two subject zones.
 3. For any source of sound that emits a pure tone or impulsive noise, the noise standards will be reduced by 5 dB.
- dBA = A-weighted sound level; L_{xx} = percentile-exceeded sound level; L_{max} = maximum sound level.

The park would be considered a commercial land use and the closest noise-sensitive receptors (homes) are residential. As noted in Table 3-9, if the measurement location is on a boundary property between two different zones, the exterior noise standard is the arithmetic mean of the standards of the two subject zones. Therefore, the relevant noise standard for operational noise propagating from the park to adjacent homes would be based on the arithmetic mean of the commercial and residential standards, as summarized in Table 3-10.

Table 3-10. Applicable Exterior Noise Standards at Adjacent Homes

Time of Day	Noise Level (dBA) that May Not Be Exceeded for More than...				
	30 min/ hour (L ₅₀)	15 min/ hour (L ₂₅)	5 min/ hour (L _{8.3})	1 min/ hour (L _{1.7})	Anytime (L _{max})
7 a.m. to 10 p.m. (daytime)	55	60	65	70	75
10 p.m. to 7 a.m. (nighttime)	50	55	60	65	70

Notes:

1. In the event that the corresponding ambient noise level (L₅₀, L₂₅, etc.) exceeds the specified standard, then the ambient noise level becomes the noise standard.
2. For any source of sound that emits a pure tone or impulsive noise, the noise standards will be reduced by 5 dB.

Construction

Construction noise is addressed in Section 12.08.440 of the code, which places limits both on the permitted hours of construction activities and on the maximum noise levels that may affect nearby properties. Construction activities are not permitted during the evening/nighttime hours of 7 p.m. to 7 a.m. or at any time on Sundays or holidays, where they would create a noise disturbance across a residential or commercial real property line. The municipal code also requires that all mobile or stationary internal combustion engine-powered equipment or machinery must be equipped with suitable exhaust and air-intake silencers in proper working order.

However, LACDPW has determined that construction noise from the proposed project is exempt from regulation by the municipal code as specified in Section 12.08.570 H, which exempts:

Public Health and Safety Activities. All transportation, flood control, and utility company maintenance and construction operations at any time on public right-of-way, and those situations which may occur on private real property deemed necessary to serve the best interest of the public and to protect the public's health and well-being, including but not limited to street sweeping, debris and limb removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, snow removal, house moving, vacuuming catch basins, removal of damaged poles and vehicles, repair of water hydrants and mains, gas lines, oil lines, sewers, etc.

Vibration

The municipal code includes the following standard, in Section 12.08.560, related to ground borne vibration:

12.08.560 Vibration

Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-

way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz.

The Noise Element of the County's general plan provides a number of policies related to community noise but does not provide any quantitative standards for regulating noise levels.

- a. Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?*
- c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*
- d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

The proposed project would require the use of heavy construction equipment for activities such as site preparation, grading and excavation, and the physical development of the proposed Park improvements. The project would expand the recreational use of the park with an upgraded soccer field and new sports lighting. The potential noise impacts due to construction and operation of the project are discussed below.

Construction

Less-than-Significant with Mitigation Incorporated. Two types of short-term noise impacts could occur during construction of the proposed project. First, construction workers who would commute to the site and trucks that would transport equipment and materials would incrementally increase noise levels on access roads. Although there would be a relatively high single-event noise level, which could cause an intermittent noise nuisance (e.g., passing trucks at 50 feet would generate up to 77 dBA), the effect on longer term ambient noise levels (e.g., the daily average noise levels considered in the state's general plan guidelines) would be small. Therefore, short-term construction-related impacts associated with commuting workers and transporting equipment to the project site would be less than significant.

The second type of short-term noise impact would be related to noise generated during site preparation, grading and excavation within the park, the physical development of the proposed Park, and installation of new pipelines along neighboring streets. Construction would generally occur between the hours of 7 a.m. and 6 p.m. Monday through Friday. In accordance with the Los Angeles County Code, all internal combustion engine-powered equipment and machinery would be equipped with suitable exhaust and air-intake silencers that would be in proper working order.

Project construction would be broken down into phases. The construction phases and anticipated construction equipment are summarized in Table 3-11.

Table 3-11. Construction Phasing and Equipment

Construction Phase	Work Activity	Equipment Type (Number of Items)
<i>Phase 1 - Mobilization and Site Preparation</i>		
--a		
<i>Phase 2 - Construction</i>		
2.1	Tree removals	Cherry Picker (1) Tree Grinder(1) Stump Grinder (1)
2.2	Construction of infiltration modules in the park	Dozer (1) Crane (1) Loader (1) End Dump Trucks (18)
2.3	Construction of lights for soccer park	Backhoe (1) Crane (1) Loader (1) End Dump Truck (1)
2.4	Construction of infiltration modules in the street	Excavator (1) Crane (1) Roller (1) Loader (1) End Dump Truck (3)
2.5	Construction of diversion pipes	Excavator (1) Loader (1) End Dump Trucks (3) Forklift (1) Roller (1) Generator (1) Air Compressor (1)
2.6	Construction of landscape improvements	Backhoe (1) Loader (1) End Dump Truck (1)
a. No major noise sources during Phase 1.		

Construction-related noise was analyzed using calculations and data from the Federal Highway Administration's Roadway Construction Noise Model (Federal Highway Administration 2008), which predicts average and maximum noise levels at nearby receptors based on the type of equipment, the distance from source to receptor, and the presence, or absence, of intervening shielding between source and receptor. The source-to-receptor distances used to calculate maximum noise levels (L_{max}) were the estimated closest distances between the sensitive receptors and the construction equipment that would be used during each phase. The source-to-receptor

distances used in the analyses of average noise levels (L_{eq}) were the acoustical average distances⁵ between the relevant construction area and the receptors. It is noted that, per the Los Angeles County Municipal Code, a sensitive receptor for construction noise is considered to be the façade of a residential building. Details of the analysis are provided in Appendix C and summarized in Table 3-12.

Table 3-12. Construction Noise Levels and Resulting Increases in Ambient Noise

Construction Phase	Work Activity	Closest Receiver(s)	Noise Level, dBA		Noise Increase ^b , dB	
			L_{eq}	L_{max}	L_{eq}	L_{max}
Phase 1 - Mobilization and Site Preparation						
--a						
Phase 2 - Construction						
2.1	Tree removals	Homes north of park	62	70	1-5	0
		Homes east of park	71	88	6-14	0-19
2.2	Construction of infiltration systems in the park	Homes north of park	63	68	2-6	0
		Homes east of park	72	86	7-15	0-17
2.3	Construction of lights for soccer park	Homes north of park	63	69	2-6	0
		Homes east of park	67	75	4-10	0-6
2.4	Construction of infiltration systems in the street	Homes on Whitsett Avenue	78	89	16	13
2.5	Construction of diversion pipes	Holmes Avenue	76	89	17	15
		Whitsett Avenue	78	89	16	13
		76th Street	83	89	18-26	0-20
2.6	Construction of landscape improvements	Homes north of park	60	66	1-4	0
		Homes east of park	70	84	5-13	0-15

a. No major noise sources during Phase 1.
 b. A range of noise increases is shown for receivers where a range of hourly noise levels was available from long-term noise monitoring.

The results in Table 3-12 indicate that temporary increases in ambient noise levels at the closest noise-sensitive receptors would range from 1 to 26 dB for L_{eq} and from 0 to 20 dB L_{max} . While noise increases of 5 to 10 dBA or more would be clearly noticeable and may cause some short-term nuisance or annoyance, construction noise would be temporary and would be limited to the daytime construction hours permitted by the Los Angeles County Code. In addition, implementation of MM NOISE-1 identified in the PEIR would control construction noise to the extent feasible. Furthermore, project construction would be exempt from the County’s noise standards, as specified in Section 12.08.570 H of the County Code (refer to Regulatory Setting, above). Therefore, with implementation of MM NOISE-1, noise impacts would be reduced to the maximum extent feasible

⁵ The acoustical average distance is used to represent noise sources that are mobile or distributed over an area; it is calculated by multiplying the shortest distance between the receiver and the noise source area by the farthest distance and then taking the square root of the product.

and would be in compliance with the County's Noise Control Ordinance. As a result, construction noise impacts would be less than significant with implementation of MM NOISE-1.

Operation

Less-than-Significant Impact. Once operational, the stormwater capture portion of the project would not include any noise-generating features (such as pumps or other mechanical equipment) and the associated new infrastructure (infiltration systems and pipelines) would be located underground. Regular maintenance would not be a major source of noise and would occur infrequently, such as biannual cleanouts of pretreatment baffle filtration units. This level of activity would be negligible compared to the ongoing maintenance (lawn mowing, landscaping, etc.) that already occurs within the park. Therefore, the noise impact of the stormwater capture portion of the project would be less than significant.

The other source of noise associated with the project would be activities at the upgraded park. Most of this noise would represent a direct continuation of existing activities and, as such, would not constitute an impact. One possible exception is the addition of lighting to the upgraded soccer field, which would allow noise from the field to extend later into the evening than is currently possible with only natural lighting. Noise levels from the soccer field were estimated based on noise measurements obtained previously of a competitive youth soccer game in southern California⁶. Details of the analysis are provided in Appendix C. The analysis indicates that soccer noise levels would comply with the County's noise standards. Average noise levels at the closest homes to the north and east would be 51 and 54 dBA L_{eq} , respectively. These noise levels are below the measured existing hourly evening noise levels of 61 to 65 dBA L_{eq} , and would increase existing ambient noise levels by 1 dB or less. Therefore, the noise impact of operational activities at the improved park would be less than significant.

Mitigation Measures

MM NOISE-1: LACDPW shall implement the following measures during construction as needed:

- Include design measures necessary to reduce the construction noise levels to where feasible. These measures may include noise barriers, curtains, or shields.
- Place noise-generating construction activities (e.g., operation of compressors and generators, cement mixing, general truck idling) as far as possible from the nearest noise-sensitive land uses.
- Locate stationary construction noise sources as far from adjacent noise-sensitive receptors as possible.
- If construction is to occur near a school, the construction contractor shall coordinate the with school administration in order to limit disturbance to the campus. Efforts to limit construction activities to non-school days shall be encouraged.

⁶ Measurements of noise from soccer games were conducted on Saturday, September 17, 2016 at Dailard Elementary Joint Use Park in San Diego, during regularly scheduled Crusaders Youth Soccer games. The games observed during the measurements consisted of 11 players per team with all participants being males approximately 12 years old. Over the course of the measurement, the total number of people at the soccer games varied from approximately 50 to 115; this included players on the field, players off the field, referees and other officials, and spectators.

- Because the BMP project is located adjacent to noise-sensitive land uses, identify a liaison for these off-site sensitive receptors, such as residents and property owners, to contact with concerns regarding construction noise and vibration. The liaison's telephone number(s) shall be prominently displayed at construction locations.
- Because the BMP project is located adjacent to noise-sensitive land uses, notify in writing all landowners and occupants of properties adjacent to the construction area of the anticipated construction schedule at least 2 weeks prior to groundbreaking.

b. Expose persons to or generate excessive ground-borne vibration or groundborne noise levels?

Less-than-Significant Impact. The proposed project would require the use of heavy construction equipment such as a backhoe, loader, and excavator. At times, this equipment would operate within 30 feet of existing residences adjacent to the park and along the roads where new pipelines or infiltration modules would be installed. At this distance, groundborne vibration would be clearly perceptible but vibration levels would not be high enough to cause damage to buildings. Vibration at any specific receptor would be temporary and would diminish rapidly with distance as work moved farther away. Groundborne vibration from construction would be limited to the permitted daytime hours of 7 a.m. to 7 p.m. and would not occur during the evening or nighttime hours when people are typically resting or sleeping. Furthermore, project construction would be exempt from the County's noise standards, as specified in Section 12.08.570 H of the County Code (refer to Regulatory Setting, above). Therefore, construction vibration impacts would be less than significant.

Once operational, the project would not include any vibration generating features (such as pumps or other mechanical equipment). Therefore, there would be no impact with respect to groundborne vibration from project operation.

Mitigation Measures

No potentially significant impacts related to ground-borne noise would occur as a result of the proposed project. Therefore, no mitigation measures are required.

e. Be located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?

f. Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?

Less-than-Significant Impact. The proposed project is not located within an airport land use plan, within 2 miles of a public airport or public use airport or in the vicinity of a private airstrip. The closest airport to the project site is the Compton/Woodley Airport, located approximately 5.3 miles south. The Hawthorne Municipal Airport is the next closest airport to the proposed project area, located 5.7 miles southwest. The primary source of aeronautical noise at the project site is LAX, which is located approximately 8.5 miles west of the project site. Aircraft overflights are frequently audible at the site, but the project site is well outside the 65 dB CNEL noise contour (Los Angeles World Airports 2017). As a result, people at the project site would not be exposed to excessive noise from aircraft and the impact would be less than significant.

Mitigation Measures

The project site is not located in the vicinity of any public or private airstrip. In addition, the proposed project would have no effect on operations at any airstrip and would not cause any change to existing aircraft noise levels. Therefore, no impact would occur.

Cumulative Impacts

There are no related projects within 0.5 mile of the proposed project site. Furthermore, the low traffic volumes associated with construction of the proposed project would produce very low noise levels, which would be negligible when compared to the existing or future traffic noise in the area. Therefore, the incremental effect of the proposed project related to operational traffic noise would not be cumulatively considerable. Thus, the incremental effect of the proposed project related to on-site operational noise would not be cumulatively considerable.

XIII. Population and Housing	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The Florence-Firestone unincorporated area is 3.6 square miles and is developed with single- and multi-family residences as well as both commercial and industrial uses. The community’s population experienced very little growth from 2000 to 2010, as it grew less than 1% over that time period (City Data 2017).

Impact Analysis

Would the project:

- a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through the extension of roads or other infrastructure)?*
- b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?*
- c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?*

Construction and Operation

No Impact. The proposed project would be located at Roosevelt Park, an area designated and zoned for parks, recreation and open space. The proposed project is consistent with the existing park uses and would not result in population growth nor displace people or housing. Therefore, no impacts would occur.

Mitigation Measures

No potentially significant impacts related to substantial population growth, displacement of existing housing units nor the displacement of people would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

As discussed above, the proposed project would have no impacts related to population and housing. No project-level impacts were identified related to substantial population growth, displacement of housing units, or displacement of people. Thus, the proposed project would have no incremental effect related to population and housing, and impacts would not be cumulatively considerable.

XIV. Public Services	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
1. Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Public services in the project vicinity include police and fire, and Florence Avenue Elementary School. The LACoFD serves the community of Florence-Firestone. The nearest LACoFD station is Fire Station 16, which is located at 8010 Compton Avenue, approximately 0.6 miles southwest of the project site (County of Los Angeles Fire Department 2017). The Los Angeles Police Department (LAPD) Southeast Community Police Station provides law enforcement services to the project site (Los Angeles Police Department 2017). LAPD is located at 145 W 108th Street approximately 4 miles southwest from the project site.

Impact Analysis

Would the project?

a. *Would the project result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:*

1. *Fire protection?*

2. *Police protection?*

Construction

Less-than-Significant with Mitigation Incorporated. The proposed project would involve the construction of stormwater collection and treatment facilities and improvements to amenities at Roosevelt Park. No habitable structures would be constructed nor would flammable materials be used during construction requiring an expanded need for fire protection services that would result in the need for new or physically altered fire protection facilities. Implementation of the proposed project would not contribute to an increase in population requiring police protection services. However, construction of the structural BMPs in streets, sidewalks, and parkland, within the existing high-density urban area, as well as associated staging area(s), could temporarily disrupt the provision of emergency service providers, resulting in potentially significant impacts. Implementation of PEIR MM PS-1, listed below, would reduce impacts to a less-than-significant level.

Operation

Less-than-Significant Impact. Once constructed, the structural BMPs would be underground and the upgraded amenities proposed at the Park would be available to the public. The proposed project would not directly induce population growth, operational impacts are not expected to result in substantial adverse physical impacts related to the new or physically altered fire or police facilities. Therefore, operation of the proposed project would result in less-than-significant impacts.

Mitigation Measures

MM PS-1: LACDPW will provide reasonable advance notification about the nature, extent, and duration of construction activities. LACDPW will provide this information to service providers such as fire, police, and emergency medical services as well as to local businesses, homeowners, and other residents adjacent to and within areas potentially affected by the proposed project. Interim updates should be provided to inform them of the status of the construction activities.

3. Schools?

Construction and Operation

No Impact. Implementation of the proposed project would not develop facilities that would contribute to population growth in the area nor would project activities occur on any school grounds. Therefore, no impacts would occur.

Mitigation Measures

No potentially significant impacts related to schools would occur as a result of the proposed project. Therefore, no mitigation measures are required.

4. Parks?

Construction

Less-than-Significant Impact. Implementation of the proposed project would not contribute to an increase in population and an associated increase in existing recreational facilities that could result in physical deterioration of existing facilities. However, the proposed project would be located within the Park, an area designated and zoned for parks/recreation/open space uses. During

construction, certain areas of the park and recreational facilities may be temporarily removed from service. Bike lanes and other linear recreational resources may also be affected by construction activities. Therefore, construction of the proposed project could temporarily limit the usage of the Park, thereby potentially temporarily increasing the use at adjacent parks. Such temporary limits on access to parks and recreational resources may create increased demand on other parks and recreational resources in the project area. However, the construction period would be temporary in nature and impacts would be less than significant.

Operation

Less-than-Significant Impact. Once constructed, the structural BMPs would be underground and the upgraded amenities proposed at the Park would be available to the public. The proposed park improvements are expected to accommodate existing park users and the project would not directly induce population growth, operational impacts are not expected to result in substantial adverse physical impacts related to the new or physically altered facilities. Therefore, operation of the proposed project would result in less-than-significant impacts.

Mitigation Measures

No potentially significant impacts related to parks would occur as a result of the proposed project. Therefore, no mitigation measures are required.

5. *Other public facilities?*

No Impact. The proposed project would not result in adverse impacts on other public facilities. Physical impacts on public services are usually associated with population changes, which can change the demand and funding for facilities. As discussed above, the proposed project would not increase the local population during construction or operation. Therefore, the proposed project would not result in an increased demand requiring new or physically altered public facilities; no construction or operational impact would occur.

Mitigation Measures

No potentially significant impacts related to public services would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

There are no related projects within a 0.5-mile radius of the proposed project site. The proposed project would have a negligible impact on public services. Thus, the incremental effect of the proposed project related to public services would not be cumulatively considerable.

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XV. Recreation				
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The Los Angeles County contains three park facilities within 1 mile of the proposed project site, which provide recreational and community services. Table 3-13 provides an overview of these facilities.

Table 3-13. Recreational Resources within 1 Mile of the Project Site

Park/Recreation Resource	Location	Description	Location Relative to the Project
Colonel Leon H. Washington Park	8908 Maie Ave, Los Angeles, CA 90002	A 12.62-acre park that includes a children’s plan area, community garden, community recreation center, computer room, fitness zone, gymnasium, picnic areas, tennis courts, a swimming pool and restrooms.	0.52 mile south
Ted Watkins Park	1335 E 103rd St, Los Angeles, CA 90002	A 27.67-acre park that includes a children’s play area, community recreation center, computer lab, gymnasium, lighted baseball/softball fields, picnic areas, skateboard park, soccer field, tennis courts and a swimming pool.	0.62 mile southwest
Mary M. Bethune Park	1244 E 61st St, Los Angeles, CA 90001	A 5.27-acre park that includes a baseball/softball field, basketball court, children’s play areas, community recreation room, gymnasium, multi-purpose field, picnic tables, skateboard park, a swimming pool and restrooms.	0.92 mile northwest

Source: Los Angeles County 2015

Impact Analysis

Would the project:

- a. *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?*

Construction and Operation

Less-than-Significant Impact. See discussion under Section XIV. a.4., Public Services, above.

Mitigation Measures

No potentially significant impacts related to physical deterioration of the recreational resources would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Construction and Operation

Less-than-Significant Impact. See discussion under Section XIV. a.4., Public Services, above. The proposed project is located within an existing park, and includes improvements to existing recreational amenities and includes additional amenities. The existing deteriorated soccer field would be replaced and expanded with new lighting added to the field, the skate park would be redesigned for safety purposes, and the following amenities would be added to the Park: healthy court with ADA-accessible exercise equipment, play mounts, picnic areas, decomposed granite walking path, educational garden with LID features and interpretive sustainable infrastructure signs. The improvements are expected to replace the existing older park facilities in order to accommodate existing park users and are not intended to draw in substantially more new users to the Park or directly induce population growth in the area. The proposed project is not expected to impact parkland in such a way that would require expansion or the creation of new parkland. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to recreational resources would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

As discussed above, the proposed project would have no potentially significant impacts related to recreation. No project-level impacts were identified related to increased use of park or other recreational facilities. In addition, no project-level impacts were identified related to the inclusion, construction, or expansion of recreational facilities. The improvements are expected to replace the existing older park facilities in order to accommodate existing park users and are not intended to draw in substantially more new users to the Park or directly induce population growth in the area. Thus, the proposed project would have no incremental effect related to recreation, and impacts would not be cumulatively considerable.

XVI. Transportation and Traffic	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The project site is located in the unincorporated Los Angeles County community of Florence-Firestone. As shown in Table 3-14, roadways in the project vicinity range from two-lane local residential streets to four-lane arterials. On-street parking is available throughout the project vicinity, with diagonal parking stalls available for park visitors on the east side of Graham Avenue. Off-street surface lots are available for park visitors at the southwest corner of the park and along the north side of the park.

Table 3-14. Roadways in the Project Vicinity

Roadway	Direction	Configuration
71st Street	East-West	One lane in each direction (not demarcated) and parking lanes
Holmes Avenue (south of Florence Avenue)	North-South	One lane in each direction (not demarcated) and southbound parking lane
Whitsett Avenue	North-South	One lane in each direction and parking lanes
Nadeau Street	East-West	Two lanes in each direction and parking lanes
Graham Avenue	North-South	One lane in each direction and parking in each direction
76th Place	East-West	One lane in each direction (not demarcated) and parking lanes

Bus service in the project vicinity is available on Nadeau Street (DASH Chesterfield Square and Metro 254 lines) and on Florence Avenue (DASH Chesterfield Square and Metro 102, 110, 111, and 611 lines). In addition, the Metro Blue Line runs along the west side of Roosevelt Park, with the Florence Station located to the northwest of the project site near the corner of Florence Avenue and Graham Avenue. Sidewalks are present throughout the project area, and crosswalks are available for pedestrian use on Florence Avenue and Nadeau Street. There are no designated on-road bicycle lanes or signage in the project vicinity.

Impact Analysis

Would the project:

- a. *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?*

Construction

Less-than-Significant with Mitigation Incorporated. The proposed project would involve the construction of new diversion pipes and underground infiltration systems within or adjacent to the following roadways: 71st Street, Holmes Avenue, Florence Avenue, E 76th Place, Whitsett Avenue, and Nadeau Street. One lane on Whitsett Avenue between 76th Place and Nadeau Street would require temporary lane closure for the construction of dry wells. During construction hours, this segment of Whitsett Avenue would remain open to through traffic and vehicles of local residents. The temporary closure could involve delays; however, the access would be maintained.

Installation of the new diversion pipe connecting to infiltration systems would involve temporary lane closure on Holmes Avenue, Florence Avenue, and E 71st Street. Installation of the new diversion pipe connecting to infiltration systems would involve temporary lane closures on Whitsett Avenue and 76th Place. Temporary lane closures would reduce the capacity of roadways and could

result in delays; however, the effects would be short-term, lasting less than three months, and full access for all residents would be maintained.

All other construction activities associated with project elements would occur at off-street locations. Installation of the diversion pipes would require temporary lane and road closures, which would result in short-term delays for roadway users because of reductions in roadway capacity or detours.

In addition to the temporary reductions in capacity, construction activities would involve the off-hauling and delivery of materials to the project site; the heavy-duty truck trips to the project site could result in additional delay for roadway users. However, with the implementation of a traffic control plan as specified in the PEIR MM TRAF-1, construction-related impacts to circulation would be less than significant.

Following the completion of construction activities, the park would be returned to its current function. Because none of the project elements would involve new park facilities that would increase the number of people visiting the park, no increase in vehicle trips would occur. Thus, traffic operations would be similar to existing conditions and no permanent effect on traffic operations would result from project implementation. Therefore, impacts would be less than significant with mitigation incorporated.

Operation

No Impact. No impacts would occur under operation of the proposed project, and no mitigation measures for operation would be required.

Mitigation Measures

MM TRAF-1: LACDPW will require the contractor to prepare a construction traffic control plan for the proposed project. Elements of the plan should include the following:

- Develop circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible.
- To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours.
- Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions. Use flaggers and/or signage to safely direct traffic through construction work zones.
- Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities.

- b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?***

Construction and Operation

Less-than-Significant Impact. Following the completion of construction activities, all roadways and parking lots would be restored to their existing conditions so that the long-term operational efficiency of the roadways in the project vicinity would not be impaired. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to level of service standards and travel demand measures would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?***

Construction and Operation

No Impact. The closest airport to the project site is the Compton/Woodley Airport, located approximately 5.3 miles south. The Hawthorne Municipal Airport is the next closest airport to the proposed project area, located 5.7 miles southwest. The proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. Therefore, no impacts would occur.

Mitigation Measures

No potentially significant impacts related to air traffic patterns would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

- e. Result in inadequate emergency access?***

Construction

Less-than-Significant Impact. The proposed project would not increase hazards because of a design feature or result in incompatible uses. The proposed stormwater infrastructure would be located bgs and would not conflict with the above ground park uses. The proposed above ground improvements to the park would result in a positive benefit to the community and is compatible with existing park uses. A portion of the park would be closed during construction activities and staging areas may temporarily occupy the parking lot to the north of the park. However, given the parking lot location set within a neighborhood, the construction activities are not anticipated to result in inadequate emergency access. See discussion under Section XIV. a., Public Services, above, regarding coordination with public service providers such as fire and police.

Operation

No Impact. No impacts would occur under operation of the proposed project, and no mitigation measures for operation would be required.

Mitigation Measures

No potentially significant impacts related to hazards because of a design feature nor would impacts related to emergency access occur as a result of the proposed project. Therefore, no mitigation measures are required.

f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Construction and Operation

Less-than-Significant Impact. The proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. The proposed project construction activities would mainly occur within the park boundaries, including staging. However, portions of the project would occur within the following streets: 71st Street, Holmes Avenue, Florence Avenue, E 76th Place, Whitsett Avenue, and Nadeau Street. Florence Avenue and Nadeau Street have bus stops in close proximity to the project site. However, the construction activities are not anticipated to disrupt these bus stop locations. In addition, the Metro Blue Line is located to the west of the project site and would not be affected by the proposed project. Therefore, impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

There are no related projects within a 0.5-mile radius, as identified in Chapter 2, *Project Description*. Both the 2010 Congestion Management Plan and the County of Los Angeles Traffic Impact Analysis Report Guidelines identify thresholds, above which a project-specific traffic analysis is required. Because the proposed project would not generate trips in excess of these thresholds, and therefore would not warrant a detailed traffic analysis, the contribution of the proposed project to existing and future congestion levels would be minor. Thus, the incremental effect of the proposed project relate to traffic operations would not be cumulatively considerable.

No project-level impacts related to air traffic patterns, increases in hazards, or transit, bicycle, or pedestrian facilities would occur. Therefore, the incremental effect of the proposed project would not be cumulatively considerable.

The proposed project, and other past, present, and reasonably foreseeable future projects, are responsible for generating vehicle trips on roadways that are also used by emergency service providers. Given that the proposed project would contribute a small number of vehicle trips during peak commute hours such that no project-specific analysis was required pursuant to the County of Los Angeles Traffic Impact Analysis Report Guidelines (County of Los Angeles Department of Public

Works 1997), the incremental effect of the proposed project related to emergency access would not be cumulatively considerable. Emergency access to the access would be unchanged relative to existing conditions.

XVII. Tribal Cultural Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p>				
<p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The project site lies within the historic territory of the Native American group known as the Gabrielino (Bean and Smith 1978; McCawley 1996). The Gabrielino territory included the Los Angeles Basin (including the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers), the coast from Aliso Creek in the south to Topanga Creek in the north, and three Channel Islands. The Gabrielino followed a hunting and gathering subsistence and maintained permanent villages along the major streams in the area. No known ethnohistoric villages are located in close proximity to the project site (McCawley 1996; Johnston 1962).

ICF contacted the California NAHC on November 4, 2016, regarding the proposed project. The NAHC responded on November 9, 2016 and indicated that a search of their Sacred Lands File was completed with negative results for the project area.

Letters, serving as formal notice of this project, were sent in March and May 2017 to Fernandeño Tataviam Band of Mission Indians, Gabrieleno Band of Mission Indians – Kizh Nation, San Gabriel Band of Mission Indians, San Manuel Band of Mission Indians and Tejon Indian Tribe (Appendix D). One tribe, the Gabrieleno Band of Mission Indians – Kizh Nation, formally requested tribal consultation with the LACDPW regarding the first phase of planning under the California Environmental Quality Act (Public Resources Code Section 21080.3.1, subdivisions (b) and (d), and mitigation of potential impacts on tribal, cultural, and environmental resources (Appendix D). The Gabrieleno Band of Mission Indians – Kizh Nation believe that the proposed project location is in a culturally sensitive area and implementation may cause a substantial adverse change in the

significance of potential tribal cultural resources. The tribe shared a confidential map with LACDPW to illustrate their concerns. LACDPW met with the Gabrieleno Band of Mission Indians – Kizh Nation on August 16, 2017 to discuss tribal monitoring and to develop adequate mitigation measures to avoid or reduce potential impacts to the tribal, cultural resources as described below. On August 23, 2017, the Gabrieleno Band of Mission Indians – Kizh Nation sent LACDPW mitigation measures approved by the tribe. LACDPW and the Gabrieleno Band of Mission Indians – Kizh Nation communicated several times through phone and email between August 23, 2017 and December 12, 2017, to consult on suitable tribal cultural resources mitigation measures for the project. On December 12, 2017, LACDPW and the Gabrieleno Band of Mission Indians – Kizh Nation came to an agreement on Project mitigation measures for tribal cultural resources and consultation was concluded.

Impact Analysis

Would the project:

- a. Cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

Construction and Operation

Less-than-Significant with Mitigation Incorporated. See discussion under Section V. a-c., Cultural Resources above. A Sacred Lands File Search and list of local Native American contacts were requested from the NAHC. The search was completed with negative results. LACDPW has extended an invitation to local tribal representatives to consult on the CEQA review and received one AB52 tribal consultation request from the Gabrieleno Band of Mission Indians – Kizh Nation on May 31, 2017. The Gabrieleno Band of Mission Indians – Kizh Nation believe that the proposed project location is in a sensitive area and implementation may cause a substantial adverse change in the significance of potential tribal cultural resources.

If resources are found, mitigation measures would require work stoppage and an assessment of the resources. Implementation of mitigation measures MM TCR-1 through MM TCR-3 would reduce potential adverse impacts on tribal resources to a less-than-significant level.

Mitigation Measures

MM TCR-1 through MM TCR-3 would be implemented to reduce impacts related to tribal resources to a less-than-significant level.

- b. Cause a substantial adverse change in a resource, as determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

Construction and Operation

Less-than-Significant with Mitigation Incorporated. On May 31, 2017, the Gabrieleno Band of Mission Indians – Kizh Nation requested AB52 tribal consultation due to the potential for tribal

resources to exist on the proposed project location. If resources are found, mitigation measures would require work stoppage and an assessment of the resources. Implementation of MM TCR-1 through MM TCR-3 would reduce potential adverse impacts on tribal resources to a less-than-significant level.

Mitigation Measures

MM TCR-1: Retain a Qualified Archaeological Monitor: To reduce potential impacts on resources identified during project construction that have the potential to be Tribal Cultural Resources, a qualified archaeologist will monitor all proposed ground-disturbing activities of the project site located in native soils in order to minimize disturbance of subsurface archaeological deposits. Specifically, the following measures will be implemented to reduce impacts:

- LADDPW will retain a qualified professional archeologist, meeting the Secretary of the Interior's Professional Qualification Standards in archaeology, as promulgated in Code of Federal Regulations (CFR), Title 36, to oversee all monitoring work and supervise the archaeological monitor.
- The qualified archeologist and the archaeological monitor should have experience working in the Los Angeles basin within the ancestral tribal territory of the Gabrieleno.
- The qualified archeologist shall prepare a Monitoring and Discovery Plan that includes procedures, chain of command, and reporting requirements. The plan will also include a map of the ancestral tribal territory of the Gabrieleno. The Monitoring and Discovery plan shall be provided and reviewed by all parties, including the AB52 consulting tribe, prior to construction.
- The Qualified Archaeologist shall conduct cultural resources awareness training to all project personnel, in cooperation with the Native American Monitor, prior to the start of construction.
- If intact cultural subsurface deposits are identified during construction, the archaeological monitor will coordinate with the LACDPW Inspector to divert construction activities away from the find (50-foot buffer around the find) and will be given sufficient time and compensation to investigate the find and determine its significance, in cooperation with the Native American monitor. No soil, within the 50-foot buffer around the find, shall be exported off site until a determination can be made regarding the significance of the resource.
- Recovered items that are determined to NOT be Tribal Cultural Resources will be treated in accordance with current professional standards by being properly provenienced, cleaned, analyzed, researched, reported, and curated in a collection facility meeting the Secretary of the Interior's Standards, as promulgated in 36 CFR 79. The costs for curation will be included in the budget for recovery of the archaeological remains.

A final Cultural Resources Monitoring Report shall be produced, which will discuss the monitoring program and its results and will provide interpretations of any recovered cultural materials. This report will be filed with the LACDPW and with the LA County Parks Department. If cultural material is found, the final records of the findings will be filed with the LACDPW, SCCIC NAHC, and the LA County Parks Department.

MM TCR-2: Retain a Gabrieleno Native American Monitor: To reduce potential impacts on Tribal Cultural Resources, monitoring shall be conducted by a monitor of Gabrieleno ancestry or Gabrieleno Tribal member during ground-disturbing activities in native soils. The role of the Native American monitor would be to work with the project's qualified archaeologist and archaeological monitor, identify potential Native American Tribal Cultural Resources, represent tribal concerns, and communicate concerns and appropriate handling to LACDPW and the Tribal Council. Appropriate representatives would be identified based on consultation between LACDPW and the AB52 consulting tribe. Specifically, the following measures will be implemented to reduce impacts:

- A qualified Native American monitor will be retained either as a subconsultant to the archaeological consultant or directly by the County to provide tribal monitoring services for this project. The Native American monitor shall maintain ongoing collaborative consultation with the archaeological monitor during all ground disturbing activities in native soils.
- The Native American monitor shall conduct cultural resources awareness training to all project personnel, in cooperation with the Qualified Archaeologist, prior to the start of construction.
- Where earth-disturbance activities in native soils occur, it shall be monitored by one Native American monitor having Gabrieleno ancestry or who is a Gabrieleno tribal member.
- Earth-disturbance activities in native soils will include, clearing, grubbing, grading, excavation, trenching, and, in certain circumstances, augering work.
- The monitoring of augering activities will be limited to the observation of the native materials that are removed and set aside from the excavation. Monitoring will not be required for augering depths, as designated by the archaeologist, which have no potential for yielding tribal cultural resources.
- Native American monitoring will not be required for work activities that include the demolition and removal of non-native materials such as existing concrete, asphalt pavement, and pavement base layers.
- Native American monitoring will not be required for vacuum-excavation potholing because all materials will be extracted through a vacuum hose that feeds into a truck-mounted tank.
- The Native American Monitor will complete daily monitoring logs that provide descriptions of construction activities, locations, soil, and any cultural materials identified.
- The Native American monitor shall have the ability to notify LACDPW's archaeological monitor, who will coordinate with the LACDPW Inspector to temporarily stop work if they find a cultural resource that may require further identification, recordation, and evaluation.
- When a potential Tribal Cultural Resource is discovered, the Archaeological Monitor, in cooperation with the Native American monitor, shall use flagging tape, rope, or some other means, as necessary, to delineate the area of the find plus a 50-foot buffer, within which construction shall halt.
- Native American monitoring shall end when earth-disturbing activities in native soils are completed, or when the Native American monitor, in consultation with the AB52 consulting tribe, have indicated that the area of native soils has a low potential for archeological resources.

MM TCR-3: Discovery of a Potential Tribal Cultural Resource: A Tribal Cultural Resource is a site feature, place, cultural landscape, sacred place or object that is of cultural value to a Tribe AND is either: On or eligible for the California Register of Historic Resources or a local historic register, OR the lead agency, at its discretion, chooses to treat the resource as a TCR (See: PRC 21074 (a)(1)(A)-(B)). As per PRC 21074(a)(2), LACDPW will determine if the resource is a Tribal Cultural Resource pursuant to criteria set forth in subdivision (c) of Section 5024.1. If potential Tribal Cultural Resources are discovered during construction, all work must halt within a 50-foot radius of the discovery. The Qualified Archaeologist and archaeological monitor shall have the authority to modify the no-work radius as appropriate, using professional judgment.

- Any discovery is to be kept confidential and secure to prevent any further disturbance. There shall be no publicity regarding any tribal cultural resources recovered. However, discoveries will be documented and included in the confidential cultural resources monitoring report, which will be submitted to LACDPW, Los Angeles County Parks, the South Central Coastal Information Center, the AB52 consulting tribe, and the Native American Heritage Commission.
- All potential Tribal Cultural Resources unearthed by project construction activities shall be evaluated by the Qualified Archaeologist in consultation with the Native American monitor. Native American artifacts and finds suspected to be Native American in nature are to be considered as potential Tribal Cultural Resources until LACDPW has determined otherwise with the consultation of the Qualified Archaeologist and AB52 consulting tribe. The Native American monitor may suggest options for the treatment of cultural finds for consideration.
- Construction shall not take place within the delineated area of the Tribal Cultural Resource until either 1) mitigation measures have been agreed upon between LACDPW and the AB52 consulting tribe, pursuant to PRC Section 21080.3.2, and that mitigation is carried out; or 2) if agreement cannot be reached, one or more of the standard mitigation measures described in PRC Section 21084.3 is carried out.
- If the Qualified Archaeologist determines that the find does not represent a potentially significant cultural resource, work may resume immediately and no agency notifications are required.
- If the find represents a potential Tribal Cultural Resource, LACDPW shall consult on a finding of eligibility and implement appropriate treatment measures. Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determines that the site either: 1) is not eligible for the National Register of Historic Places, California Register of Historic Resources, or local register; or 2) that the site is eligible for the National Register of Historic Places, California Register of Historic Resources, or local register and treatment measures have been completed to their satisfaction.
- If a resource has been determined by LACDPW to be a Tribal Cultural Resource, any and all uncovered Tribal Cultural Resources shall be repatriated to the Tribe for respectful and dignified treatment and shall not be curated.

As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, LACDPW, or its authorized representative, shall immediately notify the Los Angeles County Coroner's office by telephone. All work will stop within a 50-foot radius of the discovery until the coroner determines if the human remains are those of a Native American. If the remains are determined to be Native American, the procedures described in MM CR-2 will be followed.

Cumulative Impacts

There are no related projects within a 0.5-mile radius, as identified in Chapter 2, *Project Description*. The above-referenced mitigation measures (MM TCR-1 through MM TCR-3) would reduce the project's impacts to less than significant. In addition, the related projects would also be required to follow state law related to tribal resources. Therefore, the incremental effect of the proposed project related to tribal resources would not be cumulatively considerable.

XVIII. Utilities and Service Systems	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The project site is currently an approximately 24-acre park. The Park currently contains landscaping and minimal lighting. Within the Florence-Firestone neighborhood, the Los Angeles Department of Water and Power is the water provider, Southern California Edison is the electricity provider, Southern California Gas Company is the natural gas provider, and Consolidated Disposal Services is the refuse collector. Wastewater management is provided by the Los Angeles County Sanitation District.

Impact Analysis

Would the project:

- a. *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

Construction

Less-than-Significant Impact. As described above, wastewater management for the proposed project site is provided by Los Angeles County Sanitation District. Construction of the proposed project would generate a minimal amount of wastewater. The primary source of wastewater would be sanitary waste generated by construction workers. Portable waste facilities would be provided for use by all workers, and sanitary waste generated from the use of these facilities would be disposed of by an approved contractor at an approved disposal site.

Construction activities would include site preparation and grading. Construction activities could result in sedimentation and water contamination from liquids such as solvents and paints. As such, BMPs would be employed during construction, such as sediment and erosion control measures to prevent pollutants from leaving the site. Construction workers would be expected to follow the BMPs, which would reduce any construction-related wastewater impacts. Therefore, the proposed project would not exceed wastewater treatment requirements of the RWQCB. Therefore, construction impacts would be less than significant.

Operation

No Impact. The proposed project would not result in the generation of wastewater requiring treatment by a wastewater treatment plant; thus, implementation of the proposed project would not result in an exceedance of wastewater requirements of the applicable RWQCB. The proposed project would comply with the stormwater requirements of the MS4 Permit issued by the applicable RWQCB. Additionally, as discussed in Section IX. e, Hydrology and Water Quality, the proposed project would enhance the existing drainage capacity of the surrounding area by diverting stormwater flows to the Park for infiltration and would improve water quality in the project area because pollutants would also be diverted and removed through pre-treatment processes. As a result, pollutant loads would be diverted from the existing storm drain network. Therefore, no impacts would occur.

Mitigation Measures

No potentially significant impacts related to wastewater treatment requirements would occur as a result of the proposed project. Therefore, no mitigation measures are required.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction

Water

Less-than-Significant Impact. Construction of the proposed project would necessitate the use of water for various purposes. Water would be used during concrete and plaster work, grading, dust suppression, and other construction activities. The water uses described above would not result in a substantial permanent increase in water consumption, and new water treatment facilities would not be required to meet this incremental and temporary increase in demand. As such, construction impacts would be less than significant.

Wastewater

Less-than-Significant Impact. Construction of the proposed project would generate a minimal amount of wastewater. However, it would not require or result in the construction of new wastewater treatment facilities or the expansion of existing facilities. The primary source of wastewater would be the sanitary waste generated by construction workers. Portable waste facilities would be provided for use by all workers, and sanitary waste generated from the use of these facilities would be disposed of by an approved contractor at an approved disposal site. As such, construction impacts would be less than significant.

Operation

Water and Wastewater

No Impact. Implementation of the proposed project is not expected to require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. No impacts to water and wastewater infrastructure are expected and no further analyses is required.

Mitigation Measures

No potentially significant impacts related to water or wastewater treatment facilities would occur as a result of the proposed project. Therefore, no mitigation measures are required.

c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction and Operation

Less-than-Significant with Mitigation Incorporated. The proposed project would result in the construction of new stormwater drainage facilities at the Park and nearby streets, as described in Section 2.0, Project Description. The proposed project is anticipated to have a positive impact on the receiving waters in the watershed and would comply with LACDPW's MS4 Permit. As discussed in Section IX. e, Hydrology and Water Quality, the proposed project would enhance the existing drainage capacity of the surrounding area by diverting stormwater flows to the Park for infiltration and would improve water quality in the project area because pollutants would also be diverted and

removed through pre-treatment processes. As a result, pollutant loads would be diverted from the existing storm drain network. The proposed project would serve as regional stormwater treatment for a 195 acres of drainage area and would capture the 85th percentile storm, which is approximately 0.75 inches over 24 hours. Impacts to stormwater drainage facilities would be less than significant with mitigation measures identified throughout this Initial Study.

Mitigation Measures

All mitigation measures identified within this IS/MND are required to reduce impacts related to stormwater drainage facilities.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?

Construction

Less-than-Significant Impact. Implementation of the proposed project would not increase water demand or result in a significant impact to water supplies. Water demand during construction is not expected to be substantial enough to require new or expanded water supply resources. Additionally, the proposed project could augment local water supplies through enhanced stormwater recharge. Impacts to the existing water supplies are anticipated to be beneficial as a result of the stormwater and non-stormwater runoff infiltration. Furthermore, the project site is located in an urban built-up area where it is expected that local surface water contributes little to the regional water supply. Thus, construction of the project elements to detain stormwater is not expected to reduce flows downstream such that access to beneficial uses downstream would be significantly affected. No adverse impacts related to new or expanded water supply resources or entitlements would occur and no further analyses is required.

Ground disturbance activities could encounter buried utilities including water supply infrastructure. As part of the proposed project design, LACDPW would be required to identify the potential for underground utilities and determine whether they would need to be relocated to accommodate the proposed project. As standard construction practices require, LACDPW would conduct an underground utility search prior to excavation and would coordinate with utility providers in advance to ensure no disruption in services to the utility customers. Therefore, impacts to buried utilities infrastructure would be less than significant.

Operation

Less-than-Significant Impact. Implementation of the proposed project would utilize insignificant amounts of water supplies. Sufficient water supplies from existing entitlements and resources would be available to serve the project; no new or expanded entitlements would be needed. As such, operational impacts would be less than significant.

Mitigation Measures

No potentially significant impacts related to existing water supplies would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

No Impact. Please see responses to Section XVIII.a. and XVIII.b., Utilities and Service Systems above.

Mitigation Measures

No potentially significant impacts related to wastewater treatment systems would occur as a result of the proposed project. Therefore, no mitigation measures are required.

- f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

Construction

Less-than-Significant with Mitigation Incorporated. Construction activities could include excavation of soil and demolition of some existing infrastructure, which would produce solid waste requiring disposal in the nearest landfill. The largest potential source of solid waste during construction would be excavated soil; approximately 38,200 cubic yards of soil would be exported off site. While it is expected that most clean soil would be recycled, reused off site, or stockpiled and reused as backfill, it is assumed that a portion of excavated soil could be disposed in landfills. In the event that a significant quantity of waste produced by construction activities would need to be disposed of at a landfill, development of a waste management plan or recycling plan as proposed in MM UTIL-1 would reduce impacts to a less-than-significant level.

Operation

Less-than-Significant Impact. Because the project site is currently an existing park, operation of the proposed project would result in an insignificant generation of solid waste. However, as described above, existing waste facilities have sufficient remaining capacity to accommodate waste generated by the proposed project. As such, operational impacts would be less than significant.

Mitigation Measures

MM UTIL-1: LACDPW will encourage the construction contractor to recycle construction materials and divert inert solids (asphalt, brick, concrete, dirt, fines, rock, sand, soil, and stone) from disposal in a landfill, where feasible. Implementing agencies will incentivize construction contractors with waste minimization goals in bid specifications where feasible.

- g. Comply with federal, state, and local statutes and regulations related to solid waste?*

Construction and Operation

No Impact. Construction and operation of the proposed project would comply with all federal, state, and local statutes and regulations related to solid waste, including the Los Angeles County Construction and Demolition Debris Recycling and Reuse Program. Furthermore, Assembly Bill (AB) 939 mandates the reduction of solid waste disposal in landfills. The bill mandates a minimum 50% waste diversion goal and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. As stated in the 2015 Countywide Integrated Waste Management Plan Annual Report for Los Angeles County, the estimated diversion

rate for the entire county was 65% (County of Los Angeles 2016). Solid waste generated by the proposed project would likely be disposed of at Sunshine Canyon City/County Landfill, which monitors, inspects, and records waste that enters its facility to facilitate compliance with AB 939. Furthermore, the proposed project would be implemented in a manner that would be consistent with the County's commitment to, and compliance with, AB 939. Therefore, no impacts would occur.

Mitigation Measures

No potentially significant impacts related to utilities and service systems would occur as a result of the proposed project. Therefore, no mitigation measures are required.

Cumulative Impacts

There are no related projects within a 0.5-mile radius, as identified in Chapter 2, *Project Description*. Population growth in the Los Angeles County has been anticipated by the utility service providers, and conservation, management, and expansion strategies are being implemented to ensure adequate capacity for meeting the demands of this growth. As such, it is not anticipated that the development of the proposed project would result in significant cumulative impacts related to utilities and service systems. As discussed above, the proposed project would not result in any potentially significant impacts on utilities and service systems. The proposed project would not exceed the wastewater treatment requirements of the RWQCB, and it would not require or result in the construction of new water, wastewater treatment, or stormwater drainage facilities or the expansion of existing facilities. The proposed project would have adequate water supplies available, and it would be served by landfills with sufficient permitted capacity to accommodate its solid waste disposal needs. Therefore, the incremental effect of the proposed project related to wastewater would not be cumulatively considerable.

XIX. Mandatory Findings of Significance		Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Analysis

Impact Analysis

Would the project?

- a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?*

Less-than-Significant with Mitigation Incorporated. The proposed project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. The proposed project is anticipated to result in the removal of up to six ornamental landscape trees. No County protected trees would be removed as part of the proposed project. However, it is anticipated the trees would be replaced at the Park, including planting 27 new trees of species including Gold Medallion Tree, Chitalpa, Brisbane Box, and California Sycamore. This impact is anticipated to be less than significant with the incorporation of MM BIO-2, which requires preparation and approval of tree preservation plan or written concurrence that no plan is required.

The proposed project would not impact sensitive biological resources and would achieve multiple benefits, including water quality improvements, water conservation, park facility upgrades, and education and outreach. As a result, the proposed project is anticipated to have a positive impact on the quality of the environment and impacts would be less than significant with mitigation incorporated.

b. Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less-than-Significant Impact. A cumulative impact could occur if the proposed project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects. As discussed in Sections I through XVII of this MND, the proposed project would not result in a cumulatively considerable impact on any resource area. Therefore, impacts would be less than significant.

c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less-than-Significant Impact. The proposed project would include the construction of water quality and water conservation measures in a public facility and would not result in potentially significant impacts, as described in detail in Sections I through XVIII, above. The impacts from the proposed project are anticipated to be reduced to less than significant levels through the use of standard regulatory requirements and/or the implementation of mitigation measures. Therefore, after implementation of mitigation measures, the proposed project would not have environmental effects that would cause substantial adverse effects on human beings. Impacts would be less than significant.

Project Description

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Chapter 5

List of Preparers

Los Angeles County Department of Public Works

Rick Sun, PE, MS, MBA, LEED AP	Capital Project Manager
Louis Romero	Capital Projects Management Associate

ICF

Charles Smith, AICP, LEED AP BD+C	Project Director/QA-QC
Laura Rocha, CPSWQ, QSD/QSP	Project Manager
Holly Ayala	Other CEQA sections
Keith Cooper	Air Quality; Greenhouse Gases
Greg Hoisington	QA/QC Biological Resources
Cara Snellen	Biological Resources
Karen Crawford	QA/QC Cultural Resources
Stephen Byrne	Cultural Resources
Sydni Kitchel	Cultural Resources
Gary Clendenin	QA/QC Hazards and Hazardous Materials
Mario Barrera	Geology/Soils; Hazards and Hazardous Materials
Mark Robinson	Paleontological Resources
Laura Rocha, CPSWQ, QSD/QSP	Hydrology/Water Quality
Jonathan Higginson, INCE	Noise
Rusty Whisman	Transportation/Traffic
Brittany Buscombe	GIS
Tim Messick	Graphics
Ariana Marquis	Editor

Appendix A
Biology Literature Search



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Threatened	G2G3	S1S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S2S3	WL
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Astragalus tener var. titi coastal dunes milk-vetch	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex coulteri Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
California macrophylla round-leaved filaree	PDGER01070	None	None	G3?	S3?	1B.2
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	GHQ	SH	3.1
Carolella busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	SH	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery	PDAP10Z042	Endangered	Endangered	G5T1	S1	1B.1
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower	PDAST4N102	None	None	G5TH	SH	1A
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	PDR0S0W045	None	None	G4T1	S1	1B.1
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
<i>Microtus californicus stephensi</i> south coast marsh vole	AMAFF11035	None	None	G5T1T2	S1S2	SSC
<i>Nasturtium gambelii</i> Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
<i>Navarretia fossalis</i> spreading navarretia	PDPLM0C080	Threatened	None	G2	S2	1B.1
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.1
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
<i>Nyctinomops macrotis</i> big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
<i>Orcuttia californica</i> California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
<i>Phacelia stellaris</i> Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<i>Polioptila californica californica</i> coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
<i>Ribes divaricatum</i> var. <i>parishii</i> Parish's gooseberry	PDGRO020F3	None	None	G4TH	SH	1A
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Symphyotrichum defoliatum</i> San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
<i>Symphyotrichum greatae</i> Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 45

Scientific Name	Common Name	Family	Lifeform	Rare Plan	State Ra	Global R	CESA	FESA	Elevation	Elevation	CA E	Quad
<i>Arenaria paludicola</i>	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb		S1	G1	CE	FE	170	3	F	hollywood
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	Fabaceae	perennial herb	1B.1	S2	G2	None	FE	640	4	T	hollywood
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Ventura marsh milk-vetch	Fabaceae	perennial herb	1B.1	S1	G2T1	CE	FE	35	1	T	hollywood
<i>Astragalus tener</i> var. <i>titi</i>	coastal dunes milk-vetch	Fabaceae	annual herb	1B.1	S1	G2T1	CE	FE	50	1	T	inglewood
<i>Atriplex coulteri</i>	Coulter's saltbush	Chenopodiaceae	perennial herb	1B.2	S1S2	G3	None	None	460	3	F	inglewood
<i>Atriplex serenana</i> var. <i>davidsonii</i>	Davidson's saltscale	Chenopodiaceae	annual herb	1B.2	S1	G5T1	None	None	200	10	F	hollywood
<i>Atriplex serenana</i> var. <i>davidsonii</i>	Davidson's saltscale	Chenopodiaceae	annual herb	1B.2	S1	G5T1	None	None	200	10	F	los angeles
<i>California macrophylla</i>	round-leaved filaree	Geraniaceae	annual herb	1B.2	S3?	G3?	None	None	1200	15	F	los angeles
<i>Calochortus catalinae</i>	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	S4	G4	None	None	700	15	T	hollywood
<i>Calochortus catalinae</i>	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	S4	G4	None	None	700	15	T	los angeles
<i>Calochortus plummerae</i>	Plummer's mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	S4	G4	None	None	1700	100	T	hollywood
<i>Calochortus plummerae</i>	Plummer's mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	S4	G4	None	None	1700	100	T	los angeles
<i>Calystegia felix</i>	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	3.1	SH	GHQ	None	None	215	30	T	hollywood
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	Onagraceae	annual herb	3	S4	G4	None	None	300	0	F	inglewood
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	Onagraceae	annual herb	3	S4	G4	None	None	300	0	F	hollywood
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	Asteraceae	annual herb	1B.1	S2	G3T2	None	None	480	0	F	inglewood
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	Asteraceae	annual herb	1B.1	S2	G3T2	None	None	480	0	F	hollywood
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	Asteraceae	annual herb	1B.1	S2	G3T2	None	None	480	0	F	south gate
<i>Clinopodium mimuloides</i>	monkey-flower savory	Lamiaceae	perennial herb	4.2	S3	G3	None	None	1800	305	T	los angeles
<i>Convolvulus simulans</i>	small-flowered morning-glory	Convolvulaceae	annual herb	4.2	S4	G4	None	None	740	30	F	hollywood
<i>Dudleya multicaulis</i>	many-stemmed dudleya	Crassulaceae	perennial herb	1B.2	S2	G2	None	None	790	15	T	hollywood
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	1A	SH	G5TH	None	None	1675	10	T	hollywood
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	1A	SH	G5TH	None	None	1675	10	T	los angeles
<i>Hordeum intercedens</i>	vernal barley	Poaceae	annual herb	3.2	S3S4	G3G4	None	None	1000	5	F	inglewood
<i>Hordeum intercedens</i>	vernal barley	Poaceae	annual herb	3.2	S3S4	G3G4	None	None	1000	5	F	los angeles
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	Rosaceae	perennial herb	1B.1	S1	G4T1	None	None	810	70	T	hollywood
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	Rosaceae	perennial herb	1B.1	S1	G4T1	None	None	810	70	T	los angeles
<i>Juglans californica</i>	Southern California black walnut	Juglandaceae	perennial deciduous tree	4.2	S3	G3	None	None	900	50	T	hollywood
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	Asteraceae	annual herb	1B.1	S2	G4T2	None	None	1220	1	F	inglewood
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	Brassicaceae	annual herb	4.3	S3	G5T3	None	None	885	1	F	los angeles
<i>Nasturtium gambelii</i>	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	1B.1	S1	G1	CT	FE	330	5	F	hollywood
<i>Navarretia fossalis</i>	spreading navarretia	Polemoniaceae	annual herb	1B.1	S2	G2	None	FT	655	30	F	inglewood
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	Polemoniaceae	annual herb	1B.1	S2	G2	None	None	1210	3	T	inglewood
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	Polemoniaceae	annual herb	1B.1	S2	G2	None	None	1210	3	T	los angeles
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	Polemoniaceae	annual herb	1B.1	S2	G2	None	None	1210	3	T	south gate
<i>Orcuttia californica</i>	California Orcutt grass	Poaceae	annual herb	1B.1	S1	G1	CE	FE	660	15	F	inglewood
<i>Orcuttia californica</i>	California Orcutt grass	Poaceae	annual herb	1B.1	S1	G1	CE	FE	660	15	F	south gate
<i>Phacelia hubbyi</i>	Hubby's phacelia	Hydrophyllaceae	annual herb	4.2	S4	G4	None	None	1000	0	T	hollywood
<i>Phacelia hubbyi</i>	Hubby's phacelia	Hydrophyllaceae	annual herb	4.2	S4	G4	None	None	1000	0	T	los angeles
<i>Phacelia stellaris</i>	Brand's star phacelia	Hydrophyllaceae	annual herb	1B.1	S1	G1	None	None	400	1	F	south gate
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	Asteraceae	perennial herb	2B.2	S2	G4	None	None	2100	0	F	hollywood
<i>Symphotrichum defoliatum</i>	San Bernardino aster	Asteraceae	perennial rhizomatous herb	1B.2	S2	G2	None	None	2040	2	T	inglewood
<i>Symphotrichum defoliatum</i>	San Bernardino aster	Asteraceae	perennial rhizomatous herb	1B.2	S2	G2	None	None	2040	2	T	hollywood
<i>Symphotrichum greatae</i>	Greata's aster	Asteraceae	perennial rhizomatous herb	1B.3	S2	G2	None	None	2010	300	T	los angeles

Roosevelt Park Stormwater 20161102

IPaC Trust Resources Report

Generated November 02, 2016 12:18 PM MDT, IPaC v3.0.9

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.

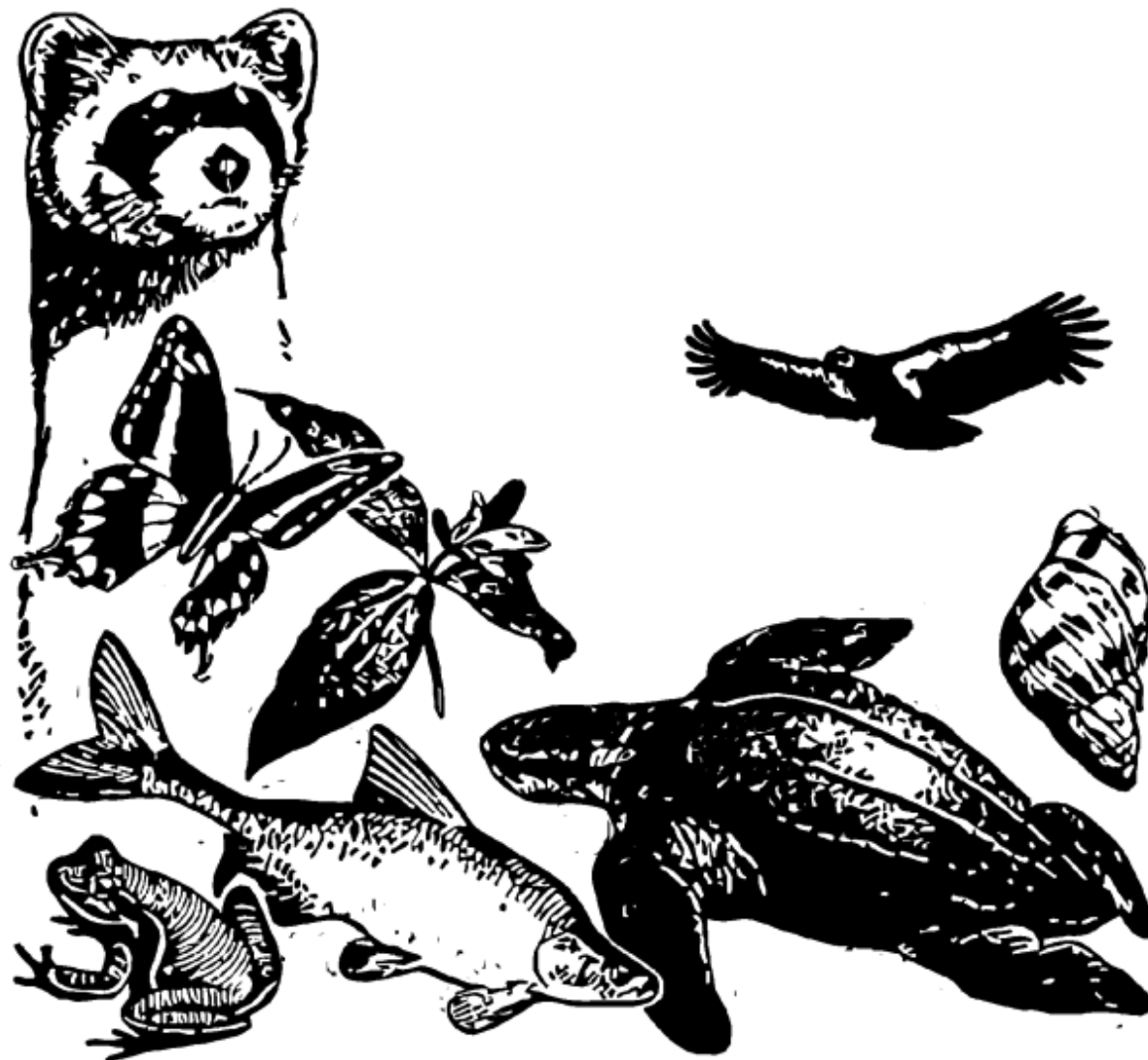


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U.S. Fish & Wildlife Service

IPaC Trust Resources Report



NAME

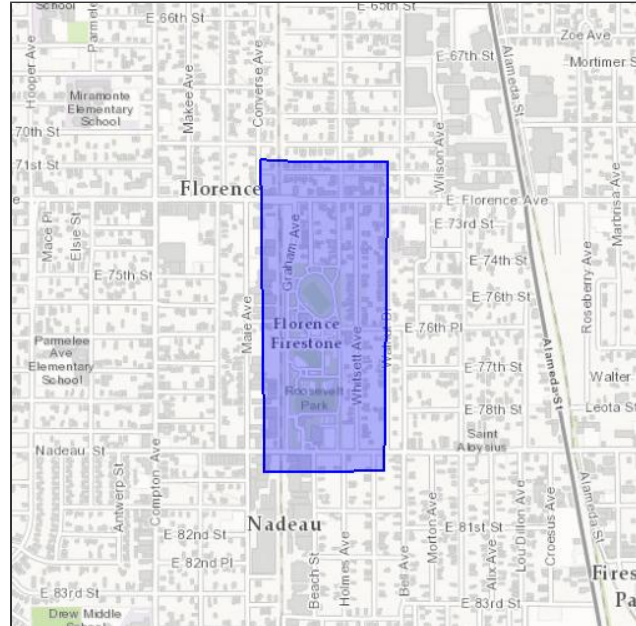
Roosevelt Park Stormwater 20161102

LOCATION

Los Angeles County, California

IPAC LINK

<https://ecos.fws.gov/ipac/project/EFFUW-Q2Y6B-BKZOW-42SNO-5571J1>



U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

[Section 7](#) of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list either from the Regulatory Documents section in IPaC or from the local field office directly.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Birds

Coastal California Gnatcatcher *Polioptila californica californica* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B08X

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.^[1] There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern
<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data
<http://www.birdscanada.org/birdmon/default/datasummaries.jsp>

The following species of migratory birds could potentially be affected by activities in this location:

Allen's Hummingbird <i>Selasphorus sasin</i>	Bird of conservation concern
Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0LI	
Bald Eagle <i>Haliaeetus leucocephalus</i>	Bird of conservation concern
Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B008	
Bell's Vireo <i>Vireo bellii</i>	Bird of conservation concern
Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0JX	
Black Oystercatcher <i>Haematopus bachmani</i>	Bird of conservation concern
Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0KJ	

Brewer's Sparrow <i>Spizella breweri</i> Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0HA	Bird of conservation concern
Burrowing Owl <i>Athene cunicularia</i> Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0NC	Bird of conservation concern
Cactus Wren <i>Campylorhynchus brunneicapillus</i> Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0FZ	Bird of conservation concern
Costa's Hummingbird <i>Calypte costae</i> Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0JE	Bird of conservation concern
Fox Sparrow <i>Passerella iliaca</i> Season: Wintering	Bird of conservation concern
Lawrence's Goldfinch <i>Carduelis lawrencei</i> Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0J8	Bird of conservation concern
Least Bittern <i>Ixobrychus exilis</i> Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B092	
Lesser Yellowlegs <i>Tringa flavipes</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0MD	Bird of conservation concern
Lewis's Woodpecker <i>Melanerpes lewis</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0HQ	Bird of conservation concern
Long-billed Curlew <i>Numenius americanus</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B06S	Bird of conservation concern
Marbled Godwit <i>Limosa fedoa</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0JL	Bird of conservation concern
Mountain Plover <i>Charadrius montanus</i> Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B078	Bird of conservation concern
Nuttall's Woodpecker <i>Picoides nuttallii</i> Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?scode=B0HT	Bird of conservation concern

Oak Titmouse <i>Baeolophus inornatus</i>	Bird of conservation concern
Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ	
Olive-sided Flycatcher <i>Contopus cooperi</i>	Bird of conservation concern
Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN	
Peregrine Falcon <i>Falco peregrinus</i>	Bird of conservation concern
Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU	
Red-crowned Parrot <i>Amazona viridigenalis</i>	Bird of conservation concern
Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0GO	
Rufous-crowned Sparrow <i>Aimophila ruficeps</i>	Bird of conservation concern
Season: Year-round http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MX	
Short-billed Dowitcher <i>Limnodromus griseus</i>	Bird of conservation concern
Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JK	
Short-eared Owl <i>Asio flammeus</i>	Bird of conservation concern
Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD	
Snowy Plover <i>Charadrius alexandrinus</i>	Bird of conservation concern
Season: Breeding	
Western Grebe <i>aechmophorus occidentalis</i>	Bird of conservation concern
Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA	
Yellow Warbler <i>dendroica petechia ssp. brewsteri</i>	Bird of conservation concern
Season: Breeding http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EN	
Red Knot <i>Calidris canutus ssp. roselaari</i>	Bird of conservation concern
Season: Wintering http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0G6	

Wildlife refuges and fish hatcheries

There are no refuges or fish hatcheries in this location

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

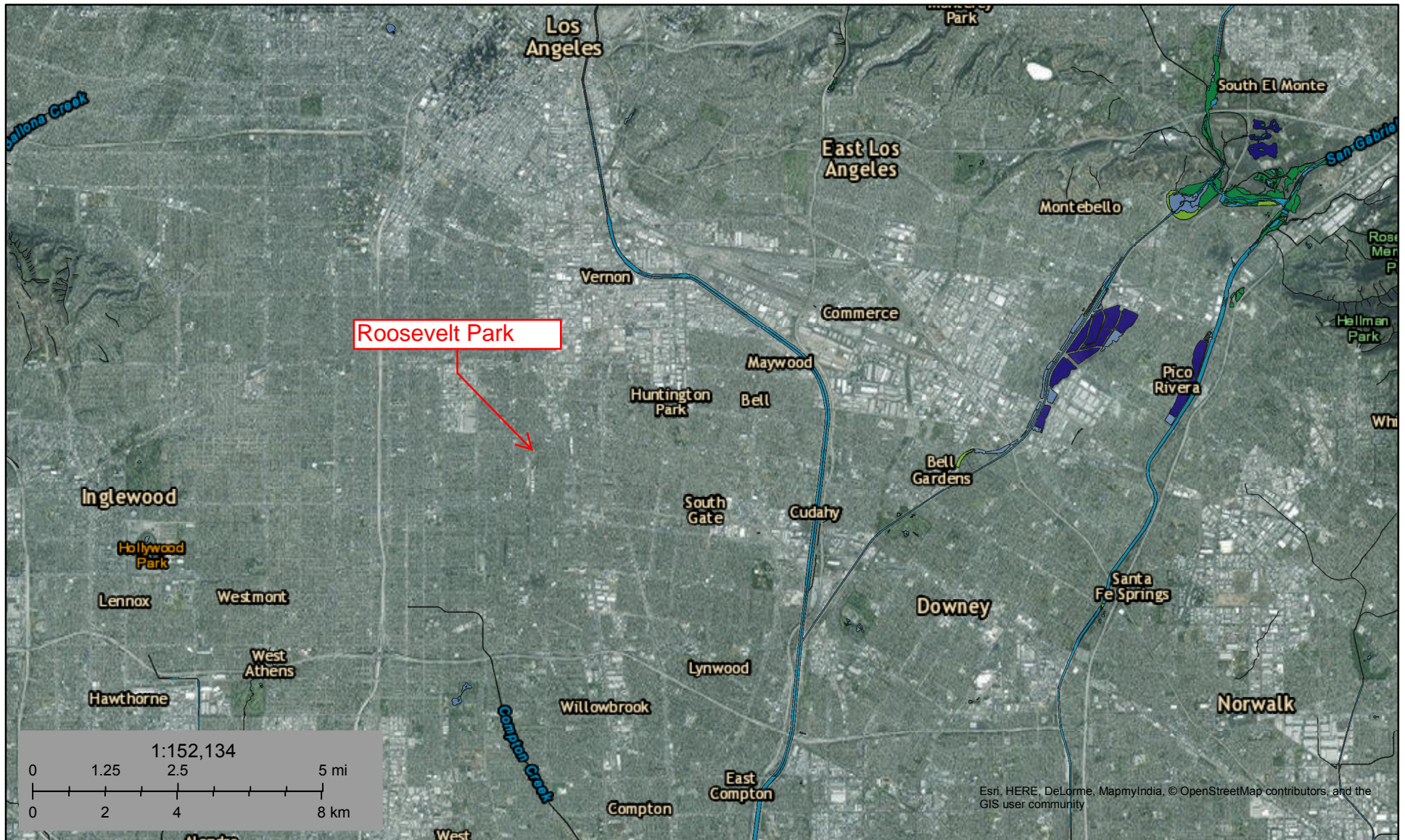
DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

There are no wetlands in this location



November 2, 2016

- | | | |
|--------------------------------|-----------------------------------|----------|
| Estuarine and Marine Deepwater | Freshwater Forested/Shrub Wetland | Other |
| Estuarine and Marine Wetland | Freshwater Pond | Riverine |
| Freshwater Emergent Wetland | Lake | |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Appendix B
Infiltration Studies



March 21, 2014
Project No. 00138948.000A

County of Los Angeles Department of Public Works
Geotechnical and Materials Engineering Division
Soils Investigations Section
900 South Fremont Avenue, 4th Floor
Alhambra, California 91803

Attention: Mr. Yonah Halpern

**Subject: Report of Infiltration Study
Low Impact Development
Roosevelt Park
7600 Graham Avenue
Los Angeles, California 90001**

Dear Mr. Halpern,

Kleinfelder is pleased to present this report summarizing our infiltration study performed at Roosevelt Park located at 7600 Graham Avenue in Los Angeles, California. The approximate location is shown on Plate 1, Site Vicinity Map. Our scope of work was presented in our December 18, 2013 proposal and authorized by your Authorization Letter for Geotechnical Services dated January 7, 2014.

SCOPE OF SERVICES

Kleinfelder's scope of work for this project included the following:

1. Literature Review: Kleinfelder reviewed the following documents:
 - a. County of Los Angeles Department of Public Works (LACoDPW, 2013) Geotechnical Investigation, Low Impact Development (LID) Feasibility Report for Roosevelt Park (presented in Appendix A, LACoDPW LID Feasibility Report);
 - b. County of Los Angeles Department of Public Works (LACoDPW, 2011), Low Impact Development Best Management Practice Guideline for Design, Investigation, and Reporting; and
 - c. Washington State Department of Ecology, Water Quality Program (WSDEWQP, 2012), Section 3.3.6 Design Saturated Hydraulic Conductivity – Guidelines and Criteria, Pilot Infiltration Test (PIT) procedures.

2. Work Plan: A work plan was prepared to aid in the execution of fieldwork and infiltration testing. The work plan is included as an attachment to this letter report as Appendix B, Work Plan.
3. Drilling and Observation Well Installation: Hollow-stem auger drilling was performed to further investigate subsurface conditions at the park, and temporary monitoring wells were constructed within hollow-stem auger borings to aid in observation of subsurface water flow during infiltration testing data. A summary of the drilling and observation well installation is presented in this letter and in Appendix C, Field Investigation.
4. Infiltration Testing: Infiltration testing was performed in a large-diameter borehole using the Pilot Infiltration Test (PIT) procedures (WSDEWQP, 2012) as guidelines. A summary of the infiltration testing performed for this project is presented in this letter report.
5. Geotechnical and Environmental Laboratory Testing: Geotechnical laboratory testing was performed to aid in soils classification and is summarized in Appendix D, Geotechnical Laboratory Testing. Select samples were also submitted to EnviroChem for analytical testing for background screening as requested by the County. Results of the environmental laboratory testing are presented in Appendix E, Environmental Laboratory Testing.
6. Data Analysis and Evaluation: Drilling, monitoring well, and infiltration test data was compiled and evaluated to support the conclusions and recommendations presented in this letter report. A summary of our data analysis and evaluation is presented herein. Results of the infiltration test data are presented in Appendix F, Infiltration Data.
7. Geotechnical Report: Kleinfelder prepared this letter report to summarize our infiltration test and to provide conclusions and recommendations for future design of an infiltration system for the site.

PURPOSE AND OBJECTIVE

Kleinfelder understands that LACoDPW is evaluating the feasibility of design and construction of LID facilities for stormwater management at various County parks. LID facilities being considered consist of buried infiltration basins and dry-well type facilities in order to infiltrate stormwater runoff while maintaining useable space at the parks. This proposed park was selected for further study by LACoDPW based on the results of the referenced feasibility study for Roosevelt Park (LACoDPW, 2013). The feasibility study was performed as a screening-level study using Cone Penetration Tests (CPTs) in order to identify potential infiltrating soils. Based on our review of the feasibility study for this park, results indicate that potential infiltrating granular layers are present approximately 15 feet below ground surface (bgs).

BACKGROUND DATA

Roosevelt Park, one of the oldest parks in the Los Angeles County, is approximately 24 acres in size. The park is located near the northeast corner of Nadeau Street and Graham Avenue in Los Angeles County, California. The park is bounded by Graham Avenue and Nadeau Street, on the west and south, respectively. The north and east boundaries of the park are residential properties. Across and paralleling Graham Avenue from the park are railroad tracks that service Los Angeles Metro light rail and freight trains. The park slopes from north-northeast to south-southwest with an elevation change of approximately 5 to 10 feet. There is parking along Graham Avenue on the west side of the park, and at the south end there are two paved parking lots. There are several buildings on site containing an indoor pool, a senior center, gymnasium, community rooms, toilet facilities, and a LACoDPW office. The park has large, grass and dirt field areas for community sports / activities, designated sports fields / courts, a playground, picnic areas, and concrete sidewalks. Our testing was performed in the center of the park within a fenced dirt field used for both baseball and soccer.

LACoDPW's screening-level work at Roosevelt Park included advancing five CPTs (CPT-1 through CPT-5) and collecting samples for grain-size distribution testing. The CPT soundings were performed by Kehoe Testing and Engineering and observed by LACoDPW. The depths of the CPTs were approximately 50 feet bgs. Using the CPT rig, soil samples were collected at depths of approximately 10 feet, 20 feet, and 30 feet bgs adjacent to the CPT soundings. Grain-size distribution and Atterberg Limits testing were performed to allow correlation with hydraulic conductivity. Based on our review of the CPT data and laboratory testing presented in the LACoDPW report (LACoDPW, 2013), subsurface soils consist predominantly of silty sand and clay to a depth of 12 to 14 feet. The silty sand and clay is underlain by sand and silty sand to a depth of 24 to 26 feet, which is underlain by clay, silt, and silty sand to the total depth explored. Groundwater was not encountered in any of the LACoDPW explorations.

The locations of the LACoDPW CPTs are presented on Plate 2, Boring Location Plan. The CPT outputs and laboratory test results are presented in the LACoDPW report presented in Appendix A, LACoDPW LID Feasibility Report.

DRILLING AND OBSERVATION WELL INSTALLATION

On January 17, 2014, Kleinfelder's subcontractor, California Pacific Drilling, installed three temporary observation wells with a Mobile B-61 truck-mounted drill rig equipped with 8-inch diameter hollow-stem augers. The observation wells were installed to depths of approximately 20.5 feet, 25.5 feet, and 51.5 feet bgs (MW-3, MW-2, and B-2, respectively). The observation wells were installed in advance of drilling a large diameter borehole for infiltration testing. The approximate locations of the observation wells are presented on Plate 2, Boring Location Plan and on Plate 3, Well Schematic. The observation wells were installed with an approximate center-to-center spacing of 4 to 5 feet. The purpose of the observation wells was to gain additional subsurface data and to aid in observing water flow (lateral migration), if any, during infiltration testing.

This section of the report presents a summary of drilling and observation well installation activities. A summary of the infiltration testing is presented in the next section of this report.

The three temporary observation wells were constructed within the 8-inch boreholes using 2-inch diameter Schedule 40 polyvinyl chloride (PVC) casing. The upper approximately 10 feet of wells B-2 and MW-3, and the upper approximately 15 feet of well MW-2 were set with solid/blank PVC. Below the blank sections of PVC, the wells were screened with 0.020-inch slotted PVC casing and a threaded end cap. Filter pack material, consisted of No. 3 Monterey Sand and was placed from the bottom to approximately 2 feet above the top of the screened interval. A 2-foot thick seal of hydrated bentonite chips was placed above the filter pack. The annular space above the top of the seal was backfilled with a bentonite-Portland cement slurry mixture to within approximately one foot bgs. The tops of the wells were finished with 8-inch well boxes flush with the surrounding ground surface.

The 50-foot deep boring/observation well (B-2) was sampled and logged during drilling. Samples of the soils were collected using Standard Penetration Test (SPT) and Modified California-type samplers at approximate 5-foot intervals. At each interval, both geotechnical and environmental samples were appropriately packaged for transportation to respective testing laboratories. A Kleinfelder staff engineer logged the borings utilizing the Unified Soil Classification System.

Boring/observation well B-2 was drilled approximately 55 feet south-southwest of CPT-5. Soil conditions observed in the upper approximately 24 feet of boring B-2 were generally consistent with the inferred Soil Behavior Types (SBTs) presented on the CPT-5 report, with the exception that we did not observed clayey soils in the upper 10 feet. The soils encountered in boring B-2 consisted of loose silty sand to approximately 14 feet bgs; medium dense poorly-graded sand with silt to approximately 24 feet bgs; medium dense silty sand to approximately 44 feet bgs; firm sandy silt to approximately 49 feet bgs; and poorly-graded sand with silt to the total depth of the boring. Within CPT-5, alternating layers of silty sand and finer grained silts and clays were inferred from approximately 26 feet bgs to the total depth explored. The log of Boring B-2 is contained in Appendix C. The boundaries between soil types shown on the logs are approximate because the transition between different soil layers may be gradual. The locations of the borings/observation wells and the CPTs from the LACoDPW report (LACoDPW, 2013) are presented on Plate 2.

Groundwater was not encountered in any of the observation wells (maximum 50 feet depth) constructed for the project. According to the California Department of Conservation (1998), the historic shallow groundwater level is approximately 25 feet bgs.

PILOT INFILTRATION TEST

Kleinfelder performed two infiltration tests in a 5-foot diameter borehole generally following PIT procedures described in WSDEWQP, 2012. The first test was performed using water from a local fire hydrant, and the second test was performed using turbid water.

Large-Diameter Borehole Construction:

On January 30, 2014, Kleinfelder's subcontractor, Roy Brothers Drilling, used an EZ Bore Bucket Rig with a large diameter bucket auger to excavate an approximately 5-foot diameter borehole (B-2a) to a depth of approximately 15 feet bgs. The approximate location of borehole B-2a is shown on Plate 2.

Soil samples within the borehole were collected at approximate depths of 2.5 feet, 5 feet, and approximate 5-foot intervals thereafter. The borehole was cased from the bottom to approximately 4 feet above ground surface using a 5-foot diameter Sonotube. A 2-inch diameter, perforated, High Density Poly-Ethylene (HDPE) observation tube was placed to the bottom of the borehole. Approximately 6 inches of clean gravel was then placed around the observation tube in the bottom of the excavation to prevent erosion during testing.

Water Supply and Initial Saturation:

Immediately following drilling of the infiltration test borehole, Kleinfelder initiated infiltration testing using water obtained from a local fire hydrant. Kleinfelder used two 500-gallon water trailers, pumps, garden hoses, and valves to place water into the excavation during the infiltration test. One water trailer was stationed next to the borehole to continuously supply water for the test, while the other trailer was used to obtain water from a nearby fire hydrant and transfer it to the stationary water trailer. During testing, Kleinfelder regulated the water flow using a gate valve near the discharge point and measured the flow with an in-line flow meter and/or a graduated bucket and stopwatch.

For the clean water test, water was pumped from the water supply trailer and conveyed into the borehole using a standard garden hose. The pump maintained a flow of approximately 7 gallons per minute (gpm) during the initial placement of water. The initial filling took approximately 20 minutes in order to achieve an approximate 8-inch water-level above the bottom of the borehole. Water was pumped from the water trailer (regulated as necessary by means of a gate valve) to maintain a relatively static water-level throughout the duration of the test.

The clean water test was terminated when the rate of change of flow slowed to less than 5 percent per hour. The duration of the test was approximately 8 hours and 45 minutes. At the conclusion of the clean water test, the flow of water was terminated and the water remaining in the excavation was allowed to infiltrate.

For the second infiltration test, soil generated from drilling of the borehole was added to the water trailer and mixed to create sediment laden water with an approximate load of 1,000 Nephelometric Turbidity Units (NTU). The turbidity of the water was measured using a portable turbidity meter. For the turbid water test, initial filling took approximately 15 minutes in order to achieve an approximate 8-inch water-level above the bottom of the borehole. The turbid water was pumped from the water supply trailer and conveyed into the borehole using a standard garden hose. The pump maintained a flow of approximately 9 gallons per minute (gpm) during the initial placement of water. Then water was pumped into the borehole (regulated as necessary by means of a gate valve) to maintain a relatively static water-level throughout the duration of the test. The turbid water test was performed in the same manner as the non-turbid water test and was terminated after approximately 14 hours. We estimate that approximately 3,000 gallons of water was used to perform both tests.

Infiltration Data Collection:

During the infiltration testing, the height of the water above the bottom of the borehole was measured through the HDPE pipe using an electronic water-level indicator. The water flow into the infiltration borehole was adjusted throughout the test to maintain a constant height of eight inches (plus or minus 0.1 foot) above the bottom. The flow was recorded at approximately 15- to 20-minute intervals throughout the test. Tabular summaries and plots of the infiltration test data are presented in Appendix F, Pilot Infiltration Data.

During the infiltration tests, Kleinfelder monitored the water-level in each of the three observation wells with the water-level indicator. Water was not observed in any of the three observation wells during performance of the clean water test. However, during the turbid water test, water was observed at a depth of approximately 25 feet bgs in well MW-2 approximately 10 hours after beginning of the test. Water was not observed in the other two monitoring wells.

BACKFILL OF EXCAVATIONS

On January 31, 2014, after completion of the infiltration testing, the upper section of the Sonotube was removed to a depth of approximately 3 feet bgs. Kleinfelder's subcontractor, Staib Backhoe & Excavation, used a backhoe to backfill the excavations with imported sand and gravel to within one foot of the ground surface. The upper approximately one foot of the excavation was backfilled with soils generated from drilling the infiltration borehole and tamped and leveled with the adjacent ground

surface. The remaining soil cuttings were transported to an offsite location as directed by LACoDPW.

As requested by LACoDPW, the observation wells were backfilled in general accordance with the Los Angeles County Department of Environmental Health guidelines. The casing within the observation wells was left in place and backfilled with a cement-bentonite grout to approximately 1 foot bgs. The upper foot of each observation well casing was removed and backfilled with soil.

GEOTECHNICAL LABORATORY TESTING

Laboratory tests were performed on selected soil samples obtained from the investigation locations. Soils tests performed included sieve analyses and hydrometer analysis, which were performed in general accordance with ASTM D-422 Test Method. The geotechnical test results are presented in Appendix D.

ENVIRONMENTAL LABORATORY TESTING

Environmental soil samples from boring B-2 were labeled and transported for analysis under chain-of-custody (COC) protocol to Kleinfelder's State of California approved environmental laboratory subconsultant, Envirochem, Inc.. Soil samples from B-2 were analyzed for total petroleum hydrocarbons (TPH) carbon chain using United States Environmental Protection Agency (US EPA) Method 8015B, volatile organic compounds (VOCs) using US EPA Method 8260B, and California Code of Regulations (CCR) Title 22 metals using US EPA Methods 6010B/7471A. In summary, the environmental testing indicates the following:

- Test Method 8015B – non-detect
- Test Method 8260B – non-detect
- Test Methods 6010B/7471A - test results indicate chromium concentrations in six samples (depths of 5, 10, 35, 40, 45, and 50 feet bgs) and copper concentrations in one sample (depth of 35 feet bgs) that are greater than 10 times Soluble Threshold Limit Concentrations (STLCs). For each sample, solubility testing was performed by the Waste Extraction Method. Based on the results of solubility testing, concentrations are less than California Human Health Screening Level (CHHSL).

The analytical laboratory test results are presented in Appendix E.

DATA ANALYSIS

Kleinfelder analyzed data from the infiltration testing following PIT procedures presented by WSDEWQP, 2012. The analysis was performed by:

- Assuming an infiltration area equal to the base of the borehole (22.3 square feet), (ft²) based on the diameter of the bucket auger as measured in the field.
- Plotting the infiltration test data and evaluating the trendline of the data.

After the initial filling for the clean water test, Kleinfelder measured initial flow rates into the excavation of approximately 4 gallons per minute (gpm). However, as the test progressed and to maintain a constant head of eight inches, the flow was adjusted and concluded at approximately 3.5 gpm (15.1 inches/hour) after approximately 7.5 hours. During performance of the turbid water test, Kleinfelder measured initial, post filling, flow rates into the excavation of approximately 3.5 gpm to maintain a constant head of eight inches. The flow was adjusted throughout the test and concluded at approximately 0.7 gpm (3.9 inches/hour, an approximate 75-percent reduction in infiltration rate from the clean water test). We have included tables with the infiltration test data and plots of the flow vs. time in Appendix F, Infiltration Test Data.

As noted previously, during the clean water test, water was not observed in any of the monitoring wells, indicating vertical or near vertical infiltration. Approximately 10 hours into the turbid water test, water was observed at a depth of approximately 25 feet bgs in well MW-2, but it was not encountered in well MW-3 (closer to the infiltration well). Given the configuration of the monitoring wells, mounding of the water table on a finer grained layer at or below 25 feet bgs was suspected. Based on the soils observed while drilling well B-2, and the inferred SBT presented on CPT-5, soils below approximately 24 to 26 feet bgs appear to consist of silty sand / sandy silt. The soils above this layer, beginning from the elevation of the infiltration test, appear to consist of medium dense poorly-graded sand with silt. The presence of coarser-grained soils (sand with silt) above finer-grained soils (silty sand) creates the possibility for mounding. It is possible that the clean water was able to infiltrate vertically (or near vertically) through the silty sand (from 24 to 26 feet bgs) without sufficient mounding to cause water to migrate into MW-2. It is also possible that the clean water test had not been run long enough for mounding to force the water to MW-2. Regardless, the decrease in the vertical hydraulic conductivity of these silty sand soils resulted in the mounding of turbid water at this depth and the presence of water in well MW-2.

DATA EVALUATION

The field results of infiltration testing are indicative of short-term infiltration rates. To evaluate long-term infiltration rates, correction factors are applied. Correction factors used for this study are based on the criteria summarized in Table 1, Correction Factors, below.

Table 1 - Correction Factors

Issue	Partial Correction Factor
Site variability and number of locations tested	$CF_v = 0.33$ to 1.0
Test Method Large-scale PIT Small-scale PIT Other small-scale (e.g. Double ring, falling head) Grain Size Method	$CF_t = 0.75$ $= 0.50$ $= 0.40$ $= 0.40$
Degree of influent control to prevent siltation and bio-buildup	$CF_m = 0.9$

Reference: Table 3.3.1, WSDEWQP, 2012

Where:

- The correction factor for site variability and number of locations tested CF_v is given as a range.
- The correction factor CF_t accounts for testing variability inherent in the testing method.
- The correction factor CF_m accounts for siltation and bio-buildup in the system and maintenance operations. CF_m in the table above is based on a maintenance schedule that calls for removing sediment when the facility is infiltrating at only 90% of its design capacity.
- The total correction factor $CF_T = CF_v \times CF_t \times CF_m$ and is used to factor the short-term infiltration rate.

CONCLUSIONS AND RECOMMENDATIONS

For clean water, based on our evaluation of the trend line from the flow data, the soils encountered at a depth of approximately 15 feet bgs in the infiltration borehole generally exhibit a short-term, non-factored infiltration rate of 15.1 inches/hr. For design (long-term) infiltration rate, Kleinfelder recommends the following correction factors.

- $CF_v = 1$ as the soils appear to be relatively uniform at the park;
- $CF_t = 0.5$ for a small-scale PIT; and
- $CF_m = 0.2$. This reduction from 0.9 (WSDEWQP, 2012) is based on unknowns associated with the proposed influent control (pre-treatment) and the high propensity for mounding of infiltration water as shown by the results of the turbid-water test.

Based on the testing performed and the correction factors presented above, we recommend a total correction factor (CF_T) = 0.1. Using $CF_T = 0.1$, the resulting long-term infiltration rate for design of a system could be considered to be on the order of 1.5 inches per hour.

Groundwater was not encountered in any of the observation wells constructed for the project. According to the California Department of Conservation (1998), the historic shallow groundwater level is approximately 25 feet bgs. We assume that the proposed infiltration system will be less than 0.6 acres in size. Based on this information, we do not anticipate that the depth to groundwater will affect the long-term performance of an infiltration system. However, performance of larger systems (greater than 0.6 acres) could be affected if groundwater levels approach the historic high groundwater level of 25 feet bgs.

During testing, infiltrating water was observed at a depth of approximately 25 feet bgs in well MW-2, indicating some mounding at depth in silty sand soils. While the gradient of the infiltrating water was steeper than the projected depths of the monitoring wells (much steeper than 1:1 (H:V)), siting of the infiltration system will be important so that lateral migration of infiltrating water does not negatively impact existing or future structures.

The degree of influent water pre-treatment and system maintenance are critical factors that will affect long-term performance, as the turbidity of the water was observed to have a significant effect on infiltration. Pre-treatment could consist of combinations of debris screens, sediment settling chambers, filters and/or other mechanisms. Maintenance includes clearing debris, cleaning pre-treatment filters and sediment chambers, and reconditioning the bottom of the infiltration system after storm events and at regular intervals. The infiltration system has not been designed, and therefore we have taken a conservative approach in recommending correction factors presented above. Depending on the level of pre-treatment and planned maintenance, correction factors could be revisited.

Recommendations:

Based on the results from our testing, our knowledge of the project, and our professional judgment, the following is a list of recommendations for development of the proposed project.

- The geotechnical engineer should be consulted with regarding system siting to check that lateral migration of infiltrating water does not negatively impact existing or future structures.
- Kleinfelder should review the final size of the infiltration system to evaluate whether historic high groundwater could affect performance.
- The design should incorporate pre-treatment of influent water.

- Maintenance of the facility should be performed annually or at more frequent intervals depending on frequency of storm events. The schedule should also be selected based on volume and turbidity of influent water, and final design of the facility.
- The facility should be designed with an outlet system to allow excess flow to either bypass the system or flow through the system and discharge into the stormdrain.
- An operations and maintenance manual should be developed for the facility. The manual should include requirements for monitoring the infiltration rate and sediment build up. The operations and maintenance manual should also include procedures on how the system should be cleaned out and restored at each maintenance interval.

Additional Considerations:

This study was performed and this report was prepared to support conceptual-level design of an infiltration system at the subject park. Our scope included evaluating the capacity of site soils to infiltrate stormwater. We did not evaluate geotechnical engineering parameters such as bearing capacity or lateral earth pressures. As the design process continues, we can provide additional conclusions and recommendations as needed. Depending on the size, shape, configuration, and depth of the infiltration system, additional geotechnical investigation may be required. Linear / rectangular excavations might require temporary shoring whereas drilled excavations (size dependent) could be performed using temporary casing. All excavations for infiltrating water should be performed from the ground surface and placing heavy equipment in the bottoms of excavations should be avoided as this will potentially compact the soils.

LIMITATIONS

This report has been prepared for the exclusive use of the Los Angeles County Department of Public Works for specific application to Roosevelt Park. This report summarizes our evaluation only of the capacity of soils to infiltrate water. The findings, conclusions and recommendations presented in this report were prepared in a manner consistent with the standards of care and skill ordinarily exercised by members of our profession practicing under similar conditions in the geographic vicinity and at the time the services will be performed. No warranty or guarantee, express or implied, is made.

Our field exploration program for this study was based on the information provided to us by the client. This report may be used only by the client and only for the purposes stated, within a reasonable time from its issuance, but in no event later than one year from the date of the report. Land use, site conditions (both on site and off site) or other factors may change over time, and additional work may be required with the passage of time. Any party, other than the client who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of this report and the nature of the new project, Kleinfelder may require that additional work be performed and

that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party and the client agrees to defend, indemnify, and hold harmless Kleinfelder from any claims or liability associated with such unauthorized use or non-compliance.

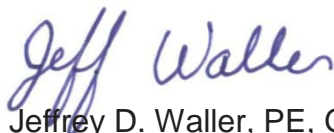
This report, and any future addenda or reports regarding this site, may be made available to bidders to supply them with only the data contained in the report regarding subsurface conditions and laboratory test results at the point and time noted. Bidders may not rely on interpretations, opinions, recommendations, or conclusions contained in the report. Because of the limited nature of any subsurface study, the contractor may encounter conditions during construction which differ from those presented in this report. In such event, the contractor should promptly notify the owner so that Kleinfelder's geotechnical engineer can be contacted to confirm those conditions. We recommend the contractor describe the nature and extent of the differing conditions in writing and that the construction contract include provisions for dealing with differing conditions.

CLOSING

We appreciate the opportunity to be of professional service to you on this project. If you have any questions or require additional information, please do not hesitate to contact the undersigned at 951-801-3681.

Respectfully submitted,

KLEINFELDER WEST, INC.



Jeffrey D. Waller, PE, GE
Project Geotechnical Engineer



C. Eric Philips, PE, GE
Principal Geotechnical Engineer



Attachments: Plate 1 – Site Vicinity Map
Plate 2 – Boring Location Plan
Plate 3 – Well Schematic
Plate 4 – Infiltration Diagram

Appendix A – LACoDWP LID Feasibility Report
Appendix B – Work Plan
Appendix C – Subsurface Investigation
Appendix D – Geotechnical Laboratory Testing
Appendix E – Environmental Laboratory Testing
Appendix F – Infiltration Data

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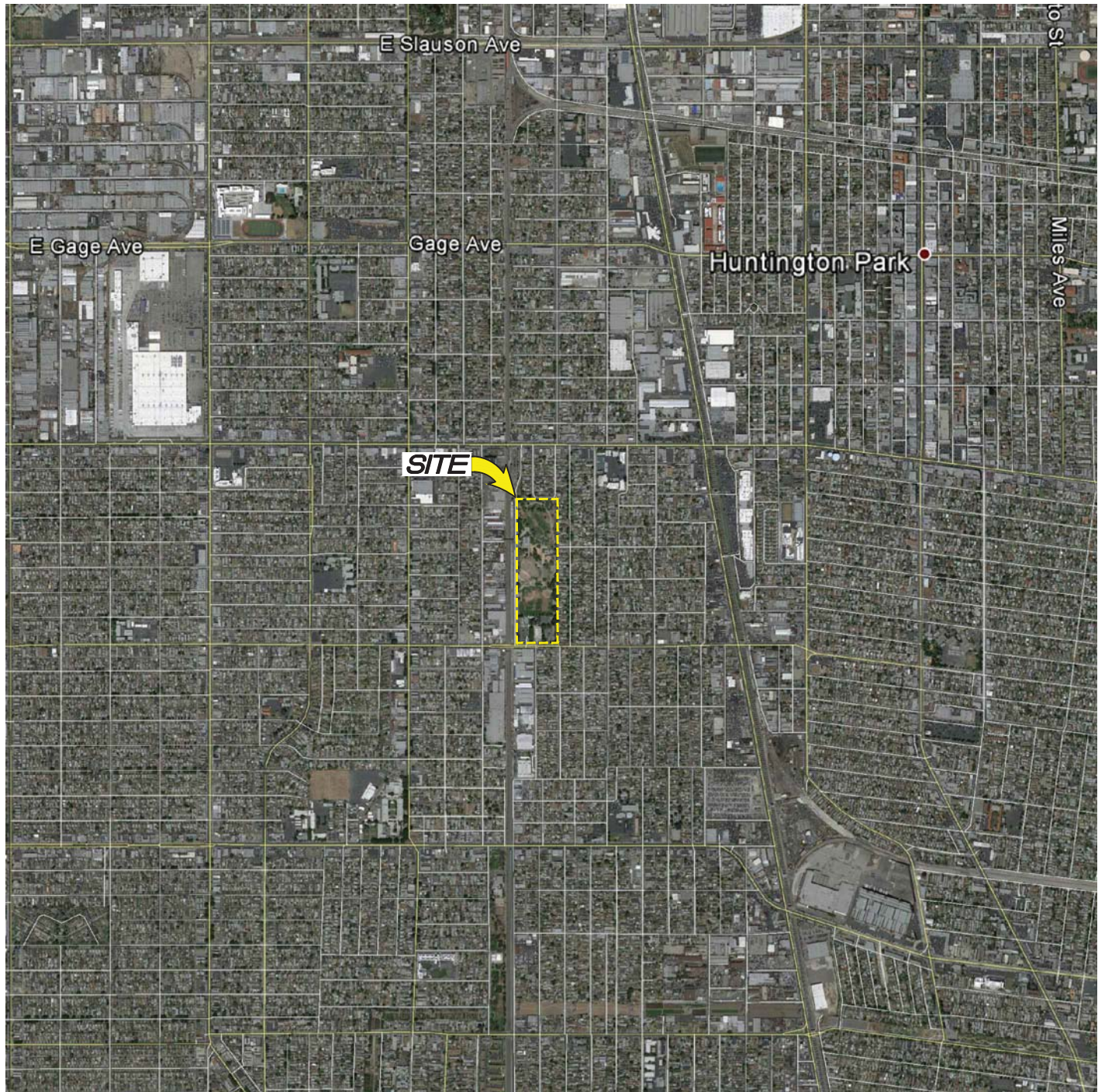
Washington State Department of Ecology, Water Quality Program (WSDEWQP), 2012. *Stormwater Management Manual for Western Washington (SWMMWW)*. Publication No. 12-10-030 (A revision of Publication No. 05-10-030), Volume III Hydrologic Analysis and Flow Control BMPs, Section 3.3.6 Design Saturated Hydraulic Conductivity – Guidelines and Criteria, pp 3-75 through 3-83, August 2013.

Plates

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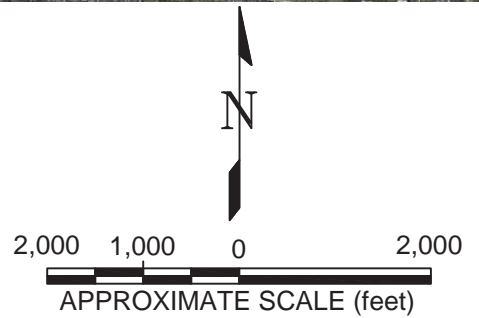
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SOURCE: GOOGLE EARTH PRO 2014, IMAGE DATE 4/16/13.

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DRAWN BY:	MRG
CHECKED BY:	JW
FILE NAME:	_138948p1_SVM_RsvPark.dwg

SITE VICINITY MAP

GEOTECHNICAL AND INFILTRATION STUDY
ROOSEVELT PARK
7600 GRAHAM AVENUE
LOS ANGELES, CALIFORNIA

PLATE

1

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EXPLANATION

- ◆ **MW-3** APPROXIMATE TEMPORARY OBSERVATION WELL LOCATION
- ◆ **B-2** APPROXIMATE TEMPORARY OBSERVATION WELL LOCATION
- ⊗ **B-2A** APPROXIMATE PILOT INFILTRATION TEST LOCATION
- ▲ **CPT-5** APPROXIMATE CPT LOCATION (LACoDPW, 2013)

SOURCE: GOOGLE EARTH PRO 2014, IMAGE DATE 4/16/13.



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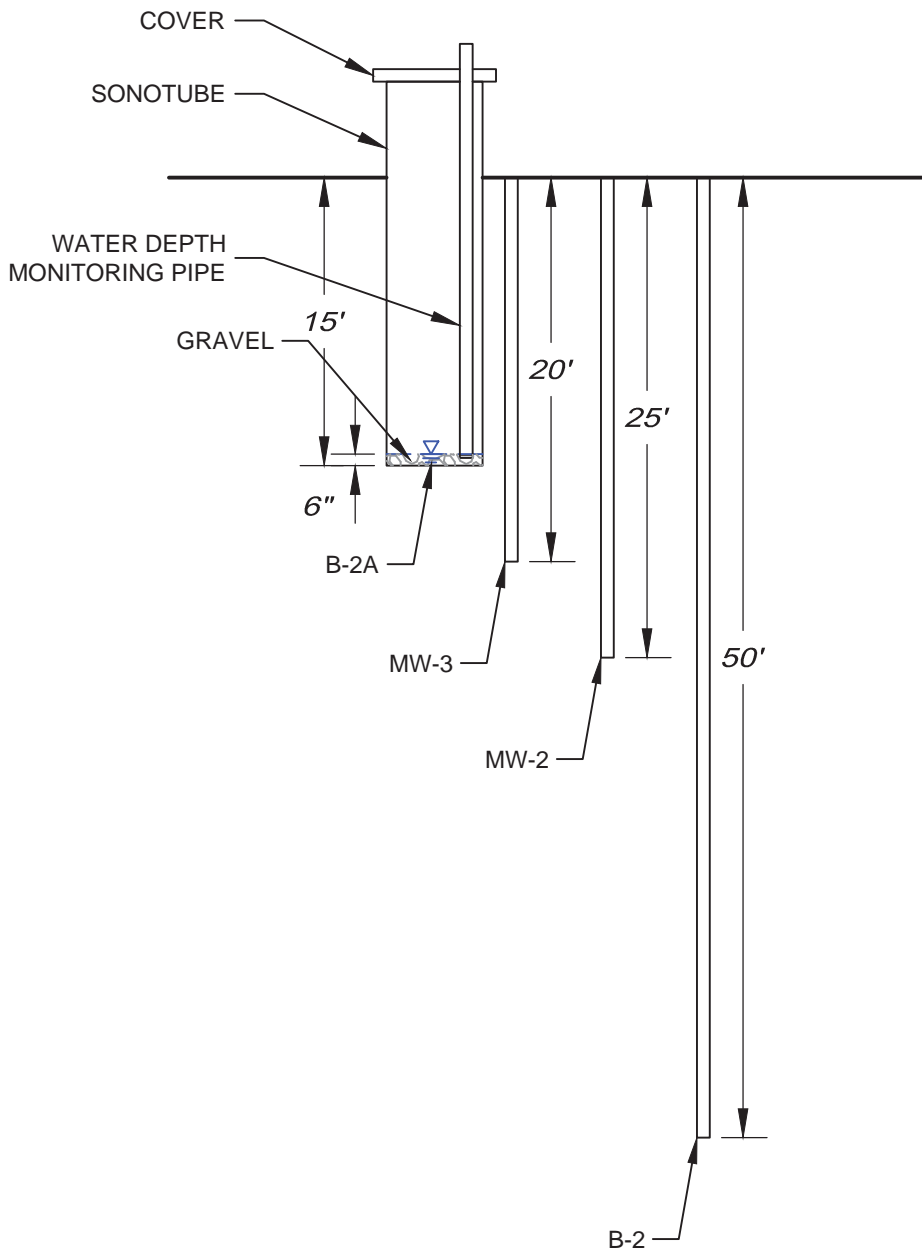
BORING LOCATION PLAN

GEOTECHNICAL AND INFILTRATION STUDY
 ROOSEVELT PARK
 7600 GRAHAM AVENUE
 LOS ANGELES, CALIFORNIA

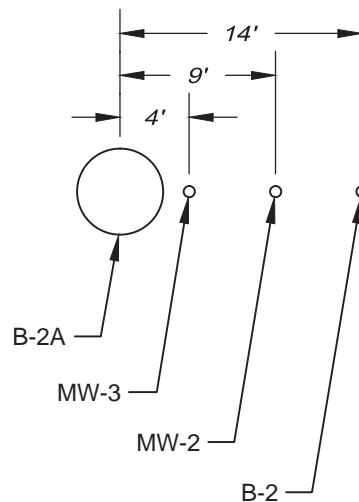
PLATE

2

PROFILE VIEW



PLAN VIEW



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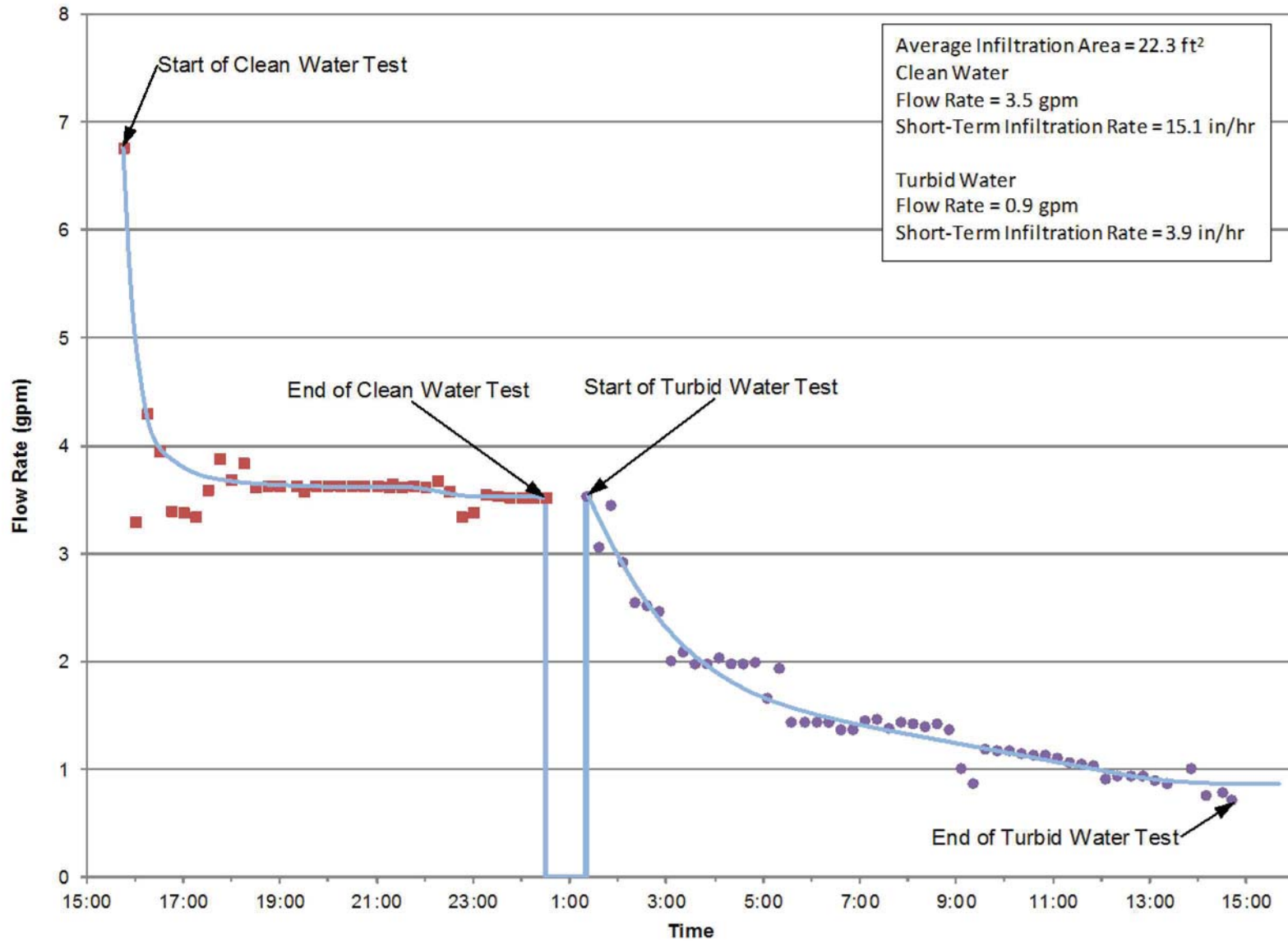
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WELL SCHEMATIC
GEOTECHNICAL AND INFILTRATION STUDY ROOSEVELT PARK 7600 GRAHAM AVENUE LOS ANGELES, CALIFORNIA

PLATE
3



	PROJECT NO. 138948	INFILTRATION DIAGRAM	PLATE
	DRAWN: 3/2014		
	DRAWN BY: MRG	GEOTECHNICAL AND INFILTRATION STUDY ROOSEVELT PARK 7600 GRAHAM AVENUE LOS ANGELES, CALIFORNIA	4
	CHECKED BY: JW		
	FILE NAME: _138948p4_Diag_RsvPark.dwg		

Appendix A
LACoDWP LID Feasibility Report

August 15, 2013

TO: Gary Hildebrand
Watershed Management Division

Attention Tona Avalos

FROM: ^{For} 
Greg Kelley
Geotechnical and Materials Engineering Division

**GEOTECHNICAL INVESTIGATION
LOW IMPACT DEVELOPMENT FEASIBILITY
ROOSEVELT PARK – FLORENCE-FIRESTONE COMMUNITY
PCA NO. F21812i49**

In response to your request, we conducted a geotechnical investigation for the subject project. Our findings and recommendations are included in the attached report.

If you have any questions regarding this matter, please contact Yonah Halpern or Brian Smith at Extension 4925. To provide feedback on our services, please access <http://dpw.lacounty.gov/go/gmedsurvey> to complete a Customer Service Survey.

YH:lcw

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Attach.

**GEOTECHNICAL INVESTIGATION
LOW IMPACT DEVELOPMENT FEASIBILITY**

**ROOSEVELT PARK
UNINCORPORATED LOS ANGELES COUNTY
FLORENCE-FIRESTONE COMMUNITY**

Prepared for

County of Los Angeles
Department of Public Works
Watershed Management Division

Prepared by

County of Los Angeles
Department of Public Works
Geotechnical and Materials Engineering Division
Soils Investigations Unit

August 15, 2013



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FIGURES

Figure 1 – Site Location Map

Figure 2 – Boring Location Map

Figure 3 – Historical High Groundwater Map

APPENDIX

Appendix A – Cone Penetration Test Results

Appendix B – Laboratory Test Results



INTRODUCTION

Watershed Management Division (WMD) requested Geotechnical and Materials Engineering Division (GMED) to perform a geotechnical investigation to determine the feasibility of constructing Low Impact Development (LID) infiltration facilities at Roosevelt Park. The scope of work consisted of a subsurface investigation, laboratory testing, engineering analyses, and preparation of this report. Recommendations regarding the feasibility of regional LID infiltration facilities are provided.

PROJECT DESCRIPTION

It is our understanding that WMD is proposing to construct regional LID infiltration facilities to recharge the groundwater in compliance with the recently updated National Pollutant Discharge Elimination System (NPDES) permit. The proposed project includes subsurface infiltration galleries and other alternative infiltration devices.

SITE LOCATION

The project site is located in the Florence-Firestone area as shown on Figure 1. The proposed locations of the infiltration facilities are in the County of Los Angeles Department of Parks and Recreation's Roosevelt Park.

SUBSURFACE INVESTIGATION

Five Cone Penetration Test (CPT) soundings with sampling were performed by Kehoe Testing and Engineering, Inc., under the supervision of GMED personnel. The CPT soundings were performed on May 6 and 7, 2013, to a maximum depth of 50 feet below ground surface (bgs). The approximate locations of the soundings are shown on Figure 2. The CPT results are provided in Appendix A.

LABORATORY TESTING

Relatively undisturbed drive samples were collected adjacent to the CPT sounding locations. Sieve analysis testing was performed to determine the gradation of subsurface material, for correlations with hydraulic conductivity and to confirm the CPT soil behavior type classifications. A summary of the results is provided in Appendix B.



FINDINGS

SUBSURFACE CONDITIONS

- The soils encountered during exploration consisted of sand and sandy silt in a medium dense condition and silt and clay in a stiff condition.
- The soils encountered from 15 to 25 feet bgs consisted predominantly of sand. Soils in the sand layer generally had less than 30 percent clay and 40 percent silt and clay combined.
- The soils encountered in the sand layer can be classified in Hydrologic Group B, based on the Department of Agriculture's Natural Resources Conservation Service Handbook.
- The soils encountered below 25 feet bgs consisted predominantly of silt and clay in a stiff condition.
- Groundwater was not encountered during exploration.

DATA REVIEW

- Based on review of the Los Angeles County Well Database, the proposed site is located more than 100 feet from any groundwater well used for drinking water.
- Based on review of the Los Angeles County Seismic Hazard Zone Report for the Los Angeles 7.5-Minute Quadrangle, historical high groundwater at the proposed site is greater than 20 feet bgs as shown on Figure 3.

CONCLUSION

The proposed site contains a low to moderate potential for infiltration. Water movement through Hydrologic Group B is considered unimpeded. The infiltration rate of the sand layer is estimated based on correlations with grain size distribution and the normalized CPT soil behavior type. The estimated range of the infiltration rate in the sand layer is 0.01- to 1.0-inches per hour.



RECOMMENDATIONS

Additional subsurface investigation may be performed to determine an estimated infiltration rate and the potential for water storage in the sandy layer from 15 to 25 feet bgs. The subsurface investigation should include in-situ percolation testing at the proposed depth and location of infiltration devices. Percolation testing should be designed to model the duration and quantity of water to be infiltrated during operation of the proposed facility.

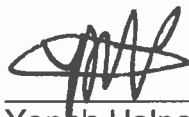
LIMITATIONS

This report has been prepared for the exclusive use of WMD for the specific site discussed herein and should not be considered transferable to other sites or projects. In the event that any modification of the design, configuration, or use of the site is planned, the conclusions and recommendations contained in this report are no longer valid. This study was conducted according to generally accepted geotechnical practice for projects of this magnitude.

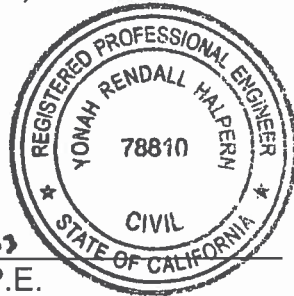
Our findings, conclusions, and recommendations are based on our field and laboratory results and our interpretation of the data. Our conclusions and recommendations are professional opinions and are not meant to be a control of nature. No warranty is herein expressed or implied.

This report may not be duplicated without the written consent of Public Works. If you have any questions concerning this report, please contact Yonah Halpern or Brian Smith at (626) 458-4925.

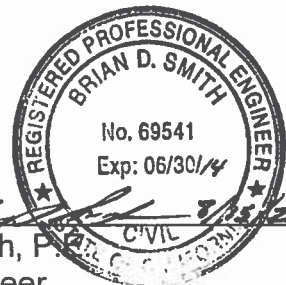
Prepared by:



Yonah Halpern, P.E.
Associate Civil Engineer



Brian Smith, P.E.
Civil Engineer



YH:lcw

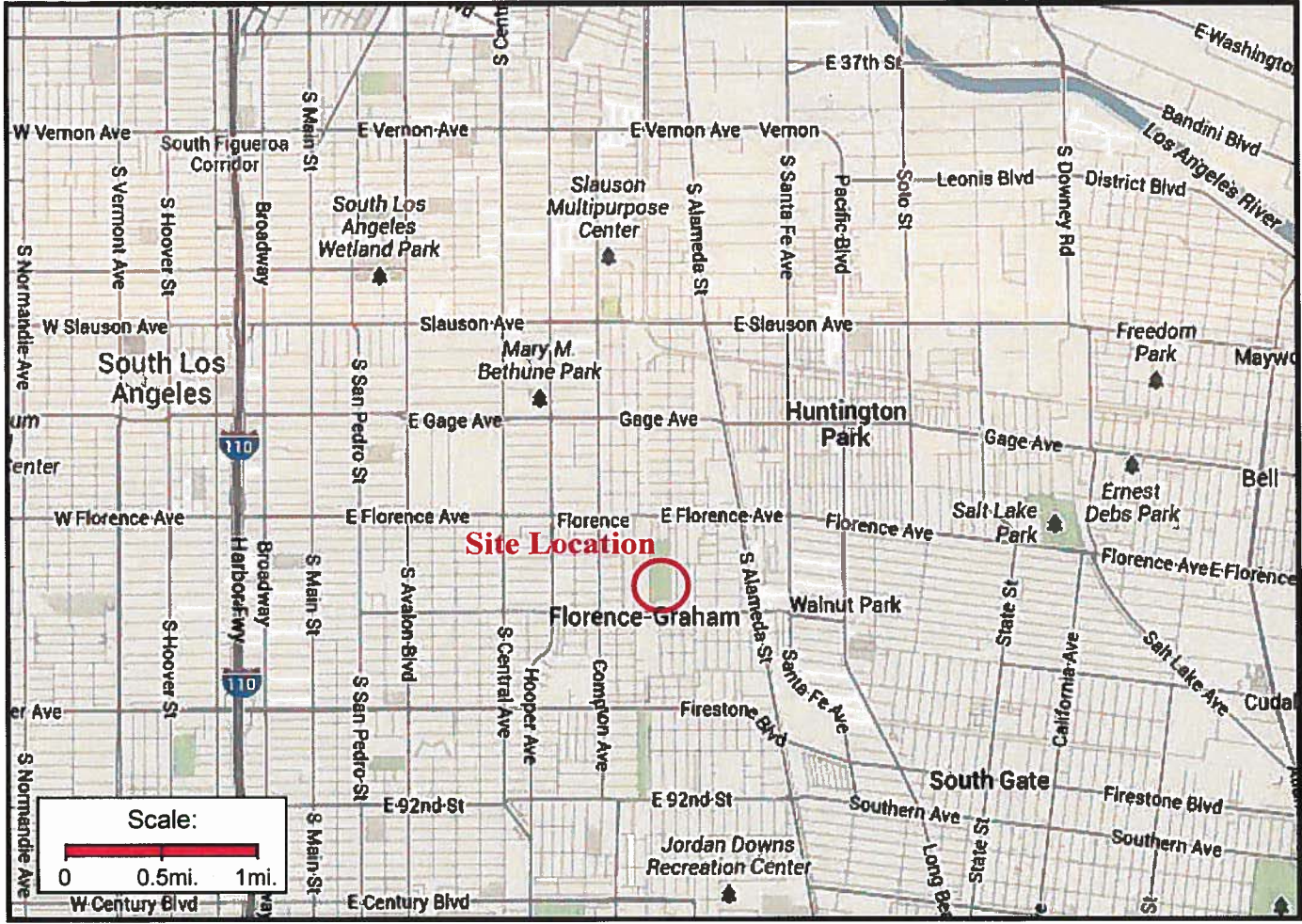
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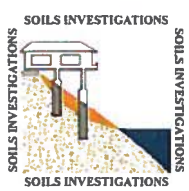
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Thomas Guide Page 704 Grid G1



ROOSEVELT PARK LOW IMPACT DEVELOPMENT SITE LOCATION MAP

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Geotechnical and Materials Engineering Division

DATE:
June 2013

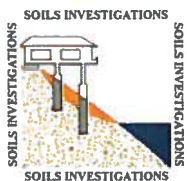
PREPARED BY:
Megan Yanez

Figure 1

NORTH



Legend:



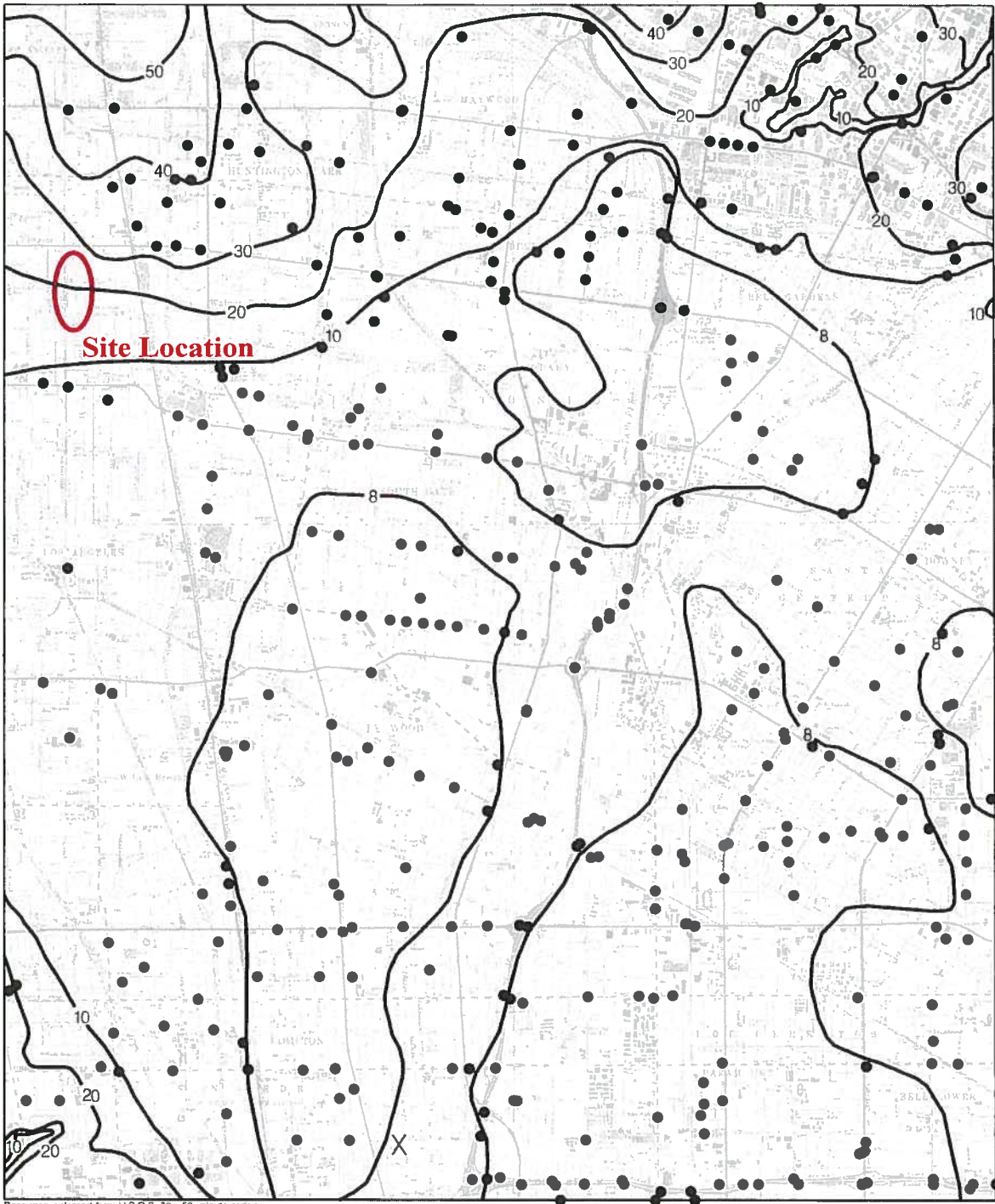
**ROOSEVELT PARK
LOW IMPACT DEVELOPMENT
BORING LOCATION MAP**

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Geotechnical and Materials Engineering Division

DATE:
June 2013

PREPARED BY:
Megan Yanez

Figure 2

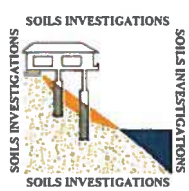


Base map enlarged from U.S.G.S. 30 x 60-minute atlas

Plate 1.2 Historically Highest Ground Water Contours and Borehole Log Data Locations, South Gate Quadrangle.

● Borehole Site — 30 — Depth to ground water in feet

ONE MILE
SCALE



**ROOSEVELT PARK
LOW IMPACT DEVELOPMENT
HISTORICAL HIGH GW MAP**

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Geotechnical and Materials Engineering Division

DATE:
July 2013

PREPARED BY:
Yonah Halpern

Figure 3

APPENDIX A

Cone Penetration Test Results



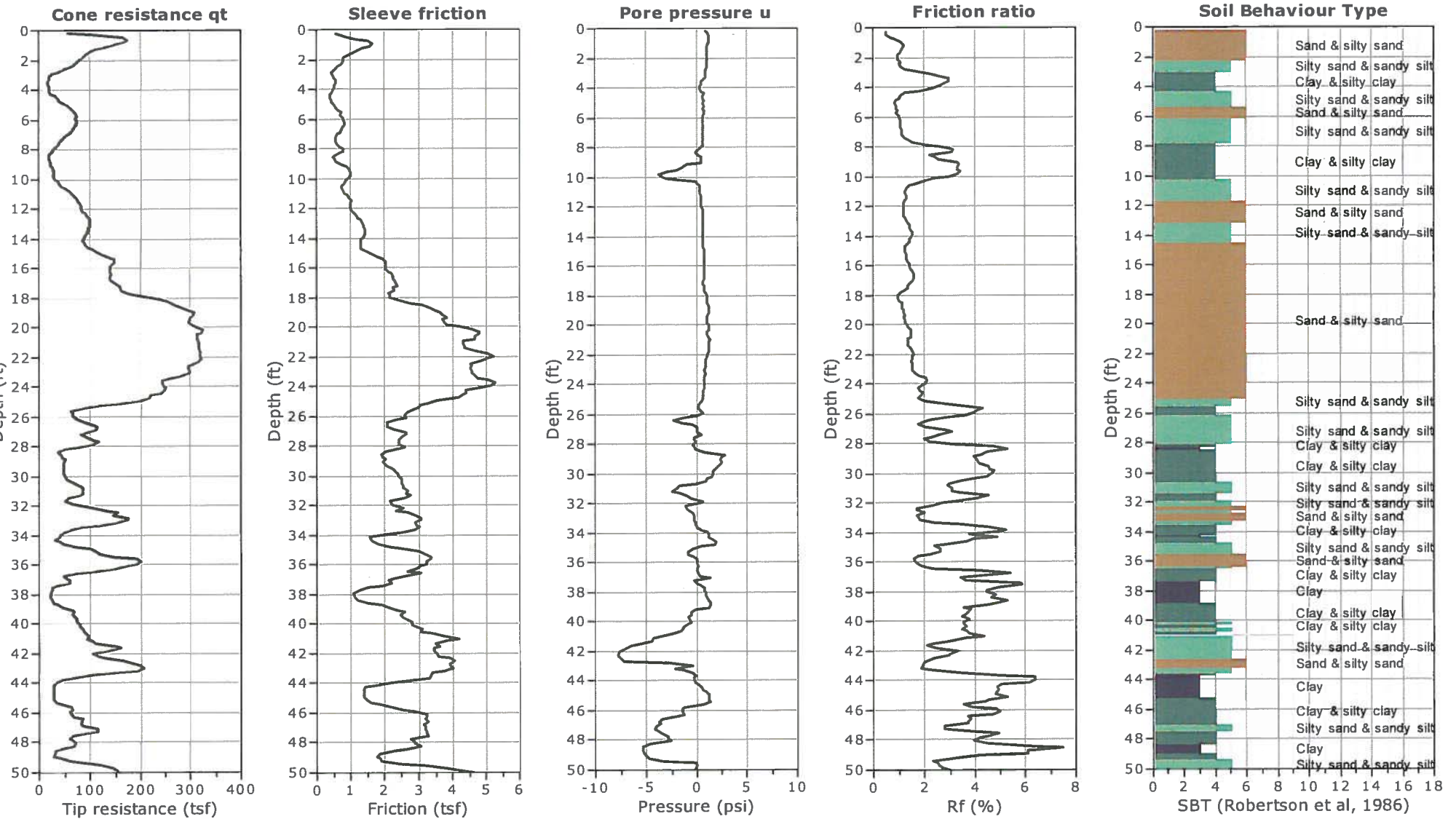
Kehoe Testing and Engineering
 714-901-7270
 rich@kehoetesting.com
 www.kehoetesting.com

CPT: CPT-1

Total depth: 50.03 ft, Date: 5/7/2013

Cone Type: Vertek

ect: County of LADPW/Franklin D. Roosevelt Park
 tion: 7600 Graham Ave. Los Angeles, CA





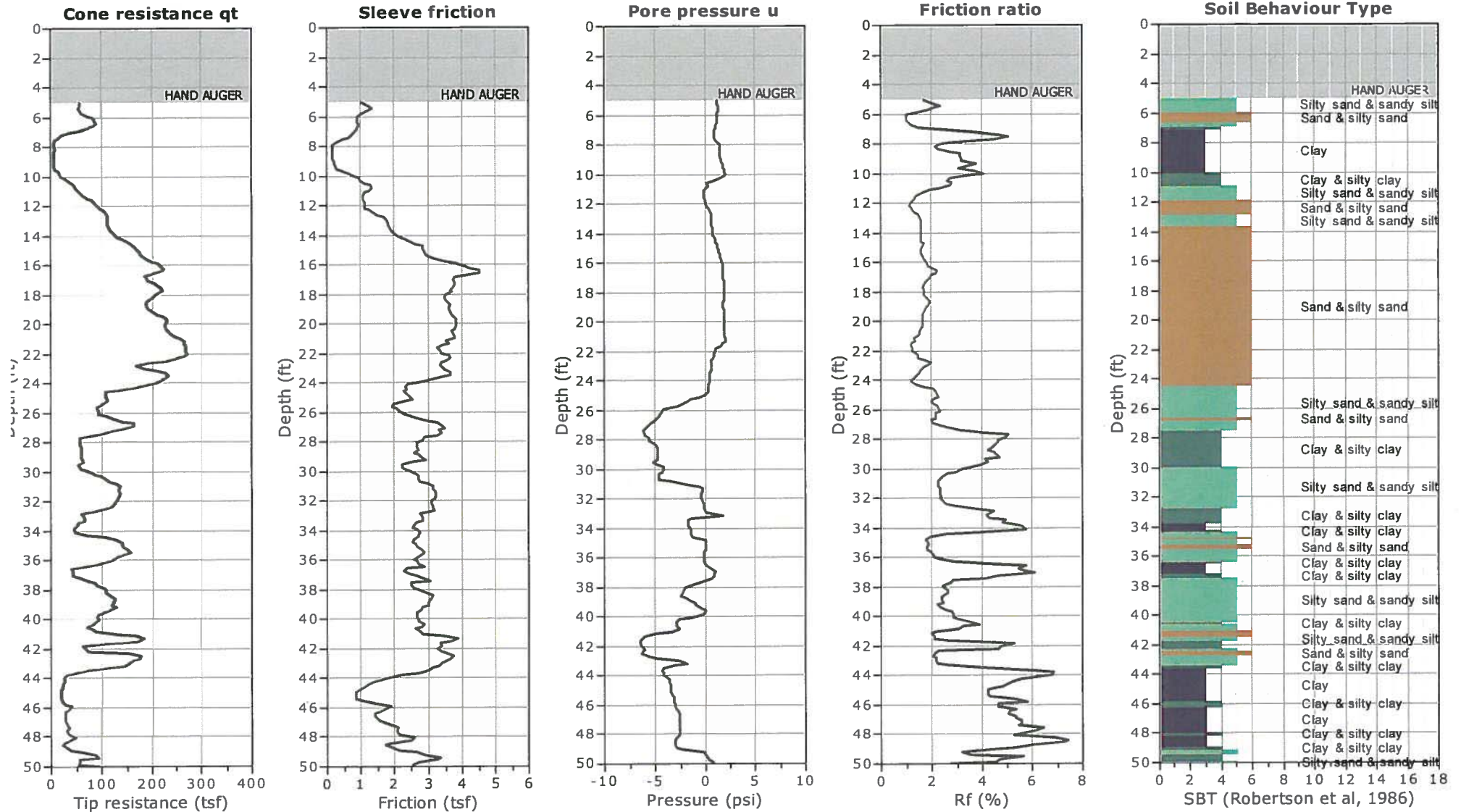
Kehoe Testing and Engineering
 714-901-7270
 rich@kehoetesting.com
 www.kehoetesting.com

CPT: CPT-2

Total depth: 50.03 ft, Date: 5/7/2013

Cone Type: Vertek

ect: County of LADPW/Franklin D. Roosevelt Park
 ition: 7600 Graham Ave. Los Angeles, CA





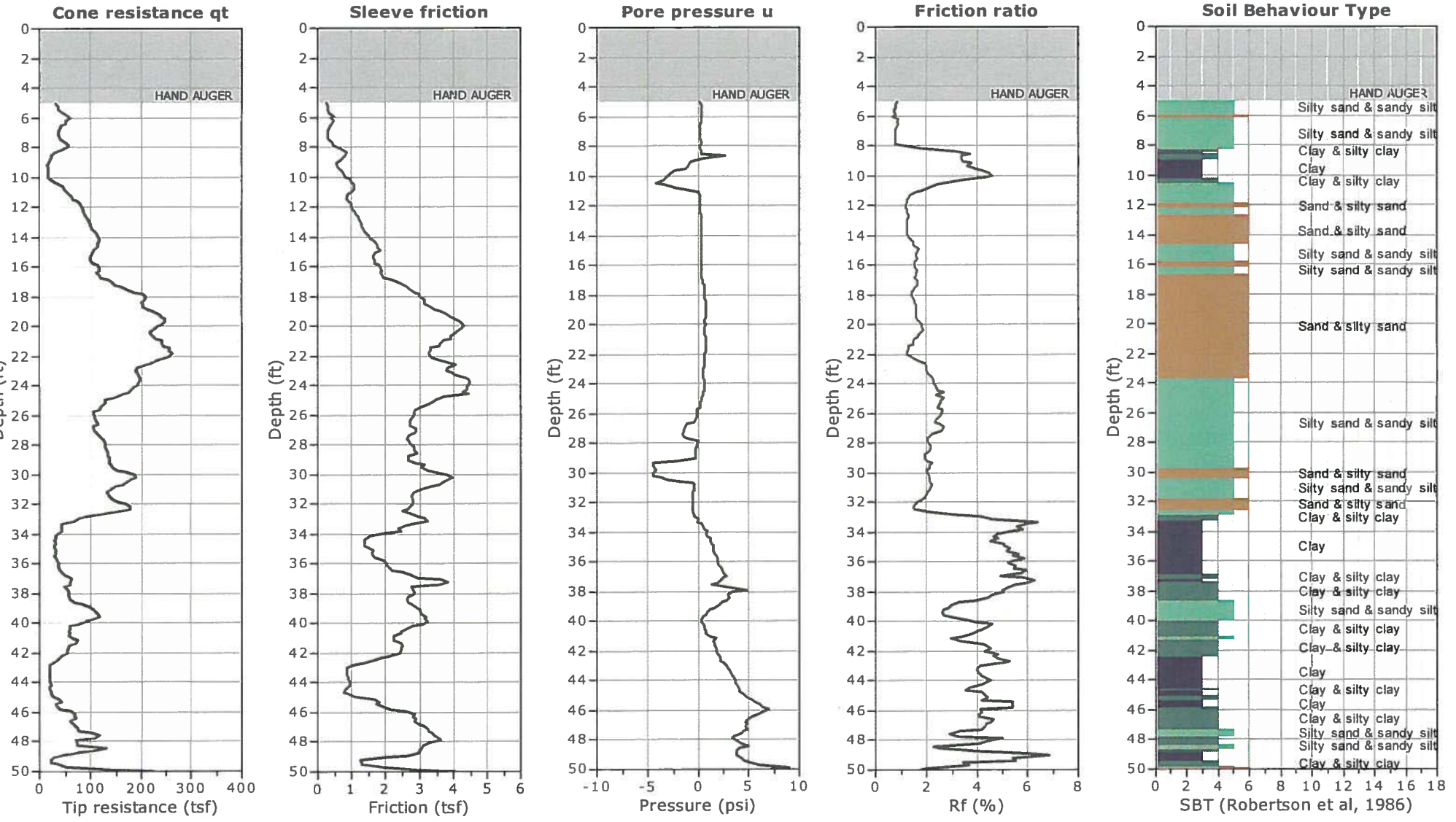
Kehoe Testing and Engineering
714-901-7270
rich@kehoetesting.com
www.kehoetesting.com

CPT: CPT-3

Total depth: 50.03 ft, Date: 5/7/2013

Cone Type: Vertek

ect: County of LADPW/Franklin D. Roosevelt Park
tion: 7600 Graham Ave. Los Angeles, CA





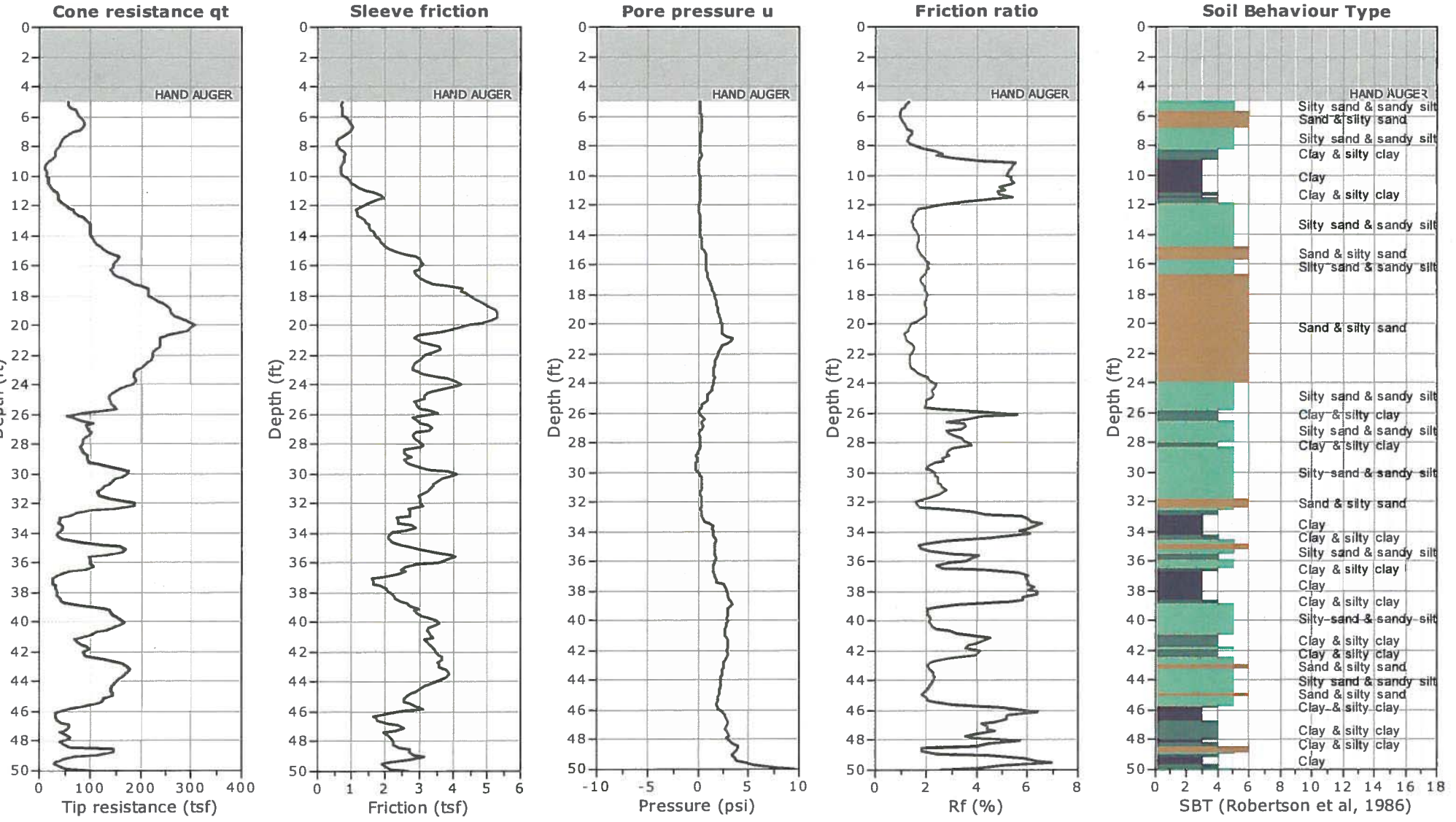
Kehoe Testing and Engineering
 714-901-7270
 rich@kehoetesting.com
 www.kehoetesting.com

CPT: CPT-4

Total depth: 50.03 ft, Date: 5/7/2013

Cone Type: Vertek

ect: County of LADPW/Franklin D. Roosevelt Park
 tion: 7600 Graham Ave. Los Angeles, CA





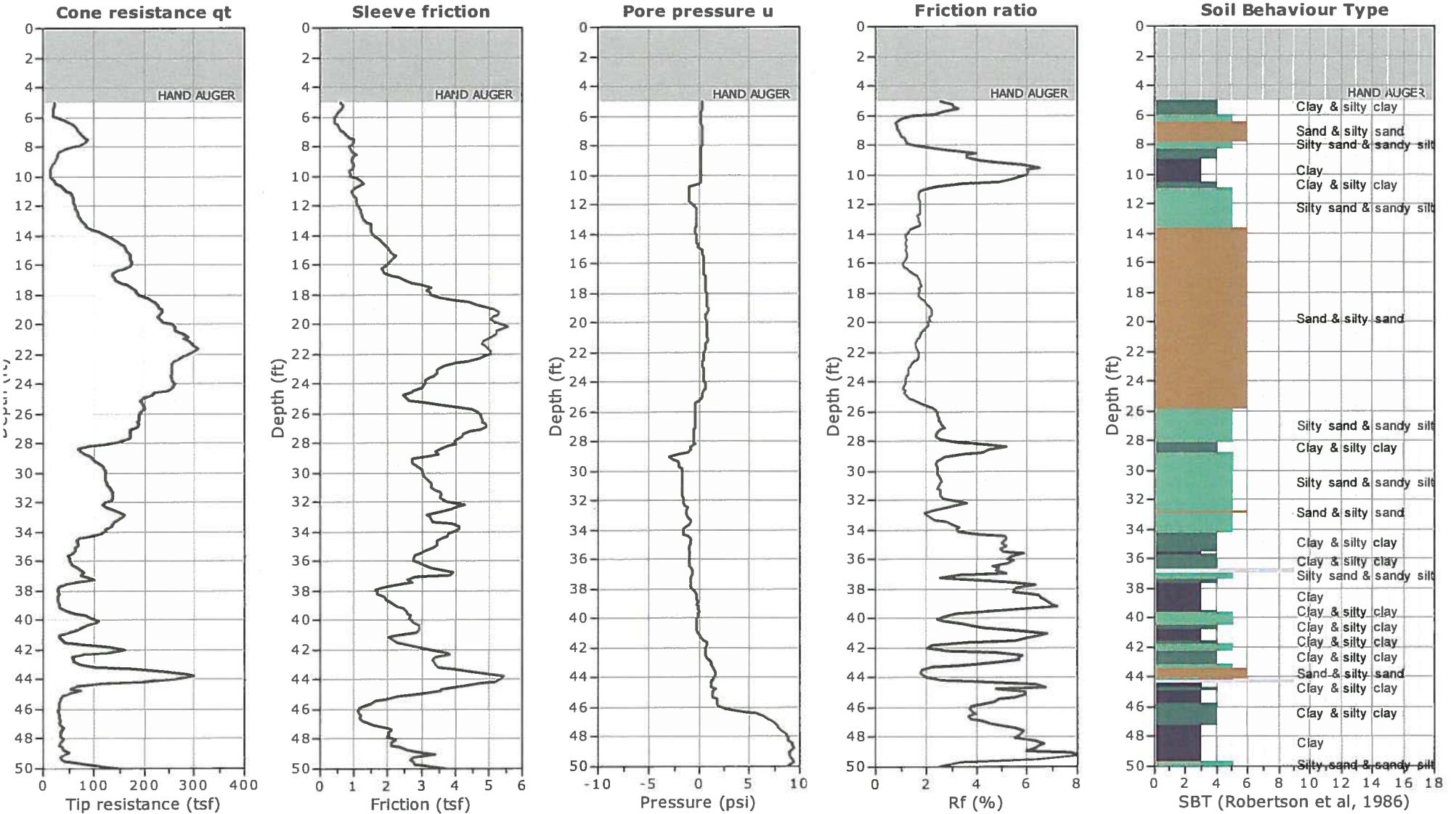
Kehoe Testing and Engineering
 714-901-7270
 rich@kehoetesting.com
 www.kehoetesting.com

CPT: CPT-5

Total depth: 50.03 ft, Date: 5/7/2013

Cone Type: Vertek

ect: County of LADPW/Franklin D. Roosevelt Park
 tion: 7600 Graham Ave. Los Angeles, CA



APPENDIX B

Laboratory Test Results

SUMMARY OF LABORATORY TEST RESULTS
Geotechnical Laboratory

PROJECT NAME: Roosevelt Park
TECHNICIAN: EH
PCA: F21812i49

ENGINEER: Y. Halpern
DATE: 08/14/2013
PAGE: 1 OF 1

BORING/ SAMPLE	DEPTH (ft)	UNIFIED SOIL CLASSIFICATION				MOISTURE AND DRY DENSITY				DIRECT SHEAR				CHEMICAL				Permeability (ft/day)	
		Class.	ATTERBERG LIMITS		#4 % Pass	#200 % Pass	* d _{field} pcf	m.C. field %	* d _{maximum} pcf	m.C. optimum %	* ultimate Degree	C _{ultimate} psf	* maximum Degree	C _{maximum} psf	pH	Min. Resistivity (K ohm-cm)	Cl (ppm)		SO ₄ (ppm)
			LL	PI															
B - S																			
CPT1-1T	10	SM	Non rollable		100.0	29.8	92.2	13.3											
CPT1-2T	20	SP-SM	Non plastic		100.0	9.7	102.9	3.6											
CPT1-3T	30	SM	Non rollable		96.8	46.1	103.1	17.4											
CPT2-1T	10	SM	Non plastic		100.0	27.7	107.1	12.2											
CPT2-2T	20	SM	*		100.0	39.7	106.0	17.5											
CPT2-3T	30	SM	Non plastic		100.0	19.8	103.0	8.2											
CPT3-1T	10	SM	Non plastic		100.0	26.8	102.2	10.4											
CPT3-2T	20	ML	*		100.0	53.6	96.1	15.4											
CPT3-3T	30	ML	27	3	100.0	61.9	76.7	21.0											
CPT4-1T	10	ML	28	3	100.0	53.7	105.8	17.5											
CPT4-2T	20	SW-SM	Non plastic		98.1	9.4	111.2	3.7											
CPT4-3T	30	SM	Non plastic		100.0	32.3	99.4	12.4											
CPT5-1T	10	ML	30	1	100.0	54.3	104.5	19.0											
CPT5-2T	20	SM	Non plastic		100.0	14.5	104.0	3.5											
CPT5-3T	30	SM	Non rollable		100.0	42.2	103.5	12.6											

* Unable to roll to 1/8" (LIQUID LIMIT AND PLASTICITY INDEX TESTS)

Appendix B
Work Plan



TECHNICAL MEMORANDUM

TO: Yonah Halpern, PE, LA County Department of Public Works

FROM: Brian Crystal, PE, GE, Kleinfelder
Jeff Waller, PE, GE, Kleinfelder
C. Eric Philips, PE, GE Kleinfelder

DATE: January 14, 2014

SUBJECT: Work Plan for Geotechnical and Infiltration Study, Low Impact Development, Roosevelt Park, 7600 Graham Ave, Los Angeles, 90001
Charles White Park, 77 Mountain View Street, Altadena, 91001

1 INTRODUCTION

The County of Los Angeles Department of Public Works (LACoDPW) has requested that Kleinfelder perform a geotechnical investigation and infiltration study in support of Low Impact Development (LID) facilities at the subject parks. Our understanding of the project and our work plan are presented in the sections below.

2 PROJECT DESCRIPTION

Kleinfelder understands that the LACoDPW is evaluating infiltration rates for design and construction of LID facilities for storm water management at various County parks. LID facilities being considered consist of buried infiltration basins and dry well type facilities in order to maintain useable space at the parks.

The two parks we are performing our evaluations at are: 1) Roosevelt Park located at 7600 Graham Ave in Los Angeles; and 2) Charles White Park located at 77 Mountain View Street in Altadena. Based on review of the feasibility studies for these two sites, they indicate that potential infiltrating sand layers are located at depths of approximately 15 feet below ground surface (bgs) at Roosevelt Park and at approximately 30 feet bgs at Charles White Park. Near surface soils overlying the sand layers generally consist of silty and clayey soils. Long-term infiltration rates for the near surface soils are likely to be much less than 0.3 inches per hour. Due to the increased likelihood that the deeper sand layers would infiltrate 0.5 inches per hour or more, the purpose of this proposed study is to further evaluate the infiltration capacity of the deeper sand layers.

3 PURPOSE OF INFILTRATION TESTING

The infiltration tests will be performed at each site to develop long term infiltration rates for the granular soil located at 15 feet BGS at Roosevelt Park and at 30 feet at Charles White Park. The infiltration tests will be performed at the bottom of 5-foot diameter borings excavated at each site. The volume of water placed in the excavation will be monitored by flow meter and the depth of water within the excavation will be monitored by a float placed in a perforated monitoring pipe.

Changes in water level in the test excavation and within the three monitoring wells will also be manually measured with a water level sounder. Recorded changes in water levels will be used to evaluate the hydraulic parameters including transmissivity and hydraulic conductivity.

4 EQUIPMENT AND SUPPLIES

To perform the proposed infiltration tests, the following equipment and supplies will be utilized:

- One 8-inch diameter hollow-stem auger drill rig;
- One 5-foot diameter auger drill rig;
- 5-foot diameter Sonotube to be placed in excavations;
- Light towers for each site;
- 4-inch diameter HDPE perforated pipe for water depth monitoring;
- 2-inch diameter well casing for each monitoring well;
- Gravel backfill for lower portion of infiltration excavations;
- Flow meter Model FTB 691-NTP;
- Fire hydrant flow meters;
- 2, trailer mounted 500-gallon water tanks with pumps;
- Sand backfill for the monitoring wells;
- Sand backfill for infiltration excavation;
- Backhoe for soil stockpile movement and placement of backfill materials;
- Flow meter Model FTB 691-NTP; and
- Lumber and tools to construct infiltration excavation cover.

5 PERSONNEL

The continuous portion of the infiltration testing is anticipated to continue for a minimum of 26 hours, with site restoration to be performed immediately following test performance. Therefore, infiltration testing will be performed by at least two field teams working approximately 10 to 12-hour shifts with roughly one hour of overlap. Each field team will consist of a team leader (Kleinfelder staff professional) and a Kleinfelder team

assistant. A Kleinfelder Project Engineer will oversee the operations during performance of the excavations and infiltration testing.

Field teams will be responsible for their own meals before and after their respective shifts. Off-site meal breaks are not permitted while infiltration testing is ongoing.

6 PROCEDURES

6.1 Boring Location, Utility Clearance, and Permitting

Kleinfelder personnel will visit each park to mark proposed boring locations in accordance with standard practice, and notify DigAlert / Underground Service Alert (USA) of our intent to excavate. We will complete well permit applications and acquire the necessary permits from the Los Angeles County Department of Public Health. We are not planning to apply for permits for the temporary piezometer borings (described below) planned for our study because the piezometers will be terminated within the vadose zone (i.e., above groundwater).

6.2 Hollow Stem Auger Borings and Well Installation

At each park, we will drill 3 hollow-stem auger borings. To investigate the depth of groundwater within the upper 50 feet at each park, we propose to drill, sample and log one 50-foot deep boring. Upon completion, the 50-foot boring will be converted to a groundwater observation well. The location of the boring/observation well will be located down gradient from the proposed infiltration test to also serve as an observation point to monitor infiltrate flow as shown on the project schematic. The center of the boring will be located approximately 14 feet from the center of the 5-foot diameter boring. Samples of the soils will be collected using Standard Penetration Test (SPT) and California-type samplers at approximate 5-foot intervals. At each interval both geotechnical and environmental samples will be appropriately packaged for transportation to respective testing laboratories.

Two additional hollow-stem auger borings will be drilled at each park. The additional borings will be located in-line and between the location of the 50-ft deep boring described above, and the location of the infiltration test. The center of the two borings will be located at approximately 4 and 9 feet from the 5-foot diameter boring. The borings will be converted to temporary piezometers for observation of infiltrate flow during testing. At Roosevelt Park, the depths of the piezometers are anticipated to be 20 and 25 feet bgs. At Charles White Park, the depths of the piezometers are anticipated to be 35 and 40 feet bgs.

Based on project team requests, temporary chain link fencing will be used to delineate the project locations. At Charles White Park, the area surrounding the well and piezometers will be surrounded by temporary chain link fencing from 1/16/2014 to approximately 1/30/14. At Roosevelt Park, we will also install temporary chain link fencing from 1/30/14 to approximately 2/3/14.

Upon completion of infiltration testing described below, the casing within the piezometers will be left in place and backfilled with –cement-bentonite grout. We will cut the casing approximately 1 foot bgs and cover with soil.

6.3 Large Diameter Boring and Infiltration Testing

We will perform infiltration testing in 5-foot-diameter boreholes drilled to 15 feet and 30 feet, at Roosevelt Park and Charles White Park, respectively. Infiltration testing will be performed using State of Washington Pilot Infiltration Test (PIT) procedures as guidelines.

The boreholes will be drilled using a flight-auger and cased using SonoTube to attempt to limit the impacts of caving of the hole. For excavation safety, the SonoTube will extend to a minimum of 42 inches above the ground surface. Soil samples will be collected at depths of 2.5, and at 5-foot intervals thereafter for environmental laboratory testing as described in our proposal. Clean gravel will be placed in the bottom of each hole to stabilize and prevent erosion during testing. For safety, a cover that can be locked in place will be constructed for placement over the hole, however, we do not intend to use the cover as we plan to remain onsite for the duration of the test.

At each park, the infiltration tests will be performed twice. The first test will be performed with clean water and the second test will be performed with sediment laden water with a minimum load of 1,000 Nephelometric Turbidity Units (NTU). After the clean water test is finished, we will allow the remaining water to infiltrate before beginning the sediment laden water test. For the turbid water test, the subsurface soils will likely be nearly saturated and infiltration should be reduced due to the sediment laden water.

During testing, the volume of water of water placed in the excavation will be monitored by a Model FTB 691-NTP flow meter. The water level within the borings will be monitored with a mechanical float and a water depth sounder.

At the conclusion of testing, the 5-foot-diameter boreholes will be backfilled with sand from a local quarry to within one foot of the ground surface. Due to the placement of gravel and sand backfill within the borehole excavations, we anticipate that there will be soil that cannot be placed back in the borehole. Due to the large quantity of IDW, we have assumed that the soil will either be relocated onsite or transported to another LACoDPW site. We have included the rental of a backhoe to assist in our services and to load soil into a dump truck move it to another LACoDPW site.

7 REPORTING

Field-collected data will be placed in tables for analysis. Hard copies of field daily reports and logs should be maintained with the project file along with all collected and generated electronic files.

8 ASSUMPTIONS

The geotechnical scope of work described above assumes the following:

- At Charles White Park, heavy equipment will likely result in some rutting. Plywood will be used to help reduce the amount of rutting that could occur. Our services for park restoration do not include replanting damaged turf.
- Irrigation will be shut off in the areas of our proposed study several days in advance of our fieldwork. Fieldwork will be delayed in the event of soft turf conditions.
- Hours of work will be unrestricted, as the infiltration tests will need to be performed on a continuous basis once started. Work will not begin prior to 7 AM, but will continue until the testing is complete.
- LACoDPW will notify adjacent homeowners, as necessary, of the potential noise and lighting impacts due to our work.
- Infiltration boreholes will be backfilled with sand from a local quarry as requested by LACoDPW. LACoDPW will restore/relevel the borehole locations if settlement of the sand were to occur.
- Piezometers will not be extracted from the ground, but will be backfilled with cement-bentonite grout.
- The soil from the large diameter excavations will be moved to a nearby location onsite acceptable to LACoDPW or may be removed from the site by Kleinfelder and delivered to a location designated by LACoDPW. We assume that if the materials are hauled off-site by Kleinfelder, the maximum haul distance for Charles White Park will be 20 miles and for Roosevelt Park the maximum haul distance will be 40 miles.
- A fire hydrant or other source of water is available on an as-needed basis.
- Additional water present in our water tanks at the conclusion of testing may be drained onsite at each park.

Appendix C
Subsurface Investigation

SAMPLE/SAMPLER TYPE GRAPHICS

	BULK SAMPLE
	CALIFORNIA SAMPLER (3 in. (76.2 mm.) outer diameter)
	MODIFIED CALIFORNIA SAMPLER (2 or 2-1/2 in. (50.8 or 63.5 mm.) outer diameter)
	STANDARD PENETRATION SPLIT SPOON SAMPLER (2 in. (50.8 mm.) outer diameter and 1-3/8 in. (34.9 mm.) inner diameter)

GROUND WATER GRAPHICS

	WATER LEVEL (level where first observed)
	WATER LEVEL (level after exploration completion)
	WATER LEVEL (additional levels after exploration)
	OBSERVED SEEPAGE

NOTES

- The report and graphics key are an integral part of these logs. All data and interpretations in this log are subject to the explanations and limitations stated in the report.
- Lines separating strata on the logs represent approximate boundaries only. Actual transitions may be gradual or differ from those shown.
- No warranty is provided as to the continuity of soil or rock conditions between individual sample locations.
- Logs represent general soil or rock conditions observed at the point of exploration on the date indicated.
- In general, Unified Soil Classification System designations presented on the logs were based on visual classification in the field and were modified where appropriate based on gradation and index property testing.
- Fine grained soils that plot within the hatched area on the Plasticity Chart, and coarse grained soils with between 5% and 12% passing the No. 200 sieve require dual USCS symbols, i.e., GW-GM, GP-GM, GW-GC, GP-GC, GC-GM, SW-SM, SP-SM, SW-SC, SP-SC, SC-SM.
- If sampler is not able to be driven at least 6 inches a 3 inches diameter by 2.5 inches inch long 60 degree conical point driven with a 170 ±2 pound hammer dropped 24 ±0.5 inches.

UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487)

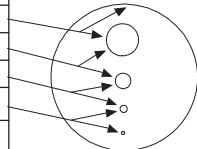
GRAVELS (More than half of coarse fraction is larger than the #200 sieve)	CLEAN GRAVEL WITH <5% FINES	Cu ≥4 and 1 ≤ Cc ≤3		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
		Cu <4 and/or 1 > Cc >3		GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
	GRAVELS WITH 5% TO 12% FINES	Cu ≥4 and 1 ≤ Cc ≤3		GW-GM	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES	
				GW-GC	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES	
		Cu <4 and/or 1 > Cc >3		GP-GM	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES	
	GRAVELS WITH > 12% FINES			GP-GC	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES	
				GM	SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES	
				GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES	
				GC-GM	CLAYEY GRAVELS, GRAVEL-SAND-CLAY-SILT MIXTURES	
CLEAN SANDS WITH <5% FINES			Cu ≥6 and 1 ≤ Cc ≤3		SW	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
			Cu <6 and/or 1 > Cc >3		SP	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
SANDS WITH 5% TO 12% FINES	Cu ≥6 and 1 ≤ Cc ≤3		SW-SM	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES		
			SW-SC	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES		
	Cu <6 and/or 1 > Cc >3		SP-SM	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES		
			SP-SC	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES		
			SM	SILTY SANDS, SAND-GRAVEL-SILT MIXTURES		
SANDS WITH > 12% FINES			SC	CLAYEY SANDS, SAND-GRAVEL-CLAY MIXTURES		
			SC-SM	CLAYEY SANDS, SAND-SILT-CLAY MIXTURES		
		SILTS AND CLAYS (Liquid Limit less than 50)		ML	INORGANIC SILTS AND VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, SILTS WITH SLIGHT PLASTICITY	
	CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS			
SILTS AND CLAYS (Liquid Limit greater than 50)		CL-ML	INORGANIC CLAYS-SILTS OF LOW PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS			
		OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY			
		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILT			
		CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS			
		OH	ORGANIC CLAYS & ORGANIC SILTS OF MEDIUM-TO-HIGH PLASTICITY			

GINT FILE: C:\roosevelt Park.gpj U:\KLF_STANDARD_GINT_LIBRARY_2014.GLB [GEO-LEGEND 1 (GRAPHICS KEY) WITH USCS]

<p>KLEINFELDER Bright People. Right Solutions.</p>	PROJECT NO.: 138948	<p>GRAPHICS KEY</p> <p>Geotechnical and Infiltration Study Roosevelt Park 7600 Graham Avenue, Los Angeles, CA</p>	PLATE
	DRAWN BY: FJ		<p>C-1</p>
CHECKED BY: JW			
DATE: 2/12/2014			
REVISED: -			

GRAIN SIZE

DESCRIPTION	SIEVE SIZE	GRAIN SIZE	APPROXIMATE SIZE
Boulders	>12 in. (304.8 mm.)	>12 in. (304.8 mm.)	Larger than basketball-sized
Cobbles	3 - 12 in. (76.2 - 304.8 mm.)	3 - 12 in. (76.2 - 304.8 mm.)	Fist-sized to basketball-sized
Gravel	coarse	3/4 - 3 in. (19 - 76.2 mm.)	Thumb-sized to fist-sized
	fine	#4 - 3/4 in. (#4 - 19 mm.)	Pea-sized to thumb-sized
Sand	coarse	#10 - #4	Rock salt-sized to pea-sized
	medium	#40 - #10	Sugar-sized to rock salt-sized
	fine	#200 - #10	Flour-sized to sugar-sized
Fines	Passing #200	<0.0029 in. (<0.07 mm.)	Flour-sized and smaller

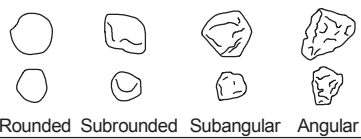


Munsell Color

NAME	ABBR
Red	R
Yellow Red	YR
Yellow	Y
Green Yellow	GY
Green	G
Blue Green	BG
Blue	B
Purple Blue	PB
Purple	P
Red Purple	RP
Black	N

ANGULARITY

DESCRIPTION	CRITERIA
Angular	Particles have sharp edges and relatively plane sides with unpolished surfaces
Subangular	Particles are similar to angular description but have rounded edges
Subrounded	Particles have nearly plane sides but have well-rounded corners and edges
Rounded	Particles have smoothly curved sides and no edges



PLASTICITY

DESCRIPTION	LL	FIELD TEST
Non-plastic	NP	A 1/8-in. (3 mm.) thread cannot be rolled at any water content.
Low (L)	< 30	The thread can barely be rolled and the lump or thread cannot be formed when drier than the plastic limit.
Medium (M)	30 - 50	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump or thread crumbles when drier than the plastic limit
High (H)	> 50	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump or thread can be formed without crumbling when drier than the plastic limit

MOISTURE CONTENT

DESCRIPTION	FIELD TEST
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

REACTION WITH HYDROCHLORIC ACID

DESCRIPTION	FIELD TEST
None	No visible reaction
Weak	Some reaction, with bubbles forming slowly
Strong	Violent reaction, with bubbles forming immediately

APPARENT / RELATIVE DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPT-N ₆₀ (# blows/ft)	MODIFIED CA SAMPLER (# blows/ft)	CALIFORNIA SAMPLER (# blows/ft)	RELATIVE DENSITY (%)
Very Loose	<4	<4	<5	0 - 15
Loose	4 - 10	5 - 12	5 - 15	15 - 35
Medium Dense	10 - 30	12 - 35	15 - 40	35 - 65
Dense	30 - 50	35 - 60	40 - 70	65 - 85
Very Dense	>50	>60	>70	85 - 100

CONSISTENCY - FINE-GRAINED SOIL

CONSISTENCY	UNCONFINED COMPRESSIVE STRENGTH (q _u)(psf)	CRITERIA
Very Soft	< 1000	Thumb will penetrate soil more than 1 in. (25 mm.)
Soft	1000 - 2000	Thumb will penetrate soil about 1 in. (25 mm.)
Firm	2000 - 4000	Thumb will indent soil about 1/4-in. (6 mm.)
Hard	4000 - 8000	Thumb will not indent soil but readily indented with thumbnail
Very Hard	> 8000	Thumbnail will not indent soil

NOTE: AFTER TERZAGHI AND PECK, 1948

STRUCTURE

DESCRIPTION	CRITERIA
Stratified	Alternating layers of varying material or color with layers at least 1/4-in. thick, note thickness
Laminated	Alternating layers of varying material or color with the layer less than 1/4-in. thick, note thickness
Fissured	Breaks along definite planes of fracture with little resistance to fracturing
Slickensided	Fracture planes appear polished or glossy, sometimes striated
Blocky	Cohesive soil that can be broken down into small angular lumps which resist further breakdown
Lensed	Inclusion of small pockets of different soils, such as small lenses of sand scattered through a mass of clay; note thickness
Homogeneous	Same color and appearance throughout

CEMENTATION

DESCRIPTION	FIELD TEST
Weakly	Crumbles or breaks with handling or slight finger pressure
Moderately	Crumbles or breaks with considerable finger pressure
Strongly	Will not crumble or break with finger pressure

GINT FILE: C:\roosevelt Park.gpj U:\KLF_STANDARD_GINT_LIBRARY_2014.GLB [GEO-LEGEND 2 (SOIL DESCRIPTION KEY)]

	PROJECT NO.: 138948	SOIL DESCRIPTION KEY Geotechnical and Infiltration Study Roosevelt Park 7600 Graham Avenue, Los Angeles, CA	PLATE
	DRAWN BY: FJ CHECKED BY: JW DATE: 2/12/2014 REVISED: -		C-2

Date Begin - End: 1/17/2014 **Drilling Company:** Cal Pac Drilling
Logged By: F. Jaime **Drill Crew:** Elliott, Travis, Andrew
Hor.-Vert. Datum: Not Available **Drilling Equipment:** B61 Mobile **Hammer Type - Drop:** 140 lb. Auto - 30 in.
Plunge: -90 degrees **Drilling Method:** Hollow Stem Auger
Weather: Sunny, warm **Exploration Diameter:** 8 in. O.D.

BORING LOG B-2

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							MONITORING WELL CONSTRUCTION*			
			Coordinates Not Available Approximate Ground Surface Elevation (ft.): 140.0 Surface Condition: Bare Earth	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)		
Lithologic Description																	
			Fill: Silty SAND (SM): brown to dark grayish brown, moist, fine grained sand, trace nodules of moderately cemented nodules	1				SM									8" Traffic rated well box encased in concrete
			Alluvium: Silty SAND (SM): dark grayish brown, moist, loose, fine grained sand, light iron oxide staining, strong reaction to HCL	2		BC=3 4 6		SM									Bentonite-Cement Grout (5% bentonite by weight)
135	5		increase fines content, micaceous, non-plastic to low plasticity	3		BC=2 3 3											2" SCH 40 Solid PVC Riser
			Poorly-Graded SAND with Silt (SP-SM): very pale brown, moist, medium dense, fine grained sand, no reaction to HCL	4		BC=7 10 15		SP-SM			100	11					Bentonite Chips
130	10																2" SCH 40 Slotted 0.020 PVC Screen
125	15																

GINT FILE: C:\roosevelt Park.gpj U:\KLF_STANDARD_GINT_LIBRARY_2014.GLB [KLF_BORING\TEST PIT SOIL LOG]



PROJECT NO.: 138948
 DRAWN BY: ZJ
 CHECKED BY: JW
 DATE:
 REVISED: -

BORING LOG B-2

Geotechnical and Infiltration Study
 Roosevelt Park
 7600 Graham Avenue, Los Angeles, CA

PLATE

C-3

Date Begin - End: 1/17/2014
 Logged By: F. Jaime
 Hor.-Vert. Datum: Not Available
 Plunge: -90 degrees
 Weather: Sunny, warm

Drilling Company: Cal Pac Drilling
 Drill Crew: Elliott, Travis, Andrew
 Drilling Equipment: B61 Mobile
 Drilling Method: Hollow Stem Auger
 Exploration Diameter: 8 in. O.D.

BORING LOG B-2

Hammer Type - Drop: 140 lb. Auto - 30 in.

Approximate Elevation (feet) Depth (feet)	Graphical Log	FIELD EXPLORATION						LABORATORY RESULTS							MONITORING WELL CONSTRUCTION*	
		Coordinates Not Available Approximate Ground Surface Elevation (ft.): 140.0 Surface Condition: Bare Earth		Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)		
		Lithologic Description														
115	25	Poorly-Graded SAND with Silt (SP-SM): very pale brown, moist, medium dense, fine grained sand, no reaction to HCL		5	BC=9 11 14					100	8.2					
110	30	Silty SAND (SM): very dark brown, moist, medium dense, fine grained sand, with mica, weak reaction to HCL micaceous, light iron oxide staining, strong reaction to HCL		6	BC=11 14 20		SM									
105	35	increase fines content, weak reaction to HCL		7	BC=5 7 10											
				8	BC=8 12 16											

GINT FILE: C:\roosevelt Park.gpj U:\KLF_STANDARD_GINT_LIBRARY_2014.GLB [KLF_BORING/TEST PIT SOIL LOG]



PROJECT NO.: 138948
 DRAWN BY: ZJ
 CHECKED BY: JW
 DATE:
 REVISED: -

BORING LOG B-2

Geotechnical and Infiltration Study
 Roosevelt Park
 7600 Graham Avenue, Los Angeles, CA

PLATE


C-3

PAGE: 2 of 3

Date Begin - End: 1/17/2014 **Drilling Company:** Cal Pac Drilling
Logged By: F. Jaime **Drill Crew:** Elliott, Travis, Andrew
Hor.-Vert. Datum: Not Available **Drilling Equipment:** B61 Mobile **Hammer Type - Drop:** 140 lb. Auto - 30 in.
Plunge: -90 degrees **Drilling Method:** Hollow Stem Auger
Weather: Sunny, warm **Exploration Diameter:** 8 in. O.D.

BORING LOG B-2

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							MONITORING WELL CONSTRUCTION*				
			Lithologic Description	Sample Number	Sample Type	Flow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)			
			Coordinates Not Available Approximate Ground Surface Elevation (ft.): 140.0 Surface Condition: Bare Earth															
			Silty SAND (SM): very dark brown, moist, medium dense, fine grained sand, with mica, weak reaction to HCL	10		BC=7 7 11												
95	45		Sandy SILT (ML): brown to yellowish brown, moist, firm, fine grained sand, low plasticity, some clay, micaceous, strong reaction to HCL	11		BC=6 10 15		ML										
90	50		Poorly-Graded SAND with Silt (SP-SM): light yellowish brown, moist, medium dense, fine grained sand, weak reaction to HCL	12		BC=7 10 12		SP-SM										
			The exploration was terminated at approximately 51.5 ft. below ground surface. Backfilled with cement-bentonite grout on 01/31/2014.				GROUNDWATER LEVEL INFORMATION: Groundwater was not encountered during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.											
85	55																	

	PROJECT NO.: 138948	BORING LOG B-2 Geotechnical and Infiltration Study Roosevelt Park 7600 Graham Avenue, Los Angeles, CA	PLATE
	DRAWN BY: ZJ		C-3
CHECKED BY: JW	DATE:		
REVISID: -			
PAGE: 3 of 3			

GINT FILE: C:\roosevelt Park.gpj U:\KLF_STANDARD_GINT_LIBRARY_2014.GLB [KLF_BORING\TEST PIT SOIL LOG]

Date Begin - End: 1/30/2014
Logged By: Z. Jarecki
Hor.-Vert. Datum: Not Available
Plunge: -90 degrees
Weather: Sunny, warm
Drilling Company: Roy Brothers Drilling
Drill Crew: N/A
Drilling Equipment: EZ Bore Bucket Rig
Drilling Method: Large Diameter Bucket
Exploration Diameter: 75 in. O.D.


BORING LOG B-2A

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks	
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)
			Fill: Silty SAND (SM): light reddish brown, dry, hard, fine grained sand, non plastic	1				SM							
			Alluvium: Silty SAND (SM): olive gray, dry to moist, fine grained sand, trace fine to coarse gravel, non plastic					SM							
135	5		Poorly-Graded SAND with Silt (SP-SM): olive gray, moist, fine grained sand, trace medium grained sand, micaceous	2		BC=N/A		SP-SM							
130	10		Silty SAND (SM): dark gray, moist, firm, fine grained sand, low plasticity, micaceous	3		BC=N/A		SM							
125	15		olive, dry to moist, trace medium to coarse grained sand,	4		BC=N/A			5.0	95.0	100	13			

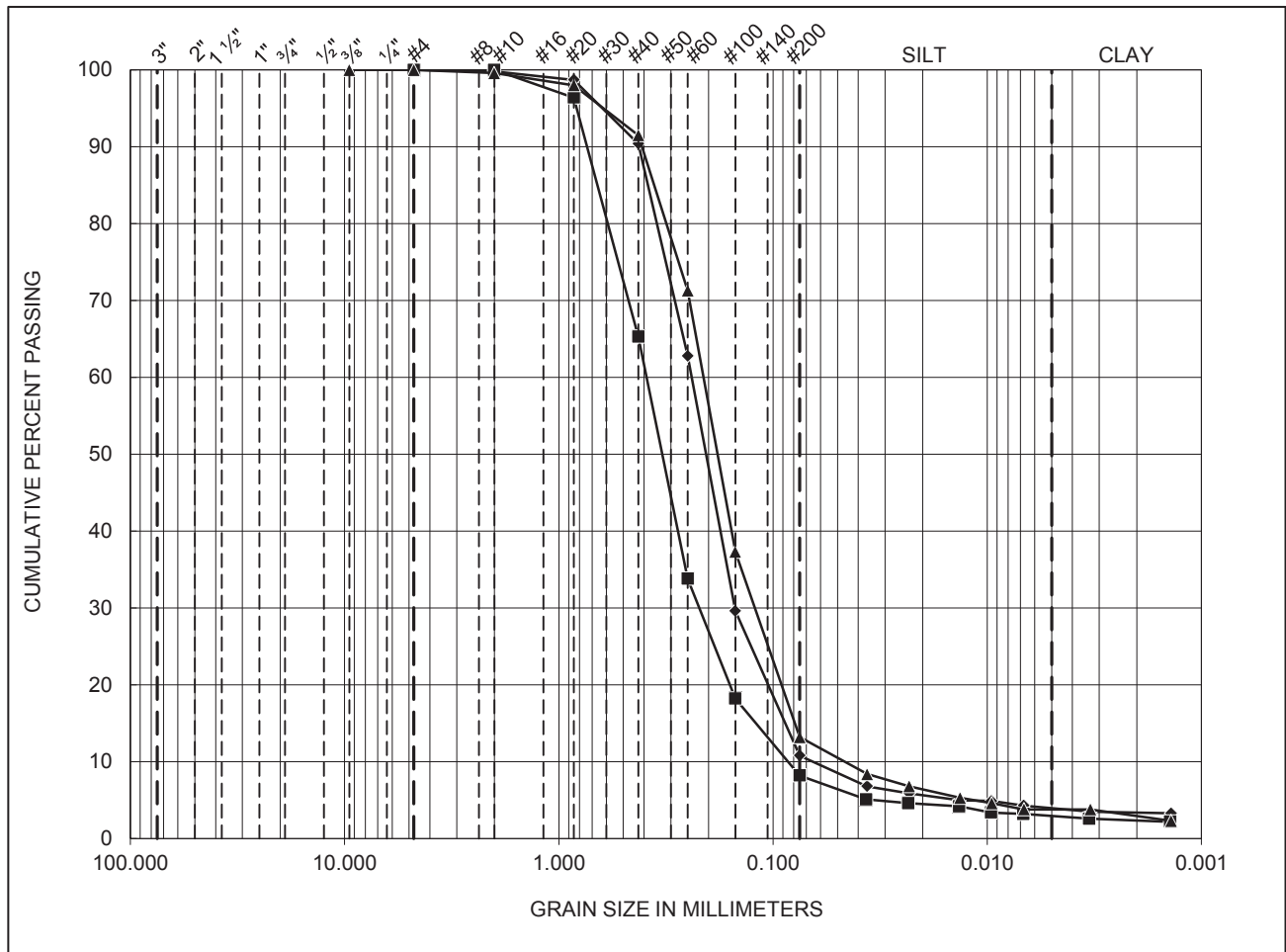
The exploration was terminated at approximately 16 ft. below ground surface. Backfilled with gravel and sand with 1-foot cap of soil cuttings on 01/31/2014.

GROUNDWATER LEVEL INFORMATION:
 Groundwater was not encountered during drilling or after completion.
GENERAL NOTES:
 The exploration location and elevation are approximate and were estimated by Kleinfelder.

GINT FILE: C:\roosevelt Park.gpj U:\KLF_STANDARD_GINT_LIBRARY_2014.GLB [KLF_BORING/TEST PIT SOIL LOG]

	PROJECT NO.: 138948	BORING LOG B-2A Geotechnical and Infiltration Study Roosevelt Park 7600 Graham Avenue, Los Angeles, CA	PLATE
	DRAWN BY: FJ CHECKED BY: JW DATE: REVISED: -		C-4
			PAGE: 1 of 1

Appendix D
Geotechnical Laboratory Testing



COBBLE	GRAVEL	SAND	SILT	CLAY
--------	--------	------	------	------

SYMBOL	SAMPLE IDENTIFICATION			PERCENTAGES			ATTEBERG LIMITS			SOIL CLASSIFICATION
	BORING NO.	SAMPLE NO.	DEPTH (ft.)	GRAVEL	SAND	FINES	LL	PL	PI	
◆	B-2	4	15	0.0	89.2	10.8	N/A	N/A	N/A	POORLY GRADED SAND WITH SILT (SP-SM)
■	B-2	5	20	0.0	91.8	8.2	N/A	N/A	N/A	POORLY GRADED SAND WITH SILT (SP-SM)
▲	B-2A	4	15	0.0	86.8	13.2	N/A	N/A	N/A	SILTY SAND (SM)



PROJECT NO.: 138948
 TESTED BY: JD
 DATE: 1/17/14
 CHECKED BY: JW
 DATE: 1/23/14

GRAIN SIZE DISTRIBUTION

Geotechnical and Infiltration Study
 Roosevelt Park
 7600 Graham Avenue, Los Angeles, CA

PLATE

D-1

Appendix E
Environmental Laboratory Testing

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: January 22, 2014

Mr. Francisco Jaime
Kleinfelder
3880 Lemon Street, Suite 300
Riverside, CA 92501
Tel(909)964-5781 Email:FJaime@Kleinfelder.com

Project: **LA County Infiltration Test**
Project No.: **138948**
Lab I.D.: **140117-21 through -30**

Dear Mr. Jaime:

The **analytical results** for the soil samples, received by our lab on January 17, 2014, are attached. The samples were received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: **LA County Infiltration Test**

PROJECT No.: **138948**

MATRIX: **SOIL**

DATE RECEIVED: **01/17/14**

DATE SAMPLED: **01/17/14**

DATE EXTRACTED: **01/20/14**

REPORT TO: **Mr. FRANCISCO JAIME**

DATE ANALYZED: **01/20/14**

DATE REPORTED: **01/22/14**

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS

METHOD: EPA 8015B

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
B-2-5-20140117	140117-21	ND	ND	ND	1
B-2-10-20140117	140117-22	ND	ND	ND	1
B-2-15-20140117	140117-23	ND	ND	ND	1
B-2-20-20140117	140117-24	ND	ND	ND	1
B-2-25-20140117	140117-25	ND	ND	ND	1
B-2-30-20140117	140117-26	ND	ND	ND	1
B-2-35-20140117	140117-27	ND	ND	ND	1
B-2-40-20140117	140117-28	ND	ND	ND	1
B-2-45-20140117	140117-29	ND	ND	ND	1
B-2-50-20140117	140117-30	ND	ND	ND	1
METHOD BLANK		ND	ND	ND	1

PQL 10 10 50

COMMENTS

C4-C10 = GASOLINE RANGE

C11-C22 = DIESEL RANGE

C23-C35 = MOTOR OIL RANGE DF = DILUTION FACTOR

PQL = PRACTICAL QUANTITATION LIMIT

ACTUAL DETECTION LIMIT = DF X PQL

ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: _____

CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8015B Soil/Solid QC

Date Analyzed: 1/20/2014

Units: mg/Kg (PPM)

Matrix: Solid/Sludge

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 140116-32

Spiked Sample Lab I.D.: **140116-32 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	190	95%	189	95%	1%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	212	106%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	140116-32	140116-33	140116-34	140116-35	140116-36	140116-37	140116-38
O-Terphenyl	60-140%	93%	82%	84%	82%	85%	82%	78%	106%
Octacosane	60-140%	114%	105%	107%	104%	107%	106%	102%	116%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		140116-39	140116-40	140116-41	140117-21	140117-22	140117-23	140117-24	140117-25
O-Terphenyl	60-140%	103%	80%	82%	87%	89%	86%	81%	79%
Octacosane	60-140%	118%	104%	105%	104%	103%	101%	102%	100%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		140117-26	140117-27	140117-28	140117-29	140117-30			
O-Terphenyl	60-140%	93%	92%	88%	84%	83%			
Octacosane	60-140%	108%	111%	107%	105%	106%			

Analyzed and Reviewed By: A

Final Reviewer: ⓪

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
 MATRIX: SOIL DATE RECEIVED: 01/17/14
 DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20&21/14
 REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14


SAMPLE I.D.: B-2-5-20140117 LAB I.D.: 140117-21

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.08	0.3	1	500	5.0	6010B
Barium (Ba)	121	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	51.6 **	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt (Co)	10.6	1.0	1	8,000	80	6010B
Copper (Cu)	695 *	1.0	10	2,500	25	6010B
Lead (Pb)	3.72	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	8.75	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	80.6	5.0	1	2,400	24	6010B
Zinc (Zn)	77.4	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: **LA County Infiltration Test**
 MATRIX: SOIL
 DATE SAMPLED: 01/17/14
 REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: **138948**
 DATE RECEIVED: 01/17/14
 DATE ANALYZED: 01/20&21/14
 DATE REPORTED: 01/22/14

SAMPLE I.D.: **B-2-10-20140117**


LAB I.D.: 140117-22

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.92	0.3	1	500	5.0	6010B
Barium (Ba)	111	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	56.9 **	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt (Co)	12.0	1.0	1	8,000	80	6010B
Copper (Cu)	24.7	1.0	1	2,500	25	6010B
Lead (Pb)	4.47	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	10.8	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	93.4	5.0	1	2,400	24	6010B
Zinc (Zn)	70.0	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: **LA County Infiltration Test** PROJECT No.: **138948**
 MATRIX: **SOIL** DATE RECEIVED: **01/17/14**
 DATE SAMPLED: **01/17/14** DATE ANALYZED: **01/20&21/14**
 REPORT TO: **Mr. FRANCISCO JAIME** DATE REPORTED: **01/22/14**

SAMPLE I.D.: **B-2-15-20140117**

LAB I.D.: **140117-23**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	0.583	0.3	1	500	5.0	6010B
Barium (Ba)	88.0	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	44.4	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt (Co)	9.81	1.0	1	8,000	80	6010B
Copper (Cu)	22.6	1.0	1	2,500	25	6010B
Lead (Pb)	2.79	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	6.10	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	70.7	5.0	1	2,400	24	6010B
Zinc (Zn)	56.1	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
 MATRIX: SOIL DATE RECEIVED: 01/17/14
 DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20&21/14
 REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-20-20140117


LAB I.D.: 140117-24

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	0.486	0.3	1	500	5.0	6010B
Barium (Ba)	55.3	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	31.9	0.5	1	2,500	560/500	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt (Co)	6.98	1.0	1	8,000	80	6010B
Copper (Cu)	8.24	1.0	1	2,500	25	6010B
Lead (Pb)	1.81	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	3.66	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	49.8	5.0	1	2,400	24	6010B
Zinc (Zn)	35.4	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20&21/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-25-20140117

LAB I.D.: 140117-25

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: **LA County Infiltration Test**
 MATRIX: SOIL
 DATE SAMPLED: 01/17/14
 REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: **138948**
 DATE RECEIVED: 01/17/14
 DATE ANALYZED: 01/20&21/14
 DATE REPORTED: 01/22/14

SAMPLE I.D.: **B-2-30-20140117**


LAB I.D.: 140117-26

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.34	0.3	1	500	5.0	6010B
Barium (Ba)	108	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	49.5	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt (Co)	10.6	1.0	1	8,000	80	6010B
Copper (Cu)	18.0	1.0	1	2,500	25	6010B
Lead (Pb)	2.87	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	7.87	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	81.3	5.0	1	2,400	24	6010B
Zinc (Zn)	59.8	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX: SOIL DATE RECEIVED: 01/17/14
DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20&21/14
REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-35-20140117 LAB I.D.: 140117-27

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: **LA County Infiltration Test** PROJECT No.: **138948**
 MATRIX: **SOIL** DATE RECEIVED: **01/17/14**
 DATE SAMPLED: **01/17/14** DATE ANALYZED: **01/20&21/14**
 REPORT TO: **Mr. FRANCISCO JAIME** DATE REPORTED: **01/22/14**

SAMPLE I.D.: **B-2-40-20140117**


LAB I.D.: **140117-28**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.44	0.3	1	500	5.0	6010B
Barium (Ba)	101	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	57.4 **	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt (Co)	11.8	1.0	1	8,000	80	6010B
Copper (Cu)	20.3	1.0	1	2,500	25	6010B
Lead (Pb)	3.68	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	8.32	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	91.1	5.0	1	2,400	24	6010B
Zinc (Zn)	67.7	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: **LA County Infiltration Test**
 MATRIX: SOIL
 DATE SAMPLED: 01/17/14
 REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: **138948**
 DATE RECEIVED: 01/17/14
 DATE ANALYZED: 01/20&21/14
 DATE REPORTED: 01/22/14

SAMPLE I.D.: **B-2-45-20140117**


LAB I.D.: 140117-29

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.15	0.3	1	500	5.0	6010B
Barium (Ba)	117	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	63.9 **	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt (Co)	12.8	1.0	1	8,000	80	6010B
Copper (Cu)	32.2	1.0	1	2,500	25	6010B
Lead (Pb)	4.36	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	11.0	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	104	5.0	1	2,400	24	6010B
Zinc (Zn)	74.1	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: **LA County Infiltration Test** PROJECT No.: **138948**
 MATRIX: SOIL DATE RECEIVED: 01/17/14
 DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20&21/14
 REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

SAMPLE I.D.: **B-2-50-20140117**

LAB I.D.: 140117-30

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.11	0.3	1	500	5.0	6010B
Barium (Ba)	109	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	51.7 **	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	1	500	5.0	7196A
Cobalt (Co)	11.6	1.0	1	8,000	80	6010B
Copper (Cu)	15.8	1.0	1	2,500	25	6010B
Lead (Pb)	2.82	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.1	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	7.84	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	84.1	5.0	1	2,400	24	6010B
Zinc (Zn)	62.6	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX: SOIL DATE RECEIVED: 01/17/14
DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20&21/14
REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

METHOD BLANK FOR LAB I.D.: 140117-21 THROUGH -30

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective limits and detection results.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 1/21/2014

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Cadmium(Cd)	140117-30	50.0	108	PASS	0	50.0	48.9	98%	49.0	98%	0%
Chromium(Cr)	140117-30	50.0	100	PASS	51.7	50.0	93.3	83%	95.5	88%	5%
Lead(Pb)	140117-30	50.0	101	PASS	2.82	50.0	47.5	89%	48.0	90%	1%

ANALYSIS DATE : 1/20/2014

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	140117-30	0.125	94	PASS	0	0.125	0.107	85%	0.110	88%	3%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Cadmium(Cd)	PASS	PASS	PASS	PASS
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:140117-21~30

ANALYST: _____

FINAL REVIEWER: _____

LABORATORY REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
 MATRIX: SOIL DATE RECEIVED: 01/17/14
 DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20/14
 REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-5-20140117 LAB I.D.: 140117-21

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME


PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-5-20140117

LAB I.D.: 140117-21

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY: 
CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-10-20140117

LAB I.D.: 140117-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME


PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-10-20140117

LAB I.D.: 140117-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY: 
CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX: SOIL DATE RECEIVED: 01/17/14
DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20/14
REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-15-20140117 LAB I.D.: 140117-23

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values (0.020 or 0.005).

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
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Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME

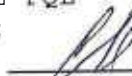
PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-15-20140117

LAB I.D.: 140117-23

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY: 
CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX: SOIL DATE RECEIVED: 01/17/14
DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20/14
REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-20-20140117 LAB I.D.: 140117-24

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME


PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-20-20140117

LAB I.D.: 140117-24

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY: 
CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
 MATRIX: SOIL DATE RECEIVED: 01/17/14
 DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20/14
 REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-25-20140117 LAB I.D.: 140117-25

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLORO BENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLORO BENZENE	ND	0.005
1,3-DICHLORO BENZENE	ND	0.005
1,4-DICHLORO BENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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3880 Lemon Street, Suite 300,
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Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME


PROJECT No.: 138948
DATE RECEIVED: 01/17/14
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SAMPLE I.D.: B-2-25-20140117

LAB I.D.: 140117-25

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY: 
CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
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 Riverside, CA 92501
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PROJECT: LA County Infiltration Test
 MATRIX: SOIL
 DATE SAMPLED: 01/17/14
 REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: 138948
 DATE RECEIVED: 01/17/14
 DATE ANALYZED: 01/20/14
 DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-30-20140117

LAB I.D.: 140117-26

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLORO BENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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LABORATORY REPORT

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PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: 138948
DATE RECEIVED: 01/17/14
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DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-30-20140117

LAB I.D.: 140117-26

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
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LABORATORY REPORT

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PROJECT No.: 138948
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SAMPLE I.D.: B-2-35-20140117

LAB I.D.: 140117-27

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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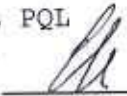
PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-35-20140117

LAB I.D.: 140117-27

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY: 
CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-40-20140117

LAB I.D.: 140117-28

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,3-DICHLOROETHANE	ND	0.005
1,4-DICHLOROETHANE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
 MATRIX: SOIL
 DATE SAMPLED: 01/17/14
 REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: 138948
 DATE RECEIVED: 01/17/14
 DATE ANALYZED: 01/20/14
 DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-40-20140117

LAB I.D.: 140117-28

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-45-20140117

LAB I.D.: 140117-29

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, and PQL X1. Lists various chemical compounds and their corresponding results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX: SOIL DATE RECEIVED: 01/17/14
DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20/14
REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-45-20140117 LAB I.D.: 140117-29

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel(909)964-5781 Email:FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
 MATRIX:SOIL
 DATE SAMPLED:01/17/14
 REPORT TO:Mr. FRANCISCO JAIME

PROJECT No.: 138948
 DATE RECEIVED:01/17/14
 DATE ANALYZED:01/20/14
 DATE REPORTED:01/22/14

SAMPLE I.D.: B-2-50-20140117

LAB I.D.: 140117-30

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test
MATRIX: SOIL
DATE SAMPLED: 01/17/14
REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: 138948
DATE RECEIVED: 01/17/14
DATE ANALYZED: 01/20/14
DATE REPORTED: 01/22/14

SAMPLE I.D.: B-2-50-20140117

LAB I.D.: 140117-30

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Handwritten signature and line

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
 MATRIX: SOIL DATE RECEIVED: 01/17/14
 DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/20/14
 REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/22/14

METHOD BLANK FOR LAB I.D.: 140117-21 THROUGH -30

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLORO BENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLORO BENZENE	ND	0.005
1,3-DICHLORO BENZENE	ND	0.005
1,4-DICHLORO BENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY:  _____

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com


PROJECT: LA County Infiltration Test
 MATRIX: SOIL
 DATE SAMPLED: 01/17/14
 REPORT TO: Mr. FRANCISCO JAIME

PROJECT No.: 138948
 DATE RECEIVED: 01/17/14
 DATE ANALYZED: 01/20/14
 DATE REPORTED: 01/22/14

METHOD BLANK FOR LAB I.D.: 140117-21 THROUGH -30

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 1/20/2014
Machine: C

Matrix: Solid/Soil/Liquid
Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 140120-LCS1/2

BATCH ID: 140120-LCS1/2

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.044	88%	0.047	94%	6%	75-125	0-20
Chlorobenzene	0	0.050	0.054	108%	0.060	120%	12%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.044	88%	0.048	96%	8%	75-125	0-20
Toluene	0	0.050	0.049	98%	0.053	106%	8%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.050	100%	0.053	106%	6%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.048	96%	75-125
Chlorobenzene	0.050	0.057	114%	75-125
Chloroform	0.050	0.041	82%	75-125
1,1-Dichloroethene	0.050	0.044	88%	75-125
Ethylbenzene	0.050	0.060	120%	75-125
o-Xylene	0.050	0.057	114%	75-125
m,p-Xylene	0.100	0.117	117%	75-125
Toluene	0.050	0.054	108%	75-125
1,1,1-Trichloroethane	0.050	0.042	84%	75-125
Trichloroethene (TCE)	0.050	0.056	112%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	140117-1	140117-2	140117-21	140117-22	140117-23	140117-24
Dibromofluoromethane	50.0	70-130	73%	91%	88%	74%	79%	85%	85%
Toluene-d8	50.0	70-130	90%	84%	111%	90%	94%	94%	94%
4-Bromofluorobenzene	50.0	70-130	96%	133*%	131*%	73%	92%	98%	99%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			140117-25	140117-26	140117-27	140117-28	140117-29	140117-30	140120-2
Dibromofluoromethane	50.0	70-130	79%	87%	92%	91%	80%	94%	94%
Toluene-d8	50.0	70-130	95%	96%	95%	97%	96%	96%	99%
4-Bromofluorobenzene	50.0	70-130	95%	92%	94%	98%	92%	96%	98%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

spk conc = Spike Concentration

MS = Matrix Spike

%RC = Percent Recovery

ACP %RC = Accepted Percent Recovery

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: 

Final Reviewer: _____

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 Other: _____
 *Week (Standard)

Misc./PO#	Analysis Required	COMMENTS
A To 27th. Rust As 12 Jeff We...		

TPH CARBON CANV	Vol's 8260B	CCR T-22	6010B / 441A

MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	SAMPLING DATE	TIME	LAB ID	SAMPLE ID
	5	ICE		1-17-14	0740	B-2-21	B-2-5-2014017
					0745	-22	B-2-10-2014017
					0750	-23	B-2-15-2014017
					0755	-24	B-2-20-2014017
					0800	-25	B-2-25-2014017
					0805	-26	B-2-30-2014017
					0810	-27	B-2-35-2014017
					0820	-28	B-2-40-2014017
					0830	-29	B-2-45-2014017
					0840	-30	B-2-50-2014017

Company Name: **KLF MFFLDEN**
 Address: 3820 Fremont St 380 Floor
 City/State/Zip: **San Francisco, CA**
 Project Contact: **Francisco Samf**
 Tel: 909 964 5781
 Fax/Email: **Francisco Samf @ KLF MFFLDEN.COM**
 Project Name/ID: **138948**
 Sampler's Signature: _____

Received by: _____
 Received by: _____
 Received by: _____

Relinquished by: _____
 Relinquished by: _____
 Relinquished by: _____

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

CHAIN OF CUSTODY RECORD

WHITE WITH SAMPLE • YELLOW TO CLIENT

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: January 24, 2014

Mr. Francisco Jaime
Kleinfelder
3880 Lemon Street, Suite 300
Riverside, CA 92501
Tel(909)964-5781 Email:FJaime@Kleinfelder.com

Project: **LA County Infiltration Test**
Project No.: **138948**
Lab I.D.: **140117-21 through -30**

Dear Mr. Jaime:

The **additional STLC-Cr/Cu results** for the soil samples, received by our lab on January 17, 2014, are attached. The samples were received chilled, intact, accompanying chain of custody and also stored per the EPA protocols.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX: SOIL DATE RECEIVED: 01/17/14
DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/22-24/14
REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/24/14

SAMPLE I.D.: B-2-5-20140117 LAB I.D.: 140117-21

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD USED
Chromium (Cr)	0.073	0.05	1	2,500	560/5.0@	6010B
Copper (Cu)	1.06	0.1	1	2,500	25	6010B

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet the TCLP limit/chromium (5.0 mg/L in TCLP leachate)
** = TCLP Chromium/TTLC-Chromium VI recommended (if marked)
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX: SOIL DATE RECEIVED: 01/17/14
DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/22-24/14
REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/24/14

SAMPLE I.D.: B-2-10-20140117


LAB I.D.: 140117-22

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD USED
Chromium (Cr)	0.050	0.05	1	2,500	560/5.0@	6010B

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
TTLIC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet the TCLP limit/chromium (5.0 mg/L in TCLP leachate)
** = TCLP Chromium/TTLIC-Chromium VI recommended (if marked)
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: 
CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
 MATRIX: SOIL DATE RECEIVED: 01/17/14
 DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/22-24/14
 REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/24/14


SAMPLE I.D.: B-2-35-20140117 LAB I.D.: 140117-27

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
 UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD USED
Chromium (Cr)	ND	0.05	1	2,500	560/5.0@	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the actual detection limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet the TCLP limit/chromium (5.0 mg/L in TCLP leachate)
 ** = TCLP Chromium/TTLIC-Chromium VI recommended (if marked)
 *** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel(909)964-5781 Email:FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX:SOIL DATE RECEIVED:01/17/14
DATE SAMPLED:01/17/14 DATE ANALYZED:01/22-24/14
REPORT TO:Mr. FRANCISCO JAIME DATE REPORTED:01/24/14

SAMPLE I.D.: B-2-40-20140117

LAB I.D.: 140117-28

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS

UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD USED
Chromium (Cr)	ND	0.05	1	2,500	560/5.0@	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the actual detection limit or non-detected


TTLIC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

@ = Must meet the TCLP limit/chromium (5.0 mg/L in TCLP leachate)

** = TCLP Chromium/TTLIC-Chromium VI recommended (if marked)

*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: 
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX: SOIL DATE RECEIVED: 01/17/14
DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/22-24/14
REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/24/14

SAMPLE I.D.: B-2-45-20140117

LAB I.D.: 140117-29

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD USED
Chromium (Cr)	ND	0.05	1	2,500	560/5.0@	6010B

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the actual detection limit or non-detected
TTLIC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet the TCLP limit/chromium (5.0 mg/L in TCLP leachate)
** = TCLP Chromium/TTLIC-Chromium VI recommended (if marked)
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: 
CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 3880 Lemon Street, Suite 300,
 Riverside, CA 92501
 Tel (909) 964-5781 Email: FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
 MATRIX: SOIL DATE RECEIVED: 01/17/14
 DATE SAMPLED: 01/17/14 DATE ANALYZED: 01/22-24/14
 REPORT TO: Mr. FRANCISCO JAIME DATE REPORTED: 01/24/14

SAMPLE I.D.: B-2-50-20140117

LAB I.D.: 140117-30

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
 UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD USED
Chromium (Cr)	ND	0.05	1	2,500	560/5.0@	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the actual detection limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet the TCLP limit/chromium (5.0 mg/L in TCLP leachate)
 ** = TCLP Chromium/TTLIC-Chromium VI recommended (if marked)
 *** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
3880 Lemon Street, Suite 300,
Riverside, CA 92501
Tel(909)964-5781 Email:FJaime@Kleinfelder.com

PROJECT: LA County Infiltration Test PROJECT No.: 138948
MATRIX:SOIL DATE RECEIVED:01/17/14
DATE SAMPLED:01/17/14 DATE ANALYZED:01/22-24/14
REPORT TO:Mr. FRANCISCO JAIME DATE REPORTED:01/24/14


METHOD BLANK FOR LAB I.D.: 140117-21, -22, -27 THROUGH -30

SOLUBLE THRESHOLD LIMIT CONCENTRATION (STLC) ANALYSIS
UNIT: mg/L IN THE STLC LEACHATE

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD USED
Chromium (Cr)	ND	0.05	1	2,500	560/5.0@	6010B
Copper (Cu)	ND	0.1	1	2,500	25	6010B

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the actual detection limit or non-detected
TTLIC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet the TCLP limit/chromium (5.0 mg/L in TCLP leachate)
** = TCLP Chromium/TTLIC-Chromium VI recommended (if marked)
*** = The concentration exceeds the STLC Limit, and the sample is defined as hazardous waste as per CAL-TITLE 22 (if marked)

Data Reviewed and Approved by: 
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --STLC

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 1/24/2014

Unit : mg/L (ppm)

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	140117-28	5.00	96	PASS	0	5.00	4.08	82%	4.11	82%	1%
Lead(Pb)	140117-28	5.00	96	PASS	0	5.00	3.19	64%	3.23	65%	1%
Nickel(Ni)	140117-28	5.00	100	PASS	0	5.00	4.46	89%	4.55	91%	2%

ANALYSIS DATE: 1/20/2014

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	140115-27	0.0125	94	PASS	0	0.0125	0.0102	82%	0.0107	86%	5%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	FAIL	FAIL	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:140113-50,140117-21,22,27~~30

ANALYST: _____ 

FINAL REVIEWER: _____ 

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 1 Week (Standard)
 Other:

SAMPLE ID	LAB ID	SAMPLING DATE TIME		MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required					COMMENTS			
								TPH	CARBON	VOCs	SVOCs	PCBs		DDTs	PAHs	
B-2-5-20140117	B-2-21	1-17-14	0740	Soil	5	ICE										
B-2-10-20140117	-22		0745													
B-2-15-20140117	-23		0750													
B-2-20-20140117	-24		0755													
B-2-25-20140117	-25		0800													
B-2-30-20140117	-26		0805													
B-2-35-20140117	-27		0810													
B-2-40-20140117	-28		0820													
B-2-45-20140117	-29		0830													
B-2-50-20140117	-30		0840													

Misc./PO#
 Δ TO
 72 Hr. Rush
 AS per Jeff W
 * = Addn
 ANALYSIS
 AS per Jeff W.

Company Name: KLEINFELDER		Project Contact: FRANCISCO SANTI		Sampler's Signature:	
Address: 3840 LEMON ST 3RD FLOOR		Tel: 909 964 5781		Project Name/ID: 138948	
City/State/Zip: RIVER SIDE, CA		Fax/Email: FRANCISCO.SANTI@KLEINFELDER.COM			
Relinquished by:	Received by:	Date & Time: 1-17-14 1207	Instructions for Sample Storage After Analysis:		
Relinquished by:	Received by:	Date & Time: 1-17-14 1335	<input type="checkbox"/> Dispose of <input type="checkbox"/> Return to Client <input type="checkbox"/> Store (30 Days)		
Relinquished by:	Received by:	Date & Time:	<input type="checkbox"/> Other:		

CHAIN OF CUSTODY RECORD

Date: _____

WHITE WITH SAMPLE - YELLOW TO CLIENT

Appendix F
Infiltration Data

Roosevelt Park Clean Water Test Data

Time	Elapsed Time (hh:mm)	Flow Rate (gpm)
15:45	0:00	6.76
16:00	0:15	3.30
16:15	0:30	4.30
16:30	0:45	3.95
16:45	1:00	3.40
17:00	1:15	3.38
17:15	1:30	3.34
17:30	1:45	3.59
17:45	2:00	3.88
18:00	2:15	3.69
18:15	2:30	3.84
18:30	2:45	3.62
18:45	3:00	3.64
19:00	3:15	3.64
19:20	3:35	3.64
19:30	3:45	3.58
19:45	4:00	3.64
20:00	4:15	3.63
20:15	4:30	3.64

Time	Elapsed Time (hh:mm)	Flow Rate (gpm)
20:30	4:45	3.64
20:45	5:00	3.64
21:00	5:15	3.63
21:15	5:30	3.62
21:20	5:35	3.65
21:30	5:45	3.62
21:45	6:00	3.64
22:00	6:15	3.62
22:15	6:30	3.67
22:30	6:45	3.58
22:45	7:00	3.34
23:00	7:15	3.38
23:15	7:30	3.55
23:30	7:45	3.54
23:45	8:00	3.52
0:00	8:15	3.52
0:15	8:30	3.52
0:30	8:45	3.52

Roosevelt Park Turbid Water Test Data

Time	Elapsed Time (hh:mm)	Flow Rate (gpm)
1:20	9:35	3.54
1:35	9:50	3.06
1:50	10:05	3.45
2:05	10:20	2.93
2:20	10:35	2.55
2:35	10:50	2.52
2:50	11:05	2.47
3:05	11:20	2.02
3:20	11:35	2.09
3:35	11:50	1.99
3:50	12:05	1.99
4:05	12:20	2.04
4:20	12:35	1.99
4:35	12:50	1.99
4:50	13:05	2.00
5:05	13:20	1.67
5:20	13:35	1.95
5:35	13:50	1.45
5:50	14:05	1.45
6:05	14:20	1.44
6:20	14:35	1.44
6:35	14:50	1.38
6:50	15:05	1.38
7:05	15:20	1.46
7:20	15:35	1.47
7:35	15:50	1.39
7:50	16:05	1.44

Time	Elapsed Time (hh:mm)	Flow Rate (gpm)
8:05	16:20	1.43
8:20	16:35	1.41
8:35	16:50	1.43
8:50	17:05	1.38
9:05	17:20	1.02
9:20	17:35	0.88
9:35	17:50	1.19
9:50	18:05	1.18
10:05	18:20	1.18
10:20	18:35	1.16
10:35	18:50	1.14
10:50	19:05	1.14
11:05	19:20	1.11
11:20	19:35	1.07
11:35	19:50	1.06
11:50	20:05	1.04
12:05	20:20	0.92
12:20	20:35	0.94
12:35	20:50	0.94
12:50	21:05	0.94
13:05	22:03	0.90
13:20	22:18	0.88
13:50	22:48	1.01
14:10	23:08	0.77
14:30	23:28	0.79
14:40	23:38	0.72



August 11, 2017
Revised August 22, 2017
Revised August 24, 2017
Kleinfelder Project No. 20180388.001A

Mr. Yonah Halpern, PE
County of Los Angeles Department of Public Works
Geotechnical and Materials Engineering Division
Soils Investigations Section
900 South Fremont Avenue, 4th Floor
Alhambra, California 91803

**SUBJECT: Final Report of Roosevelt Park Infiltration Study
7600 Graham Avenue
Los Angeles, California**

Dear Mr. Halpern:

Kleinfelder is pleased to present this revised report summarizing our infiltration study performed at Roosevelt Park located at 7600 Graham Avenue and along Whitsett Avenue in Los Angeles, California. This final report addressed comments from the County of Los Angeles Department of Public Works to our draft report dated June 27, 2017. The approximate location of the site is shown on Figure 1, Site Vicinity Map. Our scope of work was presented in our April 19, 2017 proposal, revised April 25, 2017.

PURPOSE AND OBJECTIVE

Kleinfelder understands that the County of Los Angeles, Department of Public Works (LACoDPW) is evaluating infiltration rates for design and construction of Low Impact Development (LID) facilities for stormwater management at the subject park and along Whitsett Avenue southeast of the park. We understand that the current LID facilities being considered consist of underground infiltration galleries or drywell type systems to maintain useable space at the park. The project also consists of three diversion lines to convey stormwater to the infiltration facilities. We understand that the system is being designed by LACoDPW to infiltrate approximately 8.47 acre-feet in a 96-hour period. Based on our review of the feasibility study for this park and our 2014 Kleinfelder report, the documents indicate that sand layers conducive to infiltration were present at depths ranging from approximately 15 to 25 feet below ground surface (bgs).

SCOPE OF SERVICES

Kleinfelder's scope of work for this project included the following:

- Literature Review;
- Site Visit and Borehole Location and Utility Clearance;
- Hollow-stem auger drilling and sampling;

- Borehole Percolation Testing in general accordance with Los Angeles County Guidelines dated December 31, 2016;
- Geotechnical and Environmental Laboratory Testing;
- 3-D numerical modeling of groundwater flow and mounding;
- Infiltration Analysis; and
- Preparation of a Report of Infiltration Study.

BACKGROUND DATA

Roosevelt Park, one of the oldest parks in Los Angeles County, is approximately 24 acres in size. The park is located near the northeast corner of Nadeau Street and Graham Avenue in Los Angeles County, California. The park is bounded by Graham Avenue and Nadeau Street, on the west and south, respectively. The north and east boundaries of the park are residential properties. Across and paralleling Graham Avenue from the park are railroad tracks that service Los Angeles Metro light rail and freight trains. The park slopes from north-northeast to south-southwest with an elevation change of approximately 5 to 10 feet. There is parking along Graham Avenue on the west side of the park, and at the south end there are two paved parking lots. There are several buildings on site containing an indoor pool, a senior center, gymnasium, community rooms, toilet facilities, and a Los Angeles County Department of Parks and Recreation Office. The park has large, grass and dirt field areas for community sports / activities, designated sports fields / courts, a playground, picnic areas, and concrete sidewalks. Our testing was performed in the center of the park within a fenced dirt field used for both baseball and soccer. Figure 1 shows the location of Roosevelt Park to nearby features.

In 2013, LACoDPW performed a screening-level geotechnical investigation at Roosevelt Park, which included advancing five cone penetration tests (CPTs) (CPT-1 through CPT-5) and collecting samples for grain-size distribution testing. The CPT soundings were performed by Kehoe Testing and Engineering and observed by LACoDPW. The depths of the CPTs were approximately 50 feet below the ground surface (bgs). Using the CPT rig, soil samples were collected at depths of approximately 10 feet, 20 feet, and 30 feet bgs adjacent to the CPT soundings. Grain-size distribution and Atterberg Limits testing were performed to allow correlation with hydraulic conductivity. Based on our review of the CPT data and laboratory testing presented in the referenced LACoDPW report (LACoDPW, 2013), subsurface soils consist predominantly of silty sand and clay to a depth of 12 to 14 feet. The silty sand and clay is underlain by sand and silty sand to a depth of 24 to 26 feet, which is underlain by clay, silt, and silty sand to the total depth explored. Groundwater was not encountered in any of the LACoDPW explorations performed at the site.

In 2014, Kleinfelder performed additional investigation and infiltration testing within the baseball field at Roosevelt Park (Kleinfelder, 2014). The investigation consisted of the installation of three temporary observation wells and one large diameter Pilot Infiltration Test (PIT) boring. The observation wells were installed to depths ranging from approximately 20 to 50 feet bgs. The observation wells were performed by California Pacific Drilling and advanced using a Mobile B-61 truck-mounted drill rig equipped with 8-inch diameter hollow-stem augers. Samples were obtained from the 50-foot boring using Standard Penetration Test (SPT) and Modified California-type samplers at approximate 5-foot intervals. The soils encountered in the 50-foot boring consisted of loose silty sand to approximately 14 feet bgs; medium dense poorly-graded sand with silt to approximately 24 feet bgs; medium dense silty sand to approximately 44 feet bgs; firm

sandy silt to approximately 49 feet bgs; and poorly-graded sand with silt to the total depth of the boring.

The pilot infiltration test was performed in a large diameter (5-foot) borehole in general accordance with the PIT method described by Washington State University (WSDEWQMP, 2012). The 5-foot diameter borehole was excavated using an EZ Bore Bucket Rig equipped with a large diameter bucket to a depth of approximately 15 feet bgs. After drilling, water was pumped into the large diameter borehole at a constant rate and the flowrate was recorded over time to maintain a relatively static water level throughout the duration of the test. Based on the results of the PIT infiltration test, a long-term infiltration rate of 1.5 inches per hour was recommended for the sand layer encountered at approximately 14 to 24 feet bgs.

The locations of the CPTs and borings from the 2013 and 2014 investigations are presented on Figure 2, Exploration Location Map. Groundwater was not encountered in any of the borings or CPTs performed in 2013 and 2014. According to the California Department of Conservation (1998), the historic shallow groundwater level is approximately 24 feet bgs.

2017 DRILLING AND INFILTRATION TEST INSTALLATION

On May 10 to May 16, 2017, Kleinfelder's subcontractor, California Pacific Drilling, advanced 15 hollow-stem auger borings (B-1 to B-15) with a Mobile B-61 truck-mounted drill. The borings were advanced to depths ranging from approximately 16.5 to 111.5 feet bgs. The purpose of the borings was to provide soil samples for geotechnical laboratory testing in support of the design and construction of the project. Three of the borings, B-1, B-5, and B-7 were installed as percolation test holes for infiltration testing, as discussed in the next section of this report. The approximate locations of the borings are presented on Figure 2, Exploration Overview Map, and Figures 3A and 3B, Boring Location Map.

The three borehole infiltration tests were constructed in 10-inch diameter borings, using 2-inch diameter schedule 40 polyvinyl chloride (PVC) casing. The upper approximately 15 feet of the borehole infiltration tests were set with solid/blank PVC. Below the blank sections of PVC, the wells were screened with 0.020-inch slotted PVC casing and a threaded end cap. Filter pack material, consisted of No. 3 Monterey Sand and was placed from the bottom of the boring to approximately 1-foot below the ground surface. The wells were then completed with a 10-inch traffic rated well box flush with the ground surface. The backfill around the well boxes within the park (B-5 and B-7) was soil cuttings and the well box within Whitsett Avenue (B-1) was set in quick-set concrete. A well diagram showing the construction details of the infiltration test is shown on Figure 4, Nested Well Construction Diagram.

The borings were sampled and logged during drilling. Samples of the soils were collected using Standard Penetration Test (SPT) and Modified California-type samplers at approximate 5-foot intervals. At each interval, both geotechnical and environmental samples were appropriately packaged for transportation to respective testing laboratories. A Kleinfelder staff engineer logged the borings utilizing the Unified Soil Classification System. Logs of the borings are presented in Appendix A, Field Exploration.

Subsurface Conditions

Underground Gallery #3

The subsurface conditions encountered in our borings are described in the following paragraphs. Along Whitsett Avenue and 76th Place, where Underground Gallery #3 is proposed (borings B-1 through B-4), the upper 13 to 18 feet consisted of silty sands and sandy silts. The silty sands and sandy silts were underlain by a poorly graded sand with silt (SP-SM) layer, with a thickness of approximately 5 to 10 feet. Based on boring B-2, drilled to 111.5 feet bgs, the SP-SM layer is underlain by interbedded sands, silty sands, sandy silts, and silt layers with minor amounts of gravel. Groundwater was measured in Boring B-2 at a depth of approximately 98 feet bgs at the end of drilling.

Underground Gallery #2

In the vicinity of Underground Gallery #2 (borings B-5 and B-6), we encountered silty sands, sands, sandy silts, and lean clays in the upper 14 to 18 feet bgs. The upper soils are underlain by a poorly graded sand with silt (SP-SM), with a thickness of approximately 5 to 7 feet. Based on boring B-6 drilled to 51.5 feet bgs, the SP-SM layer is underlain by silty sands, sandy silts, and lean clays. Groundwater was not encountered in the vicinity of gallery #2 up to a maximum boring depth of 51.5 feet bgs.

Underground Gallery #1

In the vicinity of Underground Gallery #1 (borings B-7 through B-9), we encountered silty sands, sands, sandy silts, and clays, in the upper approximately 16 to 18 feet bgs. The upper soils are underlain by a poorly graded sand with silt (SP-SM) layer with a thickness of approximately five feet. Based on boring B-8 drilled to 51.5 feet bgs, the SP-SM layer is underlain by silty sands and sandy, silty clays. Groundwater was not encountered in the vicinity of gallery #1 up to a maximum boring depth of 51.5 feet bgs.

Holmes Avenue North of Roosevelt Park

Along Holmes Avenue, north of Roosevelt Park (borings B-10 through B-15), we encountered silty sands, sands, and sandy silts in the upper 16.5 to 19 feet bgs. These borings were advanced for the proposed diversion pipe to convey stormwater to Underground Gallery #1. Groundwater was not encountered in the vicinity of gallery #1 up to a maximum boring depth of 51.5 feet bgs.

INFILTRATION STUDY TESTING SELECTION

Kleinfelder was contacted by LACoDPW in March 2017 to provide geotechnical services for infiltration testing for the proposed stormwater capture project at Roosevelt Park. Based on our discussions with LACoDPW, Kleinfelder proposed to perform three borehole infiltration tests at the locations of the proposed infiltration galleries in accordance with the Draft county of Los Angeles Administration Manual GS200.1. The borehole infiltration tests were performed within the poorly graded sand with silt (SP-SM) layer encountered within each infiltration area. The borehole percolation tests were performed using as a constant head of water and tested for a minimum of eight hours.

We also understand that LACoDPW is considering the use of drywells along Whitsett Avenue as an alternative to an underground gallery. Boring B-2, drilled to 111.5 feet bgs, was performed to evaluate the suitability of the deeper soils for drywells. While the results of our infiltration testing are applicable to the SP-SM layer encountered within the upper 25 feet bgs, we have performed a preliminary analysis of the deeper granular layers encountered in Boring B-2 to evaluate whether drywells would also be suitable. The results of this analysis are discussed later in this report.

BOREHOLE PERCOLATION TESTING

Kleinfelder performed a total of three infiltration tests in three 10-inch diameter boreholes (located in borings B-1, B-5, and B-7) in general accordance with the high flowrate procedure described in the Draft County of Los Angeles Administrative Manual GS200.1.

High Flowrate Percolation Testing

High flowrate percolation testing was performed between May 15 and May 17, 2016, in accordance with the County of Los Angeles Administrative Manual GS200.1 (LACoDPW, 2017). Water for the infiltration testing was obtained from a nearby fire hydrant and transported to the test hole with a 500-gallon water trailer and/or a 2,000-gallon water truck. Water was conveyed into each test boring using a combination of hose, solid pipe, and valves. During testing, Kleinfelder monitored the water flowrate and quantity into each test with an in-line magnetic-inductive flow meter.

During percolation testing, the height of the water above the bottom of the boring was measured through using an electronic water-level indicator. The water flow into the infiltration boring was adjusted throughout the test to maintain a relatively constant column of water approximately 15 feet bgs. The volume of water and flowrate was recorded at approximately 15-minute intervals throughout the test. Plots of the infiltration test data are presented in Figure 5, Infiltration Test Results – Cumulative Volume vs. Time and Figure 6, Infiltration Test Results – Flow Rate vs. Time. Results of the infiltration test are presented later in this report.

GEOTECHNICAL LABORATORY TESTING

Laboratory tests were performed on selected soil samples obtained from the borings. Soils tests performed included the following:

- Unit Weight and Moisture Content;
- Sieve Analysis;
- Hydrometer;
- Atterberg Limits;
- Direct Shear;
- R-Value Testing;
- Total Porosity;
- Hydraulic Conductivity; and
- Chemical – Corrosion Suite.

Laboratory testing was performed by AP Engineering and Testing, Inc. of Pomona, California. Results of the laboratory testing are presented in Appendix B.

ENVIRONMENTAL LABORATORY TESTING

Environmental samples were retrieved at approximately 5-foot intervals within the borings and from within the drums for waste disposal profiling. The environmental soil samples were labeled and transported under chain-of-custody (COC) protocol to Kleinfelder's State of California approved environmental laboratory sub-consultant, Envirochem, Inc. The soil samples were analyzed for total petroleum hydrocarbons (TPH) carbon chain using United States Environmental Protection Agency (USEPA) Method 8015B, volatile organic compounds (VOCs) using USEPA Method 8260B, and California Code of Regulations (CCR) Title 22 metals using USEPA Methods 6010B/7471A. In summary, the environmental testing results indicated the following:

- TPH (Test Method 8015B) – Motor oil range and diesel oil range hydrocarbons were detected in the samples from B-2 at 5 feet (36.2 to 51.8 mg/kg), B-4 at 5 feet (63.7 mg/kg), B-15 at 5 feet (13.0 mg/kg), and were not detected in other samples.
- Volatile Organic Compounds (VOCs) (Test Method 8260B) – Benzene was detected in samples from B-2 at 5 feet (0.006 mg/kg), B-2 at 35 feet (0.005 mg/kg), B-8 at 50 feet (0.008 mg/k), and was not detected in other samples. Trichloroethylene (TCE) was detected in samples from B-2 at 105 feet (0.016 mg/kg) and B-2 at 110 feet (0.020 mg/kg), and was not detected in other samples.
- California Metals (Test Methods 6010B/7471A) – test results indicated concentrations of detected metals are below their respective Total Threshold Limit Concentrations (TTLC) and below 10 times the Soluble Threshold Limit Concentrations (10X STCL).

The results of the environmental laboratory testing are presented in Appendix C, Environmental Laboratory Testing Results.

Soil Disposal

Kleinfelder provided soil sample analytical data to Mr. Larry Myers of the Los Angeles County Sanitation Districts to review for determination of applicability for soil represented by the analyzed soil samples to be disposed-of at a Los Angeles County landfill. Mr. Meyers indicated that based on the analytical results described above, most of the soil represented by the samples can be designated as "Unrestricted Reuse" for disposal at a Class III landfill. Mr. Myers indicated that the TPH-d result in sample B-2 @ 5 feet of 36 mg/kg exceeded the 10 mg/kg screening level for Unrestricted Use, but that soil represented by this sample could be disposed of as "Restricted Reuse" at a Class III landfill. A copy of the email communication between Kleinfelder and Mr. Larry Myers is included in Appendix F, Pertinent Correspondence at the end of this report.

Should the County prefer to not dispose of the soil at a Class III landfill, based on Kleinfelder's experience, soil represented by the soil samples analyzed can be disposed of as non-hazardous waste.

SITE INFILTRATION ANALYSIS

Kleinfelder analyzed data from the infiltration testing in general accordance with procedures presented in LACoDPW Guidelines (2014).

The measured flow rate was plotted with respect to time to determine the steady state, pre-adjusted flow rate of the tests. These plots are presented in Figures 5 and 6.

Table 1 summarizes the results of the High Flowrate Percolation Tests.

TABLE 1
High Flowrate Percolation Test Results

BORING	MEASURED PERCOLATION RATE (in/hr)	APPROXIMATE WATER DEPTH DURING TESTING (ft bgs*)	TOTAL DEPTH OF WELL BORING (ft bgs*)
B-1	23.3	15.0	21.5
B-5	75.7	15.6	21.5
B-7	33.5	15.0	21.5

* ft bgs denotes feet below ground surface

DATA EVALUATION

The field results of infiltration testing are indicative of short-term infiltration rates. To evaluate long-term infiltration rates, correction factors are applied. Measured infiltration rates must be reduced with correction factors to determine design values that will represent long-term performance of the proposed infiltration BMPs. Table 2 (LACoDPW, 2017) provides guidance for the range of values used for each factor.

TABLE 2
Correction Factors Applied to Measured Infiltration Rates

CATEGORY	PARTIAL CORRECTION FACTOR
Double-ring infiltrometer	$CF_t = 1$
Well permeameter	$= 1$
Boring percolation	$= 2$ (closed bottom) $= R_f$ from test procedure (open bottom)
Excavation percolation	$= R_f$ from test procedure
High flow-rate percolation	$= 3$
Infiltration Basin Percolation Test	$= 2$
Dry Well Percolation Test	$= 2$
Site variability, number of tests, and thoroughness of subsurface investigation	$CF_v = 1$ to 3
Long-term siltation, plugging and maintenance	$CF_s = 1$ to 3

Where:

- The test-specific correction factor (CF_t) accounts for the direction of flow during the test and calculations.
- The site variability correction factor (CF_v) accounts for site variability, number of tests performed, and thoroughness of subsurface investigation and is given as a range.

- The maintenance correction factor (CF_m) accounts for siltation plugging, and bio-buildup in the system. CF_m should be selected based on the specified levels of pre-treatment and maintenance for the proposed BMPs.
- The measured percolation rate is divided by the total correction factor to determine the design infiltration rate.

$$CF_T = CF_t \times CF_v \times CF_m$$

CONCLUSIONS AND RECOMMENDATIONS

For design (long-term) infiltration rate, Kleinfelder recommends the following correction factors shown in Table 3.

TABLE 3
Correction Factors

BORING	CF_t	CF_v	CF_m	CF_T
B-1	3	1.5	2	9
B-5	3	2	2	12
B-7	3	2	2	12

Where:

- The test-specific correction factor (CF_t) is based on test specific variables.
- The site variability correction factor (CF_v) varies given the differences in test results and soil conditions.
- The maintenance correction factor (CF_m) is based on unknowns associated with the proposed influent control (pre-treatment).

Conclusions and Recommendations

It is our professional opinion that the infiltration systems proposed are feasible provided the recommendations in this report are incorporated into the design and construction of the project. Based on our review of the 60% design plans provided to us by LACoDPW, we understand that infiltration galleries are proposed at three locations at Roosevelt Park (Underground Galleries #1, #2, and #3). The plans indicate that the proposed invert depths for the infiltration galleries will be approximately 10 to 15 feet bgs and will consist of a 5-foot tall chamber with two feet of permeable concrete at the bottom of the chamber. For Underground Galleries #1 and #2, the excavation will have sidewalls consisting of 12 inches of permeable concrete. At Infiltration Gallery #3, the infiltration system is proposed to consist of a precast infiltration module system with a width of approximately 8 feet.

Infiltration Galleries (Galleries #1, #2, and #3):

Using the total correction factors presented above, the resulting long-term infiltration rate for design of infiltration galleries at the following boring locations shown on Figures 2 and 3 are

presented in Table 4 below. Due to the variability of the subsurface soil, the measured percolations rate recommendations presented are only applicable for each gallery.

**TABLE 4
Recommended Infiltration Rates**

BORING	GALLERY NUMBER	MEASURED PERCOLATION RATE (in/hr)	CF _T	RECOMMENDED INFILTRATION RATE (in/hr)	APPROXIMATE BORING INFILTRATION ZONE TESTED (ft bgs*)
B-1	3	23.3	9.0	2.6	15 – 20
B-5	2	75.7	12.0	6.3	15.6 – 20
B-7	1	29.9	12.0	2.5	15 – 20

* ft bgs denotes feet below ground surface

The recommended infiltration rates are applicable to the approximate boring infiltration zone presented above.

Based on the results from our testing, our knowledge of the project, and our professional judgment, the following is a list of recommendations for development of the proposed project.

- The design should incorporate pre-treatment of influent water. Pre-treatment could consist of combinations of debris screens, sediment settling chambers, filters and/or other mechanisms. The maintenance correction factor should be re-evaluated based on the pre-treatment system selection.
- Maintenance of the facility should be performed annually or at more frequent intervals depending on frequency of storm events and infiltration system manufacturer’s guidelines. The maintenance schedule may also be selected based on volume and turbidity of influent water, and final design of the facility.
- The facility should be designed with an outlet/overflow system to discharge into the stormdrain.
- An operations and maintenance manual should be developed for the facility. The manual should include requirements for monitoring the infiltration rate and sediment build up. The operations and maintenance manual should also include procedures on how the system should be cleaned out and restored at each maintenance interval.

Drywell Feasibility at Underground Gallery #3 (Whitsett Avenue):

Based on our review of the subsurface conditions encountered in B-2, located along Whitsett Avenue near Underground Gallery #3, we have performed a preliminary analysis to evaluate if drywells may be feasible. As discussed below, drywells may be feasible along Whitsett Avenue and may be preferred due to construction considerations within the street. However, due to the limited subsurface investigation performed for drywell design, LACoDPW may consider additional field exploration. Additional field exploration consisting of deeper borings or drywell specific infiltration testing can help reduce the uncertainty and risk associated with the current limited investigation for drywells along Whitsett Avenue.

To evaluate the feasibility of drywells along Whitsett Avenue, we reviewed the boring logs, lab testing, and the infiltration test result at B-1. The subsurface stratigraphy at Boring B-2 (drilled to 111.5 feet bgs) shows three granular layers that appear conducive to infiltration. The depths of those layers are at approximately 15 to 28 feet, 43 to 50 feet, and 58 to 76 feet below ground surface (bgs). The layers appear to be conducive to infiltration based on the results of the infiltration testing at B-1 from approximately 15 to 20 feet bgs, and the gradation results from B-2 at depths of 45, 60, and 70 feet bgs.

Performance of drywells depends considerably on the continuity of the soils conducive to infiltration, such as the granular layers identified above. The infiltration rate correlations based on the Hazen equation are shown in Table 5 below.

**TABLE 5
Hazen Correlation to Grain Size Distribution**

BORING	DEPTH (ft bgs)	SOIL CLASSIFICATION	USCS	D10 (mm)	K (in/hr)
B-1	15	Silty Sand	SM	0.035	1.7
B-1	20	Poorly Graded Sand With Silt	SP-SM	0.08	9.1*
B-2	15	Silty Sand	SM	0.038	2.0
B-2	35	Silt with Sand	ML	0.002	0.0
B-2	45	Poorly Graded Sand	SP	0.15	31.9
B-2	60	Poorly Graded Sand With Silt	SP-SM	0.08	9.1
B-2	70	Well-Graded Sand	SW	0.23	75.0

* correlation in zone of infiltration for test performed in B-1

Based on the correlations presented in Table 5, the granular soils encountered at 45, 60, and 70 feet bgs in B-2 appear to have correlated infiltration rates equal to or greater than the results of the B-1 borehole percolation test at 15 to 20 feet bgs. Based on the results of our limited field exploration for drywells and the correlations above, a preliminary infiltration rate of 2.6 in/hr (39 gal/ft²/day) may be assumed for the granular soil layers encountered at 43 to 50 feet, and 58 to 76 feet bgs.

Lateral flow is a function of the height of water above the bottom of the well and depth of impervious/low permeability materials. At a distance, water can be assumed to approximate a 1H:1V slope from the top of the infiltrating water during the anticipated design-level infiltration period. This assumption is based on a laterally continuous soil profile where the depth to impervious an impervious layer is equal to the depth of the infiltration well (Zanger, 1953). Variance in soil lithology or unforeseen aquitards may cause the saturated water envelope to be flatter than 1H:1V. If seepage begins appearing on the slope face, seepage intercepting facilities such as a chimney drain or toe drain may become necessary. Additional field investigation and modeling would be required to fully predict the hydrogeological behavior of infiltrating water.

The basis of the USBR assumes saturated hemispherical shape develops under steady state seepage. Therefore measured infiltration rates are only valid if individual dry wells are spaced sufficiently such that they do not influence each other. The radius of the saturated hemispherical

shape (B) is given by the formula below; where h is the height of water above the bottom of the well and r is the radius of the well. Dry wells should be spaced no closer than $2B$.

$$B = \frac{2h}{\sqrt{\ln\left(\frac{h}{r} + \sqrt{\left(\frac{h}{r}\right)^2 + 1}\right) - 1}}$$

Settlement:

Kleinfelder has performed an analysis of the static settlement anticipated to occur above each infiltration gallery as a result of stormwater infiltration. Our analysis includes the excavation of the existing soils to and installation of an approximately 5 to 6-foot tall concrete infiltration module chamber for stormwater collection. We have assumed that the chamber will be completely filled with water for our analysis and that the existing soils will be used as cover above the chamber. Based on the results of our analysis, the pre-installation vertical stress and post-installation vertical stress are similar. As shown in our analysis presented in Appendix D, Settlement Calculations the anticipated settlement is negligible, and we do not anticipate the soils to exhibit surface settlement due to the infiltration of stormwater.

Groundwater Considerations:

As discussed previously, groundwater was encountered in boring B-2, at a depth of approximately 98 feet bgs, corresponding to an approximate elevation of 46 feet above mean sea level (MSL). Based on the encountered groundwater depth, we do not anticipate groundwater impacting the design or construction of the proposed infiltration galleries. Additionally, in accordance with Los Angeles County Guidelines (2017), we recommend that drywells (if proposed) have a design bottom elevation of at least 10 feet above the encountered groundwater depth, or 88 feet above MSL. According to the California Department of Conservation (1998), the historic shallow groundwater level is approximately 24 feet bgs. Because the galleries have a design invert elevation shallower than the historic high, we do not anticipate the historic high groundwater affecting the design or construction of the proposed infiltration galleries. However, the historic high groundwater may impact proposed drywell systems along Whitsett Avenue. Research regarding existing groundwater pumping in the area should also be performed to reduce the possibility of future rise in groundwater levels.

As presented above in the Environmental Laboratory Testing section, relatively low concentrations of environmental constituents were observed in our testing results. The number of detections is minimal (relative to the number of samples collected/sampled), their occurrence is sparse, and does not indicate a vertical continuum of impact.

Groundwater Mounding and Horizontal Flow:

Based on our review of the boring logs and results of our analysis, there is a potential for horizontal flow during operation of the proposed infiltration galleries. Generally, the poorly graded sand with silt layer (SP-SM) is underlain by silty sand to sandy silts. These underlying soils are generally restrictive to infiltration and may result in some groundwater mounding and horizontal flow.

Kleinfelder has performed groundwater modeling for Roosevelt Park as part of this investigation to evaluate the potential stormwater migration to a nearby environmentally impacted site located west of the park. Kleinfelder has prepared a separate report which discusses the potential horizontal flow and migration of stormwater during the 85th percentile, 24-hour event (Kleinfelder, 2017). This report is presented in Appendix E.

The results of the groundwater model indicate that significant changes in moisture content and degree of saturation occur near and below the infiltration basins but dissipate quickly over time. In order to avoid impact due to lateral stormwater migration, we recommend that nearby facilities have a minimum setback of 10 feet laterally in all directions from the edge of the infiltration galleries. It is our professional opinion, based on the results of our exploration and analysis, that structures offset more than 10 feet laterally from the proposed infiltration galleries will not be subject to static settlement or liquefaction induced settlement.

Based on the results of our exploration and analysis, it is our professional opinion that lateral migration of water will not adversely impact the residential community adjacent to the proposed infiltration gallery along Whitsett Avenue.

Liquefaction Potential:

Kleinfelder has evaluated the potential for the onsite soils to liquefy due to the soil becoming saturated during the design storm event from stormwater infiltration. We evaluated the deeper borings (B-2, B-6, and B-8) for liquefaction, assuming the soils underneath the bottom of the basin elevation become saturated.

Liquefaction analysis was performed in accordance with the guidelines described in Special Publication 117A (CGS, 2008), Guidelines for Evaluating and Mitigating Seismic Hazards in California, by the California Department of Conservation, California Geological Survey. A peak ground acceleration (PGA) of 0.69 in accordance with the 2013 California Building Code and an earthquake magnitude of 7.6 was used as the design-level seismic event for our liquefaction analyses. The earthquake magnitude was estimated using by performing a deaggregation from the USGS website using a 2% exceedance probability in 50 years. Table 6 presents the liquefaction-induced settlement at each evaluated boring location. Appendix D presents the liquefaction calculations for each gallery.

TABLE 6
Liquefaction Induced Settlement Results

BORING	LIQUEFACTION INDUCED SETTLEMENT (inches)	APPROXIMATE DEPTHS OF SOIL LAYERS THAT LIQUEFY
B-2	3.1	28-43 feet bgs
B-6	2.9	13.5-18.5 feet bgs 38-45.5 feet bgs 49-50 feet bgs
B-8	3.6	13.5-17 feet bgs 38-44 feet bgs 49-50 feet bgs

Based on the results of our groundwater modeling, it appears that the soils subject to saturation during the 85th percentile storm, and subject to liquefaction, are generally limited to the soils directly beneath the infiltration gallery footprint. Based on the results of our groundwater modeling (Kleinfelder, 2017), the soils beneath the infiltration galleries will remain saturated for a relatively short period of time, up to approximately 48 hours after the design storm. However, we recommend that the infiltration galleries be offset from all buildings and structures a minimum of 10 feet laterally in all directions.

Liquefaction Risk of Occurrence:

The risk of liquefaction occurring during the limited time that the soils will remain saturated (e.g., during and after the 85th percentile storm) is relatively low. The probability of occurrence for the 85th percentile storm is 50% in two years. The probability of exceedance of the design earthquake used in the liquefaction analysis is 2% in 50 years. Statistical analysis indicates that the probability of two random events occurring at the same time is the multiplication of the individual probability of both events. Therefore, the probability of the soil being saturated from an 85th percentile storm occurring during the design level earthquake is approximately 0.0000008%.

Lateral Earth Pressures and Shoring Design:

We understand that lateral earth pressures and soil strength are requested for temporary excavations during construction of the proposed diversion pipe and infiltration galleries. We have performed direct shear testing to evaluate the lateral earth pressures for the design of shoring. The recommendations below are based on a generalized friction angle of 30 degrees and a cohesion of 100 pounds per square foot (psf) for the project.

For the design of cantilevered shoring, an equivalent active fluid pressure of 40 pounds per cubic foot (pcf) may be used for level backfill. For the portion of the shoring system embedded into the soil, we recommend using an allowable passive pressure to be equivalent to a fluid pressure of 300 pcf with a maximum resistance value of 2,500 psf. All soldier piles should extend to a sufficient depth below the excavation bottom to provide the required lateral resistance. We recommend that the required embedment depths be calculated based on the principles of force and moment equilibrium. To account for three-dimensional effects, the passive resistance may be assumed to act on an area approximately 1.5 times the width of the embedded portion of the pile, provided adjacent piles are spaced at least three pile diameters, center-to-center. While not anticipated to

impact the project, the shoring should be designed for hydrostatic water pressure if groundwater is encountered.

Lateral surcharge loads (e.g., traffic, structures, etc.) located within a 1½:1 (H:V) plane drawn upward from the base of the excavation should be added to the lateral earth pressures. The lateral contribution of a uniform surcharge load located immediately behind the wall may be calculated by multiplying the surcharge by 0.33. Lateral load contributions of surcharges located at a distance behind the shored wall may be provided once the load configurations and layouts are known. As a minimum, a 2-foot equivalent soil surcharge (240 psf) is recommended to account for traffic and nominal construction loads.

For the design of other types of shoring that are not cantilevered and do not deflect under loading, we recommend using an equivalent at-rest fluid pressure fluid pressure of 60 pcf.

Additional Considerations:

This study was performed and this report was prepared to support the design and construction of the proposed infiltration systems at Roosevelt Park. Our scope included evaluating the capacity of site soils to infiltrate stormwater and providing geotechnical engineering parameters for the design of temporary shoring for the proposed excavations. If the design changes significantly, such as the shape, size, or location of infiltration galleries, or the use of alternate infiltration devices, such as drywells along Whitsett Avenue, additional exploration may be prudent. All excavations for infiltrating water should be performed from the ground surface and placing heavy equipment in the bottoms of excavations should be avoided as this will potentially compact the soils. Subsurface exploration yielded soils prone to caving. The contractor should consider methods to control caving soils during construction. Based on the subsurface conditions, linear / rectangular excavations would likely require temporary shoring whereas drilled excavations (size dependent) could be performed using temporary casing.

Appendix E presents the results of our groundwater modeling for the subject park and presents conclusions regarding the mobilization of subsurface environmental constituents for known impacted facility located to the west of the park. Based on our review of the environmental data for the samples obtained within the park during this investigation, the disposal of excavated soils would be considered non-hazardous waste, and mobilization of environmental constituents from within the park itself is considered low.

LIMITATIONS

This report has been prepared for the exclusive use of Los Angeles County Department of Public Works for specific application to Roosevelt Park. This report summarizes our evaluation only of the capacity of soils to infiltrate water. The findings, conclusions and recommendations presented in this report were prepared in a manner consistent with the standards of care and skill ordinarily exercised by members of our profession practicing under similar conditions in the geographic vicinity and at the time the services will be performed. No warranty or guarantee, express or implied, is made.

Our field infiltration program for this study was based on the information provided to us by the client, our online research, and performance of 15 soil borings. Our site infiltration analysis was based on testing performed in three borings, B-1, B-5, and B-7. This report may be used only by the client and only for the purposes stated, within a reasonable time from its issuance, but in no

event later than one year from the date of the report. Land use, site conditions (both on site and off site) or other factors may change over time, and additional work may be required with the passage of time. Any party, other than the client who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of this report and the nature of the new project, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party and the client agrees to defend, indemnify, and hold harmless Kleinfelder from any claims or liability associated with such unauthorized use or non-compliance.

This report, and any future addenda or reports regarding this site, may be made available to bidders to supply them with only the data contained in the report regarding subsurface conditions and laboratory test results at the point and time noted. Bidders may not rely on interpretations, opinions, recommendations, or conclusions contained in the report. Because of the limited nature of any subsurface study, the contractor may encounter conditions during construction which differ from those presented in this report. In such event, the contractor should promptly notify the owner so that Kleinfelder's geotechnical engineer can be contacted to confirm those conditions. We recommend the contractor describe the nature and extent of the differing conditions in writing and that the construction contract include provisions for dealing with differing conditions.

CLOSING

We appreciate the opportunity to be of professional service to you on this project. If you have any questions or require additional information, please do not hesitate to contact the undersigned at 951.801.3681.

Sincerely,

KLEINFELDER



Zachary S. Jarecki, PE
Staff Engineer



Jeffery D. Waller, PE, GE
Senior Geotechnical Engineer



FIGURES

- 1 Site Vicinity Map
- 2 Exploration Overview Map
- 3A Boring Location Map
- 3B Boring Location Map
- 4 Nested Well Construction Diagram
- 5 Infiltration Test Results - Cumulative Volume Vs Time
- 6 Infiltration Test Results - Flow Rate Vs Time

APPENDICES

- A Field Exploration
- B Geotechnical Laboratory Testing
- C Environmental Laboratory Testing
- D Calculations
- E Pollutant Mobilization Report
- F Pertinent Correspondence

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FIGURES

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ATTACHED IMAGES:
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LONG BEACH, CA

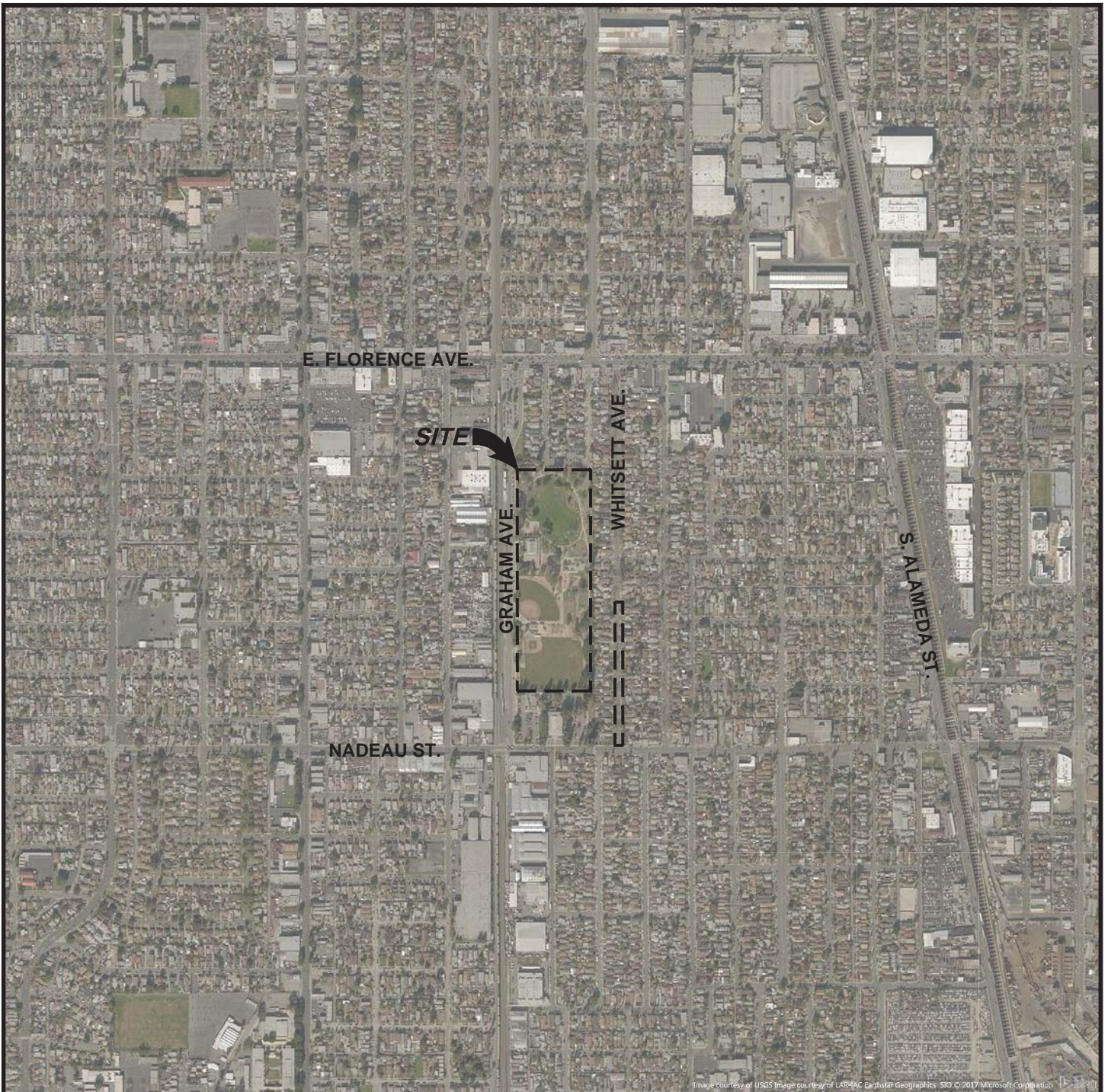
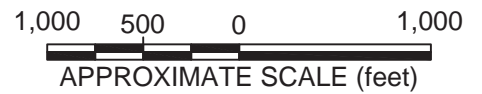


Image courtesy of USGS Image courtesy of LAR-IAC Earthstar Geographics SIO © 2017 Microsoft Corporation


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EXPLANATION

--- APPROXIMATE PROJECT LOCATIONS



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	PROJECT NO. 20180388	SITE VICINITY MAP	FIGURE 1
	DRAWN: 06/2017		
	DRAWN BY: DMF	ROOSEVELT PARK INFILTRATION STUDY 7600 GRAHAM AVENUE LOS ANGELES, CALIFORNIA	
	CHECKED BY: ZJ		
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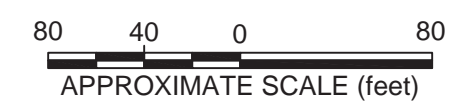
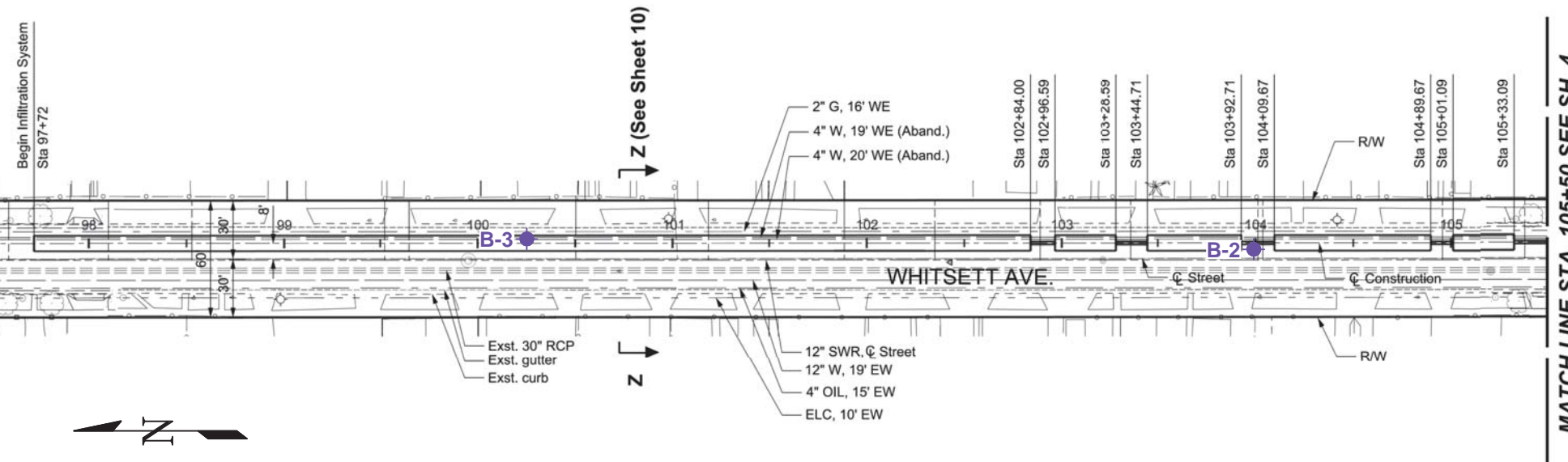
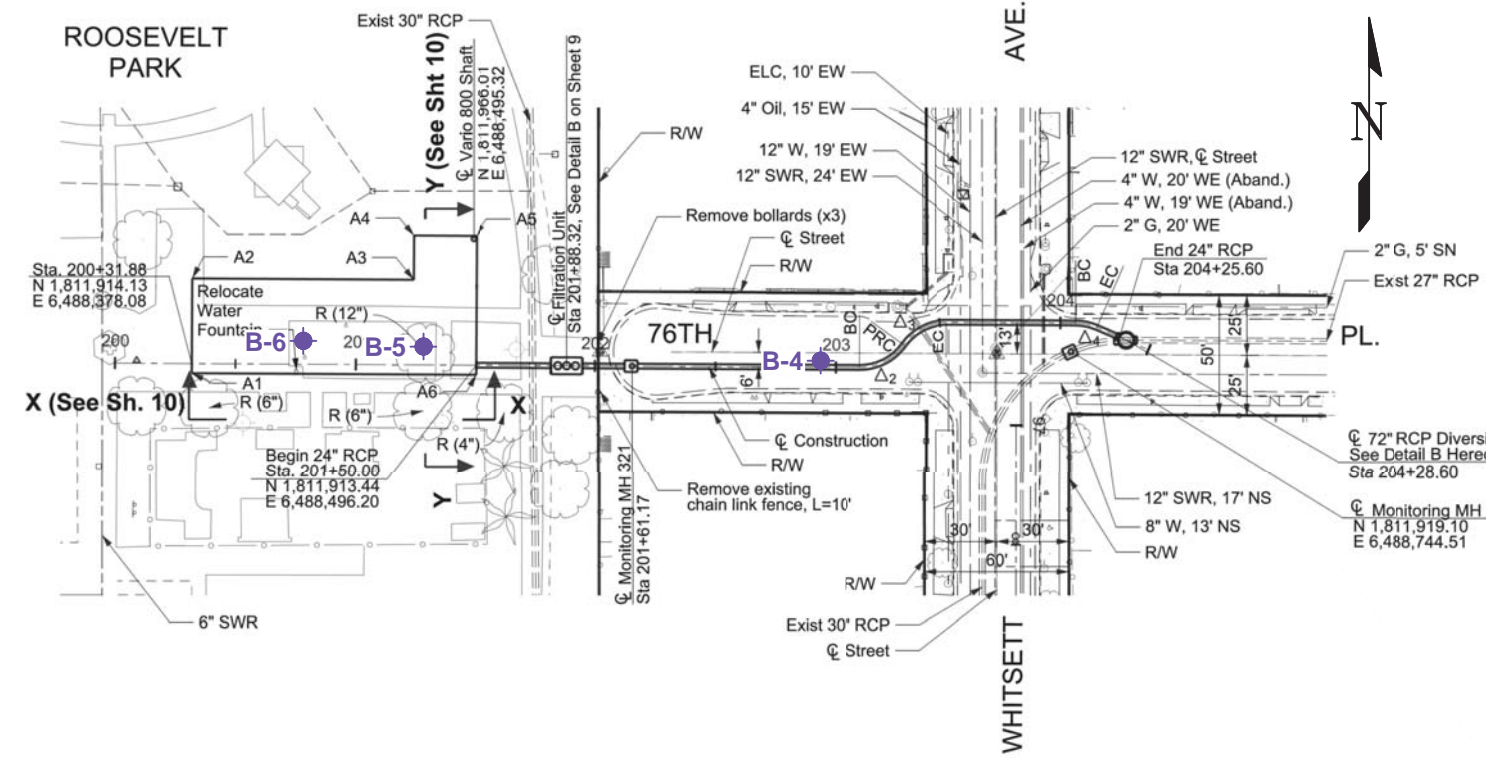
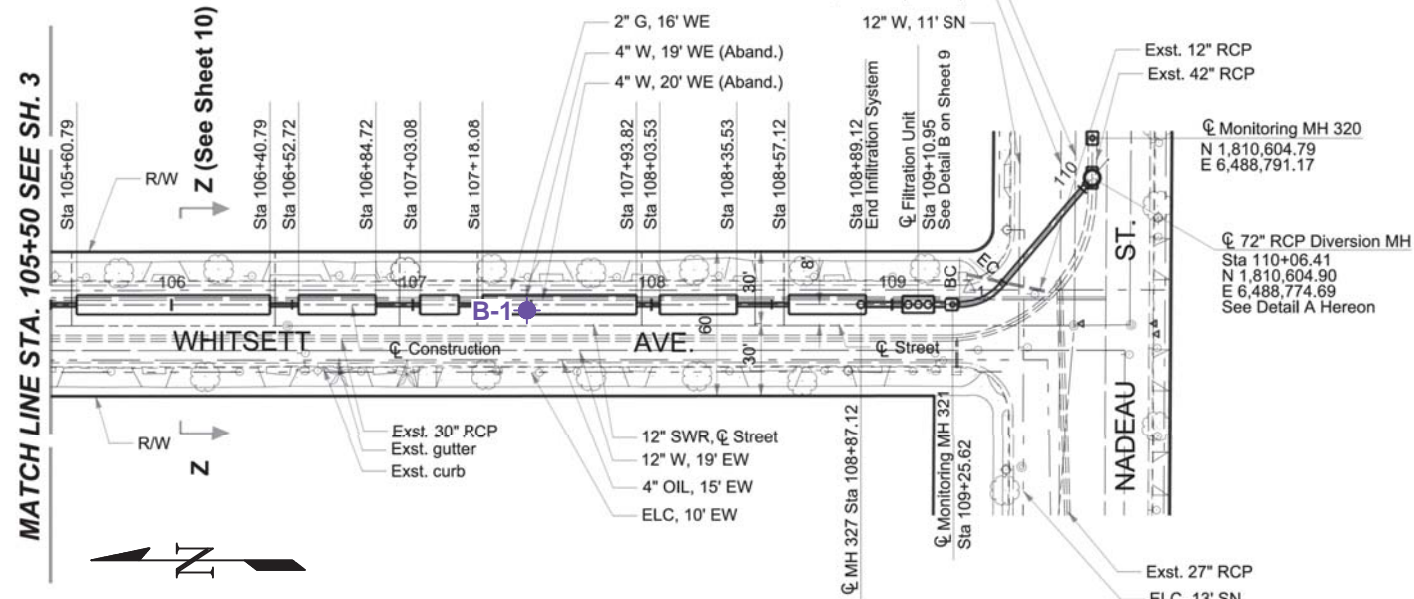
- EXPLANATION**
- B-15** ◆ APPROXIMATE BORING LOCATION (KLEINFELDER, 2017)
 - MW-3** ◆ APPROXIMATE TEMPORARY OBSERVATION WELL LOCATION (KLEINFELDER, 2014)
 - B-2** ◆ APPROXIMATE TEMPORARY OBSERVATION WELL LOCATION (KLEINFELDER, 2014)
 - B-2A** ✕ APPROXIMATE PILOT INFILTRATION TEST LOCATION (KLEINFELDER, 2014)
 - CPT-5** ▲ APPROXIMATE CPT LOCATION (LACoDPW, 2013)
 - - -** PROPOSED INFILTRATION GALLERY LOCATION

SOURCE: Image courtesy of LAR-IAC Earthstar Geographics SIO



PROJECT NO.	20180388
DRAWN:	06/2017
DRAWN BY:	MRG
CHECKED BY:	ZJ
FILE NAME:	20180388_F2.dwg

EXPLORATION OVERVIEW MAP	
ROOSEVELT PARK INFILTRATION STUDY 7600 GRAHAM AVENUE LOS ANGELES, CALIFORNIA	



EXPLANATION
B-15 APPROXIMATE BORING LOCATION (KLEINFELDER, 2017)

REFERENCE: BASE MAP PROVIDED BY COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, UNDATED.

PROJECT NO.	20180388
DRAWN:	06/2017
DRAWN BY:	MRG
CHECKED BY:	ZJ
FILE NAME:	20180388_F3.dwg

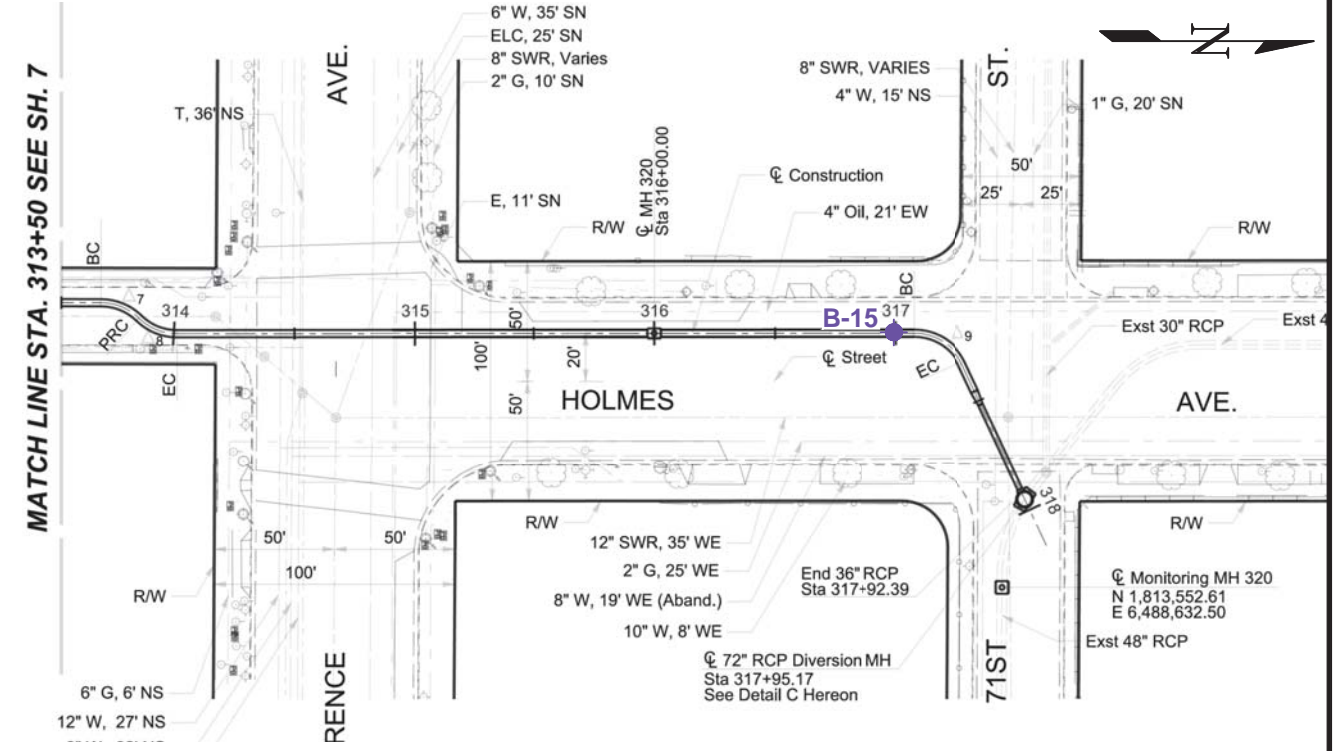
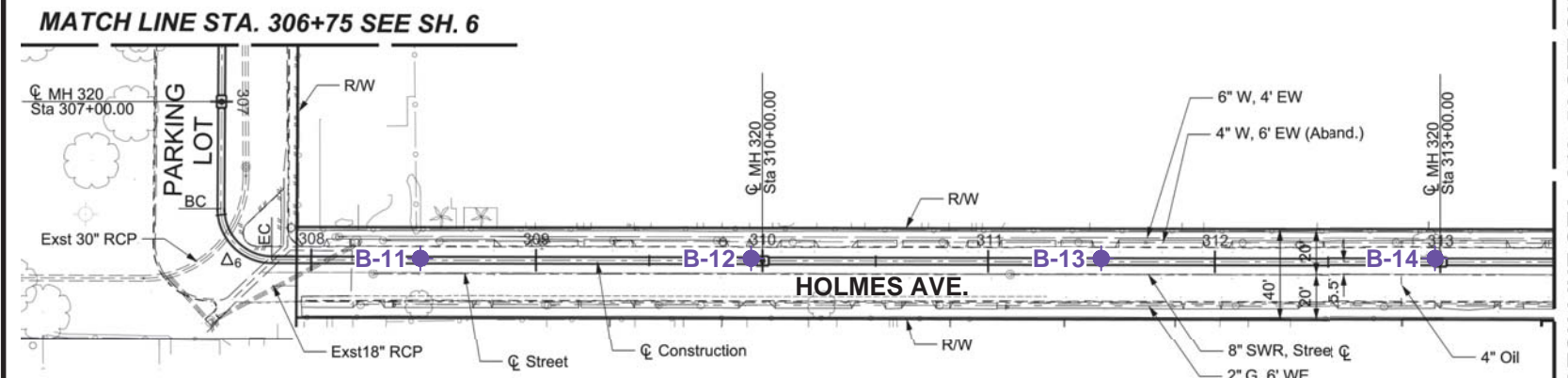
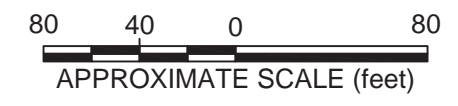
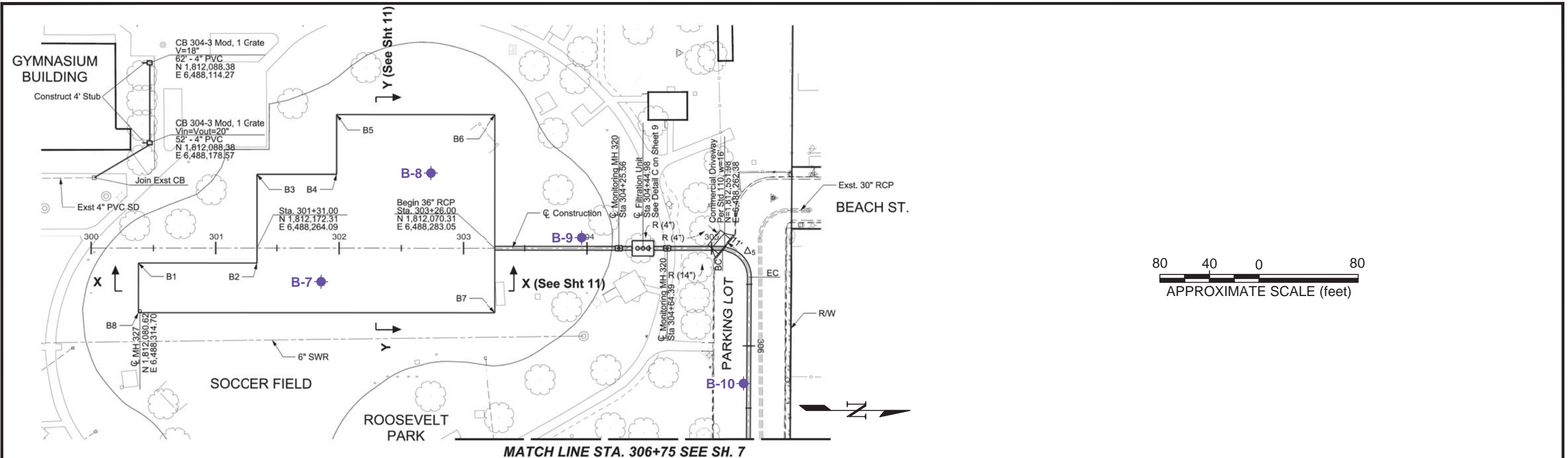
BORING LOCATION MAP		FIGURE
Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California		3A

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PLOTTED: 08 Jun 2017, 5:18pm, DFahney

CAD FILE: U:\Projects\CADD\CADD 2018\201803888_LAYOUT: 3B

ATTACHED IMAGES:
ATTACHED XREFS:
RIVERSIDE, CA



EXPLANATION
B-15 APPROXIMATE BORING LOCATION (KLEINFELDER, 2017)

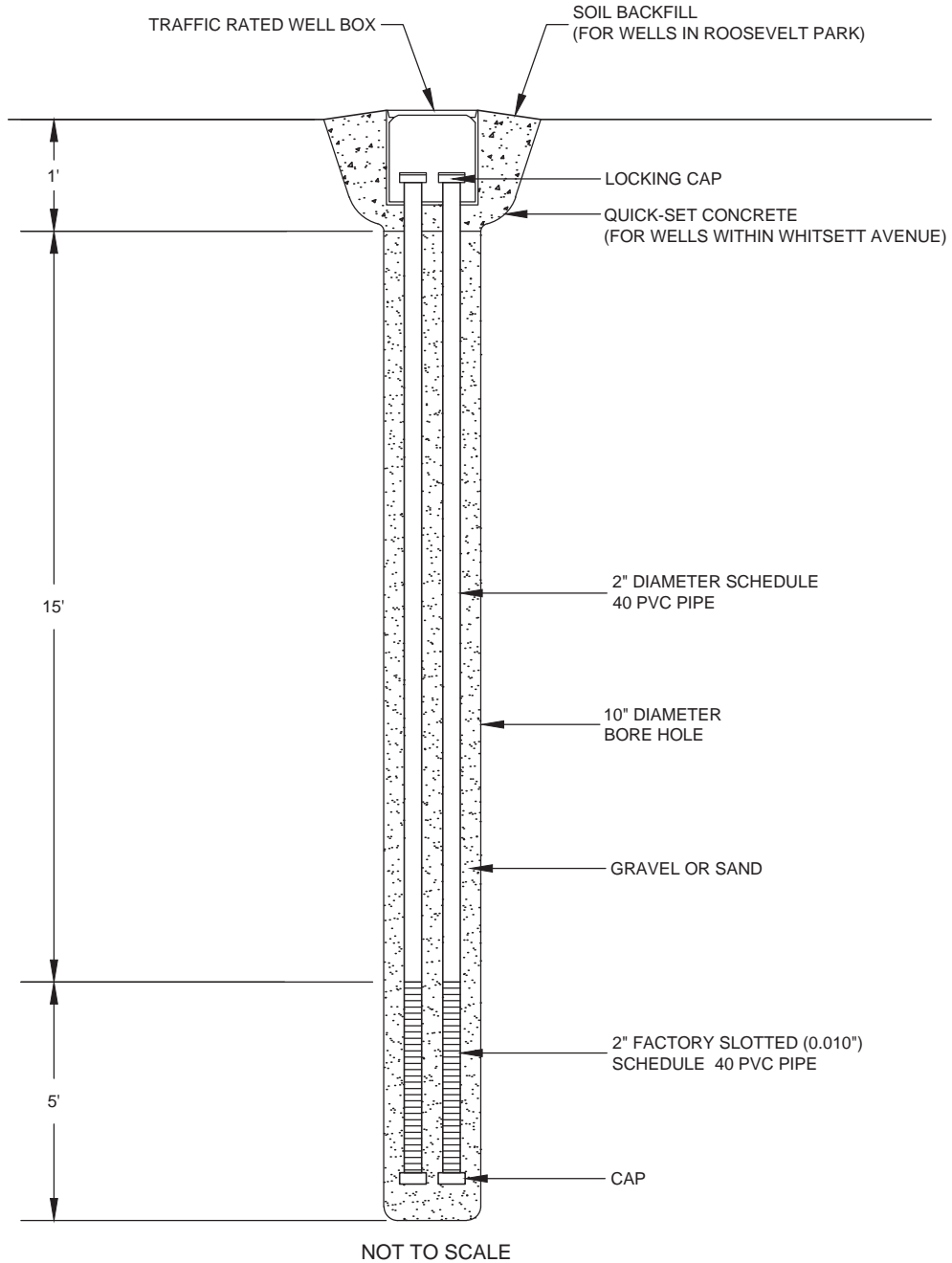
REFERENCE: BASE MAP PROVIDED BY COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, UNDATED.



PROJECT NO.	20180388	BORING LOCATION MAP	FIGURE
DRAWN:	06/2017		
DRAWN BY:	MRG	ROOSEVELT PARK INFILTRATION STUDY 7600 GRAHAM AVENUE LOS ANGELES, CALIFORNIA	3B
CHECKED BY:	ZJ		
FILE NAME:	20180388_F3.dwg		

PLOTTED: 15 Jun 2017, 4:57pm, DFahmney

CAD FILE: U:\Projects\CADD\CADD 2018\20180388\ LAYOUT: 4



NOT TO SCALE

NOTES:

- 1) PVC = POLYVINYL CHLORIDE WITH THREADED JOINTS
- 2) TRAFFIC RATED WELL BOX TO BE USED FOR WELLS IN STREETS ONLY.

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ATTACHED IMAGES:
ATTACHED XREFS:
RIVERSIDE, CA



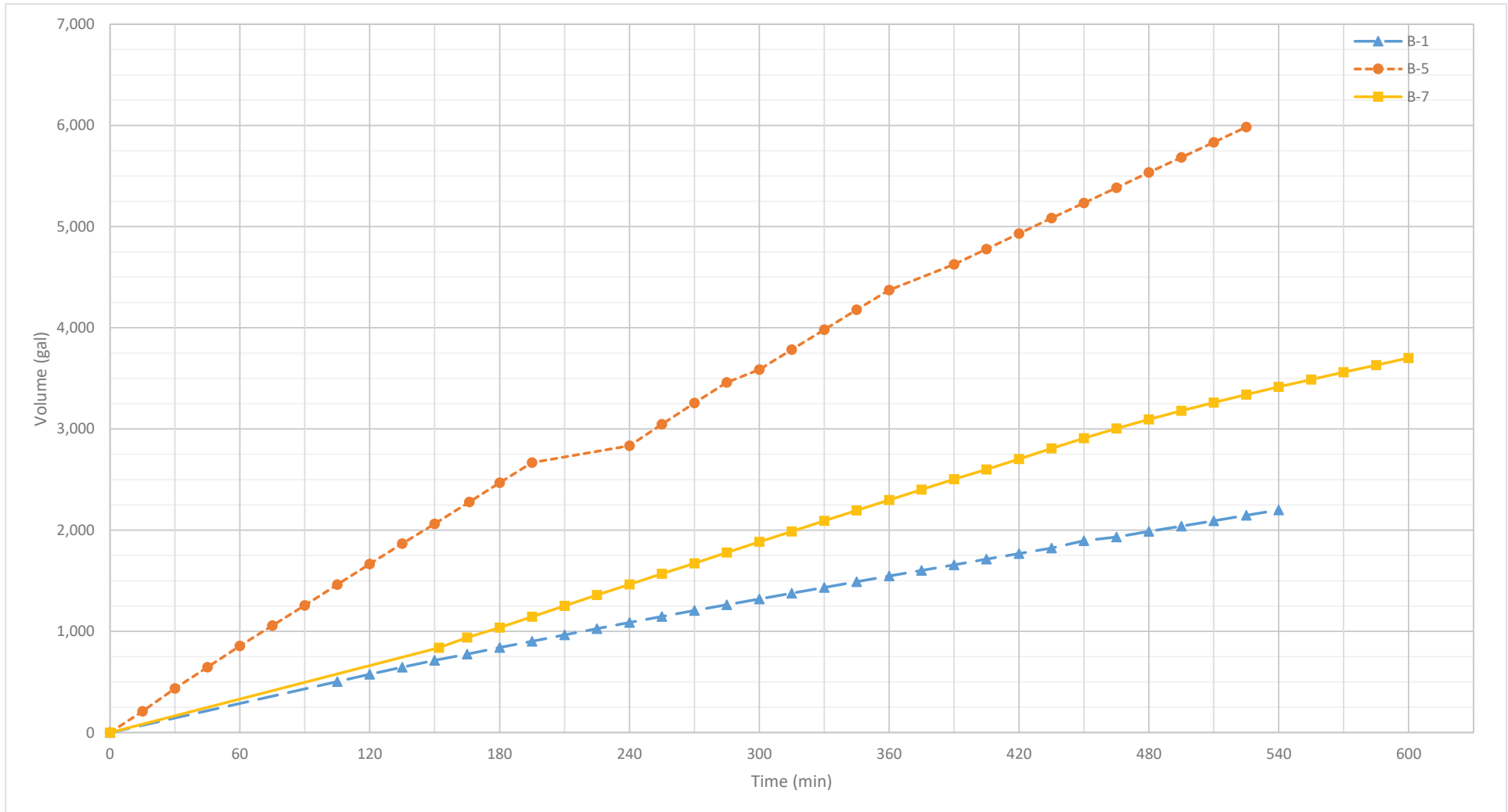
PROJECT:	20180388
DRAWN:	06/2017
DRAWN BY:	DMF
CHECKED BY:	ZJ
FILE NAME:	20180388_WCD.dwg

NESTED WELL
CONSTRUCTION DIAGRAM

ROOSEVELT PARK INFILTRATION STUDY
7600 GRAHAM AVENUE
LOS ANGELES, CALIFORNIA

FIGURE

4



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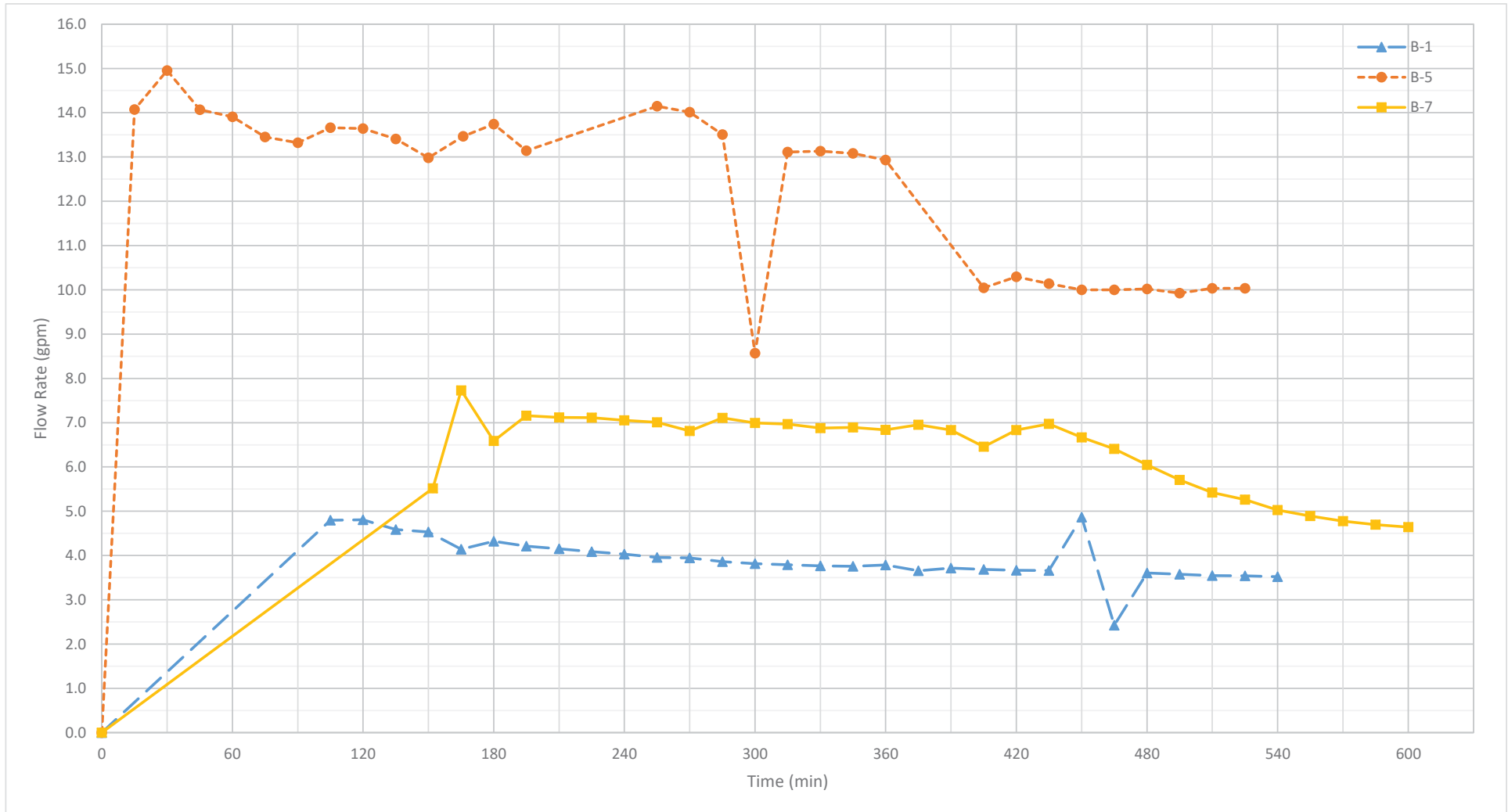
PROJECT NO. 20180388.001A
 DRAWN: 05/2017
 DRAWN BY: NR
 CHECKED BY: JW
 FILE NAME:
 ANALYSIS FIGURES

INFILTRATION TEST RESULTS
 CUMULATIVE VOLUME VS TIME

Roosevelt Park Infiltration Study
 7600 Graham Avenue
 Los Angeles, California

FIGURE

5



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PROJECT NO.	20180388.001A
DRAWN:	05/2017
DRAWN BY:	NR
CHECKED BY:	JW
FILE NAME:	ANALYSIS FIGURES

INFILTRATION TEST RESULTS
FLOW RATE VS TIME

Roosevelt Park Infiltration Study
7600 Graham Avenue
Los Angeles, California

FIGURE

6

APPENDIX A FIELD EXPLORATION

SAMPLER AND DRILLING METHOD GRAPHICS

	BULK / GRAB / BAG SAMPLE
	MODIFIED CALIFORNIA SAMPLER (2 or 2-1/2 in. (50.8 or 63.5 mm.) outer diameter)
	CALIFORNIA SAMPLER (3 in. (76.2 mm.) outer diameter)
	STANDARD PENETRATION SPLIT SPOON SAMPLER (2 in. (50.8 mm.) outer diameter and 1-3/8 in. (34.9 mm.) inner diameter)
	HQ CORE SAMPLE (2.500 in. (63.5 mm.) core diameter)
	SHELBY TUBE SAMPLER
	HOLLOW STEM AUGER
	SOLID STEM AUGER
	WASH BORING
	SONIC CONTINUOUS SAMPLER

GROUND WATER GRAPHICS

	WATER LEVEL (level where first observed)
	WATER LEVEL (level after exploration completion)
	WATER LEVEL (additional levels after exploration)
	OBSERVED SEEPAGE

NOTES

- The report and graphics key are an integral part of these logs. All data and interpretations in this log are subject to the explanations and limitations stated in the report.
- Lines separating strata on the logs represent approximate boundaries only. Actual transitions may be gradual or differ from those shown.
- No warranty is provided as to the continuity of soil or rock conditions between individual sample locations.
- Logs represent general soil or rock conditions observed at the point of exploration on the date indicated.
- In general, Unified Soil Classification System designations presented on the logs were based on visual classification in the field and were modified where appropriate based on gradation and index property testing.
- Fine grained soils that plot within the hatched area on the Plasticity Chart, and coarse grained soils with between 5% and 12% passing the No. 200 sieve require dual USCS symbols, i.e., GW-GM, GP-GM, GW-GC, GP-GC, GC-GM, SW-SM, SP-SM, SW-SC, SC-SM.
- If sampler is not able to be driven at least 6 inches then 50/X indicates number of blows required to drive the identified sampler X inches with a 140 pound hammer falling 30 inches.

ABBREVIATIONS

WOH - Weight of Hammer
WOR - Weight of Rod

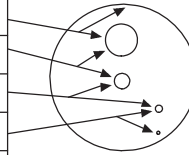
UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487)

GRAVELS (More than half of coarse fraction is larger than the #4 sieve)	CLEAN GRAVEL WITH <5% FINES	Cu ≥ 4 and 1 ≤ Cc ≤ 3		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
		Cu < 4 and/or 1 > Cc > 3		GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
	GRAVELS WITH 5% TO 12% FINES	Cu ≥ 4 and 1 ≤ Cc ≤ 3		GW-GM	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES	
				GW-GC	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES	
		Cu < 4 and/or 1 > Cc > 3		GP-GM	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES	
				GP-GC	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES	
	GRAVELS WITH > 12% FINES			GM	SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES	
				GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES	
				GC-GM	CLAYEY GRAVELS, GRAVEL-SAND-CLAY-SILT MIXTURES	
	COARSE GRAINED SOILS (More than half of coarse fraction is smaller than the #4 sieve)	CLEAN SANDS WITH <5% FINES	Cu ≥ 6 and 1 ≤ Cc ≤ 3		SW	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
			Cu < 6 and/or 1 > Cc > 3		SP	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
		SANDS WITH 5% TO 12% FINES	Cu ≥ 6 and 1 ≤ Cc ≤ 3		SW-SM	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES
				SW-SC	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES	
Cu < 6 and/or 1 > Cc > 3				SP-SM	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES	
				SP-SC	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES	
SANDS WITH > 12% FINES				SM	SILTY SANDS, SAND-GRAVEL-SILT MIXTURES	
				SC	CLAYEY SANDS, SAND-GRAVEL-CLAY MIXTURES	
				SC-SM	CLAYEY SANDS, SAND-SILT-CLAY MIXTURES	
FINE GRAINED SOILS (More than half of material is smaller than the #200 sieve)		SILTS AND CLAYS (Liquid Limit less than 50)		ML	INORGANIC SILTS AND VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, SILTS WITH SLIGHT PLASTICITY	
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
				CL-ML	INORGANIC CLAYS-SILTS OF LOW PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
	SILTS AND CLAYS (Liquid Limit greater than 50)		OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY		
			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILT		
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS		
		OH	ORGANIC CLAYS & ORGANIC SILTS OF MEDIUM-TO-HIGH PLASTICITY			

 KLEINFELDER <i>Bright People. Right Solutions.</i>	PROJECT NO.: 20180388	GRAPHICS KEY Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ CHECKED BY: JW DATE: 5/24/2017 REVISED: 6/13/2017		A-1

GRAIN SIZE

DESCRIPTION	SIEVE SIZE	GRAIN SIZE	APPROXIMATE SIZE
Boulders	>12 in. (304.8 mm.)	>12 in. (304.8 mm.)	Larger than basketball-sized
Cobbles	3 - 12 in. (76.2 - 304.8 mm.)	3 - 12 in. (76.2 - 304.8 mm.)	Fist-sized to basketball-sized
Gravel	coarse 3/4 - 3 in. (19 - 76.2 mm.)	3/4 - 3 in. (19 - 76.2 mm.)	Thumb-sized to fist-sized
	fine #4 - 3/4 in. (#4 - 19 mm.)	0.19 - 0.75 in. (4.8 - 19 mm.)	Pea-sized to thumb-sized
Sand	coarse #10 - #4	0.079 - 0.19 in. (2 - 4.9 mm.)	Rock salt-sized to pea-sized
	medium #40 - #10	0.017 - 0.079 in. (0.43 - 2 mm.)	Sugar-sized to rock salt-sized
	fine #200 - #40	0.0029 - 0.017 in. (0.07 - 0.43 mm.)	Flour-sized to sugar-sized
Fines	Passing #200	<0.0029 in. (<0.07 mm.)	Flour-sized and smaller



SECONDARY CONSTITUENT

Term of Use	AMOUNT	
	Secondary Constituent is Fine Grained	Secondary Constituent is Coarse Grained
Trace	<5%	<15%
With	≥5 to <15%	≥15 to <30%
Modifier	≥15%	≥30%

MOISTURE CONTENT

DESCRIPTION	FIELD TEST
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

CEMENTATION

DESCRIPTION	FIELD TEST
Weakly	Crumbles or breaks with handling or slight finger pressure
Moderately	Crumbles or breaks with considerable finger pressure
Strongly	Will not crumble or break with finger pressure

CONSISTENCY - FINE-GRAINED SOIL

CONSISTENCY	SPT - N ₆₀ (# blows / ft)	Pocket Pen (tsf)	UNCONFINED COMPRESSIVE STRENGTH (Q _u)(psf)	VISUAL / MANUAL CRITERIA
Very Soft	<2	PP < 0.25	<500	Thumb will penetrate more than 1 inch (25 mm). Extrudes between fingers when squeezed.
Soft	2 - 4	0.25 ≤ PP <0.5	500 - 1000	Thumb will penetrate soil about 1 inch (25 mm). Remolded by light finger pressure.
Medium Stiff	4 - 8	0.5 ≤ PP <1	1000 - 2000	Thumb will penetrate soil about 1/4 inch (6 mm). Remolded by strong finger pressure.
Stiff	8 - 15	1 ≤ PP <2	2000 - 4000	Can be imprinted with considerable pressure from thumb.
Very Stiff	15 - 30	2 ≤ PP <4	4000 - 8000	Thumb will not indent soil but readily indented with thumbnail.
Hard	>30	4 ≤ PP	>8000	Thumbnail will not indent soil.

REACTION WITH HYDROCHLORIC ACID

DESCRIPTION	FIELD TEST
None	No visible reaction
Weak	Some reaction, with bubbles forming slowly
Strong	Violent reaction, with bubbles forming immediately

FROM TERZAGHI AND PECK, 1948; LAMBE AND WHITMAN, 1969; FHWA, 2002; AND ASTM D2488

APPARENT / RELATIVE DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPT-N ₆₀ (# blows/ft)	MODIFIED CA SAMPLER (# blows/ft)	CALIFORNIA SAMPLER (# blows/ft)	RELATIVE DENSITY (%)
Very Loose	<4	<4	<5	0 - 15
Loose	4 - 10	5 - 12	5 - 15	15 - 35
Medium Dense	10 - 30	12 - 35	15 - 40	35 - 65
Dense	30 - 50	35 - 60	40 - 70	65 - 85
Very Dense	>50	>60	>70	85 - 100

FROM TERZAGHI AND PECK, 1948

STRUCTURE

DESCRIPTION	CRITERIA
Stratified	Alternating layers of varying material or color with layers at least 1/4-in. thick, note thickness.
Laminated	Alternating layers of varying material or color with the layer less than 1/4-in. thick, note thickness.
Fissured	Breaks along definite planes of fracture with little resistance to fracturing.
Slickensided	Fracture planes appear polished or glossy, sometimes striated.
Blocky	Cohesive soil that can be broken down into small angular lumps which resist further breakdown.
Lensed	Inclusion of small pockets of different soils, such as small lenses of sand scattered through a mass of clay; note thickness.

PLASTICITY

DESCRIPTION	LL	FIELD TEST
Non-plastic	NP	A 1/8-in. (3 mm.) thread cannot be rolled at any water content.
Low (L)	< 30	The thread can barely be rolled and the lump or thread cannot be formed when drier than the plastic limit.
Medium (M)	30 - 50	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump or thread crumbles when drier than the plastic limit.
High (H)	> 50	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump or thread can be formed without crumbling when drier than the plastic limit.

ANGULARITY

DESCRIPTION	CRITERIA
Angular	Particles have sharp edges and relatively plane sides with unpolished surfaces.
Subangular	Particles are similar to angular description but have rounded edges.
Subrounded	Particles have nearly plane sides but have well-rounded corners and edges.
Rounded	Particles have smoothly curved sides and no edges.



PROJECT NO.: 20180388
 DRAWN BY: ZJ
 CHECKED BY: JW
 DATE: 5/24/2017
 REVISED: 6/13/2017

SOIL DESCRIPTION KEY

Roosevelt Park Infiltration Study
 7600 Graham Avenue
 Los Angeles, California

FIGURE

A-2

PLOTTED: 06/16/2017 01:54 PM BY: ZJarecki


Date Begin - End: 5/11/2017 - 5/18/2017 **Drilling Company:** Cal Pac Drilling **BORING LOG B-1**
Logged By: Z. Jarecki **Drill Crew:** Jeff, Travis
Hor.-Vert. Datum: WGS84 - MSL **Drilling Equipment:** B61 Mobile **Hammer Type - Drop:** 140 lb. Auto - 30 in.
Plunge: -90 degrees **Drilling Method:** Hollow Stem Auger
Weather: Sunny, warm **Boring Diameter:** 10 in. O.D.

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks	
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)
			Latitude: 33.96805° N Longitude: -118.24061° E Approximate Ground Surface Elevation (ft.): 143 Surface Condition: Asphalt												
			--asphalt approximately 4.5 inches over 5 inches of aggregate base												
			Silty SAND (SM): olive brown, moist, fine-grained sand	1											Hand auger to 5 feet below ground surface. R-Value= 60
	140		Sandy SILT (ML): low plasticity, olive brown, moist, fine-grained sand												
	5		Silty SAND (SM): pale olive, moist, medium dense, fine-grained sand, trace iron oxide staining	2		BC=3 5 8			6.3	91.4					
	135		Sandy SILT (ML): low plasticity, dark olive brown, moist, medium stiff, fine-grained sand, micaceous	3		BC=3 4 7			16.2	101.6					Direct Shear
	130		Silty SAND (SM): olive, moist, medium dense, fine-grained sand, decrease in fines content with depth	4		BC=6 9 17					100	23			Total Porosity
	125		Poorly graded SAND with Silt (SP-SM): olive, moist, dense, fine-grained sand	5		BC=8 17 30			3.0	106.0	100	9.0			
	120		The percolation test hole was terminated at approximately 21.5 ft. below ground surface. The boring was backfilled as a percolation test hole on May 11, 2017. The percolation test hole was overdrilled and backfilled with bentonite chips and patched at the surface with quickset concrete dyed black on May 18, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.								
	25														
	115														
	30														
	110														

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A

GINT FILE: Kf_gint_master_2017
GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]

	PROJECT NO.: 20180388	BORING LOG B-1 Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ		A-3
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 1 of 1

Date Begin - End: 5/15/2017 **Drilling Company:** Cal Pac Drilling
Logged By: Z. Jarecki **Drill Crew:** Jeff, Andy
Hor.-Vert. Datum: WGS84 - MSL **Drilling Equipment:** B61 Mobile **Hammer Type - Drop:** 140 lb. Auto - 30 in.
Plunge: -90 degrees **Drilling Method:** Hollow Stem Auger
Weather: Cool, partly cloudy **Boring Diameter:** 6.5 in. O.D.

BORING LOG B-2

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS									
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/Remarks	
			Latitude: 33.96902° N Longitude: -118.24059° E Approximate Ground Surface Elevation (ft.): 144 Surface Condition: Asphalt													
			--asphalt approximately 4.5 inches thick over 4 inches of aggregate base													
			Silty SAND (SM): olive gray, moist, fine-grained sand													
140	5		SILT with Sand (ML): low plasticity, olive to pale olive, dry to moist, soft, fine-grained sand	1		BC=2 5 7										
			Silty SAND (SM): olive brown, moist, medium dense, fine- to medium-grained sand													
135	10		Sandy SILT (ML): low plasticity, olive brown, moist, stiff, fine-grained sand, micaceous	2		BC=4 5 10			11.2	106.8						
			Silty SAND (SM): olive brown, moist, medium stiff, fine-grained sand													
130	15		Poorly graded SAND with Silt (SP-SM): olive to pale olive, moist, medium dense, fine-grained sand, decrease in fines content with depth	3		BC=8 12 22					100	16				
			light brownish gray, dry, dense													
125	20			4		BC=8 24 40										
120	25			5		BC=12 17 19										
115	30		SILT with Sand (ML): low plasticity, olive brown, moist, stiff, fine-grained sand, micaceous	6		BC=3 6 11										
110																

Hand auger to 5.5 feet below ground surface.

PLOTTED: 06/16/2017 01:54 PM BY: ZJarecki
 PROJECT NUMBER: 20180388.001A
 OFFICE FILTER: RIVERSIDE
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB
 GINT FILE: KLF_gint_master_2017
 GINT FILE: KLF_STANDARD_GINT_LIBRARY_2017.GLB
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB
 GINT FILE: KLF_gint_master_2017



PROJECT NO.: 20180388
 DRAWN BY: ZJ
 CHECKED BY: JW
 DATE: 5/24/2017
 REVISED: 6/13/2017

BORING LOG B-2

Roosevelt Park Infiltration Study
 7600 Graham Avenue
 Los Angeles, California

FIGURE

A-4

PLOTTED: 06/16/2017 01:54 PM BY: ZJarecki

Date Begin - End: 5/15/2017 **Drilling Company:** Cal Pac Drilling
Logged By: Z. Jarecki **Drill Crew:** Jeff, Andy
Hor.-Vert. Datum: WGS84 - MSL **Drilling Equipment:** B61 Mobile **Hammer Type - Drop:** 140 lb. Auto - 30 in.
Plunge: -90 degrees **Drilling Method:** Hollow Stem Auger
Weather: Cool, partly cloudy **Boring Diameter:** 6.5 in. O.D.

BORING LOG B-2

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.96902° N Longitude: -118.24059° E Approximate Ground Surface Elevation (ft.): 144 Surface Condition: Asphalt													
	105		SILT with Sand (ML): low plasticity, olive brown, moist, stiff, fine-grained sand, micaceous	7	BC=3 6 7					100	81					
	40			8	BC=5 5 8											
	100		Poorly graded SAND (SP): olive to pale olive, dry, dense, fine- to medium-grained sand													
	45			9	BC=12 16 21					100	4.2					
	95															
	50		SILT (ML): low plasticity, olive brown, moist, soft, fine-grained sand Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, micaceous	10A 10B	BC=9 6 18											Sample split based on lithology
	90															
	55		interbedded sand and sandy silt lenses approximately 2-6 inches thick	11	BC=12 17 19											
	85		Poorly graded SAND with Silt (SP-SM): light brownish gray, dry to moist, dense, fine-grained sand													
	60			12	BC=11 17 27					99	9.2					
	80															
	65		fine- to coarse-grained sand, decrease in fines content, trace fine subrounded gravel	13	BC=12 17 23											
	75		Well-graded SAND (SP): pale olive to olive, dry to moist, very dense, fine- to coarse-grained sand, few fine subrounded gravel													

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A

GINT FILE: KLF_gint_master_2017
GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]



PROJECT NO.: 20180388
 DRAWN BY: ZJ
 CHECKED BY: JW
 DATE: 5/24/2017
 REVISED: 6/13/2017

BORING LOG B-2
 Roosevelt Park Infiltration Study
 7600 Graham Avenue
 Los Angeles, California

FIGURE
A-5
 PAGE: 2 of 4

PLOTTED: 06/16/2017 01:54 PM BY: Z.Jarecki

Date Begin - End: 5/15/2017 **Drilling Company:** Cal Pac Drilling
Logged By: Z. Jarecki **Drill Crew:** Jeff, Andy
Hor.-Vert. Datum: WGS84 - MSL **Drilling Equipment:** B61 Mobile **Hammer Type - Drop:** 140 lb. Auto - 30 in.
Plunge: -90 degrees **Drilling Method:** Hollow Stem Auger
Weather: Cool, partly cloudy **Boring Diameter:** 6.5 in. O.D.

BORING LOG B-2

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS								
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Latitude: 33.96902° N Longitude: -118.24059° E Approximate Ground Surface Elevation (ft.): 144 Surface Condition: Asphalt												
	70		Well-graded SAND (SP): pale olive to olive, dry to moist, very dense, fine- to coarse-grained sand, few fine subrounded gravel	14		BC=17 27 33					89	3.8			
	75			15		BC=19 26 28									
	65		SILT (ML): low plasticity, black, moist, stiff, trace fine-grained sand												
	80		Silty SAND (SM): dark brown to black, moist, medium dense, fine-grained sand, micaceous	16		BC=7 11 12									
	60		Sandy SILT (ML): low plasticity, olive brown, moist, stiff, fine-grained sand, micaceous												
	85			17		BC=9 11 16									
	55		Poorly graded SAND with Gravel (SP): olive, dry to moist, very dense, fine- to coarse-grained sand, with fine gravel	18		BC=15 25 50/4"									Drilling vibrations, gravel in cuttings
	90														
	50		increase in gravel content and size up to 3/4 inches diameter	19		BC=50/6"									Drilling vibrations, gravel in cuttings
	95														
	45		wet, decrease in fine-grained sand, mostly medium- to coarse-grained sand	20		BC=50/6"									Drilling vibrations, gravel in cuttings
	100														
	40														

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A

GINT FILE: KLF_gint_master_2017
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PROJECT NO.: 20180388
 DRAWN BY: ZJ
 CHECKED BY: JW
 DATE: 5/24/2017
 REVISED: 6/13/2017

BORING LOG B-2
 Roosevelt Park Infiltration Study
 7600 Graham Avenue
 Los Angeles, California

FIGURE
A-6
 PAGE: 3 of 4

GINT FILE: KLF_gint_master_2017
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]
 PROJECT NUMBER: 20180388.001A
 OFFICE FILTER: RIVERSIDE
 PLOTTED: 06/16/2017 01:54 PM BY: ZJarecki

Date Begin - End: 5/15/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-2
Logged By: Z. Jarecki	Drill Crew: Jeff. Andy	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Cool, partly cloudy	Boring Diameter: 6.5 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS							Additional Tests/Remarks	
			Latitude: 33.96902° N Longitude: -118.24059° E Approximate Ground Surface Elevation (ft.): 144 Surface Condition: Asphalt		Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)
			Lithologic Description													
			Poorly graded SAND with Gravel (SP): olive, dry to moist, very dense, fine- to coarse-grained sand, with fine gravel		21	BC=50/6"										Drilling vibrations, gravel in cuttings
					22	BC=27 32 50/4"										Drilling vibrations, gravel in cuttings

The boring was terminated because of practical auger refusal (↑) at approximately 111.5 ft. below ground surface. The boring was backfilled with bentonite chips and patched at the surface with cold patch asphalt on May 15, 2017.

GROUNDWATER LEVEL INFORMATION:
 ▼ Groundwater was observed at approximately 98 ft. below ground surface at the end of drilling.
GENERAL NOTES:
 The exploration location and elevation are approximate and were estimated by Kleinfelder.

	PROJECT NO.: 20180388	BORING LOG B-2 Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ		A-7
CHECKED BY: JW	DATE: 5/24/2017		
REVISD: 6/13/2017			PAGE: 4 of 4

PLOTTED: 06/16/2017 01:55 PM BY: ZJarecki


Date Begin - End: 5/11/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-3
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Sunny, warm	Boring Diameter: 6.5 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.96996° N Longitude: -118.24060° E Approximate Ground Surface Elevation (ft.): 146 Surface Condition: Asphalt													
145			--asphalt approximately 4 inches thick over 4 inches of aggregate base													Hand auger to 5 feet below ground surface.
			Silty SAND (SM): olive brown, dry to moist, fine-grained sand													
	5		Sandy SILT (ML): low plasticity, dark brown, moist, medium stiff, fine-grained sand													
140			Silty SAND (SM): olive to olive brown, moist, medium dense, fine-grained sand	1		BC=4 4 6			8.7	98.2						
			Sandy SILT (ML): low plasticity, dark olive brown, moist, medium stiff, fine-grained sand													
135			Silty SAND (SM): olive to olive brown, moist, medium dense, fine-grained sand	2		BC=4 4 9			14.0	104.9						Corrosion Testing
			Sandy SILT (ML): low plasticity, dark olive brown, moist, medium stiff, fine-grained sand													
130			Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, decrease fines content with depth	3		BC=6 8 13					100	50				Total Porosity
			Poorly graded SAND with Silt (SP-SM): olive to pale olive, moist, medium dense, fine-grained sand													
125			Silty SAND (SM): dark olive brown, moist, medium dense, fine-grained sand	4		BC=9 15 21										
			Silty SAND (SM): dark olive brown, moist, medium dense, fine-grained sand													
120			Silty SAND (SM): dark olive brown, moist, medium dense, fine-grained sand	5		BC=7 8 14										
			Silty SAND (SM): dark olive brown, moist, medium dense, fine-grained sand													
	30		The boring was terminated at approximately 26.5 ft. below ground surface. The boring was backfilled with bentonite chips and patched at the surface with cold patch asphalt on May 11, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.									

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A

GINT FILE: KLF_gint_master_2017
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 KLEINFELDER <i>Bright People. Right Solutions.</i>	PROJECT NO.: 20180388	BORING LOG B-3	FIGURE
	DRAWN BY: ZJ	Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	A-8
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 1 of 1

PLOTTED: 06/16/2017 01:55 PM BY: Z.Jarecki


Date Begin - End: 5/11/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-4
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Sunny, warm	Boring Diameter: 6.5 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.97099° N Longitude: -118.24083° E Approximate Ground Surface Elevation (ft.): 147 Surface Condition: Asphalt													
			--asphalt approximately 2 inches over 4 inches of aggregate base													Hand auger to 5 feet below ground surface.
145			Silty SAND (SM): olive brown, moist, fine-grained sand													
	5		Poorly graded SAND with Silt (SP-SM): light brownish gray, moist, loose, fine- to medium-grained sand, trace iron oxide staining	1		BC=2 3 6			2.5	97.7						Direct Shear
140			SILT with Sand (ML): low plasticity, olive to olive brown, moist, very stiff, fine-grained sand													
	10		SILT with Sand (ML): low plasticity, olive to olive brown, moist, very stiff, fine-grained sand	2		BC=7 9 12			6.9	107.0						
135			Poorly graded SAND with Silt (SP-SM): light gray, moist, medium dense, fine-grained sand													
	15		Poorly graded SAND with Silt (SP-SM): light gray, moist, medium dense, fine-grained sand	3		BC=8 12 18										
130			The boring was terminated at approximately 16.5 ft. below ground surface. The boring was backfilled with bentonite chips and patched at the surface with cold patch asphalt on May 11, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.									
20																
125																
25																
120																
30																
115																

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A
GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]

GINT FILE: Kf_gint_master_2017


	PROJECT NO.: 20180388	BORING LOG B-4 Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ		A-9
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 1 of 1

GINT FILE: KLF_gint_master_2017
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB
 PROJECT NUMBER: 20180388.001A
 OFFICE FILTER: RIVERSIDE
 PLOTTED: 06/16/2017 01:55 PM BY: ZJarecki
 PROJECT NUMBER: 20180388.001A
 OFFICE FILTER: RIVERSIDE
 PLOTTED: 06/16/2017 01:55 PM BY: ZJarecki

Date Begin - End: 5/10/2017 - 5/18/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-5
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis, Andy	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Cool, cloudy	Boring Diameter: 10 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.97102° N Longitude: -118.24144° E Approximate Ground Surface Elevation (ft.): 148 Surface Condition: Grass													
			Sandy SILT (ML): low plasticity, olive brown, dry to moist, soft, fine-grained sand, rootlets in upper 36 inches													Hand auger to 5 feet below ground surface.
	145		Poorly graded SAND with Silt (SP-SM): olive, moist, fine- to medium-grained sand													
	5		Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand	1		BC=6 9 13			3.1	110.2						
	140		Lean CLAY with Sand (CL): medium plasticity, olive gray, moist, very stiff, fine-grained sand, some silt	2		BC=5 9 16						32	14		Corrosion Testing	
	135		Poorly graded SAND with Silt (SP-SM): olive, moist, medium dense, fine-grained sand	3		BC=6 11 17					100	11			Total Porosity	
	15		dense, decrease in fines content	4		BC=11 20 28					100	6.5				
	130															
	20															
	125															
	25		The percolation test hole was terminated at approximately 21.5 ft. below ground surface. The boring was backfilled as a percolation test hole on May 10, 2017. The percolation test hole was overdrilled and backfilled with bentonite chips on May 18, 2017.													
	120															
	30															
	115															

GROUNDWATER LEVEL INFORMATION:
 Groundwater was not observed during drilling or after completion.
GENERAL NOTES:
 The exploration location and elevation are approximate and were estimated by Kleinfelder.

 KLEINFELDER <i>Bright People. Right Solutions.</i>	PROJECT NO.: 20180388	BORING LOG B-5 Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ		A-10
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 1 of 1

PLOTTED: 06/16/2017 01:55 PM BY: ZJarecki

Date Begin - End: <u>5/10/2017</u>	Drilling Company: <u>Cal Pac Drilling</u>	BORING LOG B-6
Logged By: <u>Z. Jarecki</u>	Drill Crew: <u>Jeff, Travis, Andy</u>	
Hor.-Vert. Datum: <u>WGS84 - MSL</u>	Drilling Equipment: <u>B61 Mobile</u>	Hammer Type - Drop: <u>140 lb. Auto - 30 in.</u>
Plunge: <u>-90 degrees</u>	Drilling Method: <u>Hollow Stem Auger</u>	
Weather: <u>Cool, cloudy</u>	Boring Diameter: <u>6.5 in. O.D.</u>	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS								Additional Tests/Remarks		
			Latitude: 33.97102° N Longitude: -118.24157° E Approximate Ground Surface Elevation (ft.): 148 Surface Condition: Grass			Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)		Liquid Limit	Plasticity Index (NP=NonPlastic)
			Lithologic Description														
			1														Hand auger to 5 feet below ground surface.
145	5	moist, medium stiff, increase in sand content, fine- to medium-grained sand	2		BC=4 7 9			10.8	108.4								Direct Shear
140	10	olive brown	3		BC=4 7 14			17.1	111.0								
135	15	Silty SAND (SM): olive to pale olive, moist, medium dense, fine-grained sand	4		BC=6 10 17					100	24						Total Porosity
130	20	Poorly graded SAND with Silt (SP-SM): light brownish gray, dry to moist, dense, fine- to medium-grained sand, trace coarse-grained sand, trace fine subangular to subrounded gravel	5		BC=8 21 33					96	6.6						
125	25	Silty SAND (SM): olive brown, moist, dense, fine-grained sand	6		BC=7 15 25					100	45						Hydraulic Conductivity Test
120	30	medium dense	7		BC=7 12 14												
115																	

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A

GINT FILE: KLF_gint_master_2017
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PROJECT NO.: 20180388
 DRAWN BY: ZJ
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 DATE: 5/24/2017
 REVISED: 6/13/2017

BORING LOG B-6

Roosevelt Park Infiltration Study
 7600 Graham Avenue
 Los Angeles, California


FIGURE
A-11

PAGE: 1 of 2

GINT FILE: KLF_gint_master_2017
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]
 PROJECT NUMBER: 20180388.001A
 OFFICE FILTER: RIVERSIDE
 PLOTTED: 06/16/2017 01:55 PM BY: ZJarecki

Date Begin - End: 5/10/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-6
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis, Andy	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Cool, cloudy	Boring Diameter: 6.5 in. O.D.	


Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.97102° N Longitude: -118.24157° E Approximate Ground Surface Elevation (ft.): 148 Surface Condition: Grass													
			Silty SAND (SM): olive brown, moist, dense, fine-grained sand	8		BC=9 10 13										
			Sandy SILT (ML): low plasticity, olive brown, moist, medium stiff, fine-grained sand													
110																
	40			9		BC=6 6 8				100	62	NP	NP			
105																
	45			10A 10B		BC=4 5 9							32	11	Sample split based on lithology.	
			Lean CLAY (CL): medium plasticity, olive brown, moist, medium stiff, trace fine-grained sand													
100																
	50			11		BC=4 7 8							NP	NP		
			Sandy SILT (ML): low plasticity, olive brown, moist, medium stiff, fine-grained sand													
	95		The boring was terminated at approximately 51.5 ft. below ground surface. The boring was backfilled with bentonite chips on May 10, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.									
	55															
	90															
	60															
	85															
	65															
	80															

	PROJECT NO.: 20180388	BORING LOG B-6	FIGURE
	DRAWN BY: ZJ	Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	A-12
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 2 of 2

PLOTTED: 06/16/2017 01:55 PM BY: ZJarecki
 OFFICE FILTER: RIVERSIDE
 PROJECT NUMBER: 20180388.001A
 GINT FILE: Kf_gint_master_2017
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]

Date Begin - End: 5/10/2017 - 5/18/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-7
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis, Andy	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Cool, cloudy	Boring Diameter: 10 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks	
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)
			Latitude: 33.97187° N Longitude: -118.24201° E Approximate Ground Surface Elevation (ft.): 149 Surface Condition: Grass												
			Silty SAND (SM): olive brown, moist, fine-grained sand, trace organics/rootlets in upper 12 inches	1											Hand auger to 5 feet below ground surface.
	5		interbedded silt and sandy silt lenses medium dense	2		BC=5 6 6			5.8	101.5					
	10		Sandy Lean CLAY (CL): medium plasticity, dark olive brown, moist, medium stiff, fine-grained sand, some silt, trace mica	3		BC=4 9 13			18.2	109.7					Direct Shear
	15		Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, decrease in fines content with depth	4		BC=7 12 21					100	27			
	20		Poorly graded SAND with Silt (SP-SM): olive, moist, dense, fine-grained sand, trace fine gravel	5		BC=11 17 26									
	25		The percolation test hole was terminated at approximately 21.5 ft. below ground surface. The boring was backfilled as a percolation test hole on May 10, 2017. The percolation test hole was overdrilled and backfilled with bentonite chips on May 18, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.								


	PROJECT NO.: 20180388	BORING LOG B-7 Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ		A-13
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 1 of 1

PLOTTED: 06/16/2017 01:55 PM BY: Z.Jarecki

Date Begin - End: 5/16/2017 **Drilling Company:** Cal Pac Drilling **BORING LOG B-8**
Logged By: Z. Jarecki **Drill Crew:** Jeff, Andy
Hor.-Vert. Datum: WGS84 - MSL **Drilling Equipment:** B61 Mobile **Hammer Type - Drop:** 140 lb. Auto - 30 in.
Plunge: -90 degrees **Drilling Method:** Hollow Stem Auger
Weather: Cool, cloudy **Boring Diameter:** 6.5 in. O.D.

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.97211° N Longitude: -118.24230° E Approximate Ground Surface Elevation (ft.): 150 Surface Condition: Grass													
			Sandy SILT (ML): olive brown, dry to moist, medium stiff, fine-grained sand, rootlets	1												Hand auger to 5 feet below ground surface.
			Silty SAND (SM): olive brown, dry to moist, fine-grained sand													
145	5		Poorly graded SAND with Silt (SP-SM): olive, moist, medium dense, fine- to medium-grained sand, trace coarse-grained sand, increase in sand content with depth	2		BC=5 11 18										
			Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand													
140	10		SILT with Sand (ML): low plasticity, dark olive brown, moist, stiff, fine-grained sand	3		BC=4 6 12			12.1	112.1						
135	15		Poorly graded SAND (SP): olive to pale olive, moist, medium dense, fine- to medium-grained sand	4		BC=6 10 15					99	3.4				Total Porosity
			Poorly graded SAND with Silt (SP-SM): olive to pale olive, moist, medium stiff, fine-grained sand													
130	20		Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, micaceous	5		BC=8 12 19					100	9.3				
125	25		Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, micaceous	6		BC=9 13 27					100	42				Hydraulic Conductivity Test
				7												
120	30		dense, decrease in fines content, micaceous	8		BC=12 18 39										
				9		BC=22 50/6"	NR									At 32 feet bgs, attempted to push shelly tube, could not push in granular soils.


PROJECT NUMBER: 20180388.001A
 OFFICE FILTER: RIVERSIDE
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]

	PROJECT NO.: 20180388	BORING LOG B-8 Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ		A-14
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 1 of 2

PLOTTED: 06/16/2017 01:55 PM BY: Z.Jarecki
 OFFICE FILTER: RIVERSIDE
 PROJECT NUMBER: 20180388.001A
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]
 GINT FILE: KLF_gint_master_2017

Date Begin - End: 5/16/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-8
Logged By: Z. Jarecki	Drill Crew: Jeff. Andy	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Cool, cloudy	Boring Diameter: 6.5 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS								
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Latitude: 33.97211° N Longitude: -118.24230° E Approximate Ground Surface Elevation (ft.): 150 Surface Condition: Grass												
			Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, micaceous	10		BC=15 15 15	NR								Driller reports possible gravel zone, drilling vibrations.
110	40		medium dense	11		BC=8 7 9									Poor sample recovery.
105	45		Sandy, Silty CLAY (CL-ML): low to medium plasticity, olive brown, moist, stiff, fine-grained sand, micaceous	12		BC=4 9 13						29	6		
100	50		interbedded silty sand lenses approximately 4-6 inches thick	13		BC=4 7 11									
95	55		The boring was terminated at approximately 51.5 ft. below ground surface. The boring was backfilled with bentonite chips on May 16, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.								
90	60														
85	65														

 KLEINFELDER <i>Bright People. Right Solutions.</i>	PROJECT NO.: 20180388	BORING LOG B-8 Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ		A-15
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 2 of 2

PLOTTED: 06/16/2017 01:56 PM BY: Z.Jarecki

Date Begin - End: 5/10/2017 **Drilling Company:** Cal Pac Drilling **BORING LOG B-9**
Logged By: Z. Jarecki **Drill Crew:** Jeff, Travis, Andy
Hor.-Vert. Datum: WGS84 - MSL **Drilling Equipment:** B61 Mobile **Hammer Type - Drop:** 140 lb. Auto - 30 in.
Plunge: -90 degrees **Drilling Method:** Hollow Stem Auger
Weather: Cool, cloudy **Boring Diameter:** 6.5 in. O.D.

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks					
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)				
150			Latitude: 33.97245° N Longitude: -118.24212° E Approximate Ground Surface Elevation (ft.): 151 Surface Condition: Grass																
			Silty SAND (SM): olive brown, moist, fine-grained sand, trace rootlets in upper 36 inches increase in moisture content with depth	1															
5			Sandy SILT (ML): low plasticity, dark olive brown, moist, medium stiff, fine-grained sand	2		BC=2 5 9													
145			Silty SAND (SM): olive, moist, medium dense, fine-grained sand, trace iron oxide staining																
10			Lean CLAY (CL): medium plasticity, olive gray, moist, stiff, trace fine-grained sand	3		BC=6 8 14			15.5	114.4									
140		Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand	4		BC=7 10 16														
135		Poorly graded SAND with Silt (SP-SM): olive, moist, medium dense, fine-grained sand	5		BC=9 13 20														
20		The boring was terminated at approximately 18.5 ft. below ground surface. The boring was backfilled with bentonite chips on May 10, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.													

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A

KLF_BORING/TEST PIT SOIL LOG



PROJECT NO.: 20180388
 DRAWN BY: ZJ
 CHECKED BY: JW
 DATE: 5/24/2017
 REVISED: 6/13/2017

BORING LOG B-9

 Roosevelt Park Infiltration Study
 7600 Graham Avenue
 Los Angeles, California

FIGURE

A-16

PLOTTED: 06/16/2017 01:56 PM BY: ZJarecki


Date Begin - End: 5/12/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-10
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Cool, cloudy	Boring Diameter: 6.5 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.97281° N Longitude: -118.24178° E Approximate Ground Surface Elevation (ft.): 151 Surface Condition: Asphalt													
150		-asphalt approximately 5 inches over 5 inches of aggregate base		1												Hand auger to 5 feet below ground surface.
		Poorly graded SAND with Silt (SP-SM): pale olive, dry to moist, fine-grained sand														
	5	Silty SAND (SM): olive gray, moist, fine-grained sand decrease in fines content		2		BC=5 6 8			2.1	100.8						
145		SILT with Sand (ML): low plasticity, olive brown, moist, stiff, fine-grained sand														
	10	Silty SAND (SM): olive to olive brown, moist, medium dense, fine-grained sand		3		BC=4 6 9			15.6	106.4						Direct Shear
140		Silty SAND (SM): olive to olive brown, moist, medium dense, fine-grained sand														
	15	Poorly graded SAND with Silt (SP-SM): olive, moist, dense, fine-grained sand, micaceous		4		BC=11 9 11			9.3	109.2						
135		Poorly graded SAND with Silt (SP-SM): olive, moist, dense, fine-grained sand, micaceous		5		BC=10 17 30										
20		The boring was terminated at approximately 19 ft. below ground surface. The boring was backfilled with bentonite chips and patched at the surface with cold patch asphalt on May 12, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.										

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A


GINT FILE: KLF_gint_master_2017
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 KLEINFELDER <i>Bright People. Right Solutions.</i>	PROJECT NO.: 20180388	BORING LOG B-10	FIGURE
	DRAWN BY: ZJ		
CHECKED BY: JW			A-17
DATE: 5/24/2017			
REVISED: 6/13/2017			PAGE: 1 of 1

GINT FILE: Kf_gint_master_2017
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]
 PROJECT NUMBER: 20180388.001A
 OFFICE FILTER: RIVERSIDE
 PLOTTED: 06/16/2017 01:56 PM BY: ZJarecki

Date Begin - End: 5/12/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-11
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Cool, cloudy	Boring Diameter: 6.5 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.97304° N Longitude: -118.24131° E Approximate Ground Surface Elevation (ft.): 152 Surface Condition: Concrete													
			--concrete approximately 6.75 inches thick, no aggregate base observed													Hand auger to 6 feet below ground surface.
150			Silty SAND (SM): olive brown, moist, fine-grained sand, micaceous													
	5		olive gray, loose	1		BC=3 4 4			13.8	87.7						
145			SILT with Sand (ML): low plasticity, olive gray to gray, moist, stiff, fine-grained sand, micaceous													
	10			2		BC=3 5 11			20.5	108.4						Corrosion Testing
140			Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, micaceous													
	15			3		BC=5 7 12										
135			The boring was terminated at approximately 16.5 ft. below ground surface. The boring was backfilled with bentonite chips and patched at the surface with quickset concrete on May 12, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.									
20																
130																
25																
125																
30																
120																


	PROJECT NO.: 20180388	BORING LOG B-11 Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ		A-18
	CHECKED BY: JW		
	DATE: 5/24/2017		
	REVISED: 6/13/2017		PAGE: 1 of 1

PLOTTED: 06/16/2017 01:56 PM BY: ZJarecki

Date Begin - End: 5/12/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-12
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Cool, cloudy	Boring Diameter: 6.5 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS								Additional Tests/Remarks
			Latitude: 33.97348° N Longitude: -118.24131° E Approximate Ground Surface Elevation (ft.): 152 Surface Condition: Concrete	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	
			Lithologic Description												
		2.5	--concrete approximately 6.5 inches thick, no aggregate base observed	1											Hand auger to 6 feet below ground surface. R-Value= 65
150			Silty SAND (SM): olive brown, moist, fine-grained sand												
	5		loose, some interbedded silt lenses, micaceous	2		BC=2 3 7			15.3	101.2					Direct Shear
145			----- Sandy SILT (ML): olive gray, moist, stiff, fine-grained sand, micaceous												
	10		----- Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, micaceous	3		BC=4 6 9			15.4	110.9					
140			----- Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, micaceous	4		BC=5 6 7									
135			The boring was terminated at approximately 16.5 ft. below ground surface. The boring was backfilled with bentonite chips and patched at the surface with quickset concrete on May 12, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.								
20															
130															
25															
125															
30															
120															


GINT FILE: KLF_gint_master_2017
GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]
PROJECT NUMBER: 20180388.001A
OFFICE FILTER: RIVERSIDE

 KLEINFELDER <i>Bright People. Right Solutions.</i>	PROJECT NO.: 20180388	BORING LOG B-12 Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	FIGURE
	DRAWN BY: ZJ		A-19
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 1 of 1

PLOTTED: 06/16/2017 01:56 PM BY: Z.Jarecki
 OFFICE FILTER: RIVERSIDE
 PROJECT NUMBER: 20180388.001A
 GINT FILE: KLF_gint_master_2017
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]

Date Begin - End: 5/11/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-13
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis	
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile	Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger	
Weather: Sunny, warm	Boring Diameter: 6.5 in. O.D.	

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks			
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)		
		--concrete approximately 7.5 inches thick, no aggregate base observed															Hand auger to 6 feet below ground surface.
		Silty SAND (SM): olive brown, moist, fine-grained sand, micaceous															
150	5	Poorly graded SAND with Silt (SP-SM): pale olive, moist, medium dense, fine-grained sand, micaceous	1		BC=2 3 9			3.7	101.0								
145	10	Sandy SILT (ML): low plasticity, olive brown, moist, stiff to very stiff, fine-grained sand, micaceous	2		BC=4 6 11			12.8	110.2								
140	15	Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand	3		BC=6 8 8												
135	20	The boring was terminated at approximately 16.5 ft. below ground surface. The boring was backfilled with bentonite chips and patched at the surface with quickset concrete on May 11, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.											
130	25																
125	30																
120																	

	PROJECT NO.: 20180388	BORING LOG B-13	FIGURE
	DRAWN BY: ZJ	Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California	A-20
CHECKED BY: JW	DATE: 5/24/2017		
REvised: 6/13/2017			PAGE: 1 of 1


PLOTTED: 06/16/2017 01:56 PM BY: ZJarecki

Date Begin - End: 5/11/2017	Drilling Company: Cal Pac Drilling	BORING LOG B-14	
Logged By: Z. Jarecki	Drill Crew: Jeff, Travis		
Hor.-Vert. Datum: WGS84 - MSL	Drilling Equipment: B61 Mobile		Hammer Type - Drop: 140 lb. Auto - 30 in.
Plunge: -90 degrees	Drilling Method: Hollow Stem Auger		
Weather: Sunny, warm	Boring Diameter: 6.5 in. O.D.		

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.97444° N Longitude: -118.24131° E Approximate Ground Surface Elevation (ft.): 154 Surface Condition: Concrete													
			--concrete approximately 7.25 inches thick, no aggregate base observed	1												Hand auger to 6 feet below ground surface.
	5		Silty SAND (SM): olive brown, moist, fine-grained sand, micaceous	2		BC=4 6 7			5.7	100.0						
			Poorly graded SAND (SP): light brownish gray, moist, medium dense, fine-grained sand													
	10		Silty SAND (SM): dark olive brown, moist, medium dense, fine-grained sand, micaceous	3		BC=4 6 10			14.6	111.6						
	15			4		BC=5 6 17										
	20		The boring was terminated at approximately 16.5 ft. below ground surface. The boring was backfilled with bentonite chips and patched at the surface with quickset concrete on May 11, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.									

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A
 GINT TEMPLATE: E:KLF_STANDARD_GINT_LIBRARY_2017.GLB [KLF_BORING/TEST PIT SOIL LOG]

	PROJECT NO.: 20180388	BORING LOG B-14	FIGURE A-21
	DRAWN BY: ZJ		
CHECKED BY: JW	Roosevelt Park Infiltration Study 7600 Graham Avenue Los Angeles, California		PAGE: 1 of 1
DATE: 5/24/2017	REVISD: 6/13/2017		

PLOTTED: 06/16/2017 01:56 PM BY: ZJarecki

Date Begin - End: <u>5/12/2017</u>	Drilling Company: <u>Cal Pac Drilling</u>	BORING LOG B-15	
Logged By: <u>Z. Jarecki</u>	Drill Crew: <u>Jeff, Travis</u>		
Hor.-Vert. Datum: <u>WGS84 - MSL</u>	Drilling Equipment: <u>B61 Mobile</u>		Hammer Type - Drop: <u>140 lb. Auto - 30 in.</u>
Plunge: <u>-90 degrees</u>	Drilling Method: <u>Hollow Stem Auger</u>		
Weather: <u>Sunny, warm</u>	Boring Diameter: <u>6.5 in. O.D.</u>		

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS							Additional Tests/Remarks		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in.	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit		Plasticity Index (NP=NonPlastic)	
			Latitude: 33.97533° N Longitude: -118.24126° E Approximate Ground Surface Elevation (ft.): 155 Surface Condition: Asphalt													
			--asphalt approximately 5 inches over 5 inches of concrete, no aggregate base observed	1												
			Silty SAND (SM): olive brown, moist, fine- to medium-grained sand													
150	5		loose, interbedded sandy silt lenses	2		BC=2 2 3										
			SILT with Sand (ML): low plasticity, olive brown, moist, medium stiff, fine-grained sand, micaceous													
145	10		Silty SAND (SM): olive brown, moist, medium dense, fine-grained sand, trace mica, trace fine gravel, decrease in fines content with depth	3		BC=5 9 15			5.5	104.2						
			Poorly graded SAND with Silt (SP-SM): light brownish gray to pale olive, moist, medium dense, fine-grained sand													
140	15			4		BC=4 12 17			5.1	99.2						
			The boring was terminated at approximately 16.5 ft. below ground surface. The boring was backfilled with bentonite chips and patched at the surface with quickset concrete dyed black on May 12, 2017.				GROUNDWATER LEVEL INFORMATION: Groundwater was not observed during drilling or after completion. GENERAL NOTES: The exploration location and elevation are approximate and were estimated by Kleinfelder.									
135	20															
130	25															
125	30															

OFFICE FILTER: RIVERSIDE

PROJECT NUMBER: 20180388.001A
 KLF_BORING/TEST PIT SOIL LOG

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PROJECT NO.: 20180388
 DRAWN BY: ZJ
 CHECKED BY: JW
 DATE: 5/24/2017
 REVISED: 6/13/2017

BORING LOG B-15

 Roosevelt Park Infiltration Study
 7600 Graham Avenue
 Los Angeles, California

FIGURE

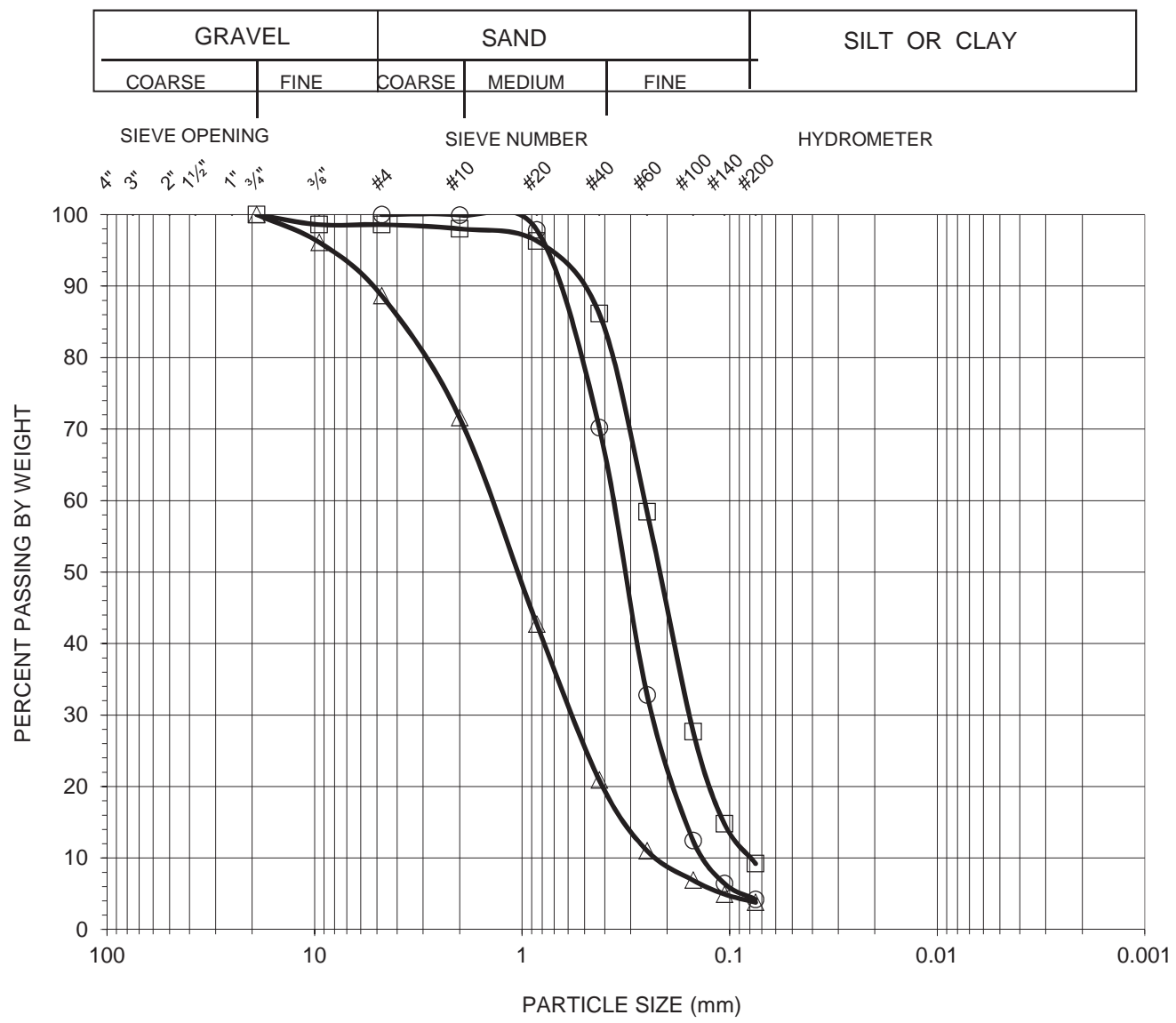
A-22

APPENDIX B

GEOTECHNICAL LABORATORY TESTING

GRAIN SIZE DISTRIBUTION CURVE ASTM D 6913

Client Name: Kleinfelder Tested by: CS Date: 05/26/17
 Project Name: Roosevelt Park Infiltration Study Computed by: JP Date: 05/26/17
 Project Number: 20180388.001A Checked by: AP Date: 05/26/17



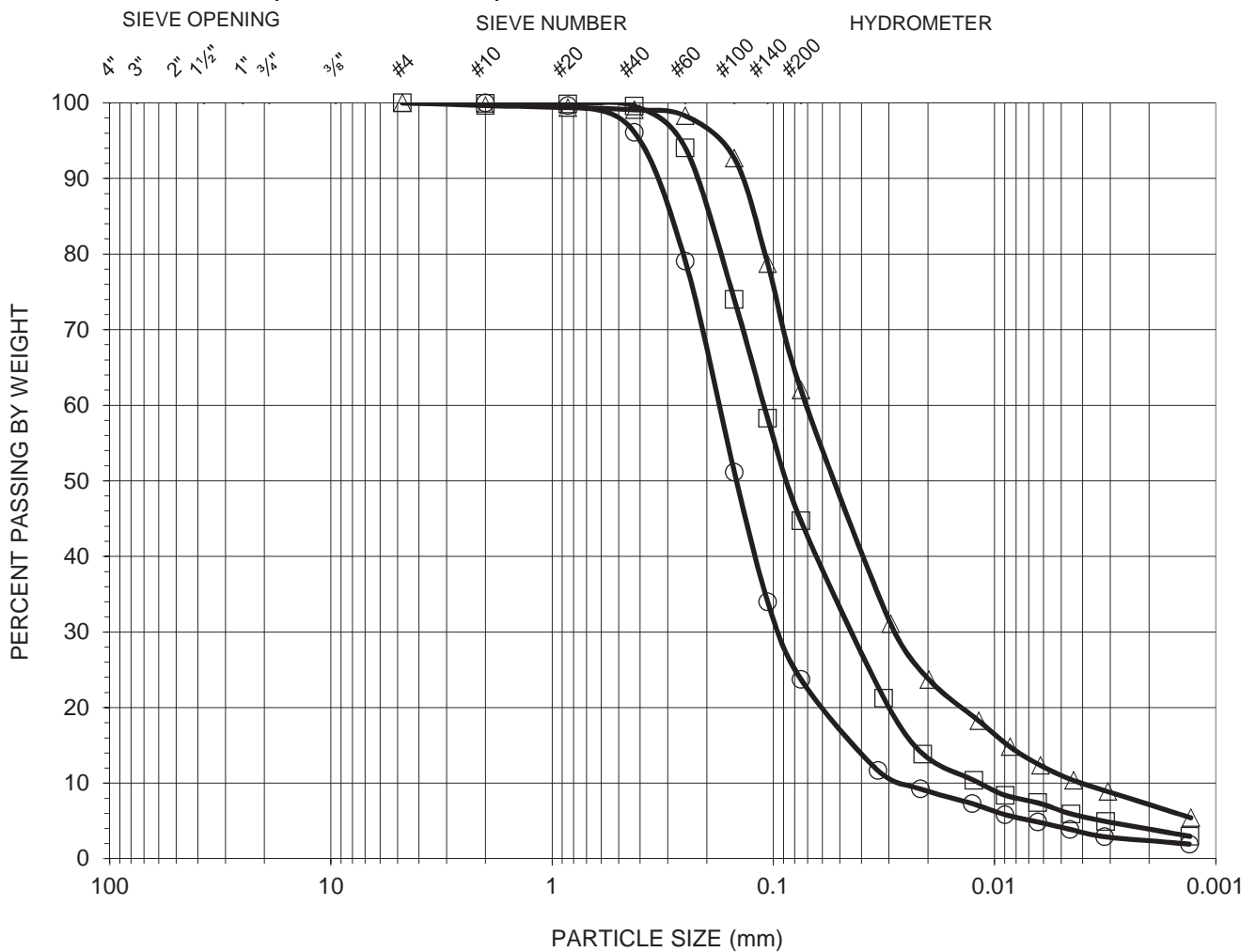
Symbol	Boring No.	Sample No.	Sample Depth (feet)	Percent			Atterberg Limits LL:PL:PI	Soil Type U.S.C.S
				Gravel	Sand	Silt & Clay		
○	B-2	9	45	0	96	4	N/A	SP
□	B-2	12	60	1	90	9	N/A	SP-SM
△	B-2	14	70	11	85	4	N/A	SW



GRAIN SIZE DISTRIBUTION CURVE ASTM D 422

Client Name: Kleinfelder Tested by: CS Date: 05/26/17
 Project Name: Roosevelt Park Infiltration Study Computed by: JP Date: 05/26/17
 Project Number: 20180388.001A Checked by: AP Date: 05/26/17

GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

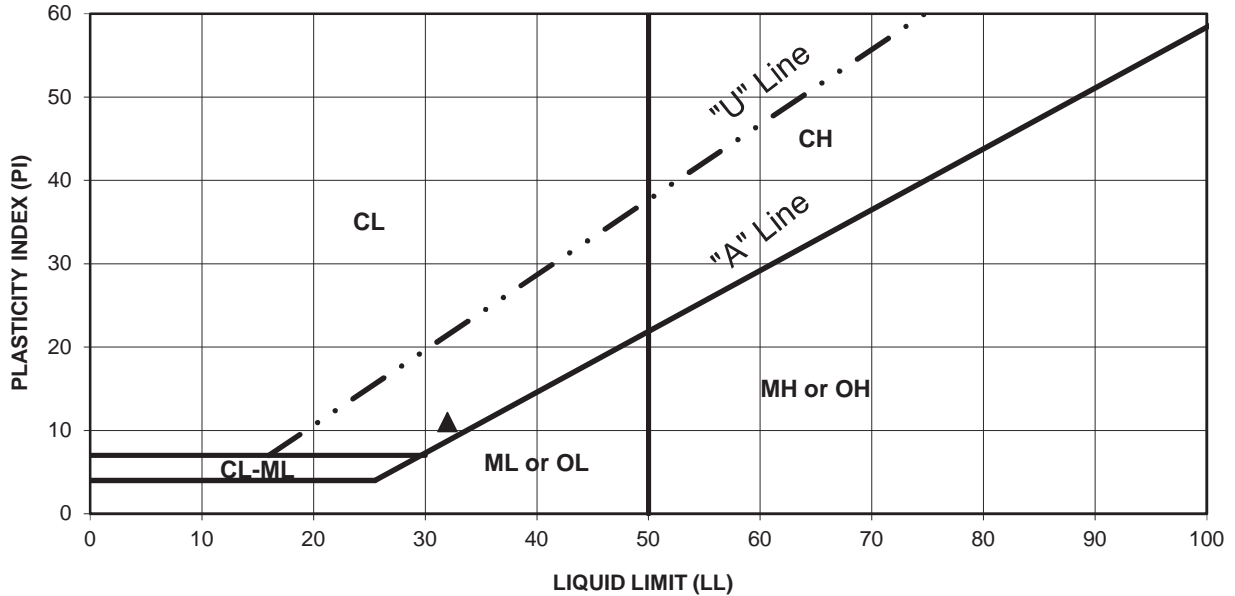


Symbol	Boring No.	Sample No.	Sample Depth (feet)	Percent			Atterberg Limits LL:PL:PI	Soil Type U.S.C.S
				Gravel	Sand	Silt & Clay		
○	B-6	4	15	0	76	24	N/A	SM
□	B-6	6	25	0	55	45	N/A	SM
△	B-6	9	40	0	38	62	N/P	ML



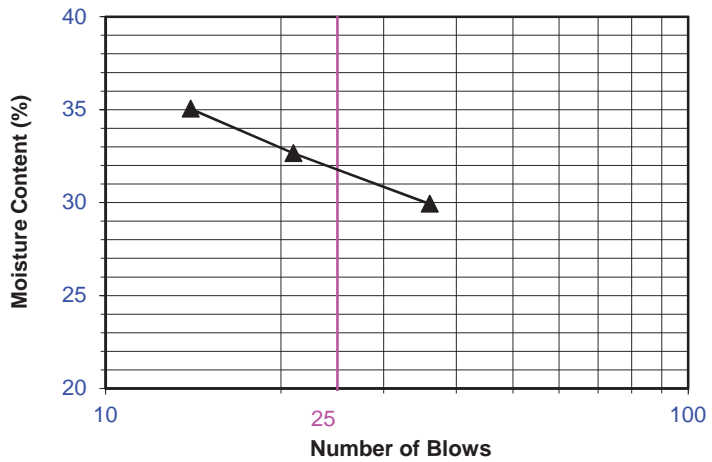
ATTERBERG LIMITS ASTM D 4318

Project Name: Roosevelt Park Infiltration Study **Tested By:** LS **Date:** 05/29/17
Project No.: 20180388.001A **Checked By:** AP **Date:** 05/30/17



PROCEDURE USED

- Wet Preparation
- Dry Preparation
- Procedure A
Multipoint Test
- Procedure B
One-point Test



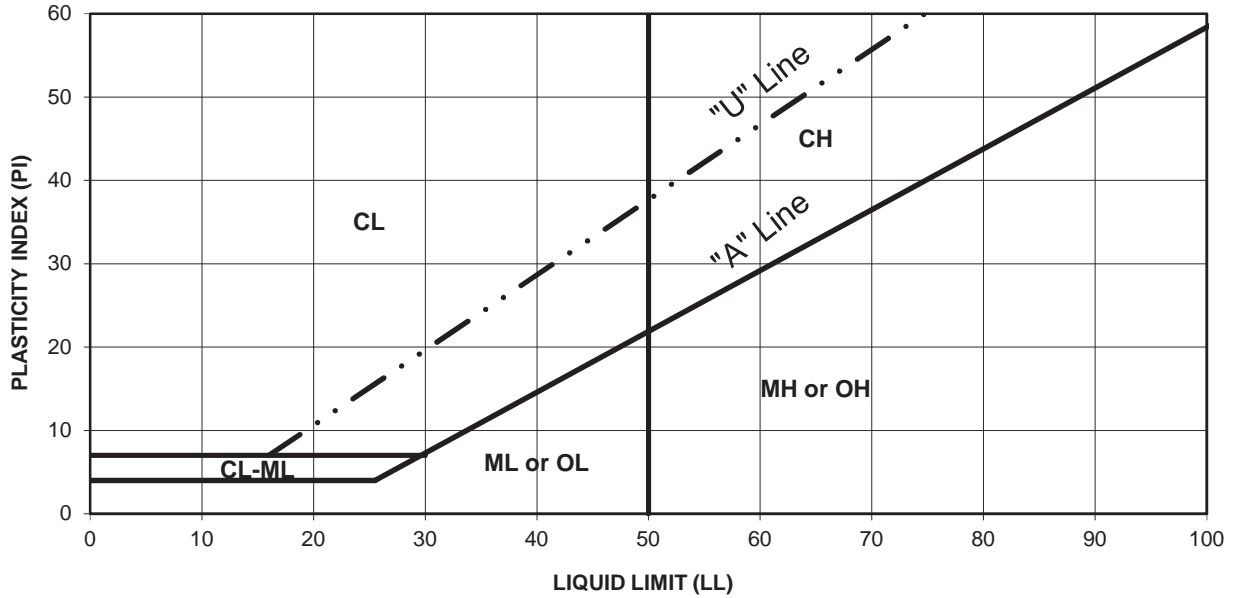
Symbol	Boring Number	Sample Number	Depth (feet)	LL	PL	PI	Plasticity Chart Symbol
	B-6	9	40	NP	NP	NP	
▲	B-6	10	45	32	21	11	CL

* NP denotes "non-plastic"



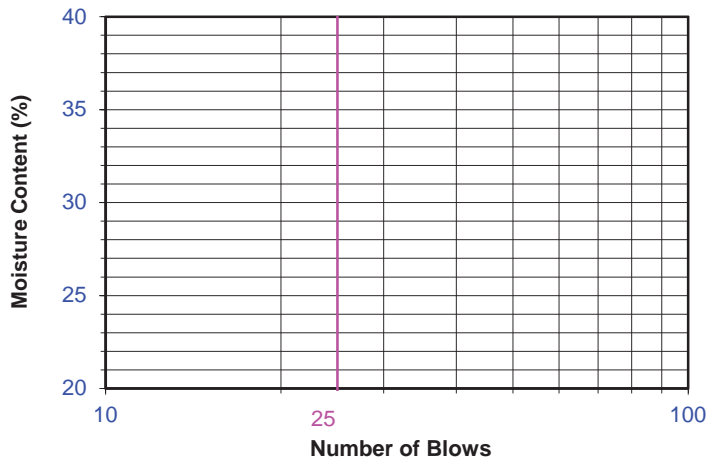
ATTERBERG LIMITS ASTM D 4318

Project Name: Roosevelt Park Infiltration Study **Tested By:** LS **Date:** 05/29/17
Project No.: 20180388.001A **Checked By:** AP **Date:** 05/30/17



PROCEDURE USED

- Wet Preparation
- Dry Preparation
- Procedure A
Multipoint Test
- Procedure B
One-point Test



Symbol	Boring Number	Sample Number	Depth (feet)	LL	PL	PI	Plasticity Chart Symbol
	B-6	11	50	NP	NP	NP	

* NP denotes "non-plastic"

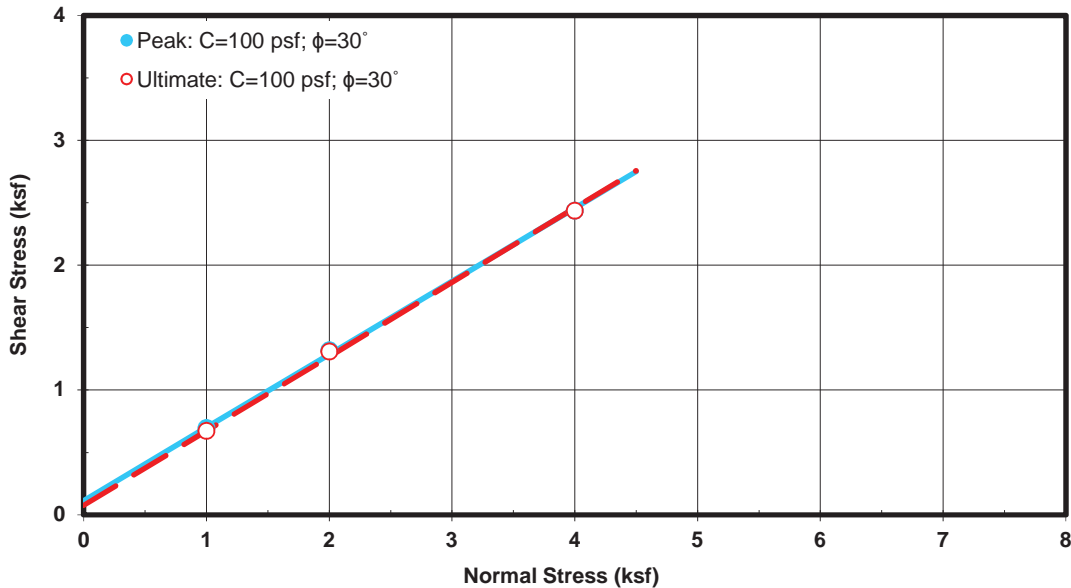
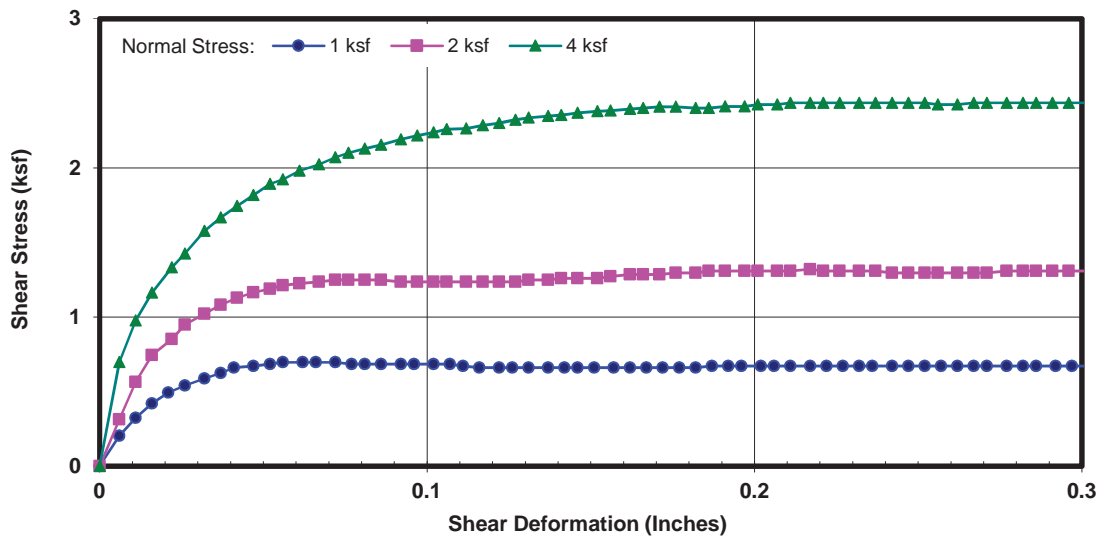


DIRECT SHEAR TEST RESULTS
ASTM D 3080

Project Name: Roosevelt Park Infiltration Study
Project No.: 20180388.001A
Boring No.: B-1
Sample No.: 3 **Depth (ft):** 10
Sample Type: Mod. Cal.
Soil Description: Silty Sand, fine-grained
Test Condition: Inundated **Shear Type:** Regular

Tested By: CS **Date:** 05/25/17
Computed By: JP **Date:** 05/30/17
Checked by: AP **Date:** 05/30/17

Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	Initial Moisture Content (%)	Final Moisture Content (%)	Initial Degree Saturation (%)	Final Degree Saturation (%)	Normal Stress (ksf)	Peak Shear Stress (ksf)	Ultimate Shear Stress (ksf)
118.1	101.6	16.2	24.2	67	99	1	0.696	0.672
						2	1.320	1.308
						4	2.436	2.436



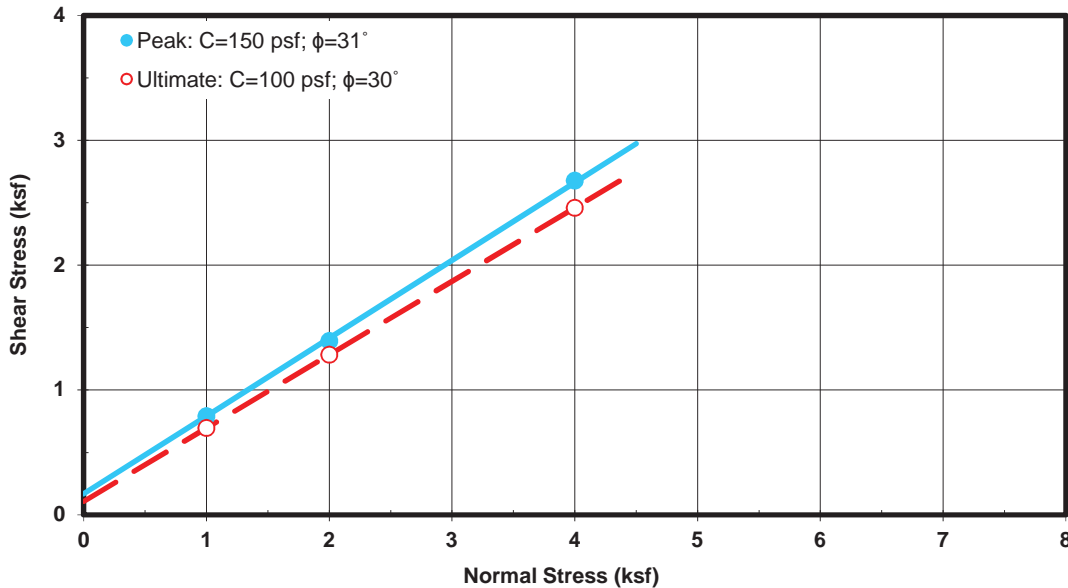
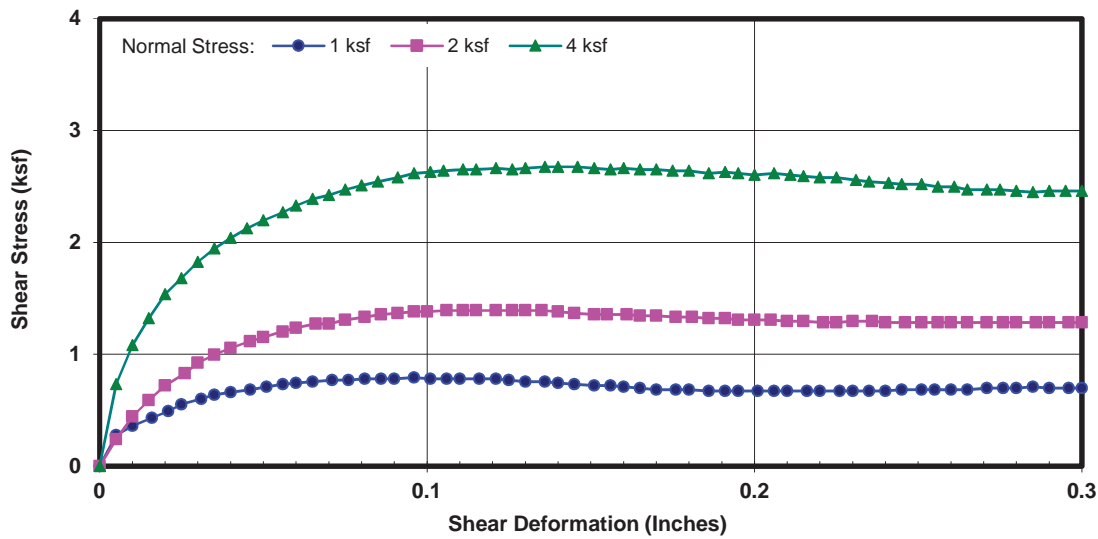


DIRECT SHEAR TEST RESULTS
ASTM D 3080

Project Name: Roosevelt Park Infiltration Study
Project No.: 20180388.001A
Boring No.: B-4
Sample No.: 1 **Depth (ft):** 5
Sample Type: Mod. Cal.
Soil Description: Fine Sand
Test Condition: Inundated **Shear Type:** Regular

Tested By: CS **Date:** 05/25/17
Computed By: JP **Date:** 05/30/17
Checked by: AP **Date:** 05/30/17

Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	Initial Moisture Content (%)	Final Moisture Content (%)	Initial Degree Saturation (%)	Final Degree Saturation (%)	Normal Stress (ksf)	Peak Shear Stress (ksf)	Ultimate Shear Stress (ksf)
98.3	95.9	2.5	25.2	9	90	1	0.792	0.696
						2	1.392	1.284
						4	2.676	2.460



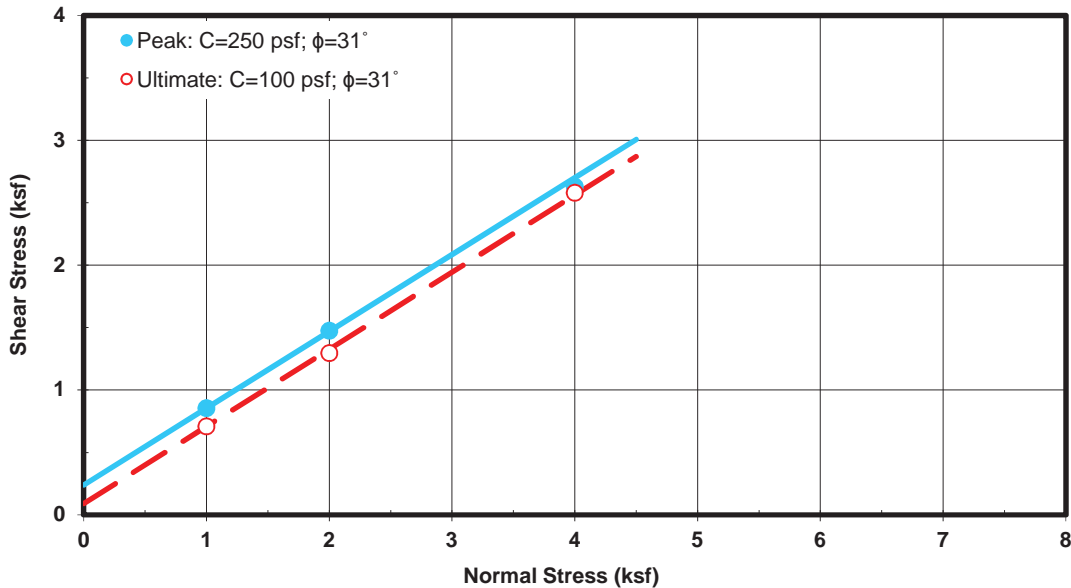
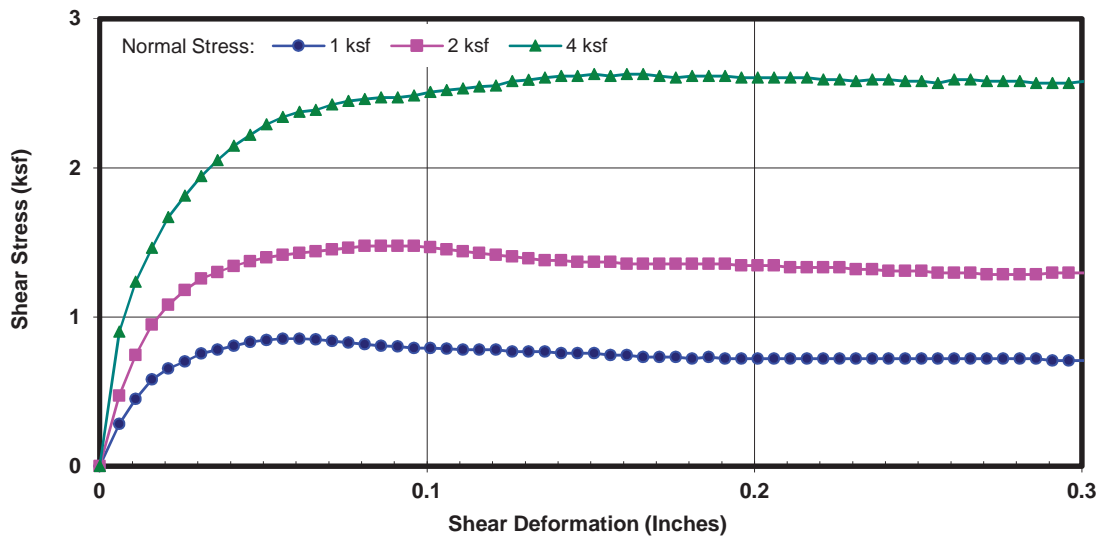


DIRECT SHEAR TEST RESULTS ASTM D 3080

Project Name: Roosevelt Park Infiltration Study
Project No.: 20180388.001A
Boring No.: B-6
Sample No.: 2 **Depth (ft):** 5
Sample Type: Mod. Cal.
Soil Description: Silty Sand, fine-grained
Test Condition: Inundated **Shear Type:** Regular

Tested By: CS **Date:** 05/25/17
Computed By: JP **Date:** 05/30/17
Checked by: AP **Date:** 05/30/17

Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	Initial Moisture Content (%)	Final Moisture Content (%)	Initial Degree Saturation (%)	Final Degree Saturation (%)	Normal Stress (ksf)	Peak Shear Stress (ksf)	Ultimate Shear Stress (ksf)
120.1	108.4	10.8	19.6	53	95	1	0.854	0.708
						2	1.476	1.296
						4	2.628	2.580



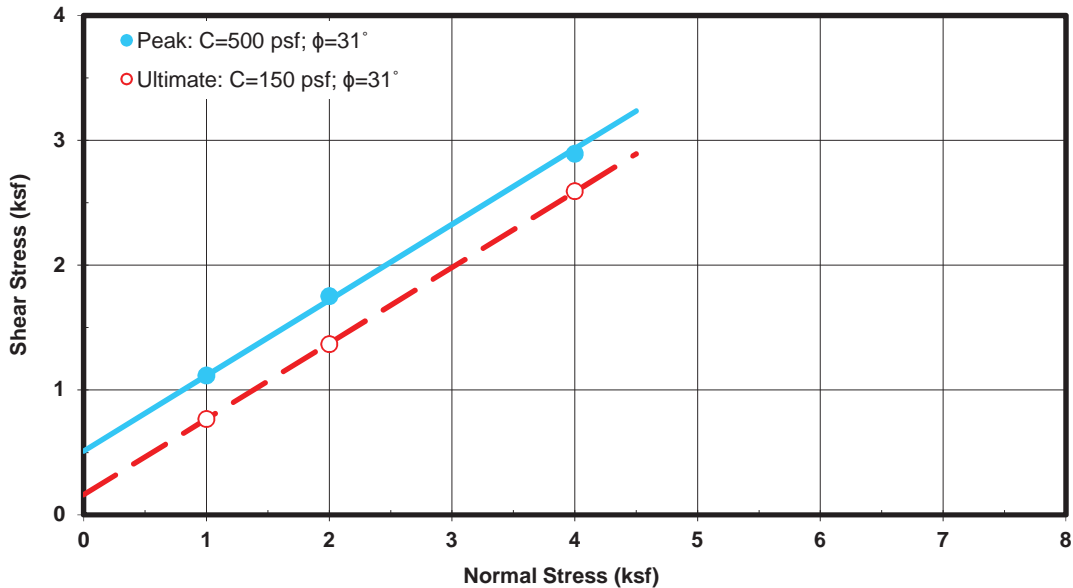
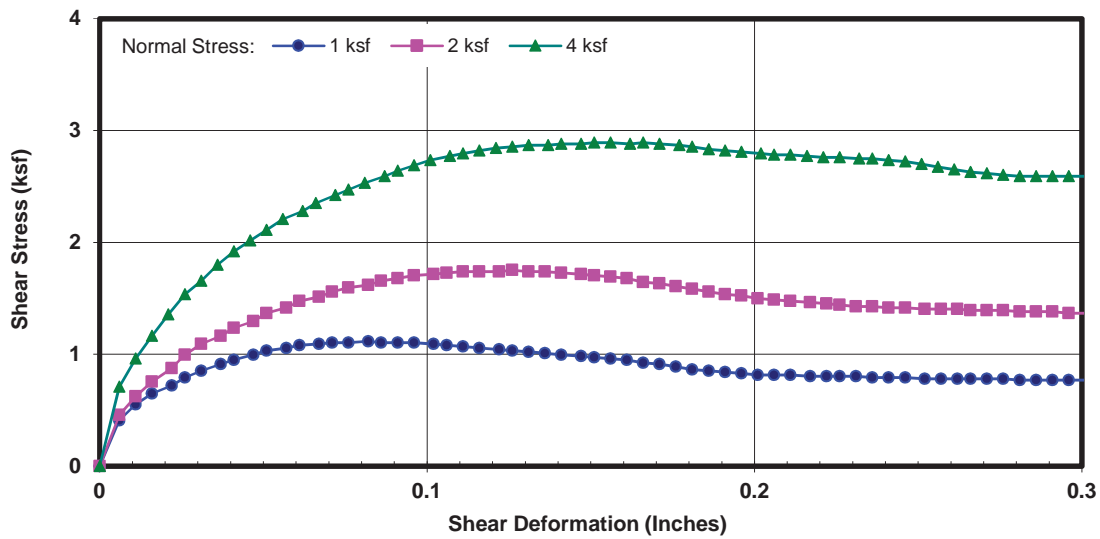


DIRECT SHEAR TEST RESULTS
ASTM D 3080

Project Name: Roosevelt Park Infiltration Study
Project No.: 20180388.001A
Boring No.: B-7
Sample No.: 3 **Depth (ft):** 10
Sample Type: Mod. Cal.
Soil Description: Clayey Sand
Test Condition: Inundated **Shear Type:** Regular

Tested By: CS **Date:** 05/26/17
Computed By: JP **Date:** 05/30/17
Checked by: AP **Date:** 05/30/17

Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	Initial Moisture Content (%)	Final Moisture Content (%)	Initial Degree Saturation (%)	Final Degree Saturation (%)	Normal Stress (ksf)	Peak Shear Stress (ksf)	Ultimate Shear Stress (ksf)
128.7	108.9	18.2	19.9	90	98	1	1.116	0.768
						2	1.752	1.368
						4	2.892	2.592



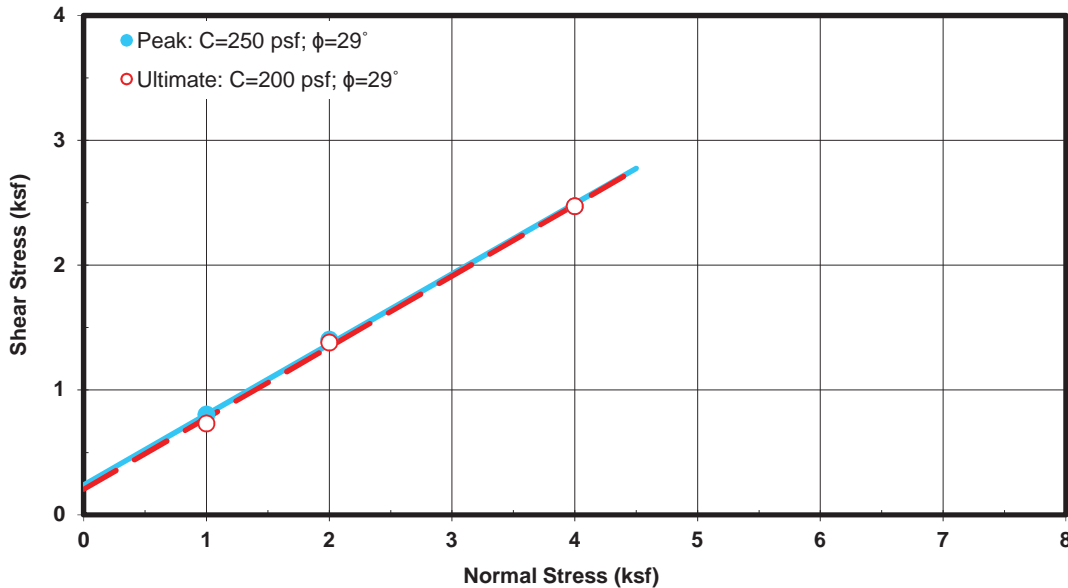
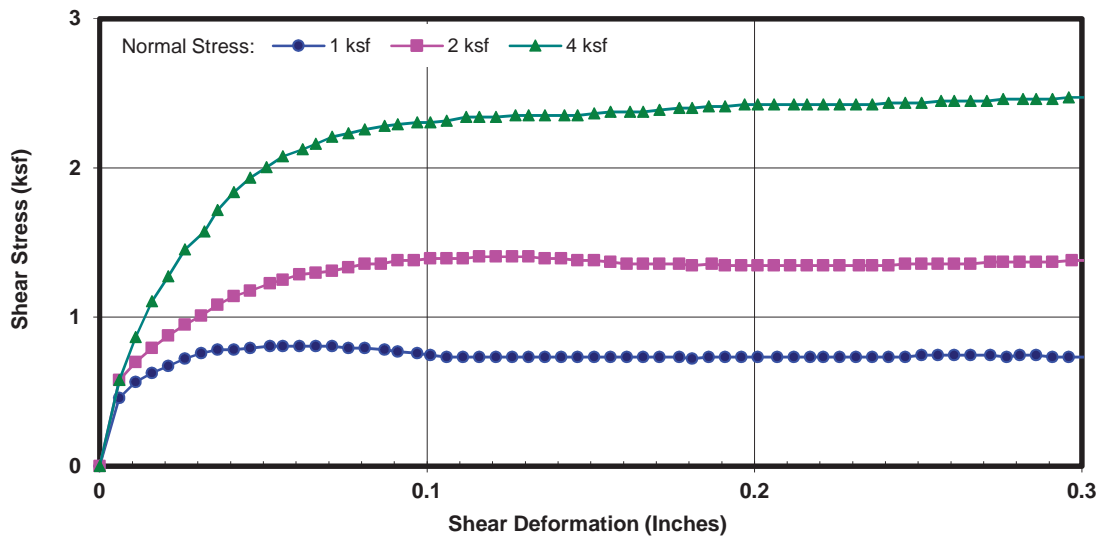


DIRECT SHEAR TEST RESULTS
ASTM D 3080

Project Name: Roosevelt Park Infiltration Study
Project No.: 20180388.001A
Boring No.: B-10
Sample No.: 3 **Depth (ft):** 10
Sample Type: Mod. Cal.
Soil Description: Silt w/fine sand
Test Condition: Inundated **Shear Type:** Regular

Tested By: CS **Date:** 05/26/17
Computed By: JP **Date:** 05/30/17
Checked by: AP **Date:** 05/30/17

Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	Initial Moisture Content (%)	Final Moisture Content (%)	Initial Degree Saturation (%)	Final Degree Saturation (%)	Normal Stress (ksf)	Peak Shear Stress (ksf)	Ultimate Shear Stress (ksf)
123.0	106.4	15.6	21.2	72	98	1	0.804	0.732
						2	1.404	1.380
						4	2.472	2.472



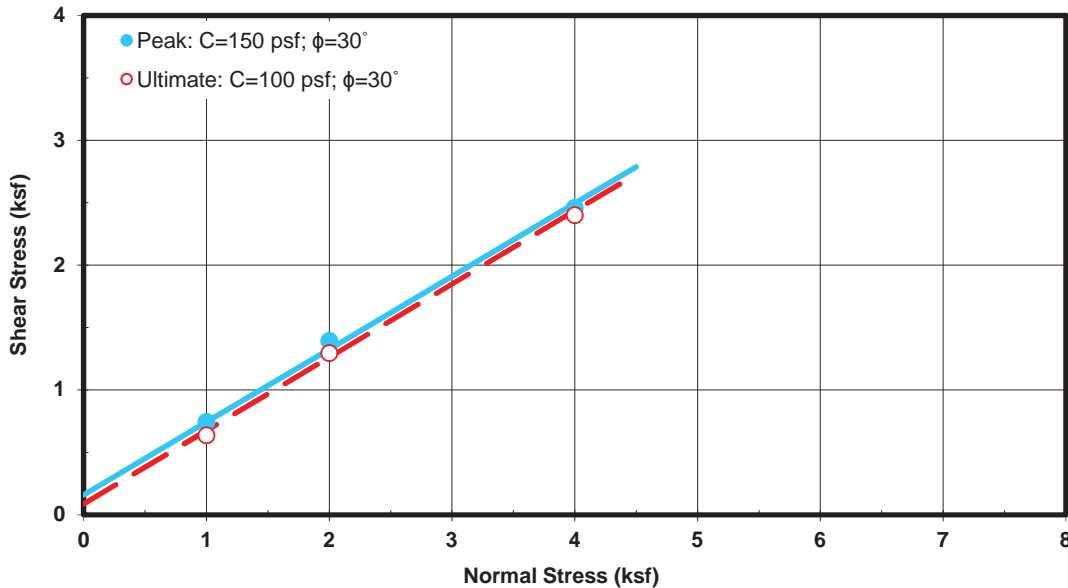
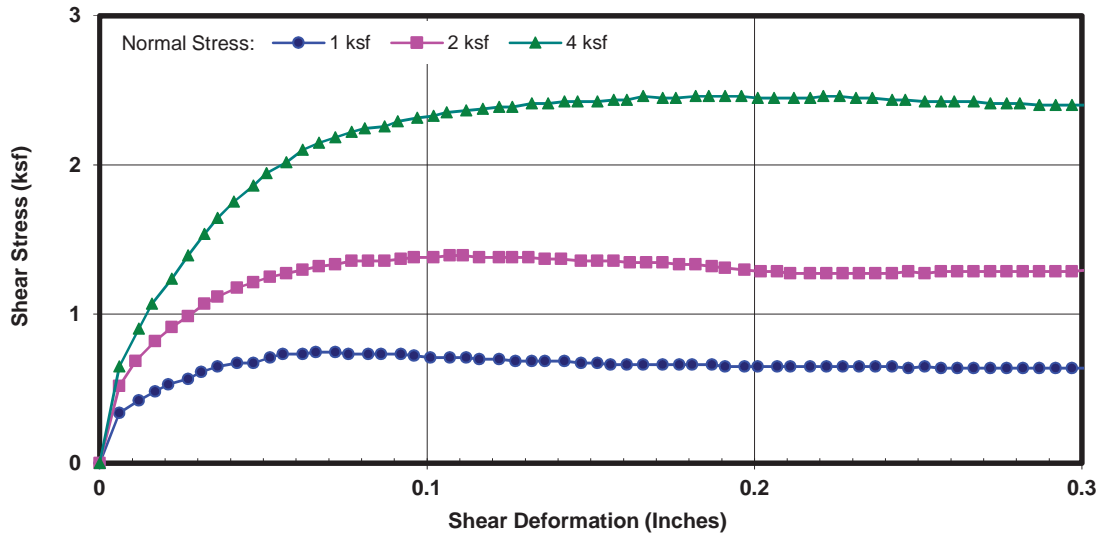


DIRECT SHEAR TEST RESULTS
ASTM D 3080

Project Name: Roosevelt Park Infiltration Study
Project No.: 20180388.001A
Boring No.: B-12
Sample No.: 2 **Depth (ft):** 5
Sample Type: Mod. Cal.
Soil Description: Silty Sand, fine-grained
Test Condition: Inundated **Shear Type:** Regular

Tested By: CS **Date:** 05/26/17
Computed By: JP **Date:** 05/30/17
Checked by: AP **Date:** 05/30/17

Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	Initial Moisture Content (%)	Final Moisture Content (%)	Initial Degree Saturation (%)	Final Degree Saturation (%)	Normal Stress (ksf)	Peak Shear Stress (ksf)	Ultimate Shear Stress (ksf)
116.7	101.2	15.3	22.4	62	91	1	0.744	0.636
						2	1.392	1.296
						4	2.460	2.400



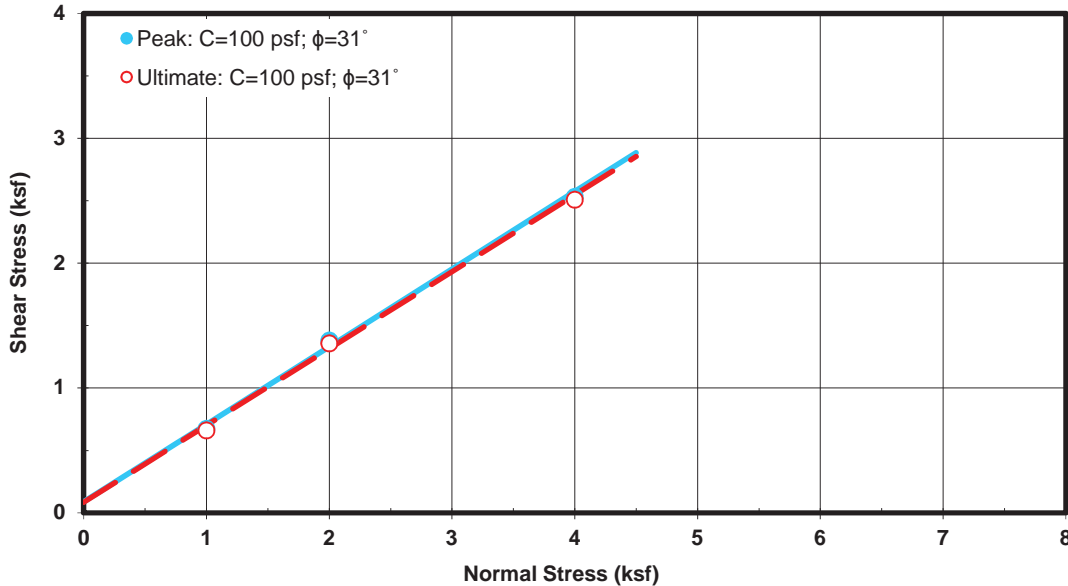
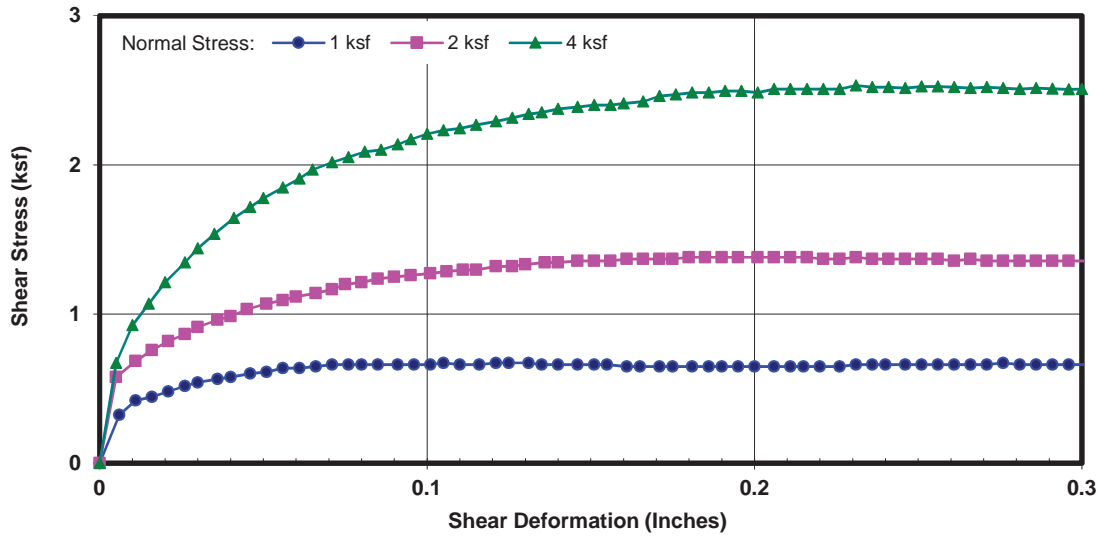


DIRECT SHEAR TEST RESULTS
ASTM D 3080

Project Name: Roosevelt Park Infiltration Study
Project No.: 20180388.001A
Boring No.: B-15
Sample No.: 2 **Depth (ft):** 5
Sample Type: Mod. Cal.
Soil Description: Silty Sand w/pockets of clay
Test Condition: Inundated **Shear Type:** Regular

Tested By: CS **Date:** 05/26/17
Computed By: JP **Date:** 05/30/17
Checked by: AP **Date:** 05/30/17

Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	Initial Moisture Content (%)	Final Moisture Content (%)	Initial Degree Saturation (%)	Final Degree Saturation (%)	Normal Stress (ksf)	Peak Shear Stress (ksf)	Ultimate Shear Stress (ksf)
114.9	105.5	9.0	19.9	41	90	1	0.672	0.660
						2	1.380	1.356
						4	2.532	2.508



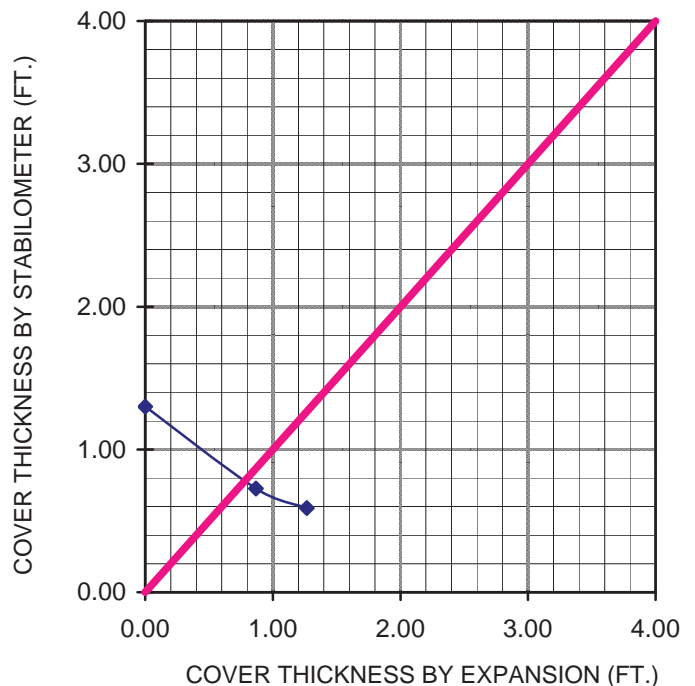
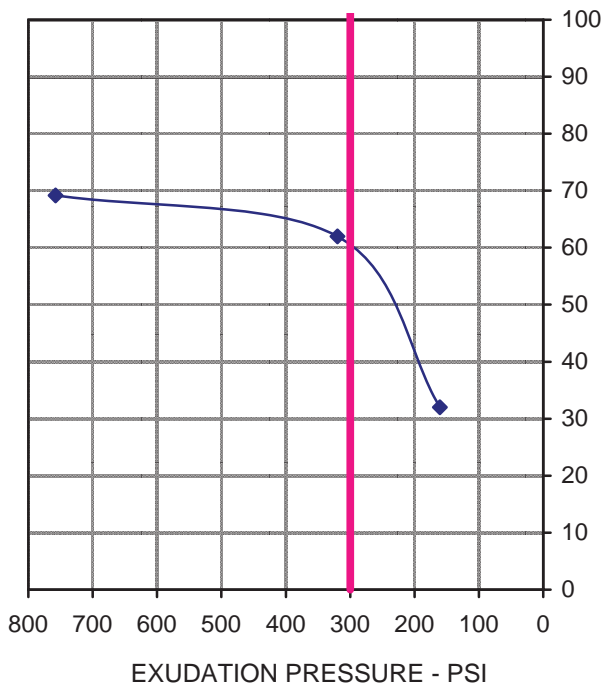


R-VALUE TEST DATA
 ASTM D2844

Project Name:	<u>Roosevelt Park Infiltration Study</u>	Tested By:	<u>ST</u>	Date:	<u>05/25/17</u>
Project Number:	<u>20180388.001A</u>	Computed By:	<u>KM</u>	Date:	<u>05/28/17</u>
Boring No.:	<u>B-1</u>	Checked By:	<u>AP</u>	Date:	<u>05/30/17</u>
Sample No.:	<u>1</u>	Depth (ft.):	<u>0-5</u>		
Location:	<u>N/A</u>				
Soil Description:	<u>Silty Sand, fine-grained</u>				

Mold Number	D	E	F	
Water Added, g	72	61	45	
Compact Moisture(%)	17.3	16.1	14.3	
Compaction Gage Pressure, psi	100	190	250	
Exudation Pressure, psi	161	320	758	
Sample Height, Inches	2.6	2.6	2.6	
Gross Weight Mold, g	3040	3007	2914	
Tare Weight Mold, g	1969	1955	1869	
Net Sample Weight, g	1071	1052	1045	
Expansion, inches $\times 10^{-4}$	0	26	38	
Stability 2,000 (160 psi)	35/84	27/40	19/33	
Turns Displacement	5.21	5.08	4.80	
R-Value Uncorrected	30	60	67	
R-Value Corrected	32	62	69	
Dry Density, pcf	106.5	105.7	106.5	
Traffic Index	8.0	8.0	8.0	
G.E. by Stability	1.30	0.73	0.59	
G.E. by Expansion	0.00	0.87	1.27	

R-VALUE	By Exudation:	60
	By Expansion:	60
	At Equilibrium: (by Exudation)	60
Remarks	Gf = 1.34, and 0.0 % Retained on the 3/4"	



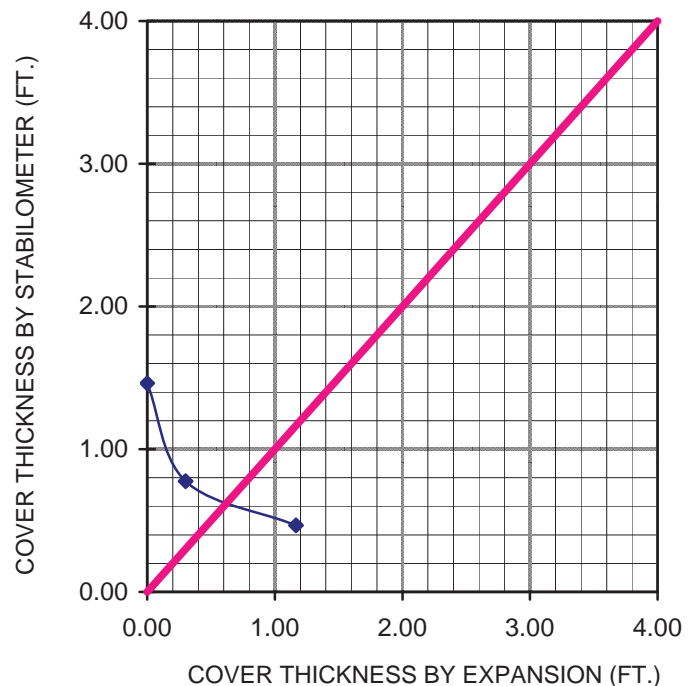
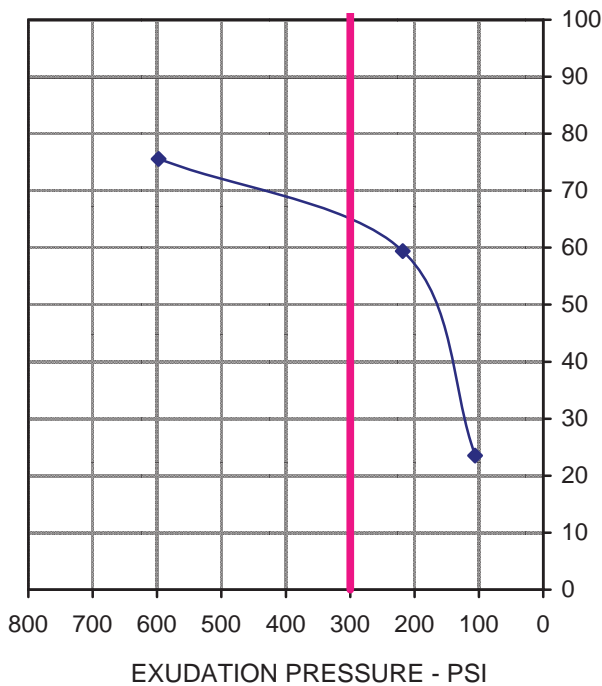


R-VALUE TEST DATA
 ASTM D2844

Project Name:	<u>Roosevelt Park Infiltration Study</u>	Tested By:	<u>ST</u>	Date:	<u>05/25/17</u>
Project Number:	<u>20180388.001A</u>	Computed By:	<u>KM</u>	Date:	<u>05/28/17</u>
Boring No.:	<u>B-12</u>	Checked By:	<u>AP</u>	Date:	<u>05/30/17</u>
Sample No.:	<u>1</u>	Depth (ft.):	<u>1-5</u>		
Location:	<u>N/A</u>				
Soil Description:	<u>Silty Sand, fine-grained</u>				

Mold Number	A	C	B	
Water Added, g	0	-15	-31	
Compact Moisture(%)	13.9	12.3	10.5	
Compaction Gage Pressure, psi	70	350	350	
Exudation Pressure, psi	106	218	597	
Sample Height, Inches	2.4	2.3	2.3	
Gross Weight Mold, g	2994	2977	2963	
Tare Weight Mold, g	1967	1965	1967	
Net Sample Weight, g	1026	1012	996	
Expansion, inches $\times 10^{-4}$	0	9	35	
Stability 2,000 (160 psi)	45/94	23/40	16/25	
Turns Displacement	5.21	4.30	3.88	
R-Value Uncorrected	25	64	78	
R-Value Corrected	24	59	76	
Dry Density, pcf	113.7	118.7	118.8	
Traffic Index	8.0	8.0	8.0	
G.E. by Stability	1.46	0.78	0.47	
G.E. by Expansion	0.00	0.30	1.17	

R-VALUE	By Exudation:	65
	By Expansion:	67
	At Equilibrium: (by Exudation)	65
Remarks	Gf = 1.34, and 0.0 % Retained on the 3/4"	





FLEXIBLE WALL HYDRAULIC CONDUCTIVITY TEST
ASTM D5084 Method A-Constant Head

Project Name: Roosevelt Park Infiltration Study
 Project No.: 20180388.001A
 Boring No.: B-6
 Sample No.: - Depth (ft.): 26.5-27.5
 Soil Description: Sandy Silt
 Test Condition: Undisturbed
Confining Pressure = 3.2 ksf
 Remarks: _____

Tested by ST Date 05/26/17
 Calculated by JP Date 05/30/17
 Checked by AP Date 05/30/17

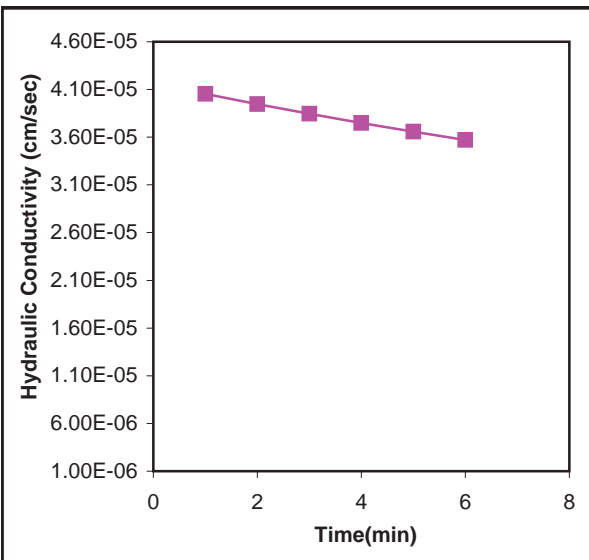
INITIAL CONDITION OF SPECIMEN

				<u>Before</u>	<u>After</u>
Diameter (d)	<u>2.899</u>	in			
Sample Area (A)	<u>6.60</u>	in ²	Wt. Wet Soil+Container(gms)	<u>298.44</u>	<u>795.86</u>
Length (L)	<u>3.009</u>	in	Wt. Dry Soil+Container(gms)	<u>272.21</u>	<u>676.74</u>
Weight Before	<u>609.90</u>	g	Wt. Container (gms)	<u>49.74</u>	<u>148.31</u>
Wet Density	<u>116.97</u>	pcf	Moisture, (%)	<u>11.79</u>	<u>22.54</u>
Dry Density	<u>104.63</u>	pcf	Degree of Saturation	<u>52</u>	<u>100</u>

SATURATION AND CONSOLIDATION PHASES

B-value Check	Initial	Final	Diff	B-value	Consolidation Data					
Cell Pressure,psi	<u>35.0</u>	<u>40.0</u>	<u>5.0</u>	<u>0.96</u>	Volume Reading (cc)					
Back Pressure,psi	<u>30.0</u>	<u>34.8</u>	<u>4.8</u>		Date	Time	Bot	Top	Total	ΔV
					<u>05/25/17</u>	<u>7:55</u>	<u>34.7</u>	<u>34.7</u>	<u>69.4</u>	<u>0.0</u>
					<u>05/26/17</u>	<u>6:35</u>	<u>32.4</u>	<u>32.5</u>	<u>64.9</u>	<u>-4.5</u>

FLOW DATA AND CALCULATIONS



Water Temp. °C, T ₁ = 24.8			Water Temp. °C, T ₂ = 24.8			
Δt (min)	Head (psi)	Burette Factor	ΔQ (cc)	Δh (cm)	Δh/L	k (cm/s)
0	1.0	1	0.0	69.43846	9.1	0
1.00	1.0	1	0.95	70.38846	9.2	4.05E-05
1.00	1.0	1	0.95	72.28846	9.5	3.95E-05
1.00	1.0	1	0.95	74.18846	9.7	3.85E-05
1.00	1.0	1	0.95	76.08846	10.0	3.75E-05
1.00	1.0	1	0.95	77.98846	10.2	3.66E-05
1.00	1.0	1	0.95	79.88846	10.5	3.57E-05

Hydraulic Conductivity, k₂₀ (cm/sec): 3.40E-05



FLEXIBLE WALL HYDRAULIC CONDUCTIVITY TEST
ASTM D5084 Method A-Constant Head

Project Name: Roosevelt Park Infiltration Study
 Project No.: 20180388.001A
 Boring No.: B-8
 Sample No.: - Depth (ft.): 26.5-28.5
 Soil Description: Sandy Silt
 Test Condition: Undisturbed
Confining Pressure = 3.2 ksf

Tested by ST Date 05/26/17
 Calculated by JP Date 05/30/17
 Checked by AP Date 05/30/17

Remarks: _____

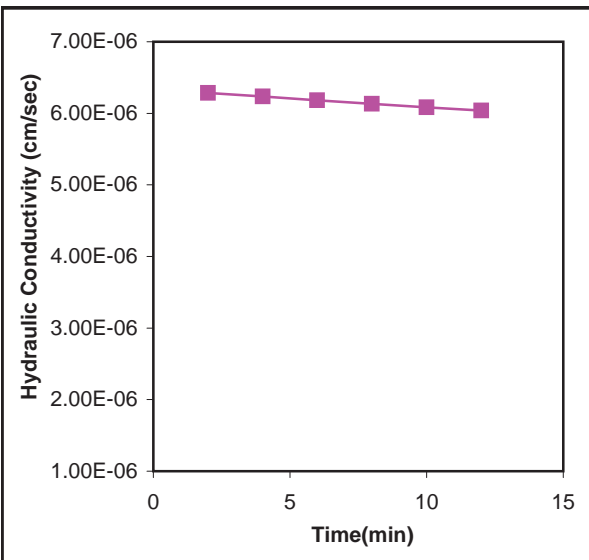
INITIAL CONDITION OF SPECIMEN

				<u>Before</u>	<u>After</u>
Diameter (d)	<u>2.87</u>	in			
Sample Area (A)	<u>6.49</u>	in ²	Wt. Wet Soil+Container(gms)	<u>281.32</u>	<u>829.38</u>
Length (L)	<u>3.02</u>	in	Wt. Dry Soil+Container(gms)	<u>249.32</u>	<u>721.73</u>
Weight Before	<u>667.80</u>	g	Wt. Container (gms)	<u>50.38</u>	<u>147.57</u>
Wet Density	<u>129.79</u>	pcf	Moisture, (%)	<u>16.09</u>	<u>18.75</u>
Dry Density	<u>111.81</u>	pcf	Degree of Saturation	<u>86</u>	<u>100</u>

SATURATION AND CONSOLIDATION PHASES

B-value Check	Initial	Final	Diff	B-value	Consolidation Data					
Cell Pressure,psi	<u>35.0</u>	<u>40.0</u>	<u>5.0</u>	0.97	Volume Reading (cc)					
Back Pressure,psi	<u>30.0</u>	<u>34.9</u>	<u>4.9</u>		Date	Time	Bot	Top	Total	ΔV
					<u>05/25/17</u>	<u>8:00</u>	<u>37.2</u>	<u>36.9</u>	<u>74.1</u>	<u>0.0</u>
					<u>05/26/17</u>	<u>7:00</u>	<u>28.2</u>	<u>36.1</u>	<u>64.3</u>	<u>-9.8</u>

FLOW DATA AND CALCULATIONS



Water Temp. °C, T ₁ = 24.6			Water Temp. °C, T ₂ = 24.6			
Δt (min)	Head (psi)	Burette Factor	ΔQ (cc)	Δh (cm)	Δh/L	k (cm/s)
0	2.0	1	0.0	133.6769	17.4	0
2.00	2.0	1	0.55	134.2269	17.5	6.29E-06
2.00	2.0	1	0.55	135.3269	17.6	6.23E-06
2.00	2.0	1	0.55	136.4269	17.8	6.18E-06
2.00	2.0	1	0.55	137.5269	17.9	6.13E-06
2.00	2.0	1	0.55	138.6269	18.1	6.09E-06
2.00	2.0	1	0.55	139.7269	18.2	6.04E-06

Hydraulic Conductivity, k₂₀ (cm/sec): 5.53E-06



AP Engineering and Testing, Inc.
DBE|MBE|SBE
2607 Pomona Boulevard | Pomona, CA 91768
t. 909.869.6316 | f. 909.869.6318 | www.aplaboratory.com

CORROSION TEST RESULTS

Client Name: Kleinfelder
Project Name: Roosevelt Park Infiltration Study
Project No.: 20180388.001A

AP Job No.: 17-0549
Date: 05/25/17

Boring No.	Sample No.	Depth (feet)	Soil Type	Minimum Resistivity (ohm-cm)	pH	Sulfate Content (ppm)	Chloride Content (ppm)
B-3	2	10	SM	2820	8.5	46	45

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



CORROSION TEST RESULTS

Client Name: Kleinfelder
Project Name: Roosevelt Park Infiltration Study
Project No.: 20180388.001A

AP Job No.: 17-0549
Date: 05/25/17

Boring No.	Sample No.	Depth (feet)	Soil Type	Minimum Resistivity (ohm-cm)	pH	Sulfate Content (ppm)	Chloride Content (ppm)
B-5	2	10	CL	649	8.6	442	243

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



CORROSION TEST RESULTS

Client Name: Kleinfelder
 Project Name: Roosevelt Park Infiltration Study
 Project No.: 20180388.001A

AP Job No.: 17-0549
 Date: 05/25/17

Boring No.	Sample No.	Depth (feet)	Soil Type	Minimum Resistivity (ohm-cm)	pH	Sulfate Content (ppm)	Chloride Content (ppm)
B-11	2	10	SM	3042	9.0	41	41

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

APPENDIX C
ENVIRONMENTAL LABORATORY TESTING

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 17, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

Project: **Roosevelt Park**
Project #: **20180388.001A**
Lab I.D.: **170511-46 through -67**

Dear Mr. Jarecki:

The **analytical results** for the soil samples, received by our laboratory on May 11, 2017, are attached. The samples were received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE SAMPLED: 05/10/17
REPORT TO: MR. ZACHARY JARECKI
DATE RECEIVED: 05/11/17
DATE EXTRACTED: 5/15/17
DATE ANALYZED: 05/15/17
DATE REPORTED: 05/17/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B; PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 6 columns: SAMPLE I.D., LAB I.D., C4-C10, C11-C22, C23-C35, DF. Rows include samples B-6@5 FT to B-6@35 FT and a METHOD BLANK row. Values are mostly ND (Not Detected) with a DF of 1. PQL values are 10, 10, and 50.

COMMENTS

C4-C10 = GASOLINE RANGE
C11-C22 = DIESEL RANGE
C23-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI


DATE RECEIVED: 05/11/17
 DATE EXTRACTED: 5/15/17
 DATE ANALYZED: 05/15/17
 DATE REPORTED: 05/17/17

TOTAL PETROLEUM HYDROCARBONS (TPB) - CARBON CHAIN ANALYSIS
 METHOD: EPA 8015B; PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
B-6@40 FT	170511-53	ND	ND	ND	1
B-6@45 FT	170511-54	ND	ND	ND	1
B-6@50 FT	170511-55	ND	ND	ND	1
B-5@5 FT	170511-56	ND	ND	ND	1
B-5@10 FT	170511-57	ND	ND	ND	1
B-5@15 FT	170511-58	ND	ND	ND	1
B-5@20 FT	170511-59	ND	ND	ND	1
B-7@5 FT	170511-60	ND	ND	ND	1
B-7@10 FT	170511-61	ND	ND	ND	1
B-7@15 FT	170511-62	ND	ND	ND	1
B-7@20 FT	170511-63	ND	ND	ND	1
B-9@5 FT	170511-64	ND	ND	ND	1
B-9@10 FT	170511-65	ND	ND	ND	1
B-9@15 FT	170511-66	ND	ND	ND	1
B-9@17.5 FT	170511-67	ND	ND	ND	1
METHOD BLANK		ND	ND	ND	1
	PQL	10	10	50	

COMMENTS

C4-C10 = GASOLINE RANGE
 C11-C22 = DIESEL RANGE
 C23-C35 = MOTOR OIL RANGE
 DF = DILUTION FACTOR
 PQL = PRACTICAL QUANTITATION LIMIT
 ACTUAL DETECTION LIMIT = DF X PQL
 ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905 Fax (909)590-5907

8015B Soil/Solid QC

Date Analyzed: 5/15-16/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051146

Spiked Sample Lab I.D.: **170510-21 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	199	99%	185	92%	7%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	168	84%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170510-10	170510-13	170510-15	170510-17	170510-19	170510-21	170510-23
O-Terphenyl	60-140%	118%	119%	126%	124%	120%	110%	133%	130%
Octacosane	60-140%	115%	132%	125%	109%	108%	102%	115%	121%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170510-25	170510-26	170510-27	170510-28	170510-29	170510-31	170511-46	170511-47
O-Terphenyl	60-140%	116%	122%	127%	125%	123%	120%	128%	125%
Octacosane	80-140%	103%	115%	111%	106%	103%	105%	107%	106%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170511-48	170511-49	170511-50	170511-51	170511-52			
O-Terphenyl	60-140%	122%	137%	115%	122%	111%			
Octacosane	60-140%	112%	114%	102%	125%	97%			

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference
 Note: LCS, MS, MSD are in control therefore results are in control.

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905 Fax (909)590-5907

8015B Soil/Solid QC

Date Analyzed: 5/15/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051153

Spiked Sample Lab I.D.: **170511-53 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11-C22 Range	0	200	195	98%	205	103%	5%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11-C22 Range	200	183	91%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170511-53	170511-54	170511-55	170511-56	170511-57	170511-58	170511-59
O-Terphenyl	60-140%	128%	120%	130%	109%	112%	113%	117%	131%
Octacosane	60-140%	124%	105%	128%	100%	102%	61%	62%	93%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170511-60	170511-61	170511-62	170511-63	170511-64	170511-65	170511-66	170511-67
O-Terphenyl	60-140%	112%	114%	113%	110%	115%	119%	107%	111%
Octacosane	60-140%	78%	93%	92%	95%	99%	105%	99%	100%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170512-19	170512-20	170512-21	170512-22	170512-23			
O-Terphenyl	60-140%	123%	114%	114%	112%	110%			
Octacosane	60-140%	125%	101%	102%	100%	100%			

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


SAMPLE I.D.: **B-6@5 FT** LAB I.D.: 170511-46

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	3.20	0.3	1	500	5.0	6010B
Barium (Ba)	119	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	21.2	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.95	1.0	1	8,000	80	6010B
Copper (Cu)	30.4	1.0	1	2,500	25	6010B
Lead (Pb)	17.2	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.121	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	11.9	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	50.8	5.0	1	2,400	24	6010B
Zinc (Zn)	77.9	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

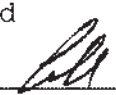
SAMPLE I.D.: **B-6@10 FT** LAB I.D.: 170511-47

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	3.39	0.3	1	500	5.0	6010B
Barium (Ba)	129	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	20.5	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	10.7	1.0	1	8,000	80	6010B
Copper (Cu)	25.0	1.0	1	2,500	25	6010B
Lead (Pb)	3.89	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.149	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	10.9	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	50.7	5.0	1	2,400	24	6010B
Zinc (Zn)	53.8	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@15 FT LAB I.D.: 170511-48

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@20 FT LAB I.D.: 170511-49

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-6@25 FT** LAB I.D.: 170511-50


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLTC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.48	0.3	1	500	5.0	6010B
Barium (Ba)	93.7	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	16.6	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.51	1.0	1	8,000	80	6010B
Copper (Cu)	14.5	1.0	1	2,500	25	6010B
Lead (Pb)	2.24	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.100	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	7.49	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	42.7	5.0	1	2,400	24	6010B
Zinc (Zn)	50.5	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLTC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLTC Limit at 560 and EPA-TCLP Limit at 5
 * = STLTC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-6@30 FT**


LAB I.D.: 170511-51

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.65	0.3	1	500	5.0	6010B
Barium (Ba)	87.7	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	13.6	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	7.97	1.0	1	8,000	80	6010B
Copper (Cu)	12.4	1.0	1	2,500	25	6010B
Lead (Pb)	2.24	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.027	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	5.26	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	38.4	5.0	1	2,400	24	6010B
Zinc (Zn)	39.4	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL** DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


SAMPLE I.D.: **B-6@35 FT** LAB I.D.: 170511-52

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.74	0.3	1	500	5.0	6010B
Barium (Ba)	85.5	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	13.8	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	8.07	1.0	1	8,000	80	6010B
Copper (Cu)	12.3	1.0	1	2,500	25	6010B
Lead (Pb)	2.38	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.067	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	5.98	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	37.4	5.0	1	2,400	24	6010B
Zinc (Zn)	41.2	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


SAMPLE I.D.: B-6@40 FT LAB I.D.: 170511-53

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.52	0.3	1	500	5.0	6010B
Barium (Ba)	123	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	18.0	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	10.2	1.0	1	8,000	80	6010B
Copper (Cu)	20.2	1.0	1	2,500	25	6010B
Lead (Pb)	3.03	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.039	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	9.51	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	45.6	5.0	1	2,400	24	6010B
Zinc (Zn)	51.3	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL** DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-6@45 FT** LAB I.D.: 170511-54

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.77	0.3	1	500	5.0	6010B
Barium (Ba)	138	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	18.9	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	10.5	1.0	1	8,000	80	6010B
Copper (Cu)	20.4	1.0	1	2,500	25	6010B
Lead (Pb)	3.36	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.042	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	11.0	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	48.1	5.0	1	2,400	24	6010B
Zinc (Zn)	50.2	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


SAMPLE I.D.: **B-6@50 FT** LAB I.D.: **170511-55**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLTC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	2.24	0.3	1	500	5.0	6010B
Barium(Ba)	118	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	16.0	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt(Co)	8.87	1.0	1	8,000	80	6010B
Copper(Cu)	14.5	1.0	1	2,500	25	6010B
Lead(Pb)	2.65	0.5	1	1,000	5.0	6010B
Mercury(Hg)	0.038	0.01	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	9.66	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	42.4	5.0	1	2,400	24	6010B
Zinc(Zn)	43.9	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLTC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLTC Limit at 560 and EPA-TCLP Limit at 5
 * = STLTC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-5@5 FT LAB I.D.: 170511-56

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

COMMENTS

- DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-5@10 FT LAB I.D.: 170511-57

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


SAMPLE I.D.: **B-5@15 FT** LAB I.D.: 170511-58

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.04	0.3	1	500	5.0	6010B
Barium (Ba)	57.6	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	9.10	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	5.77	1.0	1	8,000	80	6010B
Copper (Cu)	10.8	1.0	1	2,500	25	6010B
Lead (Pb)	1.92	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.027	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	3.38	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	29.7	5.0	1	2,400	24	6010B
Zinc (Zn)	35.2	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-5@20 FT** LAB I.D.: 170511-59


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	0.969	0.3	1	500	5.0	6010B
Barium (Ba)	49.9	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	7.16	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	4.85	1.0	1	8,000	80	6010B
Copper (Cu)	5.92	1.0	1	2,500	25	6010B
Lead (Pb)	1.59	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.043	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	25.2	5.0	1	2,400	24	6010B
Zinc (Zn)	24.5	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE SAMPLED: 05/10/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/11/17
DATE ANALYZED: 05/12/17
DATE REPORTED: 05/17/17

SAMPLE I.D.: B-7@5 FT

LAB I.D.: 170511-60

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

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Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
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REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-7@10 FT LAB I.D.: 170511-61

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
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 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


SAMPLE I.D.: **B-7@15 FT** LAB I.D.: **170511-62**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.89	0.3	1	500	5.0	6010B
Barium (Ba)	90.4	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	14.4	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	8.09	1.0	1	8,000	80	6010B
Copper (Cu)	13.0	1.0	1	2,500	25	6010B
Lead (Pb)	2.35	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.115	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	6.39	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	39.9	5.0	1	2,400	24	6010B
Zinc (Zn)	42.4	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-7@20 FT LAB I.D.: 170511-63

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


SAMPLE I.D.: **B-905 FT** LAB I.D.: 170511-64

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.78	0.3	1	500	5.0	6010B
Barium (Ba)	76.7	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	14.1	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	6.78	1.0	1	8,000	80	6010B
Copper (Cu)	18.0	1.0	1	2,500	25	6010B
Lead (Pb)	10.9	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.051	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	5.70	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	39.0	5.0	1	2,400	24	6010B
Zinc (Zn)	55.6	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-9@10 FT LAB I.D.: 170511-65

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc. with their respective results and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


SAMPLE I.D.: **B-9@15 FT** LAB I.D.: 170511-66

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.09	0.3	1	500	5.0	6010B
Barium (Ba)	117	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	14.7	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.51	1.0	1	8,000	80	6010B
Copper (Cu)	15.7	1.0	1	2,500	25	6010B
Lead (Pb)	2.60	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.057	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	6.69	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	41.1	5.0	1	2,400	24	6010B
Zinc (Zn)	43.2	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/17/17

SAMPLE I.D.: B-9@17.5 FT


LAB I.D.: 170511-67

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLTC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.35	0.3	1	500	5.0	6010B
Barium (Ba)	56.1	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	14.3	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	6.07	1.0	1	8,000	80	6010B
Copper (Cu)	11.1	1.0	1	2,500	25	6010B
Lead (Pb)	2.09	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.123	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	4.23	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	35.2	5.0	1	2,400	24	6010B
Zinc (Zn)	36.8	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLIC = Total Threshold Limit Concentration
- STLTC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLTC Limit at 560 and EPA-TCLP Limit at 5
- * = STLTC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

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METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

METHOD BLANK REPORT FOR LAB I.D.: 170511-46 THROUGH -54

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective limits and detection results.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
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*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTL--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/12/2017

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170511-49	50.0	101	PASS	8.62	50.0	51.9	87%	51.6	86%	1%
Lead(Pb)	170511-49	50.0	104	PASS	1.50	50.0	47.0	91%	48.2	93%	3%
Nickel(Ni)	170511-49	50.0	101	PASS	1.23	50.0	48.2	94%	50.7	99%	5%

ANALYSIS DATE : 5/12/2017

Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170511-72	0.125	93	PASS	0	0.125	0.112	90%	0.107	86%	5%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	76 ~ 125	85 ~ 115	0 ~ 20

Batch For Sample:170511-46--54

ANALYST: _____

FINAL REVIEWER: _____




Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


METHOD BLANK REPORT FOR LAB I.D.: 170511-55 THROUGH -67

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	ND	0.3	1	500	5.0	6010B
Barium (Ba)	ND	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	ND	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	ND	1.0	1	8,000	80	6010B
Copper (Cu)	ND	1.0	1	2,500	25	6010B
Lead (Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	ND	5.0	1	2,400	24	6010B
Zinc (Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
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 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTL--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/12/2017

Unit : mg/Kg(ppm)											
Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170511-58	50.0	95	PASS	8.10	50.0	55.3	92%	55.2	92%	0%
Lead(Pb)	170511-58	50.0	111	PASS	1.92	50.0	48.3	93%	49.8	96%	3%
Nickel(Ni)	170511-58	50.0	110	PASS	3.38	50.0	50.0	93%	51.3	96%	3%

ANALYSIS DATE : 5/12/2017

Analysis	Spk.Sample ID	170508- CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170511-72	0.125	93	PASS	0	0.125	0.112	90%	0.107	86%	5%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170511-55--67

ANALYST: 

FINAL REVIEWER: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-605 FT** LAB I.D.: **170511-46**

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@5 FT LAB I.D.: 170511-46

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM


PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@10 FT

LAB I.D.: 170511-47

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@10 FT LAB I.D.: 170511-47

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, and PQL X1. Lists various chemical compounds such as 1,3-DICHLOROPROPANE, 2,2-DICHLOROPROPANE, etc., with results mostly 'ND' and PQL values like 0.005, 0.010, 0.020.

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Handwritten signature and a horizontal line.

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/10/17**
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/11/17**
 DATE ANALYZED: **05/13/17**
 DATE REPORTED: **05/17/17**

SAMPLE I.D.: **B-6@15 FT**

LAB I.D.: **170511-48**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2**
 UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
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 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/13/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@15 FT LAB I.D.: 170511-48

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM


PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@20 FT LAB I.D.: 170511-49

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

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LABORATORY REPORT

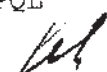
CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-6@20 FT** LAB I.D.: 170511-49

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17
DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@25 FT
LAB I.D.: 170511-50

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/10/17**
 REPORT TO: **MR. ZACHARY JARECKI**
 DATE RECEIVED: **05/11/17**
 DATE ANALYZED: **05/12/17**
 DATE REPORTED: **05/17/17**

SAMPLE I.D.: **B-6@25 FT** LAB I.D.: **170511-50**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**
 UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@30 FT
 LAB I.D.: 170511-51

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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LABORATORY REPORT

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PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/11/17
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REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@30 FT
LAB I.D.: 170511-51

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Handwritten signature

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
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 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-6@35 FT** LAB I.D.: 170511-52

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-6@35 FT**

LAB I.D.: 170511-52

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM


PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-6@40 FT** LAB I.D.: 170511-53

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2**
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: *[Signature]*

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17
DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6040 FT
LAB I.D.: 170511-53

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, and PQL X1. Lists various chemical compounds and their detection results (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Handwritten signature/initials over a horizontal line.

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@45 FT LAB I.D.: 170511-54

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-6@45 FT LAB I.D.: 170511-54

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-6@50 FT** LAB I.D.: 170511-55

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
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Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/10/17

DATE ANALYZED: 05/12/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-6@50 FT**

LAB I.D.: 170511-55

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM


PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER MTBE	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-5@5 FT** LAB I.D.: **170511-56**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2**
 UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-505 FT**

LAB I.D.: 170511-56

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-5@10 FT** LAB I.D.: **170511-57**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2**
 UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT


CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
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PROJECT: **Roosevelt Park**
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 MATRIX: SOIL DATE RECEIVED: 05/11/17
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 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-5@10 FT** LAB I.D.: 170511-57

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-5@15 FT** LAB I.D.: **170511-58**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2**
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT


CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-5@15 FT** LAB I.D.: 170511-58

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17
DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/17/17

SAMPLE I.D.: B-5@20 FT LAB I.D.: 170511-59

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-5@20 FT** LAB I.D.: 170511-59

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/17/17


SAMPLE I.D.: B-705 FT

LAB I.D.: 170511-60

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
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 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-705 FT** LAB I.D.: 170511-60

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-7@10 FT LAB I.D.: 170511-61

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-7@10 FT** LAB I.D.: 170511-61

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-7@15 FT** LAB I.D.: 170511-62

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: *SA*

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL** DATE RECEIVED: **05/11/17**
 DATE SAMPLED: **05/10/17** DATE ANALYZED: **05/12/17**
 REPORT TO: **MR. ZACHARY JARECKI** DATE REPORTED: **05/17/17**

SAMPLE I.D.: **B-7@15 FT** LAB I.D.: **170511-62**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**
 UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-7@20 FT** LAB I.D.: **170511-63**

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: LA

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT


CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-7@20 FT** LAB I.D.: 170511-63

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

METHOD BLANK REPORT FOR LAB I.D.: 170511-46 THROUGH -63

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17
DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/17/17

METHOD BLANK REPORT FOR LAB I.D.: 170511-46 THROUGH -63

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Handwritten signature

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

B260B QA/QC Report

Date Analyzed: 5/12-13/2017

Machine: C

Matrix: Solid/Soil/Liquid

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170511-46 MS/MSD

BATCH ID: 170511-46

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.058	116%	0.056	112%	4%	75-125	0-20
Chlorobenzene	0	0.050	0.058	116%	0.058	116%	0%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.059	118%	0.060	120%	2%	75-125	0-20
Toluene	0	0.050	0.055	110%	0.049	98%	12%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.041	82%	0.045	90%	8%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.058	116%	75-125
Chlorobenzene	0.050	0.053	106%	75-125
Chloroform	0.050	0.061	122%	75-125
1,1-Dichloroethene	0.050	0.055	110%	75-125
Ethylbenzene	0.050	0.057	114%	75-125
o-Xylene	0.050	0.058	116%	75-125
m,p-Xylene	0.100	0.122	122%	75-125
Toluene	0.050	0.061	122%	75-125
1,1,1-Trichloroethane	0.050	0.060	120%	75-125
Trichloroethene (TCE)	0.050	0.050	100%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170511-46	170511-47	170511-48	170511-49	170511-50	170511-51
Dibromofluoromethane	50.0	70-130	86%	110%	106%	86%	107%	139**	114%
Toluene-d8	50.0	70-130	117%	106%	119%	121%	143**	129%	127%
4-Bromofluorobenzene	50.0	70-130	71%	55**	47**	66**	80%	58**	67**

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170511-52	170511-53	170511-54	170511-55	170511-56	170511-57	170511-58
Dibromofluoromethane	50.0	70-130	108%	103%	118%	106%	81%	100%	95%
Toluene-d8	50.0	70-130	123%	123%	131**	130%	115%	117%	130%
4-Bromofluorobenzene	50.0	70-130	57**	62**	59**	61**	41**	50**	64**

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170511-59	170511-60	170511-61	170511-62	170511-63	170512-6A-D	170512-37
Dibromofluoromethane	50.0	70-130	112%	79%	111%	111%	113%	101%	107%
Toluene-d8	50.0	70-130	119%	113%	129%	126%	137**	109%	116%
4-Bromofluorobenzene	50.0	70-130	65**	47**	56**	56**	70%	67**	70%

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

spk conc = Spike Concentration

MS = Matrix Spike

%RC = Percent Recovery

ACP %RC = Accepted Percent Recovery

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: 

Final Reviewer: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-9@5 FT LAB I.D.: 170511-64

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com


PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-9@5 FT** LAB I.D.: 170511-64

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
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 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-9@10 FT** LAB I.D.: 170511-65

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
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 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-9@10 FT** LAB I.D.: 170511-65

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-9@15 FT LAB I.D.: 170511-66

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT


CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-9@15 FT** LAB I.D.: 170511-66

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/17/17

SAMPLE I.D.: B-9@17.5 FT LAB I.D.: 170511-67

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 SAMPLE I.D.: **B-9@17.5 FT** LAB I.D.: **170511-67**

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

 METHOD BLANK REPORT FOR LAB I.D.: 170511-64 THROUGH -67

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE SAMPLED: **05/10/17**

REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/11/17**

DATE ANALYZED: **05/12/17**

DATE REPORTED: **05/17/17**

METHOD BLANK REPORT FOR LAB I.D.: 170511-64 THROUGH -67

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/12-13/2017

Machine: C

Matrix: Solid/Soil/Liquid

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170512-19 MS/MSD

BATCH ID: 170512-19

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.059	118%	0.053	107%	11%	75-125	0-20
Chlorobenzene	0	0.050	0.055	110%	0.054	108%	2%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.060	120%	0.059	118%	2%	75-125	0-20
Toluene	0	0.050	0.053	106%	0.048	96%	10%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.041	82%	0.042	84%	2%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.059	118%	75-125
Chlorobenzene	0.050	0.051	102%	75-125
Chloroform	0.050	0.046	92%	75-125
1,1-Dichloroethene	0.050	0.044	88%	75-125
Ethylbenzene	0.050	0.054	108%	75-125
o-Xylene	0.050	0.052	104%	75-125
m,p-Xylene	0.100	0.108	108%	75-125
Toluene	0.050	0.055	110%	75-125
1,1,1-Trichloroethane	0.050	0.051	102%	75-125
Trichloroethene (TCE)	0.050	0.045	90%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170511-64	170511-65	170511-66	170511-67	170512-19	170512-20
Dibromofluoromethane	50.0	70-130	114%	101%	90%	139*%	85%	133*%	109%
Toluene-d8	50.0	70-130	116%	102%	117%	119%	117%	117%	119%
4-Bromofluorobenzene	50.0	70-130	74%	38*%	61*%	63*%	62*%	65*%	57*%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170512-21	170512-22	170512-23	170512-24	170512-25	170512-26	
Dibromofluoromethane	50.0	70-130	91%	85%	115%	98%	102%	108%	
Toluene-d8	50.0	70-130	124%	116%	123%	120%	130%	130%	
4-Bromofluorobenzene	50.0	70-130	58*%	53*%	53*%	57*%	56*%	63*%	

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170512-28	170512-29	170512-30	170512-31	170512-32	170512-33	
Dibromofluoromethane	50.0	70-130	83%	101%	128%	92%	97%	115%	
Toluene-d8	50.0	70-130	103%	115%	127%	129%	127%	129%	
4-Bromofluorobenzene	50.0	70-130	44*%	49*%	61*%	64*%	52*%	56*%	

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

spk conc = Spike Concentration

MS = Matrix Spike

%RC = Percent Recovery

ACP %RC = Accepted Percent Recovery

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: 

Final Reviewer: 

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 Week (Standard)
 Other: 25

TPH 8015B
 VOCs 8260B
 Analytical 7/27/03

Misc./PO#

20190388, rev.A

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required			COMMENTS
B-6 @ 5 FT	170511-46	5/10/17	1007	SOIL	5	40°F	-	1	1	1	* STILL/TEMPAS
B-6 @ 10 FT	-47		0915					1	1	1	needed
B-6 @ 15 FT	-48		0920					1	1	1	
B-6 @ 20 FT	-49		0925					1	1	1	
B-6 @ 25 FT	-50		0930					1	1	1	
B-6 @ 30 FT	-51		1005					1	1	1	
B-6 @ 35 FT	-52		1020					1	1	1	
B-6 @ 40 FT	-53		1030					1	1	1	
B-6 @ 45 FT	-54		1050					1	1	1	
B-6 @ 50 FT	-55		1100					1	1	1	
B-5 @ 5 FT	-56		1210					1	1	1	
B-5 @ 10 FT	-57		1215					1	1	1	
B-5 @ 15 FT	-58		1225					1	1	1	
B-5 @ 20 FT	-59		1230					1	1	1	

Company Name: Kleinfelder
 Address: 28 2280 Market St
 City/State/Zip: Riverside, CA 92501
 Project Contact: Zachary Jarecki
 Tel: 951-216-8012
 Fax: -
 Sampler's Signature: [Signature]
 Project Name/ID: Low Sevel + Park

Received by: [Signature] Date & Time: 5/10/17 9:30
 Received by: [Signature] Date & Time: 5/10/17 10:51
 Received by: [Signature] Date & Time: [Blank]

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
 CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 1 Week (Standard)
 Other:

Misc./PO#	20180388.001A
Analysis Required	Analysis Required
Matrix	SOIL
No. of Containers	5
Temperature	55*
Preservation	-
QPH 8058	CA Metals (matrix)
105 82613	

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required	COMMENTS
B-7 @ 5 FT	170511-60	5/10/17	1410	SOIL	5	55*	-		OK STILL/TCLP
B-7 @ 10 FT	-61		1425						AS NEEDED
B-7 @ 15 FT	-62		1435						
B-7 @ 20 FT	-63		1445						
B-9 @ 5 FT	-64		1600						
B-9 @ 10 FT	-65		1605						
B-9 @ 15 FT	-66		1615						
B-9 @ 17.5 FT	-67		1625						

Company Name: Kleinfelder
 Address: 2280 Market Street
 City/State/Zip: Riverside, CA, 92501
 Project Contact: Zelma Pavetti
 Project Name/ID: Roosevelt Park
 Sampler's Signature: _____
 Date: 5/10/17
 Received by: [Signature]
 Relinquished by: [Signature]
 Date & Time: 5/10/17 9:40
 Date & Time: 5/10/17 10:51
 Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other.

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 12, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

Project: **Roosevelt Park**
Lab I.D.: **170511-45**

Dear Mr. Jarecki:

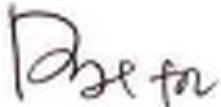
The **analytical results** for the soil sample, received by our laboratory on May 11, 2017, are attached. The sample was received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

MATRIX: <u>SOIL</u>	DATE RECEIVED: <u>05/11/17</u>
DATE SAMPLED: <u>05/10/17</u>	DATE EXTRACTED: <u>5/11/17</u>
REPORT TO: <u>MR. ZACHARY JARECKI</u>	DATE ANALYZED: <u>05/11/17</u>
	DATE REPORTED: <u>05/12/17</u>

SAMPLE I.D.: **Drum B-5 / Drum B-6 / Drum B-7 / Drum B-9**

LAB I.D.: **170511-45**

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS

METHOD: EPA 8015B

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
<u>Drum B-5 / Drum B-6 /</u>					
<u>Drum B-7 / Drum B-9</u>	<u>170511-45</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>METHOD BLANK</u>		<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
	PQL	10	10	50	

COMMENTS

C4-C10 = GASOLINE RANGE

C11-C22 = DIESEL RANGE


C23-C35 = MOTOR OIL RANGE

DF = DILUTION FACTOR

PQL = PRACTICAL QUANTITATION LIMIT

ACTUAL DETECTION LIMIT = DF X PQL

ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

8015B Soil/Solid QC

Date Analyzed: 5/11/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051145

Spiked Sample Lab I.D.: **170511-45 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	160	80%	174	87%	8%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	165	83%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170511-45						
O-Terphenyl	60-140%	132%	122%						
Octacosane	60-140%	110%	100%						

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl									
Octacosane									

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference
 Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/12/17


SAMPLE I.D.: **Drum B-5 / Drum B-6 / Drum B-7 / Drum B-9**
 LAB I.D.: 170511-45

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.83	0.3	1	500	5.0	6010B
Barium (Ba)	93.1	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	15.4	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	8.27	1.0	1	8,000	80	6010B
Copper (Cu)	15.1	1.0	1	2,500	25	6010B
Lead (Pb)	3.12	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.080	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	6.45	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	40.7	5.0	1	2,400	24	6010B
Zinc (Zn)	41.7	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/10/17

DATE ANALYZED: 05/12/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/12/17

METHOD BLANK REPORT FOR LAB I.D.: 170511-45

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	ND	0.3	1	500	5.0	6010B
Barium (Ba)	ND	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	ND	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	ND	1.0	1	8,000	80	6010B
Copper (Cu)	ND	1.0	1	2,500	25	6010B
Lead (Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	ND	5.0	1	2,400	24	6010B
Zinc (Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

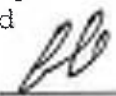
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/12/2017

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170511-49	50.0	101	PASS	8.62	50.0	51.9	87%	51.6	86%	1%
Lead(Pb)	170511-49	50.0	104	PASS	1.50	50.0	47.0	91%	48.2	93%	3%
Nickel(Ni)	170511-49	50.0	101	PASS	1.23	50.0	48.2	94%	50.7	99%	5%

ANALYSIS DATE. : 5/12/2017

Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170511-72	0.125	93	PASS	0	0.125	0.112	80%	0.107	86%	5%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Sample:170511-45

ANALYST: 

FINAL REVIEWER: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/10/17

DATE ANALYZED: 05/11/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/12/17


SAMPLE I.D.: Drum B-5 / Drum B-6 / Drum B-7 / Drum B-9

LAB I.D.: 170511-45

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2**
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE 42 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/10/17

DATE ANALYZED: 05/11/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/12/17

SAMPLE I.D.: Drum B-5 / Drum B-6 / Drum B-7 / Drum B-9
 LAB I.D.: 170511-45

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/11/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/12/17

METHOD BLANK REPORT FOR LAB I.D.: 170511-45

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

METHOD BLANK REPORT


CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 MATRIX: SOIL
 DATE SAMPLED: 05/10/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/11/17
 DATE ANALYZED: 05/11/17
 DATE REPORTED: 05/12/17

METHOD BLANK REPORT FOR LAB I.D.: 170511-45

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROCYCLOHEPTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/11/2017

Machine: 5

Matrix: Solid/Soil/Liquid

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170511-71 MS/MSD

BATCH ID: 170511-71

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.052	104%	0.053	106%	2%	75-125	0-20
Chlorobenzene	0	0.050	0.055	110%	0.056	112%	2%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.046	92%	0.056	112%	20%	75-125	0-20
Toluene	0	0.050	0.048	96%	0.048	96%	0%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.052	104%	0.044	88%	16%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.062	124%	75-125
Chlorobenzene	0.050	0.052	104%	75-125
Chloroform	0.050	0.053	106%	75-125
1,1-Dichloroethene	0.050	0.047	94%	75-125
Ethylbenzene	0.050	0.056	112%	75-125
o-Xylene	0.050	0.058	116%	75-125
m,p-Xylene	0.100	0.118	118%	75-125
Toluene	0.050	0.061	122%	75-125
1,1,1-Trichloroethane	0.050	0.044	88%	75-125
Trichloroethene (TCE)	0.050	0.049	98%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170510-27	170510-28	170510-29	170510-31	170511-45	170511-71
Dibromofluoromethane	50.0	70-130	108%	105%	127%	110%	125%	115%	90%
Toluene-d8	50.0	70-130	119%	125%	123%	119%	119%	127%	129%
4-Bromofluorobenzene	50.0	70-130	85%	80%	73%	72%	77%	66*	76%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170511-72	170511-73	170511-74	170511-68			
Dibromofluoromethane	50.0	70-130	100%	86%	120%	120%			
Toluene-d8	50.0	70-130	129%	123%	133*	139*			
4-Bromofluorobenzene	50.0	70-130	71%	65*	75%	67*			

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

spk conc = Spike Concentration

MS = Matrix Spike

%RC = Percent Recovery

ACP %RC = Accepted Percent Recovery

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: 

Final Reviewer: 

Enviro-Chem, Inc. Laboratories

1214 E. Lexington Avenue,
Pomona, CA 91766

Tel: (909) 590-5905 Fax: (909) 590-5907

CA-DHS ELAP CERTIFICATE #1555



Turnaround Time

RUSH

TPH 80158
VOCs 826015
CA Metals 60015

Misc./PO#
20180388.0014

SAMPLE ID	LAB ID	SAMPLING DATE	TIME
-----------	--------	---------------	------

DMU B5, 6, 6, 07, 09
170511-4E
5/16/17

MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION
--------	-------------------	-------------	--------------

SOIL
1X400Z

Analysis Required

COMMENTS

STRUCTURAL
6/2/17

<i>(Large handwritten signature across the table)</i>			
---	--	--	--

Company Name: **KleinFelder**

Address: **2280 Market Street**

City/State/Zip: **Riverside, CA, 92501**

Project Contact:

Zachary Jarecki

Tel: **951-216-8012**

Fax:

Sampler's Signature:

(Handwritten signature)

Project Name/ID:

Russell Park

Relinquished by: *(Signature)*

Relinquished by: *(Signature)*

Relinquished by: *(Signature)*

Received by:

Received by:

Received by:

Date & Time:

(Signature)

(Signature)

Instructions for Sample Storage After Analysis:

Dispose of Return to Client Store (30 Days)

Other:

CHAIN OF CUSTODY RECORD

Date: **5/16/17**

WHITE WITH SAMPLE • YELLOW TO CLIENT

Page **1** of **1**

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 18, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

Project: **Roosevelt Park**
Project #: **20180388.001A**
Lab I.D.: **170512-19 through -36**

Dear Mr. Jarecki:

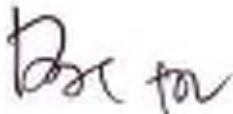
The **analytical results** for the soil samples, received by our laboratory on May 12, 2017, are attached. The samples were received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL
 DATE SAMPLED: 05/11/17
 REPORT TO: MR. ZACHARY JARECKI


DATE RECEIVED: 05/12/17
 DATE EXTRACTED: 5/15/17
 DATE ANALYZED: 05/15/17
 DATE REPORTED: 05/18/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS
 METHOD: EPA 8015B; PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
B-105 FT	170512-19	ND	ND	ND	1
B-1010 FT	170512-20	ND	ND	ND	1
B-1015 FT	170512-21	ND	ND	ND	1
B-1020 FT	170512-22	ND	ND	ND	1
B-305 FT	170512-23	ND	ND	ND	1
METHOD BLANK		ND	ND	ND	1
	PQL	10	10	50	

COMMENTS

C4-C10 = GASOLINE RANGE
 C11-C22 = DIESEL RANGE
 C23-C35 = MOTOR OIL RANGE
 DF = DILUTION FACTOR
 PQL = PRACTICAL QUANTITATION LIMIT
 ACTUAL DETECTION LIMIT = DF X PQL
 ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL**
 DATE SAMPLED: 05/11/17
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: 05/12/17
 DATE EXTRACTED: 5/15/17
 DATE ANALYZED: 05/15&16/17
 DATE REPORTED: 05/18/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS

METHOD: EPA 8015B; PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
<u>B-3@10 FT</u>	<u>170512-24</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-3@15 FT</u>	<u>170512-25</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-3@20 FT</u>	<u>170512-26</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-3@25 FT</u>	<u>170512-27</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-4@5 FT</u>	<u>170512-28</u>	<u>ND</u>	<u>ND</u>	<u>63.7</u>	<u>1</u>
<u>B-4@10 FT</u>	<u>170512-29</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-4@15 FT</u>	<u>170512-30</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-14@5 FT</u>	<u>170512-31</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-14@10 FT</u>	<u>170512-32</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-14@15 FT</u>	<u>170512-33</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-13@5 FT</u>	<u>170512-34</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-13@10 FT</u>	<u>170512-35</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>B-13@15 FT</u>	<u>170512-36</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
<u>METHOD BLANK</u>		<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>
	PQL	10	10	50	

COMMENTS

C4-C10 = GASOLINE RANGE

C11-C22 = DIESEL RANGE


C23-C35 = MOTOR OIL RANGE

DF = DILUTION FACTOR

PQL = PRACTICAL QUANTITATION LIMIT

ACTUAL DETECTION LIMIT = DF X PQL

ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8015B Soil/Solid QC

Date Analyzed: 5/15/2017

Units: mg/Kg (PPM)

Matrix: Solid/Sludge

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051219

Spiked Sample Lab I.D.: **170511-53 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	195	98%	205	103%	5%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	183	91%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170511-53	170511-54	170511-55	170511-56	170511-57	170511-58	170511-59
O-Terphenyl	60-140%	128%	120%	130%	109%	112%	113%	117%	131%
Octacosane	60-140%	124%	105%	128%	100%	102%	61%	62%	93%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170511-60	170511-61	170511-62	170511-63	170511-64	170511-65	170511-66	170511-67
O-Terphenyl	60-140%	112%	114%	113%	110%	115%	119%	107%	111%
Octacosane	60-140%	78%	93%	92%	95%	99%	105%	99%	100%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170512-19	170512-20	170512-21	170512-22	170512-23			
O-Terphenyl	60-140%	123%	114%	114%	112%	110%			
Octacosane	60-140%	125%	101%	102%	100%	100%			

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8015B Soil/Solid QC

Date Analyzed: 5/15-16/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051224

Spiked Sample Lab I.D.: **170512-24 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	183	91%	199	100%	9%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	158	79%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170512-24	170512-25	170512-26	170512-27	170512-28	170512-29	170512-30
O-Terphenyl	60-140%	111%	111%	113%	135%	106%	123%	67%	102%
Octacosane	60-140%	117%	98%	98%	113%	93%	123%	60%	89%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170512-31	170512-32	170512-33	170512-34	170512-35	170512-36		
O-Terphenyl	60-140%	125%	107%	105%	128%	112%	66%		
Octacosane	60-140%	107%	99%	92%	110%	101%	62%		

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-105 FT**

LAB I.D.: 170512-19

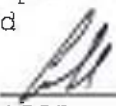
TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.76	0.3	1	500	5.0	6010B
Barium (Ba)	114	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	15.4	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.64	1.0	1	8,000	80	6010B
Copper (Cu)	15.4	1.0	1	2,500	25	6010B
Lead (Pb)	2.36	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.043	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	7.31	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	39.2	5.0	1	2,400	24	6010B
Zinc (Zn)	48.9	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/15/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-1@10 FT**

LAB I.D.: 170512-20

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.22	0.3	1	500	5.0	6010B
Barium (Ba)	129	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	19.9	0.5	1	2,500	560/500	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	10.8	1.0	1	8,000	80	6010B
Copper (Cu)	20.7	1.0	1	2,500	25	6010B
Lead (Pb)	3.44	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.066	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	10.5	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	47.7	5.0	1	2,400	24	6010B
Zinc (Zn)	55.4	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLT = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration


@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-1@15 FT**

LAB I.D.: 170512-21


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.31	0.3	1	500	5.0	6010B
Barium (Ba)	70.1	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	9.60	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	7.02	1.0	1	8,000	80	6010B
Copper (Cu)	8.68	1.0	1	2,500	25	6010B
Lead (Pb)	1.90	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.044	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	4.17	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	28.1	5.0	1	2,400	24	6010B
Zinc (Zn)	37.1	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLIC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE SAMPLED: 05/11/17

REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17

DATE ANALYZED: 05/15/17

DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-1@20 FT**

LAB I.D.: 170512-22

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.33	0.3	1	500	5.0	6010B
Barium (Ba)	48.0	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	8.77	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	5.11	1.0	1	8,000	80	6010B
Copper (Cu)	8.03	1.0	1	2,500	25	6010B
Lead (Pb)	1.68	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.029	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	33.9	5.0	1	2,400	24	6010B
Zinc (Zn)	24.9	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

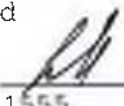
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-305 FT**


LAB I.D.: 170512-23

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.85	0.3	1	500	5.0	6010B
Barium (Ba)	96.4	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	12.9	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	7.97	1.0	1	8,000	80	6010B
Copper (Cu)	12.8	1.0	1	2,500	25	6010B
Lead (Pb)	2.40	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.033	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	5.80	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	37.7	5.0	1	2,400	24	6010B
Zinc (Zn)	39.5	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLIC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-3@10 FT** LAB I.D.: 170512-24


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	1.87	0.3	1	500	5.0	6010B
Barium(Ba)	115	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	17.0	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt(Co)	9.49	1.0	1	8,000	80	6010B
Copper(Cu)	18.6	1.0	1	2,500	25	6010B
Lead(Pb)	3.23	0.5	1	1,000	5.0	6010B
Mercury(Hg)	0.051	0.01	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	9.19	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	44.2	5.0	1	2,400	24	6010B
Zinc(Zn)	48.7	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLIC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: **05/12/17**

DATE SAMPLED: **05/11/17**

DATE ANALYZED: **05/15/17**

REPORT TO: **MR. ZACHARY JARECKI**

DATE REPORTED: **05/18/17**

SAMPLE I.D.: **B-3@15 FT**

LAB I.D.: **170512-25**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.13	0.3	1	500	5.0	6010B
Barium (Ba)	101	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	13.9	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	7.98	1.0	1	8,000	80	6010B
Copper (Cu)	17.1	1.0	1	2,500	25	6010B
Lead (Pb)	2.57	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.152	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	6.65	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	39.2	5.0	1	2,400	24	6010B
Zinc (Zn)	43.0	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLT = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration


@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-3@20 FT**

LAB I.D.: 170512-26


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.35	0.3	1	500	5.0	6010B
Barium (Ba)	59.8	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	11.2	0.5	1	2,500	560/500	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	6.40	1.0	1	8,000	80	6010B
Copper (Cu)	8.60	1.0	1	2,500	25	6010B
Lead (Pb)	1.80	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.046	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	3.97	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	34.8	5.0	1	2,400	24	6010B
Zinc (Zn)	35.3	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: **05/12/17**

DATE SAMPLED: **05/11/17**

DATE ANALYZED: **05/15/17**

REPORT TO: **MR. ZACHARY JARECKI**

DATE REPORTED: **05/18/17**

SAMPLE I.D.: **B-3@25 FT**

LAB I.D.: **170512-27**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	0.990	0.3	1	500	5.0	6010B
Barium (Ba)	78.2	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	11.4	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	7.45	1.0	1	8,000	80	6010B
Copper (Cu)	11.3	1.0	1	2,500	25	6010B
Lead (Pb)	2.23	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.036	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	5.29	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	33.7	5.0	1	2,400	24	6010B
Zinc (Zn)	40.7	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLT = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration


@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-4@5 FT**

LAB I.D.: 170512-28


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.60	0.3	1	500	5.0	6010B
Barium (Ba)	60.2	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	10.2	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	5.64	1.0	1	8,000	80	6010B
Copper (Cu)	9.17	1.0	1	2,500	25	6010B
Lead (Pb)	2.71	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.048	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	3.35	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	32.9	5.0	1	2,400	24	6010B
Zinc (Zn)	31.5	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL** DATE RECEIVED: **05/12/17**
 DATE SAMPLED: **05/11/17** DATE ANALYZED: **05/15/17**
 REPORT TO: **MR. ZACHARY JARECKI** DATE REPORTED: **05/18/17**


SAMPLE I.D.: **B-4010 FT** LAB I.D.: **170512-29**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.35	0.3	1	500	5.0	6010B
Barium (Ba)	99.2	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	14.8	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	8.76	1.0	1	8,000	80	6010B
Copper (Cu)	16.5	1.0	1	2,500	25	6010B
Lead (Pb)	2.68	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.045	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	7.70	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	40.3	5.0	1	2,400	24	6010B
Zinc (Zn)	46.2	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
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 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/12/17
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 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: B-4@15 FT

LAB I.D.: 170512-30


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.04	0.3	1	500	5.0	6010B
Barium (Ba)	55.0	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	8.09	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	5.62	1.0	1	8,000	80	6010B
Copper (Cu)	8.15	1.0	1	2,500	25	6010B
Lead (Pb)	1.91	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.062	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	2.67	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	29.3	5.0	1	2,400	24	6010B
Zinc (Zn)	30.3	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
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 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/15/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-14@5 FT**

LAB I.D.: 170512-31

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	0.988	0.3	1	500	5.0	6010B
Barium (Ba)	35.5	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	4.77	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	3.34	1.0	1	8,000	80	6010B
Copper (Cu)	4.91	1.0	1	2,500	25	6010B
Lead (Pb)	1.31	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.077	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	15.9	5.0	1	2,400	24	6010B
Zinc (Zn)	19.5	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLIC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

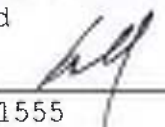
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17


SAMPLE I.D.: **B-14@10 FT** LAB I.D.: 170512-32

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.60	0.3	1	500	5.0	6010B
Barium (Ba)	102	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	15.1	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.22	1.0	1	8,000	80	6010B
Copper (Cu)	18.4	1.0	1	2,500	25	6010B
Lead (Pb)	3.06	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.057	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	40.9	5.0	1	2,400	24	6010B
Zinc (Zn)	47.6	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-14@15 FT**

LAB I.D.: 170512-33


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.12	0.3	1	500	5.0	6010B
Barium (Ba)	112	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	15.2	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.06	1.0	1	8,000	80	6010B
Copper (Cu)	15.4	1.0	1	2,500	25	6010B
Lead (Pb)	2.75	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.103	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	41.5	5.0	1	2,400	24	6010B
Zinc (Zn)	47.5	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/15/17

REPORT TO: **MR. ZACHARY JARECKI**

DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-13@5 FT**

LAB I.D.: 170512-34


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.49	0.3	1	500	5.0	6010B
Barium (Ba)	78.1	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	12.1	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	7.38	1.0	1	8,000	80	6010B
Copper (Cu)	11.0	1.0	1	2,500	25	6010B
Lead (Pb)	2.19	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.092	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	36.2	5.0	1	2,400	24	6010B
Zinc (Zn)	36.9	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLIC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-13@10 FT**


LAB I.D.: 170512-35

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.35	0.3	1	500	5.0	6010B
Barium (Ba)	110	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	17.5	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.89	1.0	1	8,000	80	6010B
Copper (Cu)	19.4	1.0	1	2,500	25	6010B
Lead (Pb)	3.00	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.054	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	9.21	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	45.2	5.0	1	2,400	24	6010B
Zinc (Zn)	50.8	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL** DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: **MR. ZACHARY JARECKI** DATE REPORTED: 05/18/17


SAMPLE I.D.: **B-13@15 FT** LAB I.D.: 170512-36

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.34	0.3	1	500	5.0	6010B
Barium (Ba)	113	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	16.5	0.5	1	2,500	560/50*	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	10.3	1.0	1	8,000	80	6010B
Copper (Cu)	18.8	1.0	1	2,500	25	6010B
Lead (Pb)	3.06	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.118	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	8.24	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	44.4	5.0	1	2,400	24	6010B
Zinc (Zn)	53.3	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17


METHOD BLANK REPORT FOR LAB I.D.: 170511-19 THROUGH -36

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	ND	0.3	1	500	5.0	6010B
Barium (Ba)	ND	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	ND	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	ND	1.0	1	8,000	80	6010B
Copper (Cu)	ND	1.0	1	2,500	25	6010B
Lead (Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	ND	5.0	1	2,400	24	6010B
Zinc (Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
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 CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTL--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/15/2017

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170512-31	50.0	92	PASS	4.77	50.0	47.9	86%	48.9	88%	2%
Lead(Pb)	170512-31	50.0	111	PASS	1.31	50.0	46.4	90%	47.0	91%	1%
Nickel(Ni)	170512-31	50.0	94	PASS	1.58	50.0	48.6	94%	49.4	96%	2%

ANALYSIS DATE: 5/15/2017

Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170512-7	0.125	91	PASS	0	0.125	0.108	86%	0.104	83%	4%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170512-19--37

ANALYST: 

FINAL REVIEWER: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-1@5 FT LAB I.D.: 170512-19

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

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 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/12/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-105 FT**

LAB I.D.: 170512-19

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

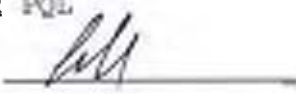
PARAMETER	SAMPLE RESULT	PQL X1
<u>1,3-DICHLOROPROPANE</u>	ND	0.005
<u>2,2-DICHLOROPROPANE</u>	ND	0.005
<u>1,1-DICHLOROPROPENE</u>	ND	0.005
<u>CIS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>TRANS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>ETHYLBENZENE</u>	ND	0.005
<u>2-HEXANONE</u>	ND	0.020
<u>HEXACHLOROBUTADIENE</u>	ND	0.005
<u>ISOPROPYLBENZENE</u>	ND	0.005
<u>4-ISOPROPYLTOLUENE</u>	ND	0.005
<u>4-METHYL-2-PENTANONE (MIBK)</u>	ND	0.020
<u>METHYL tert-BUTYL ETHER (MTBE)</u>	ND	0.005
<u>METHYLENE CHLORIDE</u>	ND	0.010
<u>NAPHTHALENE</u>	ND	0.005
<u>N-PROPYLBENZENE</u>	ND	0.005
<u>STYRENE</u>	ND	0.005
<u>1,1,1,2-TETRACHLOROETHANE</u>	ND	0.005
<u>1,1,2,2-TETRACHLOROETHANE</u>	ND	0.005
<u>TETRACHLOROETHENE (PCE)</u>	ND	0.005
<u>TOLUENE</u>	ND	0.005
<u>1,2,3-TRICHLOROBENZENE</u>	ND	0.005
<u>1,2,4-TRICHLOROBENZENE</u>	ND	0.005
<u>1,1,1-TRICHLOROETHANE</u>	ND	0.005
<u>1,1,2-TRICHLOROETHANE</u>	ND	0.005
<u>TRICHLOROETHENE (TCE)</u>	ND	0.005
<u>TRICHLOROFLUOROMETHANE</u>	ND	0.005
<u>1,2,3-TRICHLOROPROPANE</u>	ND	0.005
<u>1,2,4-TRIMETHYLBENZENE</u>	ND	0.005
<u>1,3,5-TRIMETHYLBENZENE</u>	ND	0.005
<u>VINYL CHLORIDE</u>	ND	0.005
<u>M/P-XYLENE</u>	ND	0.010
<u>O-XYLENE</u>	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

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PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/10/17

DATE ANALYZED: 05/13/17

REPORT TO: **MR. ZACHARY JARECKI**

DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-1@10 FT**

LAB I.D.: 170512-20

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

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LABORATORY REPORT

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2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/13/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


SAMPLE I.D.: **B-1@15 FT**

LAB I.D.: 170512-21

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE 42 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/11/17
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SAMPLE I.D.: **B-1@15 FT** LAB I.D.: 170512-21

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/13/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

SAMPLE I.D.: B-1@20 FT


LAB I.D.: 170512-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: **05/11/17**

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DATE ANALYZED: **05/13/17**

REPORT TO: **MR. ZACHARY JARECKI**

DATE REPORTED: **05/17/17**

SAMPLE I.D.: **B-1@20 FT**

LAB I.D.: **170512-22**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**

UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

PARAMETER	SAMPLE RESULT	PQL X1
<u>1,3-DICHLOROPROPANE</u>	ND	0.005
<u>2,2-DICHLOROPROPANE</u>	ND	0.005
<u>1,1-DICHLOROPROPENE</u>	ND	0.005
<u>CIS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>TRANS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>ETHYLBENZENE</u>	ND	0.005
<u>2-HEXANONE</u>	ND	0.020
<u>HEXACHLOROBUTADIENE</u>	ND	0.005
<u>ISOPROPYLBENZENE</u>	ND	0.005
<u>4-ISOPROPYLTOLUENE</u>	ND	0.005
<u>4-METHYL-2-PENTANONE (MIBK)</u>	ND	0.020
<u>METHYL tert-BUTYL ETHER (MTBE)</u>	ND	0.005
<u>METHYLENE CHLORIDE</u>	ND	0.010
<u>NAPHTHALENE</u>	ND	0.005
<u>N-PROPYLBENZENE</u>	ND	0.005
<u>STYRENE</u>	ND	0.005
<u>1,1,1,2-TETRACHLOROETHANE</u>	ND	0.005
<u>1,1,2,2-TETRACHLOROETHANE</u>	ND	0.005
<u>TETRACHLOROETHENE (PCE)</u>	ND	0.005
<u>TOLUENE</u>	ND	0.005
<u>1,2,3-TRICHLOROBENZENE</u>	ND	0.005
<u>1,2,4-TRICHLOROBENZENE</u>	ND	0.005
<u>1,1,1-TRICHLOROETHANE</u>	ND	0.005
<u>1,1,2-TRICHLOROETHANE</u>	ND	0.005
<u>TRICHLOROETHENE (TCE)</u>	ND	0.005
<u>TRICHLOROFLUOROMETHANE</u>	ND	0.005
<u>1,2,3-TRICHLOROPROPANE</u>	ND	0.005
<u>1,2,4-TRIMETHYLBENZENE</u>	ND	0.005
<u>1,3,5-TRIMETHYLBENZENE</u>	ND	0.005
<u>VINYL CHLORIDE</u>	ND	0.005
<u>M/P-XYLENE</u>	ND	0.010
<u>O-XYLENE</u>	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

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PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

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REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

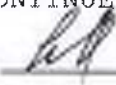
SAMPLE I.D.: B-3@5 FT

LAB I.D.: 170512-23

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
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 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-305 FT LAB I.D.: 170512-23

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL
 DATE SAMPLED: 05/11/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/11/17
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 DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-3@10 FT**

LAB I.D.: 170512-24

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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SAMPLE I.D.: **B-3@10 FT** LAB I.D.: 170512-24

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

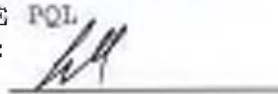
PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/13/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-3@15 FT**

LAB I.D.: 170512-25

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/10/17**
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/11/17**
 DATE ANALYZED: **05/13/17**
 DATE REPORTED: **05/17/17**

SAMPLE I.D.: **B-3@15 FT**

LAB I.D.: **170512-25**

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
<u>1,3-DICHLOROPROPANE</u>	ND	0.005
<u>2,2-DICHLOROPROPANE</u>	ND	0.005
<u>1,1-DICHLOROPROPENE</u>	ND	0.005
<u>CIS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>TRANS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>ETHYLBENZENE</u>	ND	0.005
<u>2-HEXANONE</u>	ND	0.020
<u>HEXACHLOROBTADIENE</u>	ND	0.005
<u>ISOPROPYLBENZENE</u>	ND	0.005
<u>4-ISOPROPYLTOLUENE</u>	ND	0.005
<u>4-METHYL-2-PENTANONE (MIBK)</u>	ND	0.020
<u>METHYL tert-BUTYL ETHER (MTBE)</u>	ND	0.005
<u>METHYLENE CHLORIDE</u>	ND	0.010
<u>NAPHTHALENE</u>	ND	0.005
<u>N-PROPYLBENZENE</u>	ND	0.005
<u>STYRENE</u>	ND	0.005
<u>1,1,1,2-TETRACHLOROETHANE</u>	ND	0.005
<u>1,1,2,2-TETRACHLOROETHANE</u>	ND	0.005
<u>TETRACHLOROETHENE (PCE)</u>	ND	0.005
<u>TOLUENE</u>	ND	0.005
<u>1,2,3-TRICHLOROBENZENE</u>	ND	0.005
<u>1,2,4-TRICHLOROBENZENE</u>	ND	0.005
<u>1,1,1-TRICHLOROETHANE</u>	ND	0.005
<u>1,1,2-TRICHLOROETHANE</u>	ND	0.005
<u>TRICHLOROETHENE (TCE)</u>	ND	0.005
<u>TRICHLOROFLUOROMETHANE</u>	ND	0.005
<u>1,2,3-TRICHLOROPROPANE</u>	ND	0.005
<u>1,2,4-TRIMETHYLBENZENE</u>	ND	0.005
<u>1,3,5-TRIMETHYLBENZENE</u>	ND	0.005
<u>VINYL CHLORIDE</u>	ND	0.005
<u>M/P-XYLENE</u>	ND	0.010
<u>O-XYLENE</u>	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/11/17

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REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

SAMPLE I.D.: B-3@20 FT

LAB I.D.: 170512-26

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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SAMPLE I.D.: B-3@20 FT

LAB I.D.: 170512-26

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL** DATE RECEIVED: 05/11/17
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 REPORT TO: **MR. ZACHARY JARECKI** DATE REPORTED: 05/17/17


SAMPLE I.D.: **B-3@25 FT** LAB I.D.: 170512-27

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY:
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MATRIX: SOIL DATE RECEIVED: 05/11/17
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REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-4@5 FT**

LAB I.D.: 170512-28

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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SAMPLE I.D.: **B-4@5 FT**

LAB I.D.: 170512-28

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
<u>1,3-DICHLOROPROPANE</u>	ND	0.005
<u>2,2-DICHLOROPROPANE</u>	ND	0.005
<u>1,1-DICHLOROPROPENE</u>	ND	0.005
<u>CIS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>TRANS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>ETHYLBENZENE</u>	ND	0.005
<u>2-HEXANONE</u>	ND	0.020
<u>HEXACHLOROBUTADIENE</u>	ND	0.005
<u>ISOPROPYLBENZENE</u>	ND	0.005
<u>4-ISOPROPYLTOLUENE</u>	ND	0.005
<u>4-METHYL-2-PENTANONE (MIBK)</u>	ND	0.020
<u>METHYL tert-BUTYL ETHER (MTBE)</u>	ND	0.005
<u>METHYLENE CHLORIDE</u>	ND	0.010
<u>NAPHTHALENE</u>	ND	0.005
<u>N-PROPYLBENZENE</u>	ND	0.005
<u>STYRENE</u>	ND	0.005
<u>1,1,1,2-TETRACHLOROETHANE</u>	ND	0.005
<u>1,1,2,2-TETRACHLOROETHANE</u>	ND	0.005
<u>TETRACHLOROETHENE (PCE)</u>	ND	0.005
<u>TOLUENE</u>	ND	0.005
<u>1,2,3-TRICHLOROBENZENE</u>	ND	0.005
<u>1,2,4-TRICHLOROBENZENE</u>	ND	0.005
<u>1,1,1-TRICHLOROETHANE</u>	ND	0.005
<u>1,1,2-TRICHLOROETHANE</u>	ND	0.005
<u>TRICHLOROETHENE (TCE)</u>	ND	0.005
<u>TRICHLOROFLUOROMETHANE</u>	ND	0.005
<u>1,2,3-TRICHLOROPROPANE</u>	ND	0.005
<u>1,2,4-TRIMETHYLBENZENE</u>	ND	0.005
<u>1,3,5-TRIMETHYLBENZENE</u>	ND	0.005
<u>VINYL CHLORIDE</u>	ND	0.005
<u>M/P-XYLENE</u>	ND	0.010
<u>O-XYLENE</u>	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
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PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/11/17

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REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17


SAMPLE I.D.: B-4@10 FT

LAB I.D.: 170512-29

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE 12 -----

DATA REVIEWED AND APPROVED BY: 

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SAMPLE I.D.: **B-4@10 FT**

LAB I.D.: 170512-29

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
<u>1,3-DICHLOROPROPANE</u>	ND	0.005
<u>2,2-DICHLOROPROPANE</u>	ND	0.005
<u>1,1-DICHLOROPROPENE</u>	ND	0.005
<u>CIS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>TRANS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>ETHYLBENZENE</u>	ND	0.005
<u>2-HEXANONE</u>	ND	0.020
<u>HEXACHLOROBUTADIENE</u>	ND	0.005
<u>ISOPROPYLBENZENE</u>	ND	0.005
<u>4-ISOPROPYLTOLUENE</u>	ND	0.005
<u>4-METHYL-2-PENTANONE (MIBK)</u>	ND	0.020
<u>METHYL tert-BUTYL ETHER (MTBE)</u>	ND	0.005
<u>METHYLENE CHLORIDE</u>	ND	0.010
<u>NAPHTHALENE</u>	ND	0.005
<u>N-PROPYLBENZENE</u>	ND	0.005
<u>STYRENE</u>	ND	0.005
<u>1,1,1,2-TETRACHLOROETHANE</u>	ND	0.005
<u>1,1,2,2-TETRACHLOROETHANE</u>	ND	0.005
<u>TETRACHLOROETHENE (PCE)</u>	ND	0.005
<u>TOLUENE</u>	ND	0.005
<u>1,2,3-TRICHLOROBENZENE</u>	ND	0.005
<u>1,2,4-TRICHLOROBENZENE</u>	ND	0.005
<u>1,1,1-TRICHLOROETHANE</u>	ND	0.005
<u>1,1,2-TRICHLOROETHANE</u>	ND	0.005
<u>TRICHLOROETHENE (TCE)</u>	ND	0.005
<u>TRICHLOROFLUOROMETHANE</u>	ND	0.005
<u>1,2,3-TRICHLOROPROPANE</u>	ND	0.005
<u>1,2,4-TRIMETHYLBENZENE</u>	ND	0.005
<u>1,3,5-TRIMETHYLBENZENE</u>	ND	0.005
<u>VINYL CHLORIDE</u>	ND	0.005
<u>M/P-XYLENE</u>	ND	0.010
<u>O-XYLENE</u>	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/13/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-4@15 FT** LAB I.D.: 170512-30

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

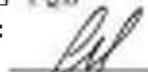
PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/10/17 DATE ANALYZED: 05/13/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-4@15 FT LAB I.D.: 170512-30

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/13/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17


SAMPLE I.D.: B-14@5 FT

LAB I.D.: 170512-31

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/10/17

DATE ANALYZED: 05/13/17

REPORT TO: **MR. ZACHARY JARECKI**

DATE REPORTED: 05/17/17

SAMPLE I.D.: **B-14@5 FT**

LAB I.D.: 170512-31

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

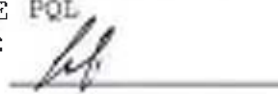
PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/13/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

SAMPLE I.D.: B-14@10 FT

LAB I.D.: 170512-32

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE 12 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

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2280 Market Street, Riverside, CA 92501
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PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/11/17

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REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

SAMPLE I.D.: B-14@10 FT

LAB I.D.: 170512-32

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A


MATRIX: SOIL DATE RECEIVED: 05/11/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/13/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

SAMPLE I.D.: B-14@15 FT LAB I.D.: 170512-33

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBEZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBEZENE	ND	0.005
1,3-DICHLOROBEZENE	ND	0.005
1,4-DICHLOROBEZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/11/17

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REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

SAMPLE I.D.: B-14@15 FT

LAB I.D.: 170512-33

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/15/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/18/17


SAMPLE I.D.: B-13@5 FT

LAB I.D.: 170512-34

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/15/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/18/17

SAMPLE I.D.: **B-13@5 FT**

LAB I.D.: 170512-34

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
<u>1,3-DICHLOROPROPANE</u>	ND	0.005
<u>2,2-DICHLOROPROPANE</u>	ND	0.005
<u>1,1-DICHLOROPROPENE</u>	ND	0.005
<u>CIS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>TRANS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>ETHYLBENZENE</u>	ND	0.005
<u>2-HEXANONE</u>	ND	0.020
<u>HEXACHLOROBUTADIENE</u>	ND	0.005
<u>ISOPROPYLBENZENE</u>	ND	0.005
<u>4-ISOPROPYLTOLUENE</u>	ND	0.005
<u>4-METHYL-2-PENTANONE (MIBK)</u>	ND	0.020
<u>METHYL tert-BUTYL ETHER (MTBE)</u>	ND	0.005
<u>METHYLENE CHLORIDE</u>	ND	0.010
<u>NAPHTHALENE</u>	ND	0.005
<u>N-PROPYLBENZENE</u>	ND	0.005
<u>STYRENE</u>	ND	0.005
<u>1,1,1,2-TETRACHLOROETHANE</u>	ND	0.005
<u>1,1,2,2-TETRACHLOROETHANE</u>	ND	0.005
<u>TETRACHLOROETHENE (PCE)</u>	ND	0.005
<u>TOLUENE</u>	ND	0.005
<u>1,2,3-TRICHLOROBENZENE</u>	ND	0.005
<u>1,2,4-TRICHLOROBENZENE</u>	ND	0.005
<u>1,1,1-TRICHLOROETHANE</u>	ND	0.005
<u>1,1,2-TRICHLOROETHANE</u>	ND	0.005
<u>TRICHLOROETHENE (TCE)</u>	ND	0.005
<u>TRICHLOROFLUOROMETHANE</u>	ND	0.005
<u>1,2,3-TRICHLOROPROPANE</u>	ND	0.005
<u>1,2,4-TRIMETHYLBENZENE</u>	ND	0.005
<u>1,3,5-TRIMETHYLBENZENE</u>	ND	0.005
<u>VINYL CHLORIDE</u>	ND	0.005
<u>M/P-XYLENE</u>	ND	0.010
<u>O-XYLENE</u>	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/15/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/18/17


SAMPLE I.D.: B-13@10 FT

LAB I.D.: 170512-35

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/18/17

SAMPLE I.D.: B-13@10 FT LAB I.D.: 170512-35

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE RECEIVED: 05/12/17
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DATE ANALYZED: 05/15/17
REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/18/17

SAMPLE I.D.: B-13@15 FT
LAB I.D.: 170512-36

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL
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DATE RECEIVED: 05/12/17
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 DATE REPORTED: 05/18/17

SAMPLE I.D.: B-13@15 FT
 LAB I.D.: 170512-36

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/12/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/18/17

METHOD BLANK REPORT FOR LAB I.D.: 170512-19 THROUGH -33

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/11/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/12/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/18/17

METHOD BLANK REPORT FOR LAB I.D.: 170512-19 THROUGH -33

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/12-13/2017

Machine: Q

Matrix: Solid/Soil/Liquid

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170512-19 MS/MSD

BATCH ID: 170512-19

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.059	118%	0.053	107%	11%	75-125	0-20
Chlorobenzene	0	0.050	0.055	110%	0.054	108%	2%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.060	120%	0.059	118%	2%	75-125	0-20
Toluene	0	0.050	0.053	106%	0.048	96%	10%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.041	82%	0.042	84%	2%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.059	118%	75-125
Chlorobenzene	0.050	0.051	102%	75-125
Chloroform	0.050	0.046	92%	75-125
1,1-Dichloroethene	0.050	0.044	88%	75-125
Ethylbenzene	0.050	0.054	108%	75-125
o-Xylene	0.050	0.052	104%	75-125
m,p-Xylene	0.100	0.108	108%	75-125
Toluene	0.050	0.055	110%	75-125
1,1,1-Trichloroethane	0.050	0.051	102%	75-125
Trichloroethene (TCE)	0.050	0.045	90%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170511-64	170511-65	170511-66	170511-67	170512-19	170512-20
Dibromofluoromethane	50.0	70-130	114%	101%	90%	139*%	85%	133*%	109%
Toluene-d8	50.0	70-130	116%	102%	117%	119%	117%	117%	119%
4-Bromofluorobenzene	50.0	70-130	74%	38*%	61*%	63*%	62*%	65*%	57*%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170512-21	170512-22	170512-23	170512-24	170512-25	170512-26	170512-27
Dibromofluoromethane	50.0	70-130	91%	85%	115%	98%	102%	108%	108%
Toluene-d8	50.0	70-130	124%	116%	123%	120%	130%	130%	115%
4-Bromofluorobenzene	50.0	70-130	58*%	53*%	53*%	57*%	56*%	63*%	57*%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170512-28	170512-29	170512-30	170512-31	170512-32	170512-33	
Dibromofluoromethane	50.0	70-130	83%	101%	128%	92%	97%	115%	
Toluene-d8	50.0	70-130	103%	115%	127%	129%	127%	129%	
4-Bromofluorobenzene	50.0	70-130	44*%	49*%	61*%	64*%	52*%	56*%	

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

spk conc = Spike Concentration

MS = Matrix Spike

%RC = Percent Recovery

ACP %RC = Accepted Percent Recovery

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: Py

Final Reviewer: e

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
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PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL

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REPORT TO: MR. ZACHARY JARECKI


DATE REPORTED: 05/18/17

METHOD BLANK REPORT FOR LAB I.D.: 170512-34, -35, -36

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE 12 -----

DATA REVIEWED AND APPROVED BY: 

METHOD BLANK REPORT

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METHOD BLANK REPORT FOR LAB I.D.: 170512-34, -35, -36

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL Xi
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/15-16/2017

Machine: C

Matrix: Solid/Soil/Liquid

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170515-22 MS/MSD

BATCH ID: 170515-22

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.052	104%	0.049	98%	6%	75-125	0-20
Chlorobenzene	0	0.050	0.057	114%	0.055	110%	4%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.055	110%	0.059	118%	8%	75-125	0-20
Toluene	0	0.050	0.048	96%	0.046	92%	4%	75-125	0-20
Trichloroethene (TCI)	0	0.050	0.050	100%	0.046	92%	8%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.050	100%	75-125
Chlorobenzene	0.050	0.051	102%	75-125
Chloroform	0.050	0.061	122%	75-125
1,1-Dichloroethene	0.050	0.059	118%	75-125
Ethylbenzene	0.050	0.056	112%	75-125
o-Xylene	0.050	0.059	118%	75-125
m,p-Xylene	0.100	0.121	121%	75-125
Toluene	0.050	0.048	96%	75-125
1,1,1-Trichloroethane	0.050	0.053	106%	75-125
Trichloroethene (TCE)	0.050	0.043	86%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170512-34	170512-35	170512-36			
Dibromofluoromethane	50.0	70-130	97%	122%	106%	86%			
Toluene-d8	50.0	70-130	124%	121%	126%	122%			
4-Bromofluorobenzene	50.0	70-130	71%	59*	54*	61*			

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

%RC = Percent Recovery

spk conc = Spike Concentration

ACP %RC = Accepted Percent Recovery

MS = Matrix Spike

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: [Signature]

Final Reviewer: [Signature]

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours



Misc./PO#
 20180388.0014

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required	COMMENTS
B-1 @ 5 FT	170512-19	5/11/17	0900	SOIL	4	-	-		*STCC/TLCP AS MEDED
B-1 @ 10 FT	-20		0910						
B-1 @ 15 FT	-21		0920						
B-1 @ 20 FT	-22		0925						
B-3 @ 5 FT	-23		1050						
B-3 @ 10 FT	-24		1110						
B-3 @ 15 FT	-25		1115						
B-3 @ 20 FT	-26		1120						
B-3 @ 25 FT	-27		1125						
B-4 @ 5 FT	-28		1225						
B-4 @ 10 FT	-29		1230						
B-4 @ 15 FT	-30		1235						
B-H @ 5 FT	-31		1330						
B-14 @ 10 FT	-32		1335						
B-14 @ 15 FT	-33		1340						

Company Name: Kleinfelder

Address: 2280 Marko St, St 300

City/State/Zip: Riverside, CA, 92501

Project Contact: Zachary Jarecki

Tel: 951-216-8012

Fax: -

Sampler's Signature: [Signature]

Project Name/ID: Roosevelt Park

Received by: [Signature] Date & Time: 5/11/17 9:40

Relinquished by: [Signature] Date & Time: 5/11/17 11:30

Relinquished by: [Signature] Date & Time: 5/11/17

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 5-72 Hours
 1 Week (Standard)



Misc./PO#	20190358 cont 20180513
LA Methyl test	
VC's 82603	
TPH 80153	

SAMPLE ID	LAB ID	SAMPLING DATE	TIME	MATRIX	NO. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required	COMMENTS
B-13 @ 5 FT	70512-34	5/11/17	1420	SODL	1	1	-	1	# STC/ACLP
B-13 @ 10 FT	70512-35	5/11/17	1445	I	1	1	1	1	AS NEEDED
B-13 @ 15 FT	70512-36	5/11/17	1450	I	1	1	1	1	
/									

Company Name: Kleinfelder Project Contact: Zachary Jarecki Sampler's Signature: [Signature]

Address: 2280 Market St, St 300 Tel: 951-210-8012 Project Name/ID: Roosevelt Park

City/State/Zip: Riverside, CA, 92501 Fax: - Date & Time: 5/11/17

Relinquished by: [Signature] Received by: [Signature]

Relinquished by: [Signature] Received by: [Signature]

Relinquished by: [Signature] Received by: [Signature]

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 15, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

Project: **Roosevelt Park**
Lab I.D.: **170512-37**

Dear Mr. Jarecki:

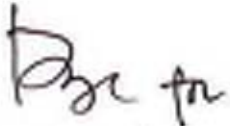
The **analytical results** for the soil sample, received by our laboratory on May 12, 2017, are attached. The sample was received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

MATRIX: SOIL

DATE SAMPLED: 05/11/17

REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17

DATE EXTRACTED: 5/15/17

DATE ANALYZED: 05/15/17

DATE REPORTED: 05/15/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS

METHOD: EPA 8015B

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
Drum B-1 /Drum B-3 /					
Drum B-4 /Drum B-14 /					
Drum B-15	170512-37	ND	338 *	ND	10
METHOD BLANK		ND	ND	ND	1
	PQL	10	10	50	

COMMENTS

C4-C10 = GASOLINE RANGE

C11-C22 = DIESEL RANGE

C23-C35 = MOTOR OIL RANGE


DF = DILUTION FACTOR

PQL = PRACTICAL QUANTITATION LIMIT

ACTUAL DETECTION LIMIT = DF X PQL

ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

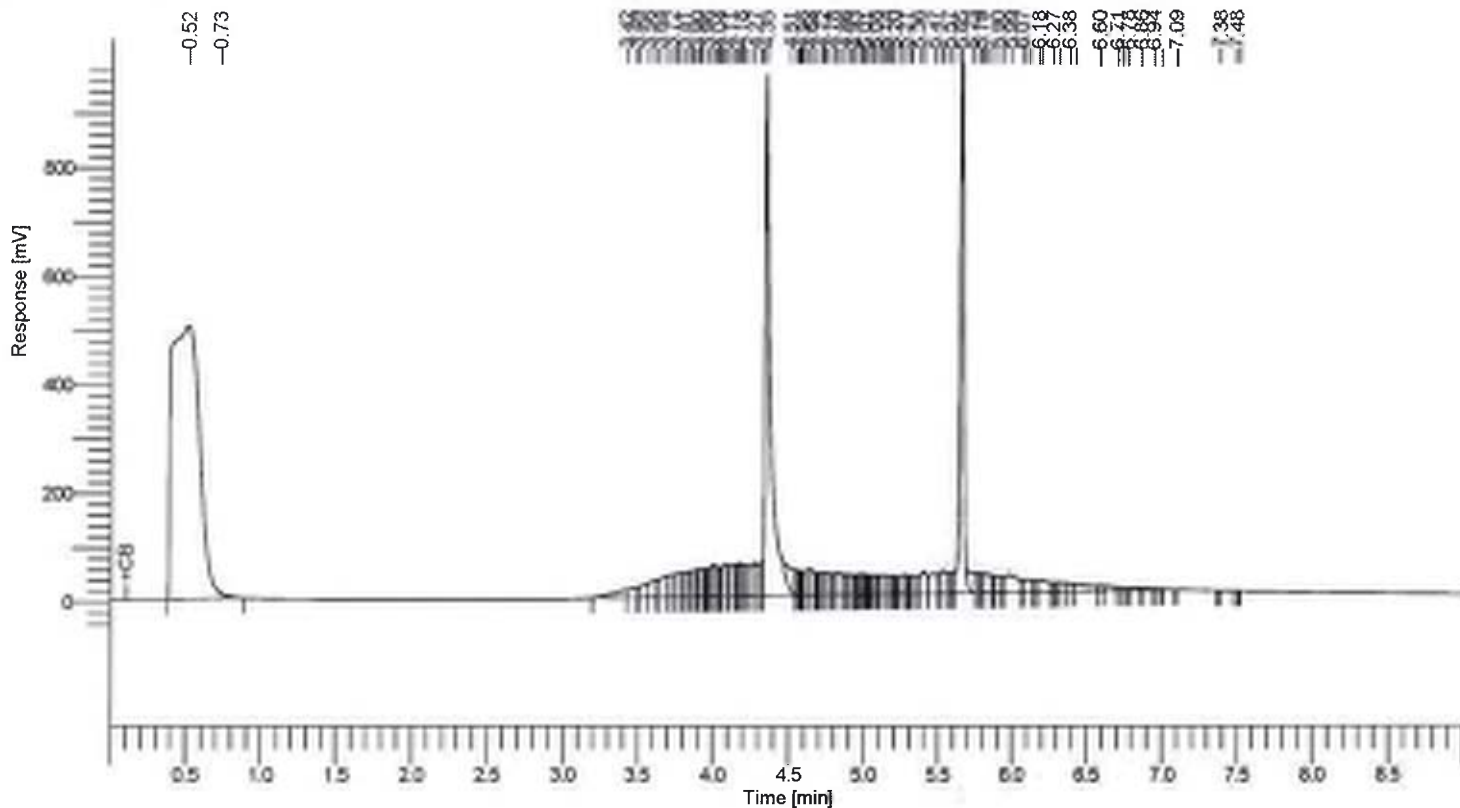
* = PEAKS IN DIESEL RANGE BUT CHROMATOGRAM DOES NOT MATCH THAT OF DIESEL STANDARD

Data Reviewed and Approved by: 
CAL-DHS ELAP CERTIFICATE No.: 1555

Software Version : 6.3.2.0646
 Sample Name : 170512-37 2020 KP*** 86
 Instrument Name : GC-I
 Rack/Vial : 0/10
 Sample Amount : 1.000000
 Cycle : 14

Date : 5/15/2017 11:10:45 AM
 Data Acquisition Time : 5/15/2017 10:47:50 AM
 Channel : A
 Operator : GC
 Dilution Factor : 1.000000

Result File : D:\GC DATA\GC-IV02017\170512\170515\A014.rst
 Sequence File : D:\GC DATA\GC-IV02017\170512\170515\170515.seq



6015 Results

Component Name	Area [uV*sec]	Adjusted Amount
C11-C22	5732581	493.0
C23-C35	3755975	506.9
9488888	999.8	

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8015B Soil/Solid QC

Date Analyzed: 5/15/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051237

Spiked Sample Lab I.D.: **170515-LCS1/2**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	163	81%	167	84%	3%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	150	75%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170512-37	170515-22					
O-Terphenyl	80-140%	125%	119%	137%					
Octacosane	80-140%	108%	108%	111%					

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl									
Octacosane									

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 MATRIX: SOIL
 DATE SAMPLED: 05/11/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/15/17
 DATE REPORTED: 05/15/17

SAMPLE I.D.: Drum B-1 / Drum B-3 / Drum B-4 / Drum B-14 /
 Drum B-15


LAB I.D.: 170512-37

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.73	0.3	1	500	5.0	6010B
Barium (Ba)	84.5	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	13.6	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	7.89	1.0	1	8,000	80	6010B
Copper (Cu)	13.0	1.0	1	2,500	25	6010B
Lead (Pb)	2.60	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.060	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	6.39	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	36.9	5.0	1	2,400	24	6010B
Zinc (Zn)	41.2	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/15/17


METHOD BLANK REPORT FOR LAB I.D.: 170512-37

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	ND	0.3	1	500	5.0	6010B
Barium (Ba)	ND	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	ND	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	ND	1.0	1	8,000	80	6010B
Copper (Cu)	ND	1.0	1	2,500	25	6010B
Lead (Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	ND	5.0	1	2,400	24	6010B
Zinc (Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis -- TTLC -- SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/15/2017

Unit : mg/Kg(ppm)

Analysis	Spk. Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170512-31	50.0	92	PASS	4.77	50.0	47.9	86%	48.9	88%	2%
Lead(Pb)	170512-31	50.0	111	PASS	1.31	50.0	46.4	90%	47.0	91%	1%
Nicke(Ni)	170512-31	50.0	94	PASS	1.58	50.0	48.6	94%	49.4	96%	2%

ANALYSIS DATE : 5/15/2017

Analysis	Spk. Sample ID	170508- CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170512-7	0.125	91	PASS	0	0.125	0.108	86%	0.104	83%	4%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nicke(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples: 170512-19~37

ANALYST: 

FINAL REVIEWER: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/15/17

SAMPLE I.D.: Drum B-1 / Drum B-3 / Drum B-4 / Drum B-14 / Drum B-15
 LAB I.D.: 170512-37

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/11/17

DATE ANALYZED: 05/12/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/15/17

SAMPLE I.D.: Drum B-1 / Drum B-3 / Drum B-4 / Drum B-14 / Drum B-15
LAB I.D.: 170512-37

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTIFICATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 MATRIX: SOIL
 DATE SAMPLED: 05/11/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/12/17
 DATE REPORTED: 05/15/17

METHOD BLANK REPORT FOR LAB I.D.: 170512-37

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYL BENZENE	ND	0.005
SEC-BUTYL BENZENE	ND	0.005
TERT-BUTYL BENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLORO BENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

METHOD BLANK REPORT


CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/11/17 DATE ANALYZED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/15/17

METHOD BLANK REPORT FOR LAB I.D.: 170512-37

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
<u>CIS-1,3-DICHLOROPROPENE</u>	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
<u>ETHYLBENZENE</u>	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
<u>METHYL tert-BUTYL ETHER (MTBE)</u>	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P--XYLENE	ND	0.010
O--XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/12-13/2017

Machine: Q

Matrix: Solid/Soils Liquid

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170511-46 MS/MSD

BATCH ID: 170511-46

Analyte	S.R	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.058	116%	0.056	112%	4%	75-125	0-20
Chlorobenzene	0	0.050	0.058	116%	0.058	116%	0%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.059	118%	0.060	120%	2%	75-125	0-20
Toluene	0	0.050	0.055	110%	0.049	98%	12%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.041	82%	0.045	90%	8%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.058	116%	75-125
Chlorobenzene	0.050	0.053	106%	75-125
Chloroform	0.050	0.061	122%	75-125
1,1-Dichloroethene	0.050	0.055	110%	75-125
Ethylbenzene	0.050	0.057	114%	75-125
o-Xylene	0.050	0.058	116%	75-125
m,p-Xylene	0.100	0.122	122%	75-125
Toluene	0.050	0.061	122%	75-125
1,1,1-Trichloroethane	0.050	0.060	120%	75-125
Trichloroethene (TCE)	0.050	0.050	100%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170511-46	170511-47		170511-49	170511-50	170511-51
Dibromofluoromethane	50.0	70-130	86%	110%	106%		107%	139%	114%
Toluene-d8	50.0	70-130	117%	106%	119%		143%	129%	127%
4-Bromofluorobenzene	50.0	70-130	71%	55*	47*		80%	58*	67*

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170511-52	170511-53	170511-54	170511-55	170511-56	170511-57	170511-58
Dibromofluoromethane	50.0	70-130	108%	103%	118%	106%	81%	100%	95%
Toluene-d8	50.0	70-130	123%	123%	131%	130%	115%	117%	130%
4-Bromofluorobenzene	50.0	70-130	57*	62*	59*	61*	41*	50*	64*

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170511-59	170511-60	170511-61	170511-62	170511-63	170512-6A-D	170512-7
Dibromofluoromethane	50.0	70-130	112%	79%	111%	111%	113%	101%	107%
Toluene-d8	50.0	70-130	119%	113%	128%	126%	137%	109%	116%
4-Bromofluorobenzene	50.0	70-130	65*	47*	56*	56*	70%	67*	70%

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

%RC = Percent Recovery

spk conc = Spike Concentration

ACP %RC = Accepted Percent Recovery

MS = Matrix Spike

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: 

Final Reviewer: _____

Date: May 19, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

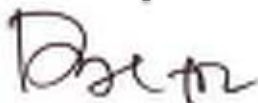
Project: **Roosevelt Park**
Project #: **20180388.001A**
Lab I.D.: **170515-9 through -21**

Dear Mr. Jarecki:

The **analytical results** for the soil samples, received by our laboratory on May 12, 2017, are attached. The samples were received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE SAMPLED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
DATE EXTRACTED: 5/17/17
DATE ANALYZED: 05/17-18/17
DATE REPORTED: 05/19/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS

METHOD: EPA 8015B

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
B-10@5FT	170515-9	ND	ND	ND	1
B-10@10FT	170515-10	ND	ND	ND	1
B-10@15FT	170515-11	ND	ND	ND	1
B-10@17.5FT	170515-12	ND	ND	ND	1
B-11@5FT	170515-13	ND	ND	ND	1
B-11@10FT	170515-14	ND	ND	ND	1
B-11@15FT	170515-15	ND	ND	ND	1
B-12@5FT	170515-16	ND	ND	ND	1
B-12@10FT	170515-17	ND	ND	ND	1
B-12@15FT	170515-18	ND	ND	ND	1
B-15@5FT	170515-19	ND	13.0 *	ND	1
B-15@10FT	170515-20	ND	ND	ND	1
B-15@15FT	170515-21	ND	ND	ND	1
METHOD BLANK		ND	ND	ND	1
	PQL	10	10	50	

COMMENTS

C4-C10 = GASOLINE RANGE

C11-C22 = DIESEL RANGE

C23-C35 = MOTOR OIL RANGE


DF = DILUTION FACTOR

PQL = PRACTICAL QUANTITATION LIMIT

ACTUAL DETECTION LIMIT = DF X PQL

ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

* = PEAKS IN DIESEL RANGE BUT CHROMATOGRAM DOES NOT MATCH THAT OF DIESEL STANDARD

Data Reviewed and Approved by: 
CAL-DHS ELAP CERTIFICATE No.: 1555

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8015B Soil/Solid QC

Date Analyzed: 5/17-18/2017

Units: mg/Kg (PPM)

Matrix: Solid/Sludge

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 1705159

Spiked Sample Lab I.D.: **170516-29 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11-C22 Range	0	200	178	89%	181	90%	2%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11-C22 Range	200	211	105%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170515-9	170515-10	170515-11	170515-12	170515-13	170515-14	170515-15
O-Terphenyl	60-140%	124%	122%	115%	121%	127%	122%	124%	110%
Octacosane	60-140%	111%	115%	103%	104%	106%	118%	117%	99%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170515-16	170515-17	170515-18	170515-19	170515-20	170515-21		
O-Terphenyl	60-140%	128%	120%	104%	118%	118%	117%		
Octacosane	60-140%	107%	124%	92%	102%	104%	103%		

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL
 DATE SAMPLED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/16/17
 DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-10@5FT**

LAB I.D.: 170515-9


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.25	0.3	1	500	5.0	6010B
Barium (Ba)	58.0	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	10.7	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	5.63	1.0	1	8,000	80	6010B
Copper (Cu)	8.26	1.0	1	2,500	25	6010B
Lead (Pb)	1.74	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.056	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	4.10	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	33.9	5.0	1	2,400	24	6010B
Zinc (Zn)	27.8	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLT = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**PROJECT #: **20180388.001A**MATRIX: **SOIL**DATE RECEIVED: **05/12/17**DATE SAMPLED: **05/12/17**DATE ANALYZED: **05/16/17**REPORT TO: **MR. ZACHARY JARECKI**DATE REPORTED: **05/19/17**SAMPLE I.D.: **B-10@10FT**LAB I.D.: **170515-10****TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS**UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLTC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.16	0.3	1	500	5.0	6010B
Barium (Ba)	123	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	20.1	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	10.1	1.0	1	8,000	80	6010B
Copper (Cu)	23.5	1.0	1	2,500	25	6010B
Lead (Pb)	3.45	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.075	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	11.1	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	48.3	5.0	1	2,400	24	6010B
Zinc (Zn)	49.1	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLIC = Total Threshold Limit Concentration

STLTC = Soluble Threshold Limit Concentration

@ = Must meet both the STLTC Limit at 560 and EPA-TCLP Limit **at 5*** = STLTC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: *A*

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE SAMPLED: **05/12/17**

REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/12/17**

DATE ANALYZED: **05/16/17**

DATE REPORTED: **05/19/17**

SAMPLE I.D.: **B-10@15FT**

LAB I.D.: **170515-11**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.93	0.3	1	500	5.0	6010B
Barium (Ba)	81.1	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	14.3	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	7.99	1.0	1	8,000	80	6010B
Copper (Cu)	15.2	1.0	1	2,500	25	6010B
Lead (Pb)	2.53	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.053	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	6.59	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	41.1	5.0	1	2,400	24	6010B
Zinc (Zn)	39.7	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLT = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

0 = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: A
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL
 DATE SAMPLED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/16/17
 DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-10@17.5FT**

LAB I.D.: 170515-12

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.11	0.3	1	500	5.0	6010B
Barium (Ba)	50.1	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	8.86	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	5.13	1.0	1	8,000	80	6010B
Copper (Cu)	15.8	1.0	1	2,500	25	6010B
Lead (Pb)	1.64	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.049	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	3.23	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	30.2	5.0	1	2,400	24	6010B
Zinc (Zn)	32.3	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: A
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/12/17**
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/12/17**
 DATE ANALYZED: **05/16/17**
 DATE REPORTED: **05/19/17**

SAMPLE I.D.: **B-11@5FT**

LAB I.D.: **170515-13**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.61	0.3	1	500	5.0	6010B
Barium (Ba)	90.5	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	17.9	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	8.01	1.0	1	8,000	80	6010B
Copper (Cu)	13.8	1.0	1	2,500	25	6010B
Lead (Pb)	2.39	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.029	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	7.15	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	49.2	5.0	1	2,400	24	6010B
Zinc (Zn)	38.9	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: A
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-11@10FT** LAB I.D.: 170515-14

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.32	0.3	1	500	5.0	6010B
Barium (Ba)	119	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	19.6	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.68	1.0	1	8,000	80	6010B
Copper (Cu)	24.7	1.0	1	2,500	25	6010B
Lead (Pb)	3.44	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.093	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	10.9	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	48.4	5.0	1	2,400	24	6010B
Zinc (Zn)	47.1	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: A
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-11@15FT**


LAB I.D.: **170515-15**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.45	0.3	1	500	5.0	6010B
Barium (Ba)	103	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	17.3	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	---	0.1	-	500	5.0	7196A
Cobalt (Co)	9.22	1.0	1	8,000	80	6010B
Copper (Cu)	17.0	1.0	1	2,500	25	6010B
Lead (Pb)	2.77	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.058	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	8.29	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	45.2	5.0	1	2,400	24	6010B
Zinc (Zn)	45.7	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLT = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL** DATE RECEIVED: **05/12/17**
 DATE SAMPLED: **05/12/17** DATE ANALYZED: **05/16/17**
 REPORT TO: **MR. ZACHARY JARECKI** DATE REPORTED: **05/19/17**

SAMPLE I.D.: **B-12@5FT**

LAB I.D.: **170515-16**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.79	0.3	1	500	5.0	6010B
Barium (Ba)	88.3	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	15.1	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	7.69	1.0	1	8,000	80	6010B
Copper (Cu)	18.7	1.0	1	2,500	25	6010B
Lead (Pb)	2.73	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.121	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	7.40	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	42.5	5.0	1	2,400	24	6010B
Zinc (Zn)	44.5	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLIC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: AW
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE SAMPLED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
DATE ANALYZED: 05/16/17
DATE REPORTED: 05/19/17

SAMPLE I.D.: B-12@10FT

LAB I.D.: 170515-17

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.97	0.3	1	500	5.0	6010B
Barium (Ba)	112	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	17.9	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	8.84	1.0	1	8,000	80	6010B
Copper (Cu)	19.3	1.0	1	2,500	25	6010B
Lead (Pb)	2.88	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.068	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	9.06	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	45.9	5.0	1	2,400	24	6010B
Zinc (Zn)	45.1	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: *AJ*

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
PROJECT #: **20180388.001A**
MATRIX: SOIL
DATE SAMPLED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
DATE ANALYZED: 05/16/17
DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-12@15FT**

LAB I.D.: 170515-18

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	2.41	0.3	1	500	5.0	6010B
Barium(Ba)	109	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	18.2	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt(Co)	9.62	1.0	1	8,000	80	6010B
Copper(Cu)	20.6	1.0	1	2,500	25	6010B
Lead(Pb)	2.90	0.5	1	1,000	5.0	6010B
Mercury(Hg)	0.096	0.01	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	9.18	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	47.6	5.0	1	2,400	24	6010B
Zinc(Zn)	49.5	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLIC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration

@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: _____

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/16/17
 DATE REPORTED: 05/19/17

SAMPLE I.D.: B-15@10FT

LAB I.D.: 170515-20

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.75	0.3	1	500	5.0	6010B
Barium (Ba)	80.0	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	13.1	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	7.03	1.0	1	8,000	80	6010B
Copper (Cu)	11.6	1.0	1	2,500	25	6010B
Lead (Pb)	2.15	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.044	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	5.44	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	38.1	5.0	1	2,400	24	6010B
Zinc (Zn)	35.8	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: A
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-15@15FT**

LAB I.D.: 170515-21

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.35	0.3	1	500	5.0	6010B
Barium (Ba)	55.7	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	12.6	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	5.98	1.0	1	8,000	80	6010B
Copper (Cu)	8.90	1.0	1	2,500	25	6010B
Lead (Pb)	2.14	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.031	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	3.27	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	47.2	5.0	1	2,400	24	6010B
Zinc (Zn)	28.2	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLIC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration


@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/16/17
 DATE REPORTED: 05/19/17


METHOD BLANK REPORT FOR LAB I.D.: 170515-9 THROUGH -21

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	ND	0.3	1	500	5.0	6010B
Barium (Ba)	ND	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	ND	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	ND	1.0	1	8,000	80	6010B
Copper (Cu)	ND	1.0	1	2,500	25	6010B
Lead (Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	ND	5.0	1	2,400	24	6010B
Zinc (Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis--TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/16/2017

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170515-12	50.0	104	PASS	8.86	50.0	56.9	86%	57.4	97%	1%
Lead(Pb)	170515-12	50.0	109	PASS	1.64	50.0	43.9	85%	44.3	85%	1%
Nicel(Ni)	170515-12	50.0	102	PASS	3.23	50.0	50.1	94%	50.5	95%	1%

ANALYSIS DATE : 5/16/2017

Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170515-45	0.125	98	PASS	0.031	0.125	0.133	82%	0.137	85%	4%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nicel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170515-9--22

ANALYST: 

FINAL REVIEWER: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
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PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/12/17

DATE ANALYZED: 05/16/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/19/17

SAMPLE I.D.: B-10@5FT

LAB I.D.: 170515-9

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

A

LABORATORY REPORT

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 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/12/17

DATE ANALYZED: 05/16/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-10@5FT**

LAB I.D.: 170515-9

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/16/17
 DATE REPORTED: 05/19/17

SAMPLE I.D.: B-10@10FT

LAB I.D.: 170515-10

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY:
 CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL** DATE RECEIVED: **05/12/17**
 DATE SAMPLED: **05/12/17** DATE ANALYZED: **05/17/17**
 REPORT TO: **MR. ZACHARY JARECKI** DATE REPORTED: **05/19/17**

 SAMPLE I.D.: **B-10@15FT** LAB I.D.: 170515-11

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: *A*

LABORATORY REPORT

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PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

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REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/19/17

SAMPLE I.D.: B-10@15FT

LAB I.D.: 170515-11

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

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PROJECT: Roosevelt Park
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 DATE REPORTED: 05/19/17

SAMPLE I.D.: B-10@17.5FT

LAB I.D.: 170515-12

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

LABORATORY REPORT

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PROJECT: Roosevelt Park

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MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/12/17

DATE ANALYZED: 05/17/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/19/17

SAMPLE I.D.: B-11@5FT

LAB I.D.: 170515-13

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

A

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/12/17

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REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-11@5FT**

LAB I.D.: 170515-13

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/17/17
 DATE REPORTED: 05/19/17

SAMPLE I.D.: B-11@10FT

LAB I.D.: 170515-14

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/12/17**
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/12/17**
 DATE ANALYZED: **05/17/17**
 DATE REPORTED: **05/19/17**

SAMPLE I.D.: **B-11@10FT**

LAB I.D.: **170515-14**

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY:
 CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/12/17**
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/12/17**
 DATE ANALYZED: **05/17/17**
 DATE REPORTED: **05/19/17**

SAMPLE I.D.: **B-11@15FT**

LAB I.D.: **170515-15**

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE SAMPLED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
DATE ANALYZED: 05/17/17
DATE REPORTED: 05/19/17

SAMPLE I.D.: B-12@5FT

LAB I.D.: 170515-16

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and PQL values (e.g., 0.020, 0.005).

----- TO BE CONTINUED ON PAGE #2 -----

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LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL
 DATE SAMPLED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/17/17
 DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-12@5FT**

LAB I.D.: 170515-16

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/12/17

DATE ANALYZED: 05/17/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/19/17

SAMPLE I.D.: B-12@10FT

LAB I.D.: 170515-17

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

A

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/12/17

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DATE ANALYZED: 05/17/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/19/17

SAMPLE I.D.: B-12@10FT

LAB I.D.: 170515-17

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/12/17

DATE ANALYZED: 05/17/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/19/17

SAMPLE I.D.: B-12@15FT

LAB I.D.: 170515-18

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

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LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/12/17

DATE SAMPLED: 05/12/17

DATE ANALYZED: 05/17/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/19/17

SAMPLE I.D.: B-12@15FT

LAB I.D.: 170515-18

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/12/17
DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/17/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/19/17

SAMPLE I.D.: B-15@5FT LAB I.D.: 170515-19

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and PQL values.

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Handwritten signature 'A' over a horizontal line.

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/12/17
DATE SAMPLED: 05/12/17
DATE ANALYZED: 05/16/17
REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/19/17

METHOD BLANK REPORT FOR LAB I.D.: 170515-9 THROUGH -19

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY: A
CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/16-17/2017

Machine: C

Matrix: Solid/Soil/Liquid

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170516-22 MS/MSD

BATCH ID: 170516-22

Analyte	S.R	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.057	114%	0.053	106%	8%	75-125	0-20
Chlorobenzene	0	0.050	0.054	108%	0.053	106%	2%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.060	120%	0.061	122%	2%	75-125	0-20
Toluene	0	0.050	0.051	102%	0.048	96%	6%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.043	86%	0.041	82%	4%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.046	92%	75-125
Chlorobenzene	0.050	0.056	112%	75-125
Chloroform	0.050	0.054	108%	75-125
1,1-Dichloroethene	0.050	0.053	106%	75-125
Ethylbenzene	0.050	0.058	116%	75-125
o-Xylene	0.050	0.059	118%	75-125
m,p-Xylene	0.100	0.123	123%	75-125
Toluene	0.050	0.043	86%	75-125
1,1,1-Trichloroethane	0.050	0.048	96%	75-125
Trichloroethene (TCE)	0.050	0.043	86%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170515-22	170516-45			170516-48	170516-49
Dibromofluoromethane	50.0	70-130	116%	99%	99%			107%	142*%
Toluene-d8	50.0	70-130	114%	110%	121%			112%	108%
4-Bromofluorobenzene	50.0	70-130	78%	74%	71%			67*%	58*%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170516-50	170515-7	170515-8	170515-9	170515-10	170515-11	170515-12
Dibromofluoromethane	50.0	70-130	181*%	82%	94%	129%	96%	121%	117%
Toluene-d8	50.0	70-130	113%	127%	117%	123%	126%	134*%	128%
4-Bromofluorobenzene	50.0	70-130	57*%	74%	71%	55*%	45*%	53*%	65*%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170515-13	170515-14	170515-15	170515-16	170515-17	170515-18	170515-19
Dibromofluoromethane	50.0	70-130	93%	92%	97%	130%	83%	111%	94%
Toluene-d8	50.0	70-130	128%	124%	116%	120%	118%	126%	118%
4-Bromofluorobenzene	50.0	70-130	62*%	53*%	56*%	59*%	56*%	52*%	47*%

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

spk conc = Spike Concentration

MS = Matrix Spike

%RC = Percent Recovery

ACP %RC = Accepted Percent Recovery

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: Dz

Final Reviewer: AV

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/17/17
 DATE REPORTED: 05/19/17

SAMPLE I.D.: B-15@10FT

LAB I.D.: 170515-20

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

A

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/12/17
 DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/17/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/19/17

SAMPLE I.D.: **B-15@10FT** LAB I.D.: 170515-20

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE SAMPLED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17
DATE ANALYZED: 05/17/17
DATE REPORTED: 05/19/17

SAMPLE I.D.: B-15@15FT

LAB I.D.: 170515-21

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/12/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/12/17
 DATE ANALYZED: 05/17/17
 DATE REPORTED: 05/19/17

SAMPLE I.D.: B-15@15FT LAB I.D.: 170515-21

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL

DATE SAMPLED: 05/12/17

REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/12/17

DATE ANALYZED: 05/17/17

DATE REPORTED: 05/19/17

METHOD BLANK REPORT FOR LAB I.D.: 170515-20, -21

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, and PQL X1. Lists various chemical compounds and their detection status (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Handwritten signature/initials over a horizontal line.

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/17-18/2017

Matrix: Solid/Soil/Liquid

Machine: C

Unit: mg/kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170517-28 MS/MSD

BATCH ID: 170517-28

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.051	102%	0.057	114%	12%	75-125	0-20
Chlorobenzene	0	0.050	0.059	118%	0.061	122%	4%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.053	106%	0.061	122%	16%	75-125	0-20
Toluene	0	0.050	0.053	106%	0.057	114%	8%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.056	112%	0.060	120%	8%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.048	96%	75-125
Chlorobenzene	0.050	0.062	124%	75-125
Chloroform	0.050	0.044	88%	75-125
1,1-Dichloroethene	0.050	0.046	92%	75-125
Ethylbenzene	0.050	0.055	110%	75-125
o-Xylene	0.050	0.056	112%	75-125
m,p-Xylene	0.100	0.105	105%	75-125
Toluene	0.050	0.051	102%	75-125
1,1,1-Trichloroethane	0.050	0.041	82%	75-125
Trichloroethene (TCE)	0.050	0.061	122%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170515-20	170515-21	170517-28			
Dibromofluoromethane	50.0	70-130	99%	87%	102%	86%			
Toluene-d8	50.0	70-130	99%	101%	102%	96%			
4-Bromofluorobenzene	50.0	70-130	101%	95%	103%	104%			

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

%RC = Percent Recovery

spk conc = Spike Concentration

ACP %RC = Accepted Percent Recovery

MS = Matrix Spike

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: [Signature]

Final Reviewer: [Signature]

Enviro-Chem, Inc. Laboratories
 Turnaround Time
 0 Same Day
 0 24 Hours
 0 48 Hours

214 E. Lexington Avenue,
 Pomona, CA 91766

Tel: (909) 590-5905 Fax: (909) 590-5907
 A-DHS ELAP CERTIFICATE #1555



SAMPLE ID	LAG ID	SAMPLING DATE	TIME	MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required	COMMENTS
B-10 @ 5 FT	170515-9	5/24/17	0800	SOIL	4	-	-	1 1 1 1	*STL FIELD AS NEEDED
B-10 @ 10 FT	- 10		0810					1 1 1 1	
B-10 @ 15 FT	- 11		0820					1 1 1 1	
B-10 @ 17.5 FT	- 12		0825					1 1 1 1	
B-11 @ 5 FT	- 13		0910					1 1 1 1	
B-11 @ 10 FT	- 14		0915					1 1 1 1	
B-11 @ 15 FT	- 15		0920					1 1 1 1	
B-12 @ 5 FT	- 16		1015					1 1 1 1	
B-12 @ 10 FT	- 17		1020					1 1 1 1	
B-12 @ 15 FT	- 18		1025					1 1 1 1	
B-15 @ 5 FT	- 19		1120					1 1 1 1	
B-15 @ 10 FT	- 20		1125					1 1 1 1	
B-15 @ 15 FT	- 21		1130					1 1 1 1	

APH 8015 B
 VOL 5 8260 P3
 CA Metals 1001015

Misc./PO#
 201803882014

Company Name: **Kleinfelder**

Address: **2280 Market Street, Suite 300, Riverside, CA, 92501**

Project Contact: **Zachary Starecki**

Project Name/ID: **Roosevelt Bm**

Sampler's Signature: *[Signature]*

Received by: *[Signature]* Date: **5/24/17**

Received by: *[Signature]* Date: **5/24/17**

Received by: *[Signature]* Date: **5/24/17**

Inquired by: *[Signature]*

Inquired by: *[Signature]*

Inquired by: *[Signature]*

Received by: *[Signature]*

Received by: *[Signature]*

Received by: *[Signature]*

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

CHAIN OF CUSTODY RECORD

WHITE WITH SAMPLE • YELLOW TO CLIENT

Page **1** of **1**

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 16, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

Project: **Roosevelt Park**
Project #: **20180388.001A**
Lab I.D.: **170515-22**

Dear Mr. Jarecki:

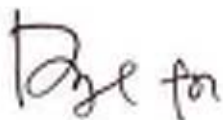
The **analytical results** for the soil sample, received by our laboratory on May 13, 2017, are attached. The sample was received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE SAMPLED: 05/12/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/13/17
DATE EXTRACTED: 5/15/17
DATE ANALYZED: 05/15/17
DATE REPORTED: 05/16/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 6 columns: SAMPLE I.D., LAB I.D., C4-C10, C11-C22, C23-C35, DF. Rows include Drum B-10 / Drum B-11, Drum B-14 / Drum B-15, and METHOD BLANK. PQL values are listed below the table.

COMMENTS

C4-C10 = GASOLINE RANGE
C11-C22 = DIESEL RANGE
C23-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

8015B Soil/Solid QC

Date Analyzed: 5/15/2017

Units: mg/Kg (PPM)

Matrix: Solid/Sludge

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051522

Spiked Sample Lab I.D.: **170515-LCS1/2**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	163	81%	167	84%	3%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	150	75%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170512-37	170515-22					
O-Terphenyl	60-140%	125%	119%	137%					
Octacosane	60-140%	108%	105%	111%					

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl									
Octacosane									

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference
 Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/13/17
 DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/16/17

SAMPLE I.D.: **Drum B-10 / Drum B-11 / Drum B-14 / Drum B-15**
 LAB I.D.: 170515-22

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.56	0.3	1	500	5.0	6010B
Barium (Ba)	75.4	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	12.7	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	6.70	1.0	1	8,000	80	6010B
Copper (Cu)	11.5	1.0	1	2,500	25	6010B
Lead (Pb)	2.45	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.065	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	5.15	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	40.1	5.0	1	2,400	24	6010B
Zinc (Zn)	33.8	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/13/17
 DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/16/17

METHOD BLANK REPORT FOR LAB I.D.: 170515-22


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	ND	0.3	1	500	5.0	6010B
Barium (Ba)	ND	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	ND	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	ND	1.0	1	8,000	80	6010B
Copper (Cu)	ND	1.0	1	2,500	25	6010B
Lead (Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	ND	5.0	1	2,400	24	6010B
Zinc (Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/16/2017

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170515-12	50.0	104	PASS	8.86	50.0	56.9	96%	57.4	97%	1%
Lead(Pb)	170515-12	50.0	109	PASS	1.64	50.0	43.9	85%	44.3	85%	1%
NickeI(Ni)	170515-12	50.0	102	PASS	3.23	50.0	50.1	94%	50.5	95%	1%

ANALYSIS DATE. : 5/16/2017

Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170515-45	0.125	98	PASS	0.031	0.125	0.133	82%	0.137	85%	4%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
NickeI(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170515-9--22

ANALYST: _____



FINAL REVIEWER: _____

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/13/17
 DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/16/17

SAMPLE I.D.: **Drum B-10 / Drum B-11 / Drum B-14 / Drum B-15**
 LAB I.D.: 170515-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBEZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBEZENE	ND	0.005
1,3-DICHLOROBEZENE	ND	0.005
1,4-DICHLOROBEZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY:  _____

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/13/17
 DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/16/17

SAMPLE I.D.: Drum B-10 / Drum B-11 / Drum B-14 / Drum B-15
 LAB I.D.: 170515-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE RECEIVED: 05/13/17
 DATE SAMPLED: 05/12/17
 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE REPORTED: 05/16/17

METHOD BLANK REPORT FOR LAB I.D.: 170515-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
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 MATRIX: SOIL DATE RECEIVED: 05/13/17
 DATE SAMPLED: 05/12/17 DATE ANALYZED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/16/17

METHOD BLANK REPORT FOR LAB I.D.: 170515-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/15-16/2017

Matrix: Solid/Soil/Liquid

Machine: C

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170515-22 MS/MSD

BATCH ID: 170515-22

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.052	104%	0.049	98%	6%	75-125	0-20
Chlorobenzene	0	0.050	0.057	114%	0.055	110%	4%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.055	110%	0.059	118%	8%	75-125	0-20
Toluene	0	0.050	0.048	96%	0.046	92%	4%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.050	100%	0.046	92%	8%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.050	100%	75-125
Chlorobenzene	0.050	0.051	102%	75-125
Chloroform	0.050	0.061	122%	75-125
1,1-Dichloroethene	0.050	0.059	118%	75-125
Ethylbenzene	0.050	0.056	112%	75-125
o-Xylene	0.050	0.059	118%	75-125
m,p-Xylene	0.100	0.121	121%	75-125
Toluene	0.050	0.048	96%	75-125
1,1,1-Trichloroethane	0.050	0.053	106%	75-125
Trichloroethene (TCE)	0.050	0.043	86%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170512-34	170512-35	170512-36	170512-43	170515-22	170512-15
Dibromofluoromethane	50.0	70-130	97%	122%	106%	86%	99%	98%	120%
Toluene-d8	50.0	70-130	124%	121%	126%	122%	98%	130%	125%
4-Bromofluorobenzene	50.0	70-130	71%	59*	54*	61*	37*	65*	73%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

%RC = Percent Recovery

spk conc = Spike Concentration

ACP %RC = Accepted Percent Recovery

MS = Matrix Spike

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: [Signature]

Final Reviewer: [Signature]

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 0 Same Day
 0 72 Hours
 0 1 Week (Standard)
 Other: TURNAROUND 5/16

RUSH
 TPB 8015B
 VCS 8260P
 Q. Methyl Group

Misc./PO#
 20180388.001.14

SAMPLE ID	LAB ID	DATE	SAMPLING TIME	MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required	COMMENTS
DRUM B-10, B-11, B-14, B-15	MS 15. 22	5/12/17	1149	SOIL	1	-	-	 	* STIC / TCUP AS APPEARED
2 day turnaround due Tuesday 5/16/17									
PH									

Company Name: Kleinfelder Project Contact: Zachary Jarek Sampler's Signature: [Signature]

Address: 2780 Markar Street, S4303 Tel: 951-216-8012 Project Name/ID: Roosevelt Park

City/State/Zip: Riverside, CA, 92501 Fax: ---

Relinquished by: [Signature] Received by: [Signature] Date & Time: 5/16/17 1730

Relinquished by: [Signature] Received by: [Signature] Date & Time: 5/16/17 08:11

Relinquished by: [Signature] Received by: [Signature] Date & Time: [Blank]

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 23, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

Project: **Roosevelt Park**
Project #: **20180388.001A**
Lab I.D.: **170516-23 through -44**

Dear Mr. Jarecki:

The **analytical results** for the soil samples, received by our laboratory on May 16, 2017, are attached. The samples were received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 925D1
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE EXTRACTED: 5/17/17
REPORT TO: MR. ZACHARY JARECKI DATE ANALYZED: 05/17&18/17
DATE REPORTED: 05/23/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B; PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 6 columns: SAMPLE I.D., LAB I.D., C4-C10, C11-C22, C23-C35, DF. Rows include B-2@5FT to B-2@35FT and METHOD BLANK. Values range from ND to 51.8.

COMMENTS

C4-C10 = GASOLINE RANGE
C11-C22 = DIESEL RANGE
C23-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
* = PEAKS IN DIESEL RANGE BUT CHROMATOGRAM DOES NOT MATCH THAT OF DIESEL STANDARD

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

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LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: <u>SOIL</u>	DATE RECEIVED: <u>05/16/17</u>
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REPORT TO: <u>MR. ZACHARY JARECKI</u>	DATE ANALYZED: <u>05/17/17</u>
	DATE REPORTED: <u>05/23/17</u>

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS

METHOD: EPA 8015B; PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
B-2@40FT	170516-30	ND	ND	ND	1
B-2@45FT	170516-31	ND	ND	ND	1
B-2@50FT	170516-32	ND	ND	ND	1
B-2@55FT	170516-33	ND	ND	ND	1
B-2@60FT	170516-34	ND	ND	ND	1
B-2@65FT	170516-35	ND	ND	ND	1
B-2@70FT	170516-36	ND	ND	ND	1
B-2@75FT	170516-37	ND	ND	ND	1
B-2@80FT	170516-38	ND	ND	ND	1
B-2@85FT	170516-39	ND	ND	ND	1
B-2@90FT	170516-40	ND	ND	ND	1
B-2@95FT	170516-41	ND	ND	ND	1
B-2@100FT	170516-42	ND	ND	ND	1
B-2@105FT	170516-43	ND	ND	ND	1
B-2@110FT	170516-44	ND	ND	ND	1
METHOD BLANK		ND	ND	ND	1
	PQL	10	10	50	

COMMENTS

C4-C10 = GASOLINE RANGE
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 C23-C35 = MOTOR OIL RANGE
 DF = DILUTION FACTOR
 PQL = PRACTICAL QUANTITATION LIMIT
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 ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

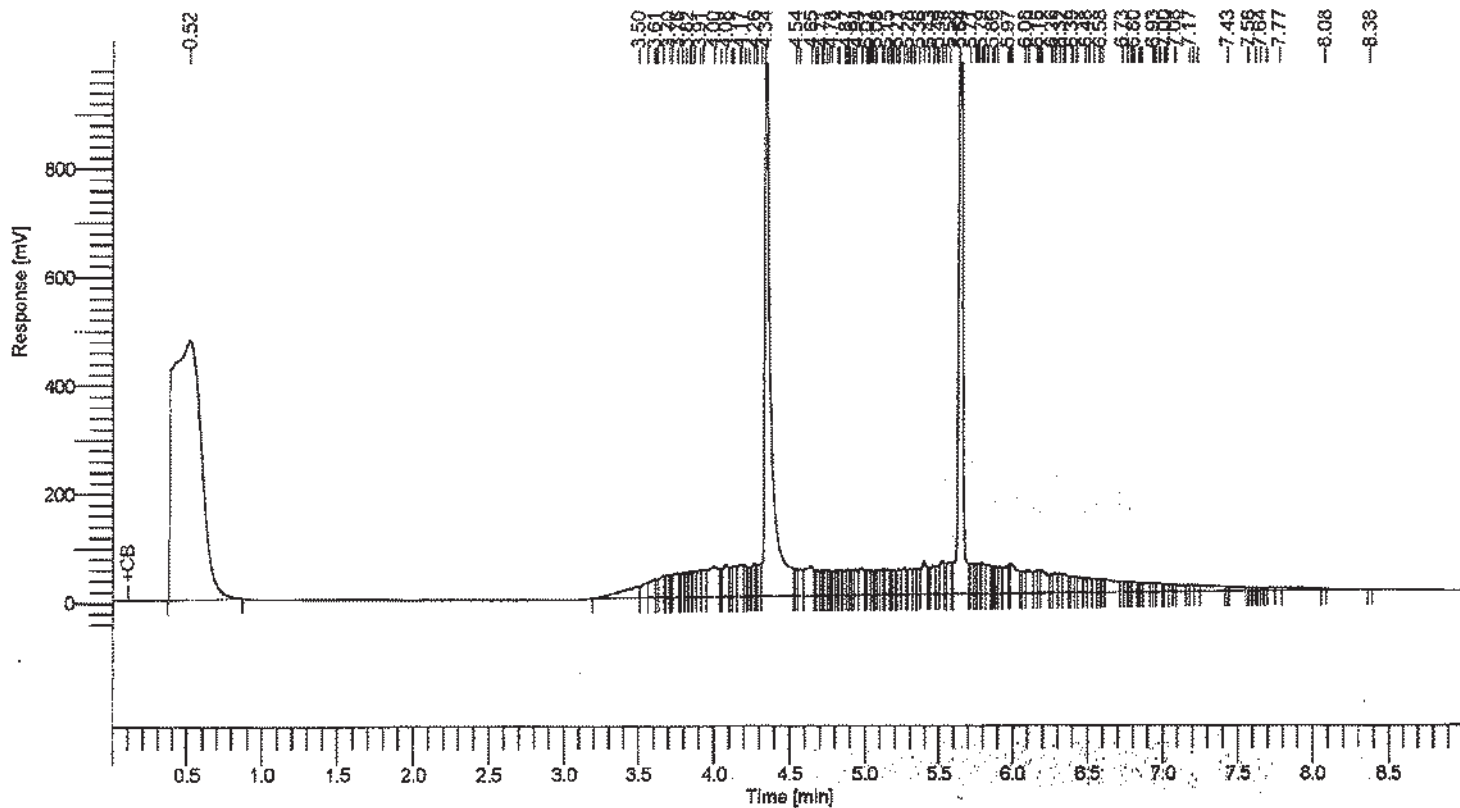
Data Reviewed and Approved by: *[Signature]*
 CAL-DHS ELAP CERTIFICATE No.: 1555

Software Version : 6.3.2.0646
 Sample Name : 170516-23 20/2***
 Instrument Name : GC-I
 Rack/Vial : 0/78
 Sample Amount : 1.000000
 Cycle : 52

Date : 5/18/2017 9:33:32 AM
 Data Acquisition Time : 5/18/2017 12:25:28 AM
 Channel : A
 Operator : GC
 Dilution Factor : 1.000000

(B-2@5')

Result File : D:\GC DATA\GC-NO2017\170516\170517\A052.rst
 Sequence File : D:\GC DATA\GC-NO2017\170516\170517\170517.seq



8015 Results

Component Name	Area [uV*sec]	Adjusted Amount
C11-C22	6302317	536.6
C23-C35	5870800	755.3
	12173117	1291.9

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8015B Soil/Solid QC

Date Analyzed: 5/17-18/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051623

Spiked Sample Lab I.D.: **170516-29 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	178	89%	181	90%	2%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	211	105%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170516-23	170516-24	170516-25	170516-26	170516-27	170516-28	170516-29
O-Terphenyl	60-140%	124%	134%	118%	120%	119%	109%	125%	131%
Octacosane	60-140%	111%	125%	106%	106%	104%	98%	107%	108%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

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8015B Soil/Solid QC

Date Analyzed: 5/17/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051630

Spiked Sample Lab I.D.: **170516-30 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	169	85%	174	87%	3%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	223	111%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170516-30	170516-31	170516-32	170516-33	170516-34	170516-35	170516-36
O-Terphenyl	60-140%	136%	119%	93%	117%	121%	123%	112%	118%
Octacosane	60-140%	114%	104%	88%	120%	104%	106%	104%	103%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170516-37	170516-38	170516-39	170516-40	170516-41	170516-42	170516-43	170516-44
O-Terphenyl	80-140%	114%	111%	115%	97%	101%	106%	108%	122%
Octacosane	60-140%	94%	91%	92%	83%	83%	85%	88%	98%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

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Note: LCS, MS, MSD are in control therefore results are in control.

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PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

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SAMPLE I.D.: B-2@5FT LAB I.D.: 170516-23

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

COMMENTS

DF = Dilution Factor
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SAMPLE I.D.: **B-2@10FT** LAB I.D.: 170516-24


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.63	0.3	1	500	5.0	6010B
Barium (Ba)	113	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	16.9	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	9.02	1.0	1	8,000	80	6010B
Copper (Cu)	17.4	1.0	1	2,500	25	6010B
Lead (Pb)	3.28	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.065	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	9.16	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	44.3	5.0	1	2,400	24	6010B
Zinc (Zn)	46.1	0.5	1	5,000	250	6010B

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SAMPLE I.D.: B-2@15FT LAB I.D.: 170516-25

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

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SAMPLE I.D.: B-2@20FT LAB I.D.: 170516-26

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

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SAMPLE I.D.: B-2@25FT LAB I.D.: 170516-27

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

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SAMPLE I.D.: B-2@30FT

LAB I.D.: 170516-28

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

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SAMPLE I.D.: B-2@35FT

LAB I.D.: 170516-29

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

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SAMPLE I.D.: B-2@40FT LAB I.D.: 170516-30

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

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SAMPLE I.D.: B-2@45FT LAB I.D.: 170516-31

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

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PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@50FT LAB I.D.: 170516-32

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@55FT LAB I.D.: 170516-33

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

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Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

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LABORATORY REPORT

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Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@60FT LAB I.D.: 170516-34

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

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-- = Not analyzed/not requested

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CAL-DHS ELAP CERTIFICATE No.: 1555

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LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@65FT** LAB I.D.: 170516-35


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	0.853	0.3	1	500	5.0	6010B
Barium (Ba)	37.6	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	5.23	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	3.31	1.0	1	8,000	80	6010B
Copper (Cu)	5.60	1.0	1	2,500	25	6010B
Lead (Pb)	1.36	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.025	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	18.9	5.0	1	2,400	24	6010B
Zinc (Zn)	17.3	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
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- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@70FT LAB I.D.: 170516-36

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

COMMENTS

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PQL = Practical Quantitation Limit
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LABORATORY REPORT

CUSTOMER: Kleinfelder
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Tel (951) 216-8012 E-Mail: zJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@75FT LAB I.D.: 170516-37

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

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LABORATORY REPORT

CUSTOMER: Kleinfelder
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Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@80FT LAB I.D.: 170516-38

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
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 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
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 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17


SAMPLE I.D.: **B-2@85FT** LAB I.D.: 170516-39

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.93	0.3	1	500	5.0	6010B
Barium (Ba)	121	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	15.0	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	8.54	1.0	1	8,000	80	6010B
Copper (Cu)	12.5	1.0	1	2,500	25	6010B
Lead (Pb)	2.34	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.048	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	6.71	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	36.0	5.0	1	2,400	24	6010B
Zinc (Zn)	41.6	0.5	1	5,000	250	6010B

COMMENTS

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Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@90FT LAB I.D.: 170516-40

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

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CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

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LABORATORY REPORT

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Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@95FT LAB I.D.: 170516-41

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective sample results and limits.

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LABORATORY REPORT

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PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@100FT LAB I.D.: 170516-42

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

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Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

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LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@105FT LAB I.D.: 170516-43

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective results and limits.

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-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

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LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@110FT LAB I.D.: 170516-44

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

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Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

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METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

METHOD BLANK REPORT FOR LAB I.D.: 170516-23 THROUGH -30

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective limits and methods.

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Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTL--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/17/2017

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170516-25	50.0	99	PASS	9.76	50.0	56.5	93%	56.7	94%	0%
Lead(Pb)	170516-25	50.0	109	PASS	1.92	50.0	49.4	95%	50.9	98%	3%
Nickel(Ni)	170516-25	50.0	100	PASS	4.30	50.0	52.5	96%	52.8	97%	1%

ANALYSIS DATE: 5/17/2017

Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170516-55	0.125	93	PASS	0	0.125	0.108	87%	0.104	83%	4%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170516-22--30

ANALYST: 

FINAL REVIEWER: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17&18/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17


METHOD BLANK REPORT FOR LAB I.D.: 170516-31 THROUGH -44

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	ND	0.3	1	500	5.0	6010B
Barium (Ba)	ND	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	ND	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	ND	1.0	1	8,000	80	6010B
Copper (Cu)	ND	1.0	1	2,500	25	6010B
Lead (Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	ND	5.0	1	2,400	24	6010B
Zinc (Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/18/2017

Unit : mg/Kg(ppm)

Analysis	Spk. Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170516-42	50.0	99	PASS	3.08	50.0	51.6	97%	51.9	98%	1%
Lead(Pb)	170516-42	50.0	103	PASS	0.915	50.0	49.7	98%	50.3	99%	1%
Nickel(Ni)	170516-42	50.0	105	PASS	1.52	50.0	45.7	88%	46.5	90%	2%

ANALYSIS DATE: 5/17/2017

Analysis	Spk. Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170516-41	0.125	94	PASS	0.031	0.125	0.139	86%	0.134	82%	5%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170516-31~44

ANALYST: _____

FINAL REVIEWER: _____

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/18/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

 SAMPLE I.D.: **B-2@5FT** LAB I.D.: 170516-23

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	0.006	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
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 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/18/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@5FT** LAB I.D.: 170516-23

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@10FT LAB I.D.: 170516-24

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values (0.020 or 0.005).

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL
 DATE SAMPLED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/16/17
 DATE ANALYZED: 05/18/17
 DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@10FT
 LAB I.D.: 170516-24

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/16/17

DATE SAMPLED: 05/15/17

DATE ANALYZED: 05/18/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@15FT**

LAB I.D.: 170516-25

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2**
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@15FT LAB I.D.: 170516-25

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Handwritten signature and line.

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/15/17**
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/16/17**
 DATE ANALYZED: **05/18/17**
 DATE REPORTED: **05/23/17**

SAMPLE I.D.: **B-2@20FT**

LAB I.D.: **170516-26**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2**
 UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: **05/16/17**

DATE SAMPLED: **05/15/17**

DATE ANALYZED: **05/18/17**

REPORT TO: **MR. ZACHARY JARECKI**

DATE REPORTED: **05/23/17**

SAMPLE I.D.: **B-2@20FT**

LAB I.D.: **170516-26**

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/16/17

DATE SAMPLED: 05/15/17

DATE ANALYZED: 05/18/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@25FT

LAB I.D.: 170516-27

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@25FT LAB I.D.: 170516-27

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Handwritten signature and line.

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
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PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/18/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@30FT LAB I.D.: 170516-28

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/16/17
 DATE ANALYZED: 05/18/17
 DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@30FT LAB I.D.: 170516-28

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@35FT LAB I.D.: 170516-29

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values (0.020, 0.005, 0.010).

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@35FT** LAB I.D.: 170516-29

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

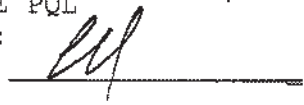
PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@40FT** LAB I.D.: 170516-30

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
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REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@40FT LAB I.D.: 170516-30

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

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CAL-DHS CERTIFICATE # 1555

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LABORATORY REPORT

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 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/16/17

DATE SAMPLED: 05/15/17

DATE ANALYZED: 05/19/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/23/17


SAMPLE I.D.: B-2@45FT

LAB I.D.: 170516-31

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

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Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

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 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com


PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

 SAMPLE I.D.: **B-2045FT** LAB I.D.: 170516-31

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

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LABORATORY REPORT

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PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@50FT LAB I.D.: 170516-32

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values (0.020 or 0.005).

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: [Signature]

Enviro - Chem, Inc.

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LABORATORY REPORT

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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
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 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

 SAMPLE I.D.: **B-2@50FT** LAB I.D.: 170516-32

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

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Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE SAMPLED: 05/15/17
REPORT TO: MR. ZACHARY JARECKI
DATE RECEIVED: 05/16/17
DATE ANALYZED: 05/19/17
DATE REPORTED: 05/23/17

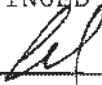
SAMPLE I.D.: B-2@55FT

LAB I.D.: 170516-33

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@55FT LAB I.D.: 170516-33

ANALYSIS: VOLATILE ORGANICS, EPA METBOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Handwritten signature

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@60FT LAB I.D.: 170516-34

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and PQL values.

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

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Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE SAMPLED: 05/15/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/16/17
DATE ANALYZED: 05/19/17
DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2065FT

LAB I.D.: 170516-35

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their results (mostly ND) and PQL values.

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY:

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

 SAMPLE I.D.: **B-2@65FT** LAB I.D.: 170516-35

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@70FT** LAB I.D.: 170516-36

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLORO BENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17
DATE ANALYZED: 05/19/17
REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@70FT
LAB I.D.: 170516-36

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 3 columns: PARAMETER, SAMPLE RESULT, PQL X1. Lists various chemical compounds and their detection results (ND) and practical quantitation limits (PQL).

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY: [Signature]
CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/16/17

DATE SAMPLED: 05/15/17

DATE ANALYZED: 05/19/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@75FT

LAB I.D.: 170516-37

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

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2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/16/17
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REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@75FT
LAB I.D.: 170516-37

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

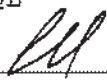
PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/16/17
 DATE ANALYZED: 05/19/17
 DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@80FT

LAB I.D.: 170516-38

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@80FT**

LAB I.D.: 170516-38

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

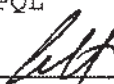
PARAMETER	SAMPLE RESULT	PQL XI
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



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LABORATORY REPORT

CUSTOMER: Kleinfelder
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Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/16/17
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DATE ANALYZED: 05/19/17
REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@85FT
LAB I.D.: 170516-39

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com


PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2085FT** LAB I.D.: 170516-39

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@90FT

LAB I.D.: 170516-40

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/16/17

DATE SAMPLED: 05/15/17

DATE ANALYZED: 05/19/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@90FT**

LAB I.D.: 170516-40

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

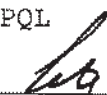
PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL
 DATE SAMPLED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/16/17
 DATE ANALYZED: 05/19/17
 DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@95FT**

LAB I.D.: 170516-41

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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LABORATORY REPORT

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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL
 DATE SAMPLED: 05/15/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/16/17
 DATE ANALYZED: 05/19/17
 DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@95FT**

LAB I.D.: 170516-41

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/15/17**
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/16/17**
 DATE ANALYZED: **05/19/17**
 DATE REPORTED: **05/23/17**

SAMPLE I.D.: **B-2@100FT**

LAB I.D.: **170516-42**

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: *[Signature]*

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@100FT**

LAB I.D.: 170516-42

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE SAMPLED: 05/15/17
REPORT TO: MR. ZACHARY JARECKI
DATE RECEIVED: 05/16/17
DATE ANALYZED: 05/19/17
DATE REPORTED: 05/23/17

SAMPLE I.D.: B-2@105FT

LAB I.D.: 170516-43

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/16/17

DATE SAMPLED: 05/15/17

DATE ANALYZED: 05/19/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/23/17

SAMPLE I.D.: **B-2@105FT**

LAB I.D.: 170516-43

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	0.016	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

 SAMPLE I.D.: **B-2@110FT** LAB I.D.: 170516-44

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

 SAMPLE I.D.: **H-2@110FT** LAB I.D.: 170516-44

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	0.020	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/16/17

DATE SAMPLED: 05/15/17

DATE ANALYZED: 05/18/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/23/17

METHOD BLANK REPORT FOR LAB I.D.: 170516-23 THROUGH -28

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

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1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE RECEIVED: 05/16/17
DATE SAMPLED: 05/15/17
DATE ANALYZED: 05/18/17
REPORT TO: MR. ZACHARY JARECKI
DATE REPORTED: 05/23/17

METHOD BLANK REPORT FOR LAB I.D.: 170516-23 THROUGH -28

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL XI
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/18/2017
Machine: C

Matrix: Solid/Soil/Liquid
Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170515-38 MS/MSD

BATCH ID: 170515-38

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.057	114%	0.054	108%	6%	75-125	0-20
Chlorobenzene	0	0.050	0.060	120%	0.060	120%	0%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.056	112%	0.060	120%	8%	75-125	0-20
Toluene	0	0.050	0.058	116%	0.055	110%	6%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.061	122%	0.059	118%	4%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.047	94%	75-125
Chlorobenzene	0.050	0.059	118%	75-125
Chloroform	0.050	0.044	88%	75-125
1,1-Dichloroethene	0.050	0.056	112%	75-125
Ethylbenzene	0.050	0.056	112%	75-125
o-Xylene	0.050	0.056	112%	75-125
m,p-Xylene	0.100	0.109	109%	75-125
Toluene	0.050	0.050	100%	75-125
1,1,1-Trichloroethane	0.050	0.040	80%	75-125
Trichloroethene (TCE)	0.050	0.055	110%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170515-38	170515-39	170515-40	170515-41	170515-42	170515-43
Dibromofluoromethane	50.0	70-130	103%	123%	118%	133*%	138*%	124%	117%
Toluene-d8	50.0	70-130	97%	103%	101%	102%	98%	99%	99%
4-Bromofluorobenzene	50.0	70-130	101%	104%	109%	103%	110%	103%	107%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170515-44	170516-23	170516-24	170518-25	170516-28	170516-27	170516-28
Dibromofluoromethane	50.0	70-130	128%	105%	103%	122%	107%	111%	97%
Toluene-d8	50.0	70-130	103%	88%	94%	102%	104%	103%	102%
4-Bromofluorobenzene	50.0	70-130	103%	79%	87%	98%	95%	92%	97%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170616-70	170518-59	170518-65	170518-70	170518-78	170518-81	170518-84
Dibromofluoromethane	50.0	70-130	115%	107%	88%	113%	98%	101%	101%
Toluene-d8	50.0	70-130	93%	102%	99%	99%	101%	100%	96%
4-Bromofluorobenzene	50.0	70-130	94%	99%	97%	98%	91%	102%	87%

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

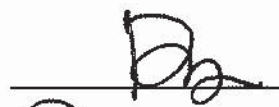
%RC = Percent Recovery

spk conc = Spike Concentration

ACP %RC = Accepted Percent Recovery

MS = Matrix Spike

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: 

Final Reviewer: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A
MATRIX: SOIL
DATE SAMPLED: 05/15/17
REPORT TO: MR. ZACHARY JARECKI
DATE RECEIVED: 05/16/17
DATE ANALYZED: 05/19/17
DATE REPORTED: 05/23/17

METHOD BLANK REPORT FOR LAB I.D.: 170516-29 THROUGH -44

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/23/17

 METHOD BLANK REPORT FOR LAB I.D.: 170516-29 THROUGH -44

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/19/2017

Machine: C

Matrix: Solid/Soil/Liquid

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170516-30 MS/MSD

BATCH ID: 170516-30

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.053	106%	0.054	108%	2%	75-125	0-20
Chlorobenzene	0	0.050	0.061	122%	0.061	122%	0%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.061	122%	0.058	116%	6%	75-125	0-20
Toluene	0	0.050	0.054	108%	0.058	116%	8%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.058	116%	0.060	120%	4%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.052	104%	75-125
Chlorobenzene	0.050	0.059	118%	75-125
Chloroform	0.050	0.057	114%	75-125
1,1-Dichloroethene	0.050	0.057	114%	75-125
Ethylbenzene	0.050	0.057	114%	75-125
o-Xylene	0.050	0.057	114%	75-125
m,p-Xylene	0.100	0.109	109%	75-125
Toluene	0.050	0.052	104%	75-125
1,1,1-Trichloroethane	0.050	0.040	80%	75-125
Trichloroethene (TCE)	0.050	0.057	115%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170516-29	170516-30	170516-31	170516-32	170516-33	170516-34
Dibromofluoromethane	50.0	70-130	121%	134*	117%	123%	112%	137*	122%
Toluene-d8	50.0	70-130	102%	96%	102%	102%	100%	103%	104%
4-Bromofluorobenzene	50.0	70-130	101%	97%	94%	96%	94%	83%	97%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170516-35	170516-36	170516-37	170516-38	170516-39	170516-40	170516-41
Dibromofluoromethane	50.0	70-130	113%	129%	124%	107%	112%	118%	120%
Toluene-d8	50.0	70-130	97%	105%	94%	98%	101%	100%	99%
4-Bromofluorobenzene	50.0	70-130	95%	96%	95%	79%	99%	94%	95%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170516-42	170516-43	170516-44	170517-44	170516-19	170516-60	
Dibromofluoromethane	50.0	70-130	107%	121%	108%	113%	274*	109%	
Toluene-d8	50.0	70-130	103%	102%	106%	101%	63*	15*	
4-Bromofluorobenzene	50.0	70-130	97%	99%	101%	101%	176*	113%	

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

spk conc = Spike Concentration

MS = Matrix Spike

%RC = Percent Recovery

ACP %RC = Accepted Percent Recovery

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: 

Final Reviewer: 

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
 CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 1 Week (Standard)
 Other: _____

Misc./PO#
 2018032888-0314
 TRH 8015B
 VCS 8200B
 CA Metals 2014
 2018032888-0314

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required	COMMENTS
B-2 @ 5 FT	70516-23	5/15/17	0915	SOIL	4	-	RE		* STILL / CLP AS NEEDED
B-2 @ 10 FT	-24		0920			X402W			
B-2 @ 15 FT	-25		0930			X402W			
B-2 @ 20 FT	-26		0935						
B-2 @ 25 FT	-27		1020						
B-2 @ 30 FT	-28		1035						
B-2 @ 35 FT	-29		1040						
B-2 @ 40 FT	-30		1055						
B-2 @ 45 FT	-31		1105						
B-2 @ 50 FT	-32		1110						
B-2 @ 55 FT	-33		1125						
B-2 @ 60 FT	-34		1140						
B-2 @ 65 FT	-35		1150						
B-2 @ 70 FT	-36		1205						
B-2 @ 75 FT	-37		1215						

Company Name: Kleinfelder
 Address: 2280 Market Street, Suite 300
 City/State/Zip: Riverside, CA 92501
 Project Contact: Zachary Jarecki
 Tel: 951-210-8012
 Fax: _____
 Project Name/ID: Roosevelt Park
 Sampler's Signature: _____
 Date & Time: 5/15/17
 Received by: [Signature]
 Relinquished by: [Signature]
 Relinquished by: [Signature]

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 1 Week (Standard)
 Other:

Misc./PO#	20180388-0114
Analysis Required	7PH 805 B NCS 826a B CAMELIS 74714
COMMENTS	* SILL/TUP AS NEEDED

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required	COMMENTS
B-2 @ 80 FT	701638	5/19/17	1230	SOIL	4	-	ICE		
B-2 @ 85 FT	-39		1245						
B-2 @ 90 FT	-40		1325						
B-2 @ 95 FT	-41		1350						
B-2 @ 100 FT	-42		1415						
B-2 @ 105 FT	-43		1430						
B-2 @ 110 FT	-44		1500						

Company Name: **Kleinfelder**
 Address: **2280 Markat Street, Suite 300**
 City/State/Zip: **Riverside, CA, 92501**
 Project Contact: **Zachary Jarecki**
 Tel: **951-216-8012**
 Fax: **-**
 Sampler's Signature: *[Signature]*
 Project Name/ID: **Roosevelt Park**
 Date & Time: **5/15/17 9:51**
 Received by: *[Signature]*
 Relinquished by: *[Signature]*
 Relinquished by: *[Signature]*

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

CHAIN OF CUSTODY RECORD

Date: **5/15/17**

WHITE WITH SAMPLE - YELLOW TO CLIENT

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 17, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

Project: **Roosevelt Park**
Project #: **20180388.001A**
Lab I.D.: **170516-22**

Dear Mr. Jarecki:

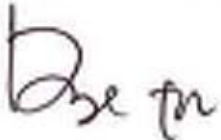
The **analytical results** for the soil sample, received by our laboratory on May 16, 2017, are attached. The sample was received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE SAMPLED: 05/15/17
REPORT TO: MR. ZACHARY JARECKI


DATE RECEIVED: 05/16/17
DATE EXTRACTED: 5/16/17
DATE ANALYZED: 05/16/17
DATE REPORTED: 05/17/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
Drum B-2	170516-22	ND	ND	ND	1
<u>METHOD BLANK</u>		ND	ND	ND	1
	PQL	10	10	50	

COMMENTS

C4-C10 = GASOLINE RANGE
C11-C22 = DIESEL RANGE
C23-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: 
CAL-DHS ELAP CERTIFICATE No.: 1555

8015B Soil/Solid QC

Date Analyzed: 5/16/2017

Units: mg/Kg (PPM)

Matrix: Solid/Sludge

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051622

Spiked Sample Lab I.D.: **170516-22 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	154	77%	158	79%	3%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	171	85%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D		MB	170516-22						
O-Terphenyl	60-140%	137%	129%						
Octacosane	60-140%	132%	105%						

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

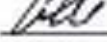
SAMPLE I.D.: **Drum B-2** LAB I.D.: 170516-22

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.30	0.3	1	500	5.0	6010B
Barium (Ba)	67.0	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	12.5	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	5.90	1.0	1	8,000	80	6010B
Copper (Cu)	8.74	1.0	1	2,500	25	6010B
Lead (Pb)	1.89	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.052	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	4.56	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	30.7	5.0	1	2,400	24	6010B
Zinc (Zn)	28.5	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/17/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17


METHOD BLANK REPORT FOR LAB I.D.: 170516-22

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	ND	0.3	1	500	5.0	6010B
Barium (Ba)	ND	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	ND	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	ND	1.0	1	8,000	80	6010B
Copper (Cu)	ND	1.0	1	2,500	25	6010B
Lead (Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	ND	5.0	1	2,400	24	6010B
Zinc (Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/17/2017

Unit : mg/Kg(DDM)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170516-25	50.0	99	PASS	9.76	50.0	56.5	93%	56.7	94%	0%
Lead(Pb)	170516-25	50.0	109	PASS	1.92	50.0	49.4	95%	50.9	98%	3%
Nicke(Ni)	170516-25	50.0	100	PASS	4.30	50.0	52.5	96%	52.8	97%	1%

ANALYSIS DATE : 5/17/2017

Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170516-41	0.125	94	PASS	0.031	0.125	0.139	86%	0.134	82%	5%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nicke(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170516-22~30

ANALYST: 

FINAL REVIEWER: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE SAMPLED: 05/15/17

REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/16/17

DATE ANALYZED: 05/16/17

DATE REPORTED: 05/17/17

SAMPLE I.D.: Drum B-2

LAB I.D.: 170516-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030/8260B, PAGE 1 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/16/17

DATE SAMPLED: 05/15/17

DATE ANALYZED: 05/16/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

SAMPLE I.D.: **Drum B-2**

LAB I.D.: 170516-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL DATE RECEIVED: 05/16/17
 DATE SAMPLED: 05/15/17 DATE ANALYZED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/17/17

METHOD BLANK REPORT FOR LAB I.D.: 170516-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/16/17

DATE SAMPLED: 05/15/17

DATE ANALYZED: 05/16/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/17/17

METHOD BLANK REPORT FOR LAB I.D.: 170516-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 24, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

Project: **Roosevelt Park**
Project #: **20180388.001A**
Lab I.D.: **170517-18 through -27**

Dear Mr. Jarecki:

The **analytical results** for the soil samples, received by our laboratory on May 17, 2017, are attached. The samples were received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL

DATE SAMPLED: 05/16/17

REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/17/17

DATE EXTRACTED: 5/22/17

DATE ANALYZED: 05/22/17

DATE REPORTED: 05/24/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS

METHOD: EPA 8015B

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
B-805FT	170517-18	ND	ND	ND	1
B-8010FT	170517-19	ND	ND	ND	1
B-8015FT	170517-20	ND	ND	ND	1
B-8020FT	170517-21	ND	ND	ND	1
B-8025FT	170517-22	ND	ND	ND	1
B-8030FT	170517-23	ND	ND	ND	1
B-8035FT	170517-24	ND	ND	ND	1
B-8040FT	170517-25	ND	ND	ND	1
B-8045FT	170517-26	ND	ND	ND	1
B-8050FT	170517-27	ND	ND	ND	1
METHOD BLANK		ND	ND	ND	1
	PQL	10	10	50	

COMMENTS

C4-C10 = GASOLINE RANGE

C11-C22 = DIESEL RANGE

C23-C35 = MOTOR OIL RANGE


DF = DILUTION FACTOR

PQL = PRACTICAL QUANTITATION LIMIT

ACTUAL DETECTION LIMIT = DF X PQL

ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

* = PEAKS IN DIESEL RANGE BUT CHROMATOGRAM DOES NOT MATCH THAT OF DIESEL STANDARD

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

8015B Soil/Solid QC

Date Analyzed: 5/22/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051718

Spiked Sample Lab I.D.: **170518-94 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	187	94%	182	91%	2%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	182	91%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170517-18	170517-19	170517-20	170517-21	170517-22	170517-23	170517-24
O-Terphenyl	60-140%	113%	102%	135%	93%	92%	130%	95%	95%
Octacosane	60-140%	104%	88%	107%	82%	80%	105%	78%	81%

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		170517-25	170517-26	170517-27					
O-Terphenyl	60-140%	101%	99%	99%					
Octacosane	60-140%	82%	85%	82%					

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/18&19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@10FT


LAB I.D.: 170517-19

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.25	0.3	1	500	5.0	6010B
Barium (Ba)	93.7	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	16.8	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	8.00	1.0	1	8,000	80	6010B
Copper (Cu)	23.5	1.0	1	2,500	25	6010B
Lead (Pb)	4.38	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.081	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	8.61	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	44.6	5.0	1	2,400	24	6010B
Zinc (Zn)	45.5	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/17/17
DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/18&19/17
REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@15FT LAB I.D.: 170517-20

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 7 columns: ELEMENT ANALYZED, SAMPLE RESULT, PQL, DF, TTLC LIMIT, STLC LIMIT, EPA METHOD. Lists various elements like Antimony, Arsenic, Barium, etc., with their respective values and limits.

COMMENTS

DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection Limit or non-detected
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration
@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
* = STLC analysis for the metal is recommended (if marked)
** = Additional Analysis required, please call to discuss (if marked)
*** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
-- = Not analyzed/not requested

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/18&19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@20FT** LAB I.D.: 170517-21


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	0.945	0.3	1	500	5.0	6010B
Barium (Ba)	48.8	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	9.10	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt (Co)	5.70	1.0	1	8,000	80	6010B
Copper (Cu)	14.3	1.0	1	2,500	25	6010B
Lead (Pb)	1.93	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.069	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	3.50	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	30.4	5.0	1	2,400	24	6010B
Zinc (Zn)	30.3	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL
 DATE SAMPLED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/17/17
 DATE ANALYZED: 05/18&19/17
 DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@25FT**


LAB I.D.: 170517-22

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	1.61	0.3	1	500	5.0	6010B
Barium(Ba)	82.6	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	13.1	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	--	500	5.0	7196A
Cobalt(Co)	7.77	1.0	1	8,000	80	6010B
Copper(Cu)	12.7	1.0	1	2,500	25	6010B
Lead(Pb)	2.06	0.5	1	1,000	5.0	6010B
Mercury(Hg)	0.084	0.01	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	7.26	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	37.2	5.0	1	2,400	24	6010B
Zinc(Zn)	37.8	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/18&19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@30FT

LAB I.D.: 170517-23


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.86	0.3	1	500	5.0	6010B
Barium (Ba)	91.0	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	15.0	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	8.62	1.0	1	8,000	80	6010B
Copper (Cu)	16.0	1.0	1	2,500	25	6010B
Lead (Pb)	0.719	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.140	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	9.14	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	28.4	5.0	1	2,400	24	6010B
Zinc (Zn)	38.7	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLIC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/18&19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@35FT LAB I.D.: 170517-24


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	2.06	0.3	1	500	5.0	6010B
Barium(Ba)	101	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	16.2	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt(Co)	8.88	1.0	1	8,000	80	6010B
Copper(Cu)	17.6	1.0	1	2,500	25	6010B
Lead(Pb)	2.93	0.5	1	1,000	5.0	6010B
Mercury(Hg)	0.123	0.01	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	8.03	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	39.5	5.0	1	2,400	24	6010B
Zinc(Zn)	45.2	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLIC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
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- *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL** DATE RECEIVED: **05/17/17**
 DATE SAMPLED: **05/16/17** DATE ANALYZED: **05/18&19/17**
 REPORT TO: **MR. ZACHARY JARECKI** DATE REPORTED: **05/24/17**

SAMPLE I.D.: **B-8@40FT** LAB I.D.: **170517-25**


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	2.01	0.3	1	500	5.0	6010B
Barium(Ba)	107	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	15.2	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt(Co)	8.82	1.0	1	8,000	80	6010B
Copper(Cu)	15.2	1.0	1	2,500	25	6010B
Lead(Pb)	2.36	0.5	1	1,000	5.0	6010B
Mercury(Hg)	0.064	0.01	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	7.97	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	39.0	5.0	1	2,400	24	6010B
Zinc(Zn)	42.7	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLT = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/17/17
 DATE ANALYZED: 05/18&19/17
 DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@45FT

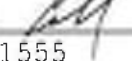
LAB I.D.: 170517-26

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLIC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.18	0.3	1	500	5.0	6010B
Barium (Ba)	102	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	17.9	0.5	1	2,500	560/5@	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.09	1.0	1	8,000	80	6010B
Copper (Cu)	17.5	1.0	1	2,500	25	6010B
Lead (Pb)	2.88	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.071	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	8.94	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	47.7	5.0	1	2,400	24	6010B
Zinc (Zn)	44.1	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLIC = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLIC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/17/17
 DATE ANALYZED: 05/18&19/17
 DATE REPORTED: 05/24/17


SAMPLE I.D.: B-8@50FT LAB I.D.: 170517-27

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	2.98	0.3	1	500	5.0	6010B
Barium (Ba)	280	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	0.780	0.5	1	100	1.0	6010B
Chromium Total (Cr)	25.3	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	9.81	1.0	1	8,000	80	6010B
Copper (Cu)	28.0	1.0	1	2,500	25	6010B
Lead (Pb)	4.76	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.147	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	13.0	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	44.7	5.0	1	2,400	24	6010B
Zinc (Zn)	44.6	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/18&19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

METHOD BLANK REPORT FOR LAB I.D.: 170517-18 THROUGH -27


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLC LIMIT	STLC LIMIT	EPA METHOD
Antimony(Sb)	ND	1.0	1	500	15	6010B
Arsenic(As)	ND	0.3	1	500	5.0	6010B
Barium(Ba)	ND	5.0	1	10,000	100	6010B
Beryllium(Be)	ND	0.5	1	75	0.75	6010B
Cadmium(Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total(Cr)	ND	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt(Co)	ND	1.0	1	8,000	80	6010B
Copper(Cu)	ND	1.0	1	2,500	25	6010B
Lead(Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury(Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum(Mo)	ND	5.0	1	3,500	350	6010B
Nickel(Ni)	ND	2.5	1	2,000	20	6010B
Selenium(Se)	ND	1.0	1	100	1.0	6010B
Silver(Ag)	ND	1.0	1	500	5.0	6010B
Thallium(Tl)	ND	1.0	1	700	7.0	6010B
Vanadium(V)	ND	5.0	1	2,400	24	6010B
Zinc(Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = PQL X DF
 ND = Below the Actual Detection Limit or non-detected
 TTLC = Total Threshold Limit Concentration
 STLC = Soluble Threshold Limit Concentration
 @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
 * = STLC analysis for the metal is recommended (if marked)
 ** = Additional Analysis required, please call to discuss (if marked)
 *** = The concentration exceeds the TTLC Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 -- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTL--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/19/2017

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170517-20	50.0	99	PASS	4.81	50.0	47.7	86%	47.4	85%	1%
Lead(Pb)	170517-20	50.0	102	PASS	1.26	50.0	46.4	90%	46.2	90%	0%
Nickel(Ni)	170517-20	50.0	103	PASS	1.82	50.0	48.9	94%	49.2	95%	1%


ANALYSIS DATE : 5/18/2017


Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170517-45	0.125	93	PASS	0	0.125	0.108	86%	0.107	86%	1%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170517-18--27

ANALYST: 

FINAL REVIEWER: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@5FT LAB I.D.: 170517-18

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com


PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@5FT LAB I.D.: 170517-18

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@10FT LAB I.D.: 170517-19

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE 12 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

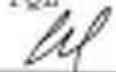
PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL** DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@10FT** LAB I.D.: 170517-19

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: 05/17/17

DATE SAMPLED: 05/16/17

DATE ANALYZED: 05/19/17

REPORT TO: **MR. ZACHARY JARECKI**

DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@15FT**

LAB I.D.: 170517-20

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2**

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com


PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

 SAMPLE I.D.: **B-8@15FT** LAB I.D.: 170517-20

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL**
 DATE SAMPLED: **05/16/17**
 REPORT TO: **MR. ZACHARY JARECKI**


DATE RECEIVED: **05/17/17**
 DATE ANALYZED: **05/19/17**
 DATE REPORTED: **05/24/17**

SAMPLE I.D.: **B-8@20FT**

LAB I.D.: 170517-21

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A


MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@25FT LAB I.D.: 170517-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

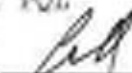
PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@25FT** LAB I.D.: 170517-22

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL.
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/16/17**
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: **05/17/17**
 DATE ANALYZED: **05/19/17**
 DATE REPORTED: **05/24/17**

SAMPLE I.D.: **B-8@30FT**

LAB I.D.: 170517-23

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: **05/16/17**
 REPORT TO: **MR. ZACHARY JARECKI**


DATE RECEIVED: **05/17/17**
 DATE ANALYZED: **05/19/17**
 DATE REPORTED: **05/24/17**

SAMPLE I.D.: **B-8@30FT**

LAB I.D.: **170517-23**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**
 UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@35FT** LAB I.D.: 170517-24

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
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PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: **SOIL** DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: **MR. ZACHARY JARECKI** DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@35FT** LAB I.D.: 170517-24

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2**
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL
 DATE SAMPLED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/17/17
 DATE ANALYZED: 05/19/17
 DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@40FT**

LAB I.D.: 170517-25

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE 42 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: **SOIL**
 DATE SAMPLED: 05/16/17
 REPORT TO: **MR. ZACHARY JARECKI**

DATE RECEIVED: 05/17/17
 DATE ANALYZED: 05/19/17
 DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@40FT**

LAB I.D.: 170517-25

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE RECEIVED: 05/17/17

DATE SAMPLED: 05/16/17

DATE ANALYZED: 05/19/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/24/17

SAMPLE I.D.: **B-8@45FT**

LAB I.D.: 170517-26

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM


PARAMETER	SAMPLE RESULT	PQL X1
<u>1,3-DICHLOROPROPANE</u>	ND	0.005
<u>2,2-DICHLOROPROPANE</u>	ND	0.005
<u>1,1-DICHLOROPROPENE</u>	ND	0.005
<u>CIS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>TRANS-1,3-DICHLOROPROPENE</u>	ND	0.005
<u>ETHYLBENZENE</u>	ND	0.005
<u>2-HEXANONE</u>	ND	0.020
<u>HEXACHLOROBUTADIENE</u>	ND	0.005
<u>ISOPROPYLBENZENE</u>	ND	0.005
<u>4-ISOPROPYLTOLUENE</u>	ND	0.005
<u>4-METHYL-2-PENTANONE (MIBK)</u>	ND	0.020
<u>METHYL tert-BUTYL ETHER (MTBE)</u>	ND	0.005
<u>METHYLENE CHLORIDE</u>	ND	0.010
<u>NAPHTHALENE</u>	ND	0.005
<u>N-PROPYLBENZENE</u>	ND	0.005
<u>STYRENE</u>	ND	0.005
<u>1,1,1,2-TETRACHLOROETHANE</u>	ND	0.005
<u>1,1,2,2-TETRACHLOROETHANE</u>	ND	0.005
<u>TETRACHLOROETHENE (PCE)</u>	ND	0.005
<u>TOLUENE</u>	ND	0.005
<u>1,2,3-TRICHLOROBENZENE</u>	ND	0.005
<u>1,2,4-TRICHLOROBENZENE</u>	ND	0.005
<u>1,1,1-TRICHLOROETHANE</u>	ND	0.005
<u>1,1,2-TRICHLOROETHANE</u>	ND	0.005
<u>TRICHLOROETHENE (TCE)</u>	ND	0.005
<u>TRICHLOROFLUOROMETHANE</u>	ND	0.005
<u>1,2,3-TRICHLOROPROPANE</u>	ND	0.005
<u>1,2,4-TRIMETHYLBENZENE</u>	ND	0.005
<u>1,3,5-TRIMETHYLBENZENE</u>	ND	0.005
<u>VINYL CHLORIDE</u>	ND	0.005
<u>M/P-XYLENE</u>	ND	0.010
<u>O-XYLENE</u>	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park

PROJECT #: 20180388.001A

MATRIX: SOIL

DATE RECEIVED: 05/17/17

DATE SAMPLED: 05/16/17

DATE ANALYZED: 05/19/17

REPORT TO: MR. ZACHARY JARECKI

DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@50FT

LAB I.D.: 170517-27

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	0.008	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROBENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROBENZENE	ND	0.005
1,3-DICHLOROBENZENE	ND	0.005
1,4-DICHLOROBENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE 12 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI


DATE RECEIVED: 05/17/17
 DATE ANALYZED: 05/19/17
 DATE REPORTED: 05/24/17

SAMPLE I.D.: B-8@50FT

LAB I.D.: 170517-27

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/17/17
 DATE ANALYZED: 05/19/17
 DATE REPORTED: 05/24/17

METHOD BLANK REPORT FOR LAB I.D.: 170517-18 THROUGH -27

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLORO BENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLORO BENZENE	ND	0.005
1,3-DICHLORO BENZENE	ND	0.005
1,4-DICHLORO BENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com


PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/17/17
 DATE SAMPLED: 05/16/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/24/17

METHOD BLANK REPORT FOR LAB I.D.: 170517-18 THROUGH -27

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5035/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/19-20/2017

Matrix: Solid/Soil/Liquid

Machine: C

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170519-94-96 MS/MSD

BATCH ID: 170519-94-96

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.054	108%	0.052	104%	4%	75-125	0-20
Chlorobenzene	0	0.050	0.060	120%	0.062	124%	4%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.048	96%	0.054	108%	12%	75-125	0-20
Toluene	0	0.050	0.055	110%	0.054	108%	2%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.057	114%	0.056	112%	2%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.053	106%	75-125
Chlorobenzene	0.050	0.062	124%	75-125
Chloroform	0.050	0.050	100%	75-125
1,1-Dichloroethene	0.050	0.053	106%	75-125
Ethylbenzene	0.050	0.058	116%	75-125
o-Xylene	0.050	0.060	120%	75-125
m,p-Xylene	0.100	0.116	116%	75-125
Toluene	0.050	0.054	108%	75-125
1,1,1-Trichloroethane	0.050	0.040	80%	75-125
Trichloroethene (TCE)	0.050	0.057	114%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170517-18	170517-19	170517-20	170517-21	170517-22	170517-23
Dibromofluoromethane	50.0	70-130	113%	111%	107%	123%	126%	113%	125%
Toluene-d8	50.0	70-130	102%	86%	101%	103%	104%	102%	101%
4-Bromofluorobenzene	50.0	70-130	104%	61*%	91%	96%	97%	91%	91%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170517-24	170517-25	170517-26	170517-27	170518-94-96	170518-35	170518-37
Dibromofluoromethane	50.0	70-130	111%	124%	104%	98%	110%	122%	121%
Toluene-d8	50.0	70-130	100%	103%	104%	100%	100%	101%	99%
4-Bromofluorobenzene	50.0	70-130	88%	95%	86%	88%	99%	87%	97%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170519-5	170519-6					
Dibromofluoromethane	50.0	70-130	92%	62*%					
Toluene-d8	50.0	70-130	99%	101%					
4-Bromofluorobenzene	50.0	70-130	96%	102%					

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

%RC = Percent Recovery

spk conc = Spike Concentration

ACP %RC = Accepted Percent Recovery

MS = Matrix Spike

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: [Signature]

Final Reviewer: [Signature]

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 (X) 1 Week (Standard)



Misc./PO#
 201805880011A
 TRM 80158
 VLS 82003
 CA Metals (cont)
 74719

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONTAINERS	TEMPERATURE	RESERVATION	Analysis Required	COMMENTS
B-8 @ 5 FT	17057-18	5/16/17	0850	SOIL	4	18.5°C	18.5°C		*STILL/TECP AS NEEDED
B-8 @ 10 FT	-19		0905						
B-8 @ 15 FT	-20		0915						
B-8 @ 20 FT	-21		0925						
B-8 @ 25 FT	-22		0935						
B-8 @ 30 FT	-23		1030						
B-8 @ 35 FT	-24		1055						
B-8 @ 40 FT	-25		1100						
B-8 @ 45 FT	-26		1115						
B-8 @ 50 FT	-27		1120						

Company Name: Kleinfelder
 Project Contact: Zachary Tarecki
 Address: 2280 Market St, Suite 300
 City/State/Zip: Riverside, CA, 92501
 Tel: 951-216-8012
 Fax: -
 Sampler's Signature: [Signature]
 Project Name/ID: Roosevelt Park

Received by: [Signature] Date & Time: 5/17/17 10:20
 Relinquished by: [Signature]
 Relinquished by: [Signature]
 Relinquished by: [Signature]

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 18, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

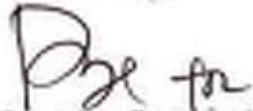
Project: **Roosevelt Park**
Project #: **20180388.001A**
Lab I.D.: **170517-28**

Dear Mr. Jarecki:

The **analytical results** for the soil sample, received by our laboratory on May 17, 2017, are attached. The sample was received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets

Vice President/Program Manager



Andy Wang
Laboratory Manager

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE SAMPLED: 05/16/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/17/17
DATE EXTRACTED: 05/17/17
DATE ANALYZED: 05/17/17
DATE REPORTED: 05/18/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 6 columns: SAMPLE I.D., LAB I.D., C4-C10, C11-C22, C23-C35, DF. Rows include Drum B-8, METHOD BLANK, and PQL values.

COMMENTS

C4-C10 = GASOLINE RANGE
C11-C22 = DIESEL RANGE
C23-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905 Fax (909)590-5907

8015B Soil/Solid QC

Date Analyzed: 5/17/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051728

Spiked Sample Lab I.D.: **170516-30 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	169	85%	174	87%	3%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	223	111%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170517-28						
O-Terphenyl	60-140%	136%	115%						
Octacosane	60-140%	114%	107%						

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: *me*

Final Reviewer: *Al*

* = Surrogate fail due to matrix interference
 Note: LCS, MS, MSD are in control therefore results are in control.

QA/QC for Metals Analysis --TTLC--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 5/18/2017

Unit : mg/Kg(ppm)

Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170516-42	50.0	99	PASS	3.08	50.0	51.6	97%	51.9	98%	1%
Lead(Pb)	170516-42	50.0	103	PASS	0.915	50.0	49.7	99%	50.3	99%	1%
Nickel(Ni)	170516-42	50.0	105	PASS	1.52	50.0	45.7	88%	46.5	90%	2%


ANALYSIS DATE : 5/18/2017

Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170517-45	0.125	93	PASS	0	0.125	0.108	86%	0.107	86%	1%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170517-28

ANALYST: 

FINAL REVIEWER: 

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**

PROJECT #: **20180388.001A**

MATRIX: **SOIL**

DATE RECEIVED: **05/17/17**

DATE SAMPLED: **05/16/17**

DATE ANALYZED: **05/17/17**

REPORT TO: **MR. ZACHARY JARECKI**

DATE REPORTED: **05/18/17**

SAMPLE I.D.: **Drum B-8**

LAB I.D.: **170517-28**

ANALYSIS: **VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2**

UNIT: **mg/Kg = MILLIGRAM PER KILOGRAM = PPM**

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel (951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A
 MATRIX: SOIL
 DATE SAMPLED: 05/16/17
 REPORT TO: MR. ZACHARY JARECKI
 DATE RECEIVED: 05/17/17
 DATE ANALYZED: 05/17/17
 DATE REPORTED: 05/18/17

METHOD BLANK REPORT FOR LAB I.D.: 170517-28

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY:
 CAL-DHS CERTIFICATE # 1555



Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/17-18/2017

Matrix: Solid/Soil/Liquid

Machine: C

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170517-28 MS/MSD

BATCH ID: 170517-28

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.051	102%	0.057	114%	12%	75-125	0-20
Chlorobenzene	0	0.050	0.059	118%	0.061	122%	4%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.053	106%	0.061	122%	16%	75-125	0-20
Toluene	0	0.050	0.053	106%	0.057	114%	8%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.056	112%	0.060	120%	8%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.048	96%	75-125
Chlorobenzene	0.050	0.062	124%	75-125
Chloroform	0.050	0.044	88%	75-125
1,1-Dichloroethene	0.050	0.046	92%	75-125
Ethylbenzene	0.050	0.055	110%	75-125
o-Xylene	0.050	0.056	112%	75-125
m,p-Xylene	0.100	0.105	105%	75-125
Toluene	0.050	0.051	102%	75-125
1,1,1-Trichloroethane	0.050	0.041	82%	75-125
Trichloroethene (TCE)	0.050	0.061	122%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170515-20	170515-21	170517-28			
Dibromofluoromethane	50.0	70-130	99%	87%	102%	86%			
Toluene-d8	50.0	70-130	99%	101%	102%	96%			
4-Bromofluorobenzene	50.0	70-130	101%	95%	103%	104%			

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.									
Dibromofluoromethane	50.0	70-130							
Toluene-d8	50.0	70-130							
4-Bromofluorobenzene	50.0	70-130							

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results

%RC = Percent Recovery

spk conc = Spike Concentration

ACP %RC = Accepted Percent Recovery

MS = Matrix Spike

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: [Signature]

Final Reviewer: [Signature]

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766

Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 0 Same Day

0-24 HOURS
 X 48 HOURS
 0-72 HOURS

0-30 Weeks (Standard)

DATE: 5/16/17

RUSH

90H 80158
 VC's 82013
 CA Metals 7/11/17

Misc./PO#

20180308.001A

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required	COMMENTS
DRUM B-8	170517-28	5/14/17	1130	SOL	1	-	-		*STL / TLP ASIVE.0510 DUE Thursday 5/18!
<i>[Handwritten signature]</i>									

Company Name: Kleinfelder

Project Contact: Zuchay Jarecki

Sampler's Signature: *[Signature]*

Address: 22 80 Market Street, Suite 300

Tel: 951-216-8012

Project Name/ID: Roosevelt Park

City/State/Zip: Riverside, CA, 92501

Fax: -

Relinquished by: *[Signature]*

Received by: *[Signature]*

Date & Time: 5/16/17 12:30

Relinquished by: *[Signature]*

Received by: *[Signature]*

Date & Time: 5/16/17 1:30

Relinquished by: *[Signature]*

Received by: *[Signature]*

Date & Time: 5/16/17 1:30

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

CHAIN OF CUSTODY RECORD

Date: 5/16/17

WHITE WITH SAMPLE - YELLOW TO CLIENT

Page 1 of 1

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: May 22, 2017

Mr. Zachary Jarecki
Kleinfelder
2280 Market Street
Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

Project: **Roosevelt Park**
Project #: **20180388.001A**
Lab I.D.: **170518-94, -95, -96**

Dear Mr. Jarecki:

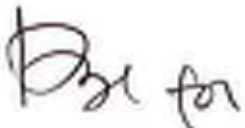
The **analytical results** for the soil samples, received by our laboratory on May 18, 2017, are attached. The samples were received chilled, intact and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: Kleinfelder
2280 Market Street, Riverside, CA 92501
Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
PROJECT #: 20180388.001A

MATRIX: SOIL
DATE SAMPLED: 05/18/17
REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/18/17
DATE EXTRACTED: 5/22/17
DATE ANALYZED: 05/22/17
DATE REPORTED: 05/22/17

TOTAL PETROLEUM HYDROCARBONS (TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

Table with 6 columns: SAMPLE I.D., LAB I.D., C4-C10, C11-C22, C23-C35, DF. Rows include B-1 Abandon, B-5 Abandon, B-7 Abandon, (Composite), METHOD BLANK, and PQL values.

COMMENTS

C4-C10 = GASOLINE RANGE
C11-C22 = DIESEL RANGE
C23-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: [Signature]
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8015B Soil/Solid QC

Date Analyzed: 5/22/2017

Units: mg/Kg (PPM)

Matrix: **Solid/Sludge**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Batch I.D. : 17051894

Spiked Sample Lab I.D.: **170518-94 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11~C22 Range	0	200	187	94%	182	91%	2%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11~C22 Range	200	182	91%	75-125

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170518-94,95,96						
O-Terphenyl	60-140%	113%	127%						
Octacosane	60-140%	104%	103%						

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Surrogate Recovery	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
O-Terphenyl	60-140%								
Octacosane	60-140%								

Analyzed and Reviewed By: 

Final Reviewer: 

* = Surrogate fail due to matrix interference

Note: LCS, MS, MSD are in control therefore results are in control.

LABORATORY REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**

MATRIX: SOIL

DATE SAMPLED: 05/18/17

REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/18/17

DATE ANALYZED: 05/22/17

DATE REPORTED: 05/22/17

SAMPLE I.D.: **B-1 Abandon / B-5 Abandon / B-7 Abandon (Composite)**

LAB I.D.: **170518-94, -95, -96 (Composite)**

TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	1.75	0.3	1	500	5.0	6010B
Barium (Ba)	34.3	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	5.89	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	3.27	1.0	1	8,000	80	6010B
Copper (Cu)	5.72	1.0	1	2,500	25	6010B
Lead (Pb)	1.63	0.5	1	1,000	5.0	6010B
Mercury (Hg)	0.033	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	3.84	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	13.3	5.0	1	2,400	24	6010B
Zinc (Zn)	16.8	0.5	1	5,000	250	6010B

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = PQL X DF

ND = Below the Actual Detection Limit or non-detected

TTLT = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration


@ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5

* = STLC analysis for the metal is recommended (if marked)

** = Additional Analysis required, please call to discuss (if marked)

*** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

-- = Not analyzed/not requested

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

METHOD BLANK REPORT

CUSTOMER: **Kleinfelder**
 2280 Market Street, Riverside, CA 92501
 Tel (951) 216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: **Roosevelt Park**
 PROJECT #: **20180388.001A**
 MATRIX: SOIL
 DATE SAMPLED: 05/18/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/18/17
 DATE ANALYZED: 05/22/17
 DATE REPORTED: 05/22/17

METHOD BLANK REPORT FOR LAB I.D.: 170518-94, -95, -96 (Composite)


TOTAL THRESHOLD LIMIT CONCENTRATION ANALYSIS

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	TTLT LIMIT	STLC LIMIT	EPA METHOD
Antimony (Sb)	ND	1.0	1	500	15	6010B
Arsenic (As)	ND	0.3	1	500	5.0	6010B
Barium (Ba)	ND	5.0	1	10,000	100	6010B
Beryllium (Be)	ND	0.5	1	75	0.75	6010B
Cadmium (Cd)	ND	0.5	1	100	1.0	6010B
Chromium Total (Cr)	ND	0.5	1	2,500	560/50	6010B
Chromium VI (Cr6)	--	0.1	-	500	5.0	7196A
Cobalt (Co)	ND	1.0	1	8,000	80	6010B
Copper (Cu)	ND	1.0	1	2,500	25	6010B
Lead (Pb)	ND	0.5	1	1,000	5.0	6010B
Mercury (Hg)	ND	0.01	1	20	0.2	7471A
Molybdenum (Mo)	ND	5.0	1	3,500	350	6010B
Nickel (Ni)	ND	2.5	1	2,000	20	6010B
Selenium (Se)	ND	1.0	1	100	1.0	6010B
Silver (Ag)	ND	1.0	1	500	5.0	6010B
Thallium (Tl)	ND	1.0	1	700	7.0	6010B
Vanadium (V)	ND	5.0	1	2,400	24	6010B
Zinc (Zn)	ND	0.5	1	5,000	250	6010B

COMMENTS

- DF = Dilution Factor
- PQL = Practical Quantitation Limit
- Actual Detection Limit = PQL X DF
- ND = Below the Actual Detection Limit or non-detected
- TTLT = Total Threshold Limit Concentration
- STLC = Soluble Threshold Limit Concentration
- @ = Must meet both the STLC Limit at 560 and EPA-TCLP Limit at 5
- * = STLC analysis for the metal is recommended (if marked)
- ** = Additional Analysis required, please call to discuss (if marked)
- *** = The concentration exceeds the TTLT Limit, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
- = Not analyzed/not requested

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for Metals Analysis --TTL--SOLID/SOIL MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 6/22/2017

Unit : mg/Kg(ppm)											
Analysis	Spk.Sample ID	CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Chromium(Cr)	170519-2	50.0	89	PASS	0.446	50.0	42.9	85%	44.0	87%	3%
Lead(Pb)	170519-2	50.0	110	PASS	3.00	50.0	48.8	92%	52.0	98%	7%
Nickel(Ni)	170519-2	50.0	94	PASS	0.518	50.0	47.0	93%	50.1	99%	6%


ANALYSIS DATE : 5/22/2017

Analysis	Spk.Sample ID	170508-CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)	170519-54	0.125	84	PASS	0	0.125	0.108	86%	0.111	89%	3%

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Chromium(Cr)	PASS	PASS	PASS	PASS
Lead(Pb)	PASS	PASS	PASS	PASS
Nickel(Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	75 ~ 125	75 ~ 125	85 ~ 115	0 ~ 20

Batch For Samples:170518-94~~96

ANALYST: 

FINAL REVIEWER: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL
 DATE SAMPLED: 05/18/17
 REPORT TO: MR. ZACHARY JARECKI

DATE RECEIVED: 05/18/17
 DATE ANALYZED: 05/19/17
 DATE REPORTED: 05/22/17

SAMPLE I.D.: B-1 Abandon / B-5 Abandon / B-7 Abandon (Composite)
 LAB I.D.: 170518-94, -95, -96 (Composite)

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: 

LABORATORY REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
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MATRIX: SOIL
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SAMPLE I.D.: B-1 Abandon / B-5 Abandon / B-7 Abandon (Composite)
 LAB I.D.: 170518-94, -95, -96 (Composite)

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

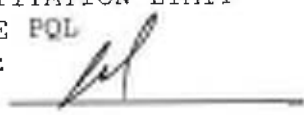
PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT

ND = NON-DETECTED OR BELOW THE PQL

DATA REVIEWED AND APPROVED BY:

CAL-DHS CERTIFICATE # 1555



METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com

PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/18/17
 DATE SAMPLED: 05/18/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/22/17

METHOD BLANK REPORT FOR LAB I.D.: 170518-94, -95, -96 (Composite)

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	0.020
BENZENE	ND	0.005
BROMOBENZENE	ND	0.005
BROMOCHLOROMETHANE	ND	0.005
BROMODICHLOROMETHANE	ND	0.005
BROMOFORM	ND	0.005
BROMOMETHANE	ND	0.005
2-BUTANONE (MEK)	ND	0.020
N-BUTYLBENZENE	ND	0.005
SEC-BUTYLBENZENE	ND	0.005
TERT-BUTYLBENZENE	ND	0.005
CARBON DISULFIDE	ND	0.010
CARBON TETRACHLORIDE	ND	0.005
CHLOROENZENE	ND	0.005
CHLOROETHANE	ND	0.005
CHLOROFORM	ND	0.005
CHLOROMETHANE	ND	0.005
2-CHLOROTOLUENE	ND	0.005
4-CHLOROTOLUENE	ND	0.005
DIBROMOCHLOROMETHANE	ND	0.005
1,2-DIBROMO-3-CHLOROPROPANE	ND	0.005
1,2-DIBROMOETHANE	ND	0.005
DIBROMOMETHANE	ND	0.005
1,2-DICHLOROENZENE	ND	0.005
1,3-DICHLOROENZENE	ND	0.005
1,4-DICHLOROENZENE	ND	0.005
DICHLORODIFLUOROMETHANE	ND	0.005
1,1-DICHLOROETHANE	ND	0.005
1,2-DICHLOROETHANE	ND	0.005
1,1-DICHLOROETHENE	ND	0.005
CIS-1,2-DICHLOROETHENE	ND	0.005
TRANS-1,2-DICHLOROETHENE	ND	0.005
1,2-DICHLOROPROPANE	ND	0.005

----- TO BE CONTINUED ON PAGE 12 -----

DATA REVIEWED AND APPROVED BY: *let*

METHOD BLANK REPORT

CUSTOMER: Kleinfelder
 2280 Market Street, Riverside, CA 92501
 Tel(951)216-8012 E-Mail: ZJarecki@Kleinfelder.com


PROJECT: Roosevelt Park
 PROJECT #: 20180388.001A

MATRIX: SOIL DATE RECEIVED: 05/18/17
 DATE SAMPLED: 05/18/17 DATE ANALYZED: 05/19/17
 REPORT TO: MR. ZACHARY JARECKI DATE REPORTED: 05/22/17

METHOD BLANK REPORT FOR LAB I.D.: 170518-94, -95, -96 (Composite)

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
 UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

PARAMETER	SAMPLE RESULT	PQL X1
1,3-DICHLOROPROPANE	ND	0.005
2,2-DICHLOROPROPANE	ND	0.005
1,1-DICHLOROPROPENE	ND	0.005
CIS-1,3-DICHLOROPROPENE	ND	0.005
TRANS-1,3-DICHLOROPROPENE	ND	0.005
ETHYLBENZENE	ND	0.005
2-HEXANONE	ND	0.020
HEXACHLOROBUTADIENE	ND	0.005
ISOPROPYLBENZENE	ND	0.005
4-ISOPROPYLTOLUENE	ND	0.005
4-METHYL-2-PENTANONE (MIBK)	ND	0.020
METHYL tert-BUTYL ETHER (MTBE)	ND	0.005
METHYLENE CHLORIDE	ND	0.010
NAPHTHALENE	ND	0.005
N-PROPYLBENZENE	ND	0.005
STYRENE	ND	0.005
1,1,1,2-TETRACHLOROETHANE	ND	0.005
1,1,2,2-TETRACHLOROETHANE	ND	0.005
TETRACHLOROETHENE (PCE)	ND	0.005
TOLUENE	ND	0.005
1,2,3-TRICHLOROBENZENE	ND	0.005
1,2,4-TRICHLOROBENZENE	ND	0.005
1,1,1-TRICHLOROETHANE	ND	0.005
1,1,2-TRICHLOROETHANE	ND	0.005
TRICHLOROETHENE (TCE)	ND	0.005
TRICHLOROFLUOROMETHANE	ND	0.005
1,2,3-TRICHLOROPROPANE	ND	0.005
1,2,4-TRIMETHYLBENZENE	ND	0.005
1,3,5-TRIMETHYLBENZENE	ND	0.005
VINYL CHLORIDE	ND	0.005
M/P-XYLENE	ND	0.010
O-XYLENE	ND	0.005

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
 ND = NON-DETECTED OR BELOW THE PQL
 DATA REVIEWED AND APPROVED BY: 
 CAL-DHS CERTIFICATE # 1555

Enviro-Chem, inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905

Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 5/19-20/2017

Machine: C

Matrix: Solid/Soil/Liquid

Unit: mg/Kg (PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 170519-94-96 MS/MSD

BATCH ID: 170519-94-96

Analyte	S.R	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	0.050	0.054	108%	0.052	104%	4%	75-125	0-20
Chlorobenzene	0	0.050	0.060	120%	0.062	124%	4%	75-125	0-20
1,1-Dichloroethene	0	0.050	0.048	96%	0.054	108%	12%	75-125	0-20
Toluene	0	0.050	0.055	110%	0.054	108%	2%	75-125	0-20
Trichloroethene (TCE)	0	0.050	0.057	114%	0.056	112%	2%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	0.050	0.053	106%	75-125
Chlorobenzene	0.050	0.062	124%	75-125
Chloroform	0.050	0.050	100%	75-125
1,1-Dichloroethene	0.050	0.053	106%	75-125
Ethylbenzene	0.050	0.058	116%	75-125
o-Xylene	0.050	0.060	120%	75-125
m,p-Xylene	0.100	0.116	116%	75-125
Toluene	0.050	0.054	108%	75-125
1,1,1-Trichloroethane	0.050	0.040	80%	75-125
Trichloroethene (TCE)	0.050	0.057	114%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			M-BLK	170517-18	170517-19	170517-20	170517-21	170517-22	170517-23
Dibromofluoromethane	50.0	70-130	113%	111%	107%	123%	126%	113%	125%
Toluene-d8	50.0	70-130	102%	86%	101%	103%	104%	102%	101%
4-Bromofluorobenzene	50.0	70-130	104%	61*	91%	96%	97%	91%	91%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170517-24	170517-25	170517-26	170517-27	170518-94-96	170518-35	170518-37
Dibromofluoromethane	50.0	70-130	111%	124%	104%	98%	119%	122%	121%
Toluene-d8	50.0	70-130	100%	103%	104%	100%	100%	101%	99%
4-Bromofluorobenzene	50.0	70-130	88%	95%	86%	88%	99%	87%	97%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			170519-5	170519-6					
Dibromofluoromethane	50.0	70-130	92%	62*					
Toluene-d8	50.0	70-130	99%	101%					
4-Bromofluorobenzene	50.0	70-130	96%	102%					

* = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.

S.R. = Sample Results


%RC = Percent Recovery

spk conc = Spike Concentration

ACP %RC = Accepted Percent Recovery

MS = Matrix Spike

MSD = Matrix Spike Duplicate

Analyzed/Reviewed By: 

Final Reviewer: _____

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 1-2 Business Days
 3-5 Business Days
 1 Week (Standard)
 Other: _____

Misc./POB
 201805588000A
 TPB 805B
 VLS 8210B
 CA Metals Lab
 7074

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required		COMMENTS
B-1 Abandon	170518-94	5/18/17	0800	SOIL	1	1	-	1	1	*SRL/MLP AS NEEDED
B-5 Abandon	-95	5/18/17	0945	SOIL	1	-	-	1	1	composites
B-7 Abandon	-96	5/18/17	1100	SOIL	1	-	-	1	1	DUE Monday 5/22/17!
<i>[Large handwritten signature]</i>										

Company Name: Kleinfelder Project Contact: Zachary Sorecki Sample Signature: _____
 Address: 2280 Market Street, Suite 300 Tel: 951-210-8012 Project Name/ID: Roosevelt + Park
 City/State/Zip: Riverside, CA, 92501 Fax: _____
 Relinquished by: _____ Received by: [Signature] Date & Time: 5/18/17 1715
 Relinquished by: _____ Received by: _____ Date & Time: _____
 Relinquished by: _____ Received by: _____ Date & Time: _____

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other: _____

APPENDIX D CALCULATIONS

Boring ID: **B-2**

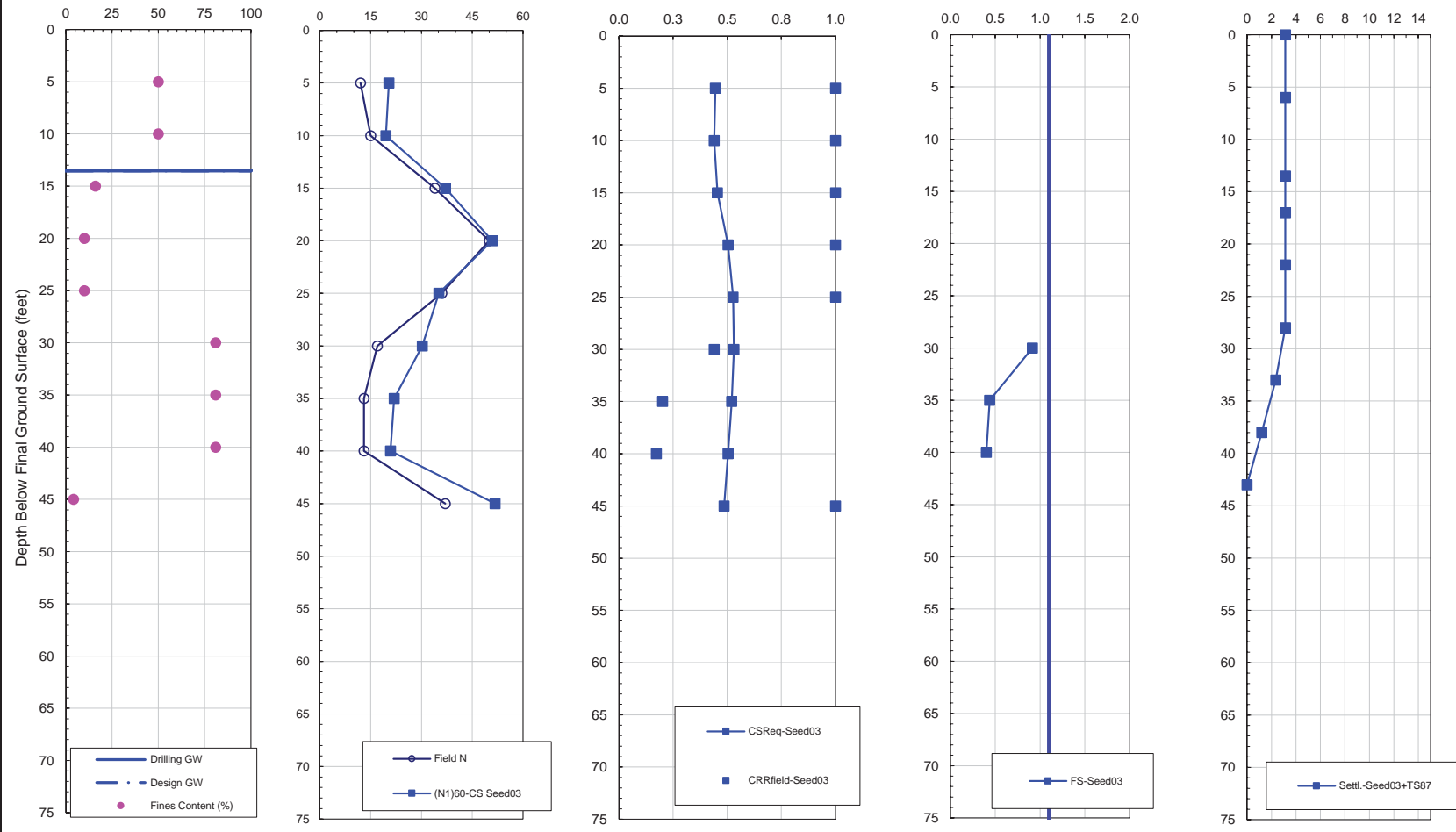
B-2

$M_w = 7.6$
 $PGA = 0.69g$

Groundwater Depth During Drilling (ft) = **13.5 ft**
 Design Groundwater Depth (ft) = **13.5 ft**

Existing Ground Elevation = **100.0 ft**
 Final Ground Elevation = **100.0 ft**

Ana. by: Zachary Jarecki
 Checked by:



1. $(N_1)_{60-CS}$ capped at 60; 2. $CRR_{field} = 1$ for non-liquefiable soils; 3. FS is capped at 2.0 for liquefiable soils and not plotted for non-liquefiable soils including soils above G.W.T.



Project Name: Roosevelt Park Infiltration
 Project No.: 20180388.001A
 Project Location: 7600 Graham Avenue, Los

EARTHQUAKE-INDUCED SETTLEMENTS

Date: 6/13/2017 **FIGURE D-1**

Boring ID: **B-6**

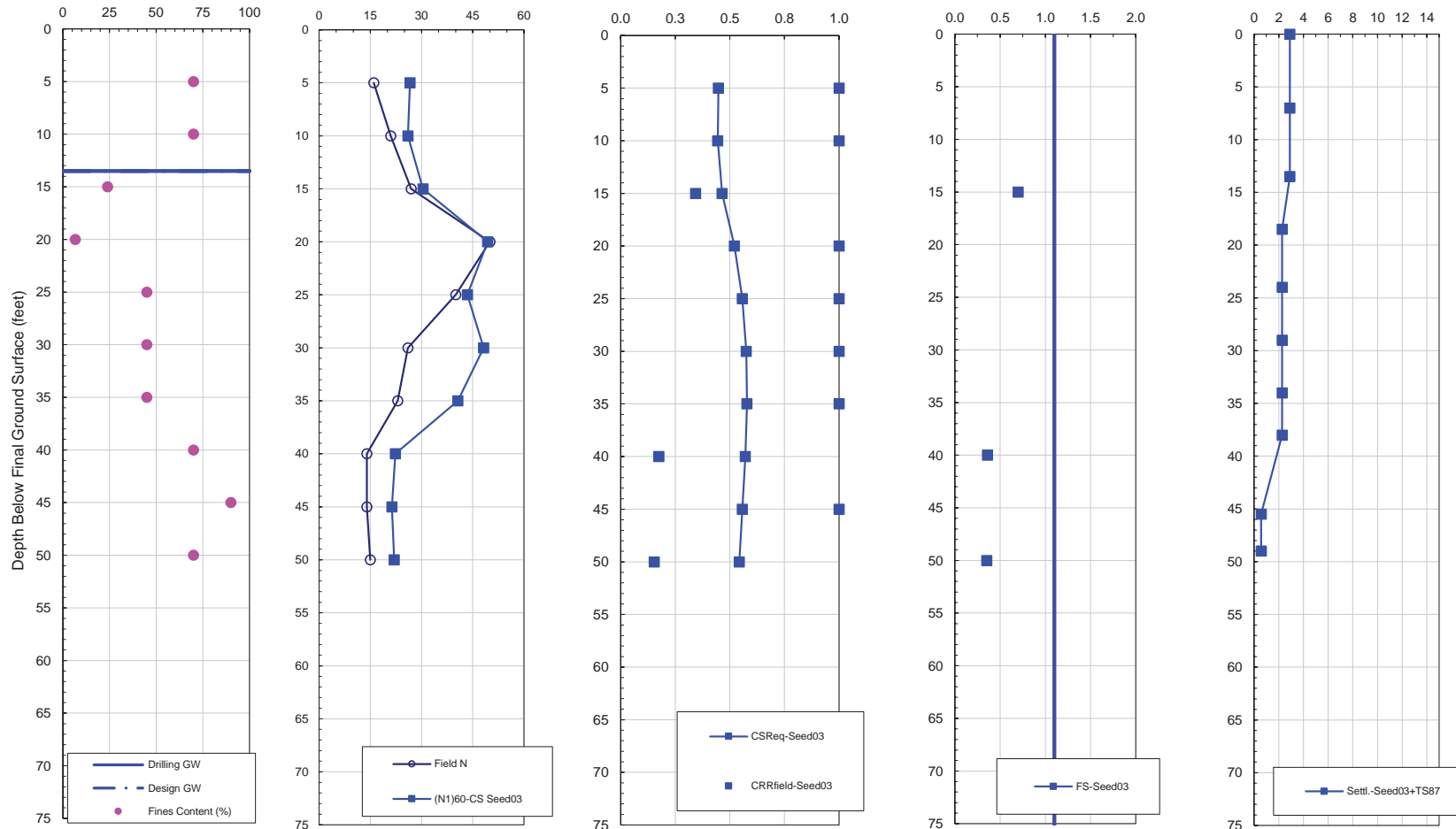
B-6

$M_w = 7.6$
 $PGA = 0.69g$

Groundwater Depth During Drilling (ft) = **13.5 ft**
 Design Groundwater Depth (ft) = **13.5 ft**

Existing Ground Elevation = **100.0 ft**
 Final Ground Elevation = **100.0 ft**

Ana. by: Zachary Jarecki
 Checked by:



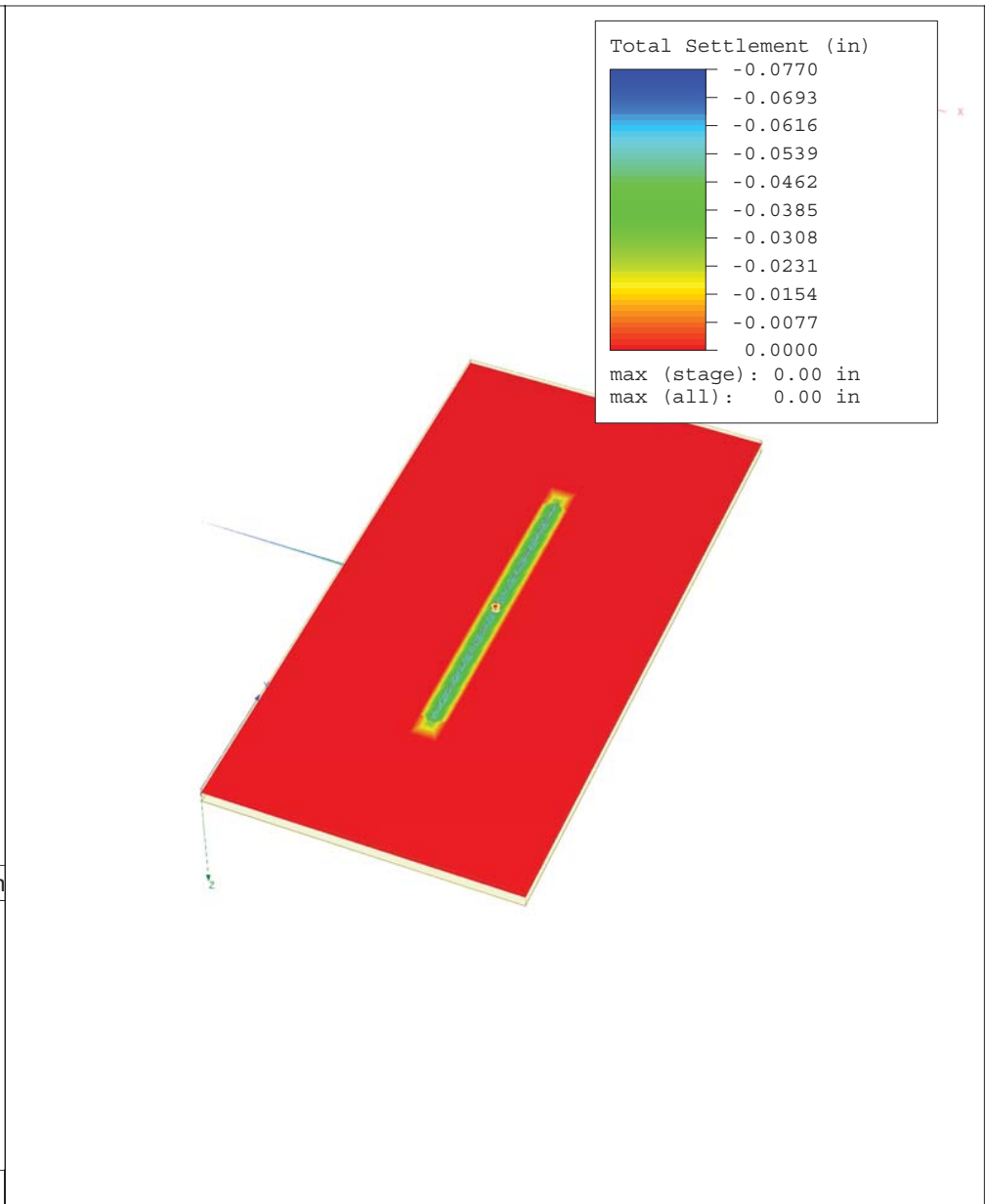
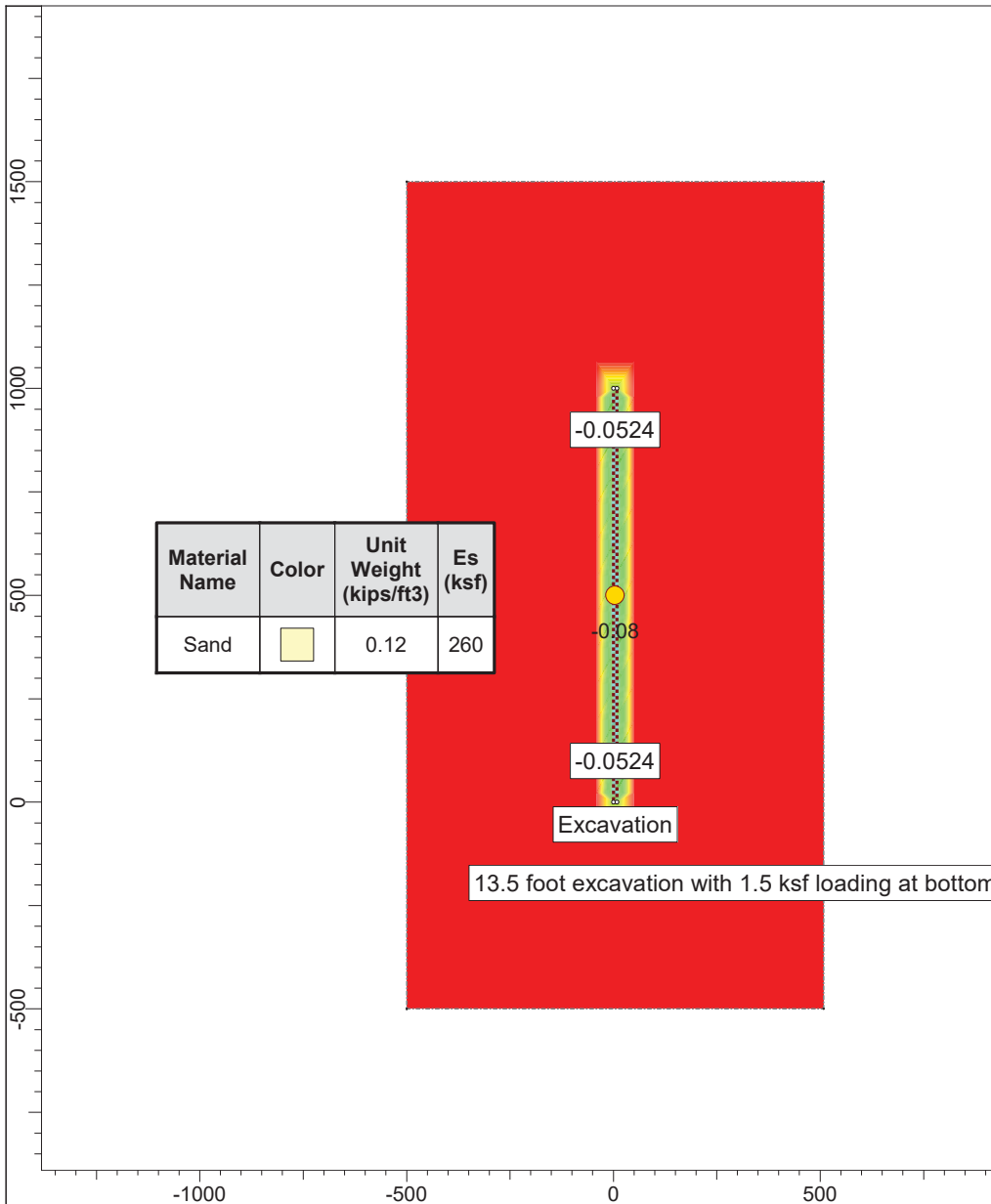
1. $(N_1)_{60-CS}$ capped at 60; 2. $CRR_{field} = 1$ for non-liquefiable soils; 3. FS is capped at 2.0 for liquefiable soils and not plotted for non-liquefiable soils including soils above G.W.T.




Project Name: Roosevelt Park Infiltration
 Project No.: 20180388.001A
 Project Location: 7600 Graham Avenue, Los

EARTHQUAKE-INDUCED SETTLEMENTS

Date: 6/13/2017 **FIGURE D-2**



	Project		Roosevelt Park Infiltration	
	Analysis Description		Static Settlement	
	Drawn By	Z. Jarecki	Company	Kleinfelder
	Date	7/31/2017	File Name	Gallery 3 Settlement.s3z

SETTLE3D 4.007

Figure D-4



APPENDIX E POLLUTANT MOBILIZATION REPORT



August 10, 2017
Kleinfelder Project No.: 20180388.001A

Mr. Yonah Halpern, PE
County of Los Angeles Department of Public Works
Geotechnical and Materials Engineering Division
Soils Investigations Section
900 South Fremont Avenue, 4th Floor
Alhambra, California 91803

**SUBJECT: Technical Memorandum: Modeling of
Stormwater Infiltration and Groundwater
Mounding at the Roosevelt Park
7600 Graham Avenue, Los Angeles, California**

Dear Mr. Halpern:

Kleinfelder is pleased to present this DRAFT report summarizing our groundwater modeling performed as part of an Infiltration Study at Roosevelt Park located at 7600 Graham Avenue in Los Angeles, California. The approximate location is shown on Figure 1, Site Vicinity Map. Our scope of work was presented in our April 19, 2017 proposal, revised April 25, 2017.

INTRODUCTION

This *Technical Memorandum: Modeling of Stormwater Infiltration and Groundwater Mounding at Roosevelt Park* ("TM") has been prepared by Kleinfelder, Inc., to support design of Low Impact Development (LID) facilities for stormwater management at the Roosevelt Park (Site) in Los Angeles County. The transient groundwater model was used to evaluate the potential for stormwater infiltration at the three infiltration galleries to migrate beneath the former Waymire facility, located at 7702 Maie Avenue, Los Angeles, California, 90001 (Figure 1). The Waymire facility is located more than 500 feet southwest of the proposed infiltration gallery #1.

SCOPE AND PURPOSE

The County of Los Angeles Department of Public Works is evaluating infiltration rates for design and construction of LID facilities for stormwater management at the Site and along Whitsett Avenue southeast of the park. LID requirements and the presence of residual concentrations of constituents of concern (COCs) in soil and groundwater at former Waymire facility may affect the proposed plans for construction activities at the Site. Improvements at the Site may include the installation of LID facilities such as three underground infiltration galleries and associate diversion pipelines to convey stormwater and allow its infiltration into the subsurface. Implementing typical best management practices (BMPs) to comply with LID requirements, stormwater infiltration would be implemented with the intent of replenishing the shallow aquifer beneath the Site.

The main purposes of the numerical transient groundwater flow modeling are to simulate moisture content changes and groundwater mounding due to the proposed infiltration. Changes in moisture content or groundwater mounding beneath the former Waymire facility may accelerate the transport of existing contaminated groundwater due to a change in the hydraulic gradient or mobilize soil contamination. The numerical groundwater model was used to evaluate potential groundwater mounding caused by stormwater infiltration, the impact on local saturated and unsaturated groundwater flow patterns, and the travel time of groundwater to reach the northeastern corner of former Waymire facility. The maximum runoff volume for each gallery was calculated by Watershed Management Division (2016) based on the 85th percentile 24-hour storm event for a 203-acre tributary area.

BACKGROUND

Review of boring logs suggest that the geology of the Site is characterized by silty-sand, sandy silt, poorly graded sand with silt, and occasional silt or clay layers. There is a relatively continuous sandy layer at the Site, starting at approximately 15 feet below ground surface (bgs) above which the infiltration galleries are located. At a depth of approximately 22 feet bgs, an interbedded layer of fine-grained soil and silty sand appears to continue laterally with an average thickness of approximately 15 feet. The groundwater gradient in November 2000 beneath the former Waymire facility was 0.000025 foot per foot (ft/ft), which is almost horizontal, with a flow direction toward the north-northeast (IT Corporation, 2001). The depth to groundwater beneath the Site and former Waymire facility has historically and recently been approximately 99 feet.

The former Waymire facility, which is more than 500 feet southwest of the proposed infiltration gallery #1, has documented environmental contamination in the underlying soil. Since its closure in May 1992, the Waymire facility has been used as empty drum storage. Cleanup activities were initiated in September 1998. In July 1995, elevated levels of trichloroethylene (TCE) and its degradation by-products were detected in the soil and groundwater (IT Corporation, 2001). Environmental data from the vicinity of the former Waymire facility (IT Corporation, 2001) were reviewed and Site-specific data (e.g., boring logs, percolation testing, sieve analysis, and permeability testing results) were obtained (Kleinfelder, 2017b) to develop the numerical groundwater model.

METHODOLOGY AND PROCEDURES

This section presents the methods and procedures that were followed to construct the numerical transient groundwater flow model. Existing available datasets were gathered from various sources to create a conceptual model of the Site.

The model was constructed using the Groundwater Modeling System[®] (GMS, v.10.0) modeling platform developed by Aquaveo of Provo, Utah (Aquaveo, 2016). The program consists of a series of pre- and post-processors that transfer information to a groundwater modeling computer code. The software used to simulate flow was selected because of its common usage and numerically stable codes having an extensive record of successful use (providing validation of the program), along with its ability to simulate a system in three dimensions.

An unstructured finite element 3D model grid was created using the computer code FEMWATER (Lin et al., 1997), which is integrated into the state-of-the-art graphical user environment in GMS. FEMWATER is a coupled flow and transport finite element density-dependent model that can be

used for simulations involving both saturated and unsaturated (vadose) groundwater zones. FEMWATER contains a series of user selectable packages or modules that can simulate groundwater flow and solute transport, selecting solver parameters, and simulate boundary conditions.

A GIS map and existing Site documents (Kleinfelder, 2017a) were used to define the coordinates and to locate the three proposed infiltration galleries and the former Waymire facility within the model. The units of length (in feet) and time (in days) were specified in the model; the assigned parameter values were in consistent units. The model domain was slightly tilted to follow the minimal hydraulic gradient (IT Corporation, 2001), although later a flat water table was used conservatively. The modeling domain, model boundaries, finite element mesh, and location of infiltration galleries are shown on Figure 2. The former Waymire facility and location of three cross sections and three infiltration galleries are shown on Figure 3. The cross sections were used to visualize the groundwater flow patterns.

Model Grid

A simplified three-layer interpreted geology was converted to a three-dimensional (3D) numerical FEMWATER model with non-rectangular grids made up of linear prismatic elements. Elements in the 3D grid are grouped into units representing three stratigraphic layers, and each layer is assigned with a material identification. The top layer extends from 15 feet bgs (the bottom of galleries) to 22 feet bgs, the middle layer is 15 feet thick, and the bottom layer extends from 37 feet bgs to 135 feet bgs. The bottom layer is vertically discretized into four sub-layers. The grid consists of 85,938 prismatic elements representing an area of 2.53 square miles, and the element size is refined from 300 feet along the boundaries to as low as eight feet within infiltration galleries. The model mesh is progressively refined toward the infiltration galleries to capture in detail the behavior of the flow system in the unsaturated zone near the source area (Figures 2 and 3). The model mesh extended beyond the Site to minimize boundary effects and to provide flexibility for future model enhancement and extension, if needed.

Boundary Conditions

One of the challenges of the FEMWATER model was establishing head boundary conditions. Accurate definition of head boundary conditions is an essential part of conceptualizing and modeling saturated and unsaturated groundwater flow systems. Ideally, in groundwater investigations, a system under study should be enclosed by a boundary surface that corresponds to identifiable hydrogeologic features at which some characteristic of groundwater flow is easily described (for example, a surface-water body, an impermeable surface, or a water table). The position of a three-dimensional boundary surface in nature (regardless of the extent to which it has been arbitrarily specified) may define the geometry of the groundwater flow system.

Infiltration at three galleries in the transient model was simulated as specified flux boundaries. Duration of infiltrations were calculated by dividing the expected runoff volume of the 85th percentile 24-hour storm event (Watershed Management Division, 2016) at each gallery by design rates (Kleinfelder 2017b) and then by the area of the gallery (see Table 1 below). Since the modeling focus is directed toward evaluating the impact of stormwater infiltration, no areal recharge (outside of infiltration galleries) was included in the model domain.

Spatially and temporally, there are no recent monitoring wells upgradient or downgradient of the Site that have groundwater level data applicable to create head boundary conditions. Historical hydraulic gradients around the Site are expected to be relatively flat, as suggested by IT Corporation (2001). Specified head boundary (CHD) conditions were assigned along all model domain boundaries (51 feet above mean sea level, see Figure 2). The boundary conditions were chosen in a way that reflect the expected groundwater levels at the Site (99 feet bgs). No active pumping wells were identified near the Site. The selection of the head boundary conditions for the numerical transient model involved considerable simplification of the actual hydrogeologic conditions.

Table 1
Modeling parameters at three proposed infiltration galleries

Location	Design Rate, in/hr (or ft/day)	Runoff Volume (ft ³)	Infiltration Duration (day)	Gallery Area (ft ²)
Gallery No. #1	5.58 (8.37)	282,051	1.065	31,640
Gallery No. #2	12.61 (18.92)	39,727	0.409	5,135
Gallery No. #3	3.89 (5.84)	47,045	1.051	7,672

Note: ft/day = feet per day, ft³ = cubic feet, ft² = square feet

Hydraulic Parameters

To simulate the groundwater behavior at the Site, the complex hydrogeologic conditions at the Site are approximated with a hydrogeologic aquifer system that has three layers as described above: a top sandy layer below the bottom of galleries (extending from 15 feet bgs to 22 feet bgs); a middle layer (15 feet thick) with either the same properties as layers 1 and 3 (scenario 1) or properties representing a continuous aquitard that approximates the low permeability silty sand zones identified on boring logs (scenario 2); and a bottom sandy layer (extending from 37 feet bgs to 135 feet bgs).

The results from percolation testing and soil permeability testing by Kleinfelder (Kleinfelder, 2017b) were used to estimate hydraulic conductivity values of the porous media and the aquitard materials. The hydraulic conductivity of the top and bottom model layers was assigned based on the geometric mean of three percolation testing results at the Site (58.42 ft/day). Hydraulic conductivity of the middle layer (the aquitard) is based on the average of two hydraulic conductivity testing results at the Site (0.065 ft/day). The selected hydraulic conductivity values are consistent with typically expected ranges for sandy and silty materials based on grain size distribution curves in several locations at the Site (Kleinfelder, 2017b).

Numerical Solver

FEMWATER is equipped with a several efficient and robust numerical solvers to handle rigorous unsaturated flow and transport simulations. The polynomial pre-conditioned conjugate gradient 2 (PCG2) solver was used to solve the groundwater flow matrix equations for hydraulic head produced by FEMWATER.

Model Calibration

Since there was no continuous water level data for a transient calibration, groundwater elevations from IT Corporation (2001) were simply used to visually calibrate the model in steady-state condition with no infiltration (no parameter adjustments were made). Parameters such as porosity, initial moisture content, vertical infiltration rates values, and hydraulic conductivity values for the sandy aquifer and low-permeability aquitard were taken from recent laboratory testing (Kleinfelder, 2017b). The transient flow model was visually inspected to follow the expected local hydrogeology (such as water table elevation), moisture content range, and unsaturated pressure range. Like other unsaturated flow codes, convergence of FEMWATER is very sensitive to input parameters and boundary conditions. The model construction process involved trying multiple configurations of model interpolation methods, solvers, weighing factors, and quadrature (a solver parameter) methods and were continued until the model converged within a reasonable simulation time.

NUMERICAL MODELING INPUT PARAMETERS AND ASSUMPTIONS

Each element in the grid is assigned a material identification corresponding to the aquifer zone in which the element is located. As an input to the model, the material identification is selected from a list of pre-defined soil properties. The soil properties such as hydraulic conductivity and porosity, and a sequence of three water retention curves are defined for each material. The water retention curves describe how moisture content, relative conductivity, and water capacity vary with pressure head in the unsaturated zone.

Moisture content (i.e., ratio of the mass of water to the mass of solids in soil) in the vadose zone is a function of the pressure head: The more negative the pressure head, the lower the moisture content. The curve describing the relationship between moisture content and pressure head varies between the saturated moisture content (i.e., 40%) and the residual moisture content (i.e., 4.6%), based on the laboratory testing results (Kleinfelder, 2017b). Changes in moisture content would result in a change of relative hydraulic conductivity and therefore preferential movement of water through certain pathways, because of the influence of capillary forces. Moving upward from the water table, as the soil becomes less saturated, the groundwater flow becomes restricted to the pore sequences of smaller radii and therefore the spatially averaged effective hydraulic conductivity decreases.

The numerical groundwater flow model input parameters and model assumptions are summarized below.

- The model domain includes areas beyond the Roosevelt Park and the former Waymire facility to minimize the effects of the boundary conditions on the area of interest. To provide flexibility, specified head values were assigned to all boundaries of the model domain (Figure 2).
- Borehole logs from the geotechnical report were reviewed to estimate the physical properties and evaluate the soil composition of the aquifer.
- Recent laboratory test results (Kleinfelder, 2017b) were reviewed to obtain estimates of infiltration rates, hydraulic conductivity, porosity, and soil moisture content.
- The model is a simplified version of the heterogeneous nature of the aquifer.
- Groundwater elevations from IT Corporation (2001) were used for steady-state visual calibration of the groundwater flow model.

- Infiltration rates at three galleries in the transient model were simulated as specified flux boundaries.
- Historical hydraulic gradient magnitudes at the Site were insignificant (on average 0.000025 ft/ft). The hydraulic gradient at the Site was conservatively assumed to be 0 ft/ft to help achieve convergence of the unsaturated model.
- Design stormwater volumes of 6.475, 0.912, and 1.083 acre-feet (ac-ft) are expected to be stored in infiltration galleries #1, #2, and #3 with effective areas of 31,640, 5,135, and 7,672 square feet (ft²), respectively. Estimated design infiltration rates of 8.37, 18.92, and 5.84 ft/day would result in an infiltration duration of approximately 1.07, 0.41, and 1.05 days, respectively, at these galleries.

To evaluate the impact of an aquitard layer on groundwater flow behavior, two distinct scenarios were simulated: 1) no aquitard layer (scenario 1), and 2) incorporating an aquitard layer (scenario 2). The results of the numerical groundwater flow modeling for each scenario are discussed below.

RESULTS AND DISCUSSION

Solver parameters and convergence criteria were refined during model construction to attain model convergence without excessive iterations. Use of similar specified-head boundaries along the model domain boundaries eliminated any boundary effects on regional groundwater flow and allowed straightforward evaluation of the saturated and unsaturated flow of infiltrated water.

The aquifer was simulated as a sandy medium in scenario 1, and as a sandy medium with continuous aquitard layer (from 22 to 37 feet bgs) with a low hydraulic conductivity under scenario 2. Scenario 2 is understood to be an extreme condition, assuming a very low permeability aquitard is present and continuous within the model domain. The quality of the constructed model was visually evaluated by reviewing the vertical migration patterns of infiltrated water within vadose zone (with or without an aquitard layer) calculated by the transient model for each scenario. To enhance the visual presentation (Diagrams 1a, 1b, 2a, and 2b), the flow and pressure profiles for both scenarios are vertically exaggerated by 20.

Unsaturated Flow (Scenario 1)

Under scenario 1 (without an aquitard layer), unsaturated flow following stormwater infiltration is represented by a change in moisture content along cross section A-A' after 1, 5, 20, 60, and 120 day(s) from left to right on Diagram 1a. The black line at the top of each diagram indicates the location of the former Waymire facility. Unsaturated flow is generally downward and quickly reaches the water table and dissipates rapidly.

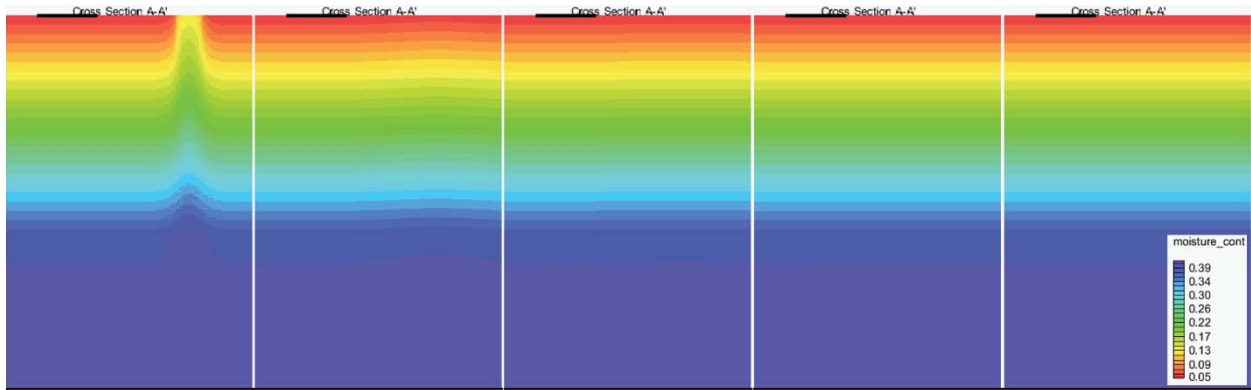


Diagram 1a. Unsaturated flow patterns at cross section A-A' (scenario 1)

Unsaturated Flow (Scenario 2)

Under scenario 2 (considering an aquitard layer), unsaturated flow following stormwater infiltration is again represented by a change in moisture content along cross section A-A' after 1, 5, 20, 60, and 120 day(s) from left to right on Diagram 1b. The simulated aquitard layer slows the vertical migration of infiltrated water. The unsaturated groundwater flow spreads laterally and gradually moves downward and across the aquitard. In Scenario 2, the unsaturated flow dissipates slower compared to scenario 1 (Diagram 1a). The moisture content at top of layer 1 temporarily increases beneath the northeastern corner of the former Waymire facility to approximately 4.66 percent but dissipates by the end of the simulation at 120 days.

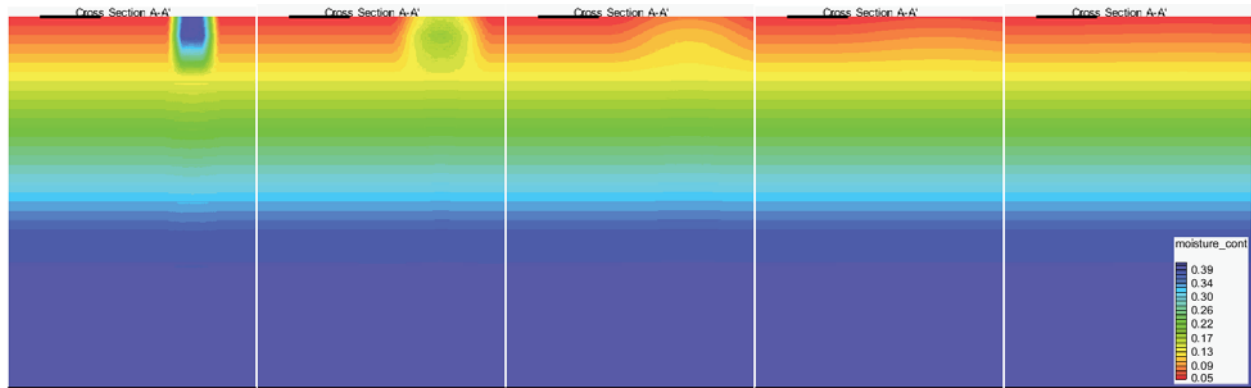


Diagram 1b. Unsaturated flow patterns at cross section A-A' (scenario 2)

Infiltration gallery #1 (cross section A-A', Figure 3) is larger and therefore imposes the largest effect on subsurface moisture content. Animated time-lapse unsaturated flow profiles for scenario 1 and scenario 2 along cross section A-A' as well as along cross sections B-B' and C-C' can be found on compact disc in Attachment A.

Head Pressure (Scenario 1)

Unsaturated flow is proportional to the pressure head gradient, and is shown along cross section A-A' after 1, 5, 20, 60, and 120 day(s) from left to right on Diagram 2a (scenario 1) and Diagram 2b (scenario 2). The continuous black line represents the groundwater table (i.e., zero pressure head). The black line at the top of each diagram indicates the location of the former Waymire facility.

Stormwater infiltration through the vadose zone induces different mounding patterns of pressure head on the water table immediately underneath the three permeable galleries. Under scenario 1, the mounding patterns are sharper and disappear quickly, with no long-term impact on local water levels or increase in the water table under the former Waymire facility (Diagram 2a).

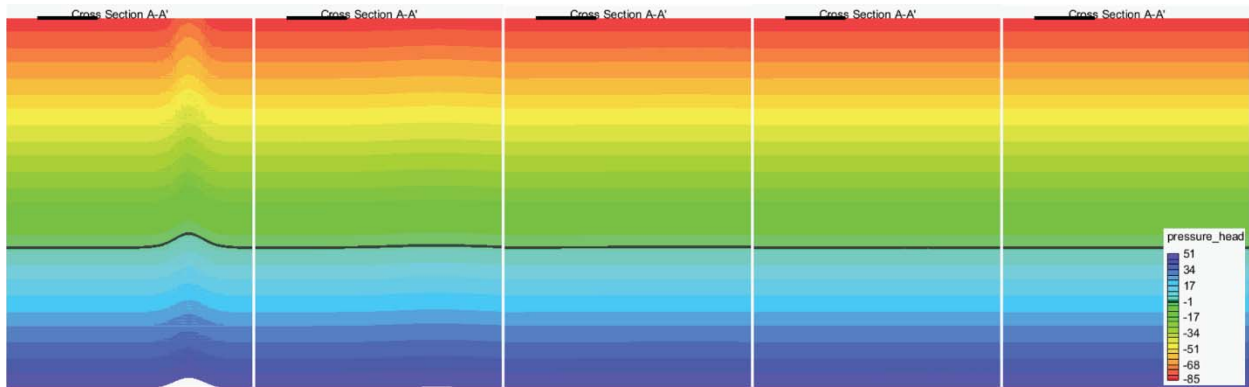


Diagram 2a. Pressure head patterns at cross section A-A' (scenario 1)

Head Pressure (Scenario 2)

With an aquitard layer, the infiltrated water along cross section A-A' immediately below infiltration gallery #1 temporarily reaches full saturation and pressure. Stormwater infiltration through the vadose zone is slowed by the aquitard layer, resulting in more significant induced mounding patterns of pressure head above and within the aquitard and less significant induced mounding patterns of pressure head below the aquitard and on the water table in locations immediately underneath the three infiltration galleries. Mounding above and within the aquitard layer spreads laterally, but eventually dissipates with no long-term impact on local water levels. The water table is not affected under the former Waymire facility (Diagram 2b).

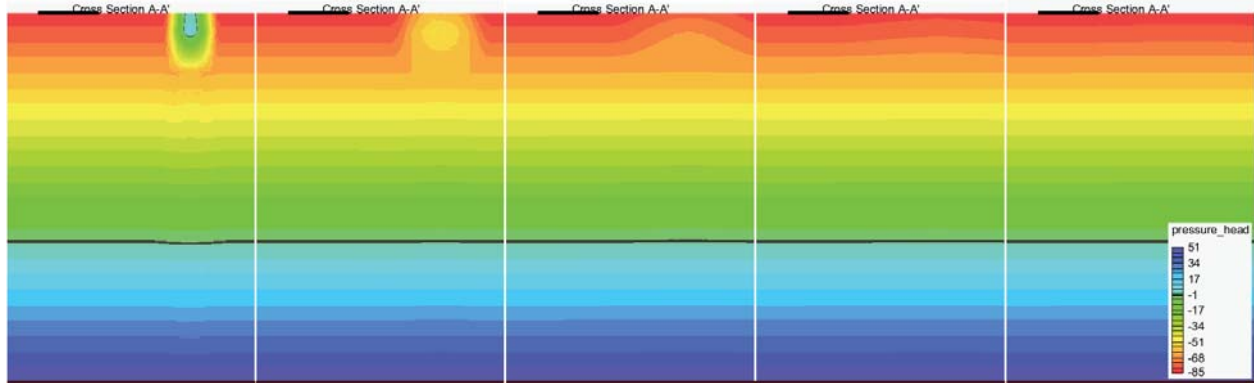


Diagram 2b. Pressure head patterns at cross section A-A' (scenario 2)

Animated pressure head profiles for scenario 1 and scenario 2 along cross sections A-A' through C-C' are included on compact disc in Attachment A.

Equimoisture Contours

To better evaluate the increase in moisture content beneath the northeastern corner of the former Waymire facility, equimoisture contours at 15 feet bgs (or top of layer 1) for scenario 2 after 1, 3, and 10 days from left to right (top), and after 30, 60, and 120 days from left to right (bottom) are presented on Diagram 3. The background moisture content is assumed to be 4.6%, based on laboratory testing results (Kleinfelder, 2017b). Three white colored zones represent the infiltration galleries, and the blue colored zone represents the former Waymire facility. The moisture content temporarily rises slightly at the northeastern corner of the former Waymire facility (Diagram 3). The moisture content at the far end of northeastern corner reaches 0.0466 after approximately 70 days, which is equivalent to 0.15% of the saturated water content of 40%.

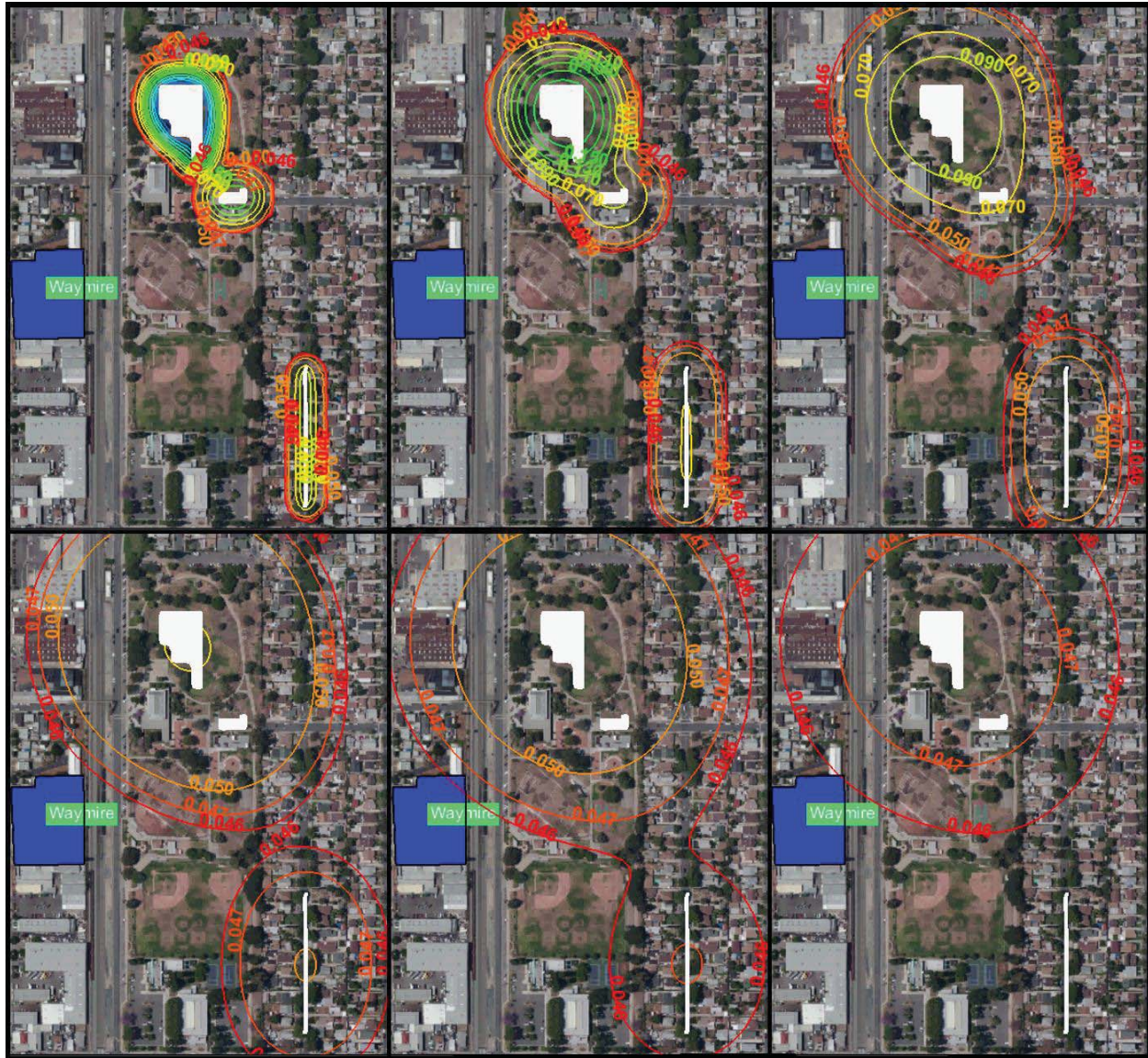


Diagram 3. Equimoisture contours at the grid surface (15 feet bgs) for scenario 2

Similar insignificant increases in moisture content below the former Waymire facility are present above and within the aquitard but do not extend below the aquitard at 37 feet bgs. An animated equimoisture contour map for scenario 2 is included on compact disc in Attachment A.

CONCLUSION

The potential impact of stormwater infiltration at Roosevelt Park during the 85th percentile storm on moisture content beneath the former Waymire facility was evaluated pursuant to potential effects on pollutant mobilization in contaminated soil or groundwater. A transient finite element numerical model was developed to simulate the change in moisture content within the vadose zone and groundwater mounding caused by stormwater infiltration from the proposed infiltration

galleries within the Site. The groundwater model was designed to simulate the lateral and vertical movement of water through the unsaturated zone.

Groundwater mounding (vertical displacement of water table) under both scenarios is limited only to the vicinity of the infiltration galleries and does not spread beneath the former Waymire facility. Based on the simulated scenarios, the saturated groundwater underneath the former Waymire facility is not impacted by stormwater infiltration at the three galleries.

The simulated aquitard in the scenario 2 model is assumed to be continuous, which is not expected in the actual subsurface conditions at the Site. The moisture content above the aquitard and underneath the infiltration galleries reaches saturated conditions under scenario 2. The enhanced moisture content levels dissipate laterally and there are only minimal increases in moisture content below northeastern corner of the former Waymire facility. This small increase in moisture content above and within the aquitard does not extend below the aquitard at 37 feet bgs.

LIMITATIONS

This work was prepared in a manner consistent with the level of care and skill ordinarily exercised by other members of Kleinfelder, Inc.'s, profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions, and recommendations are based on a limited number of observations and data. Kleinfelder, Inc., makes no other representation, guarantee, or warranty, expressed or implied, regarding the services, communication (oral or written), report opinion, or instrument of service provided.

CLOSING

We appreciate the opportunity to be of professional service to you on this project. If you have any questions or require additional information, please do not hesitate to contact the undersigned at 951.801.3681.

Sincerely,

KLEINFELDER



Reza Ghasemizadeh, PhD, PE
Staff Hydrogeologist II



Bini Zerai, PhD, CHG
Senior Hydrogeologist

FIGURES:

- 1 Site Vicinity Map
- 2 Model Domain
- 3 Location of Cross Sections, Galleries, and The Former Waymire Facility

ATTACHMENT:

- A Animated Flow and Pressure Patterns and Equimoisture Contours (On CD)

REFERENCES

- IT Corporation (2001). RE: 4th Quarter 2000 Groundwater Sampling report, Former Waymire Drum Co. Site, 7702 S. Maie Avenue, Los Angeles, CA. January 2.
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- Kleinfelder (2017a). Proposal for Geotechnical and Infiltration Study, Low Impact Development Roosevelt Park, 7600 Graham Avenue, Los Angeles, 90001. April 19.
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- Watershed Management Division (2016). Memorandum from Angela R. George to Gary Hildebrand, Project Concept Report Franklin D. Roosevelt Park Regional Stormwater Capture Project, dated August 11.
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FIGURES

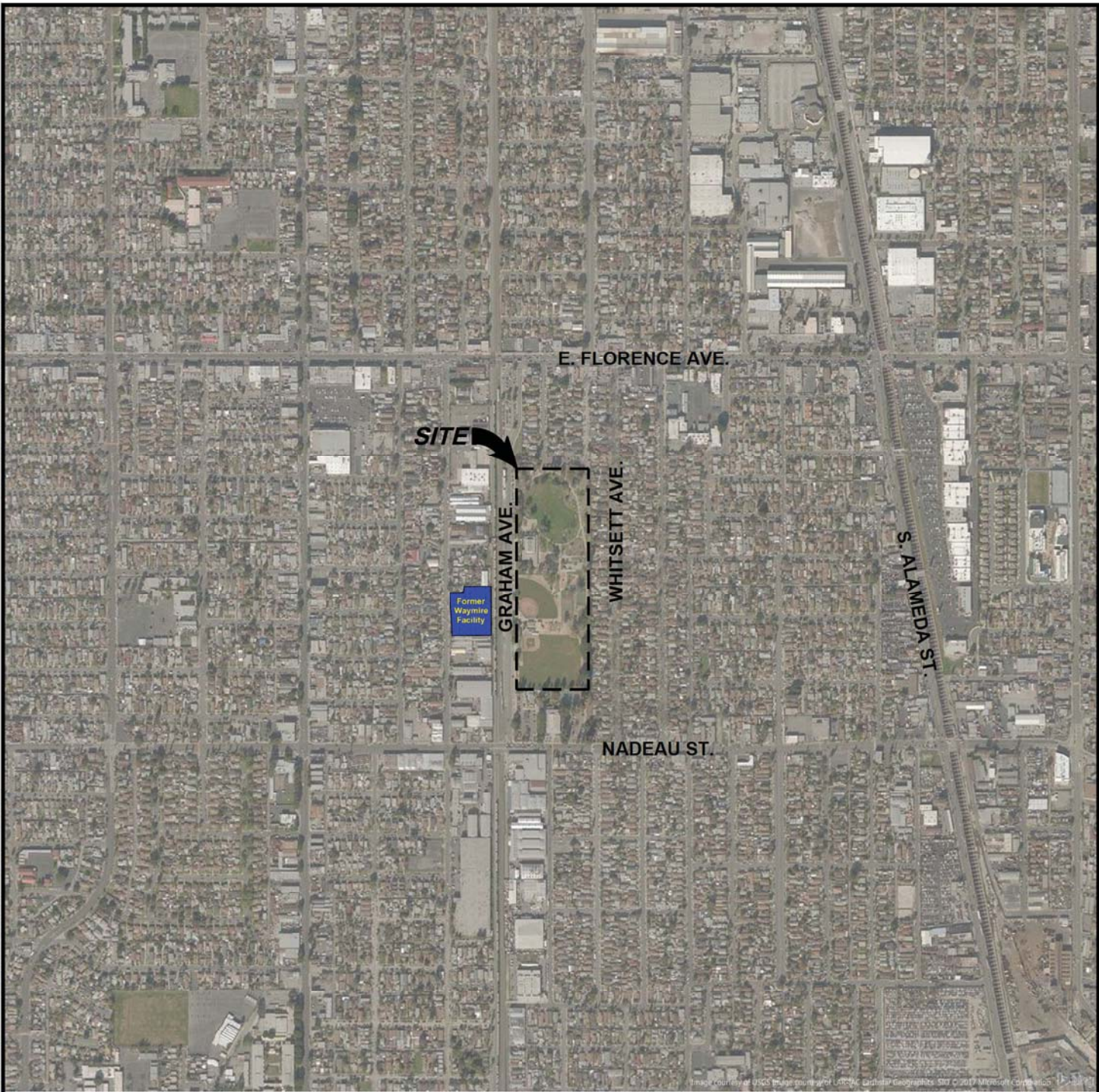
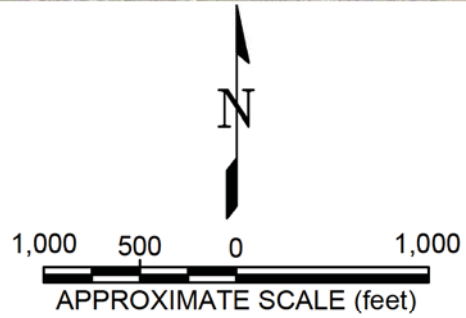


Image courtesy of USGS (Image courtesy of USGS) and ESRI (Image courtesy of ESRI) © 2017 Microsoft Corporation

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PROJECT NO.	20180388
DRAWN:	06/2017
DRAWN BY:	RG
CHECKED BY:	BZ
FILE NAME:	20180388_F1.dwg

SITE VICINITY MAP

MODELING OF STORMWATER INFILTRATION AND GROUNDWATER MOUNDING AT THE ROOSEVELT PARK, 7600 GRAHAM AVENUE LOS ANGELES, CALIFORNIA

FIGURE
1

PLOTTED: 08 Jun 2017, 12:39pm, DFahrne

CAD FILE: U:\Projects\CADD\CADD 2018\20180388\ LAYOUT: 1



Three infiltration galleries are represented by white zones within which the grid is highly refined.
 The boundary of former Waymire facility is represented with a black line.
 The boundary of the model is represented with a red rectangular.

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ATTACHED XREFS:
LONG BEACH, CA



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DRAWN BY:	RG
CHECKED BY:	BZ
FILE NAME:	20180388_F1.dwg

Model Domain
MODELING OF STORMWATER INFILTRATION AND GROUNDWATER MOUNDING AT THE ROOSEVELT PARK, 7600 GRAHAM AVENUE LOS ANGELES, CALIFORNIA

FIGURE	2
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PLOTTED: 08 Jun 2017, 12:39pm, DFahrney

CAD FILE: U:\Projects\CADD\CADD 2018\20180388\ LAYOUT: 1



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ATTACHED IMAGES:
ATTACHED XREFS:
LONG BEACH, CA



PROJECT NO.	20180388
DRAWN:	06/2017
DRAWN BY:	RG
CHECKED BY:	BZ
FILE NAME:	20180388_F1.dwg

LOCATION OF CROSS SECTIONS, GALLERIES, AND THE FORMER WAYMIRE FACILITY

MODELING OF STORMWATER INFILTRATION AND GROUNDWATER MOUNDING AT THE ROOSEVELT PARK, 7600 GRAHAM AVENUE LOS ANGELES, CALIFORNIA

FIGURE
3

ATTACHMENT A
Animated Flow and Pressure Patterns and Equimoisture Contours (On CD)

APPENDIX F
PERTINENT CORRESPONDENCE

From: Myers, Larry [<mailto:LMyers@lacs.org>]

Sent: Thursday, August 03, 2017 12:27 PM

To: Bryan Reese <BReese@kleinfelder.com>

Subject: RE: Export Soil for Use as Landfill Cover: Kleinfelder 7/27/17 Discussion

External Email.

Bryan,

Puente Hills is a closed landfill (as of 10/31/13) and is currently only accepting clean/unrestricted reuse dirt for fill purposes and a buttress project. When it was open it was a class III lined landfill. Scholl Canyon is a class III landfill but is unlined: the difference between lined/unlined is the type, and contamination level, of waste they can accept. As far as TPH contaminated dirt levels go:

Unrestricted reuse/clean dirt

GRO < 10 mg/kg (C4-C12)
DRO < 10 mg/kg (C13-C22)
ORO < 500 mg/kg (> C23)

Restricted reuse / disposal on unlined areas

GRO < 500 mg/kg
DRO < 1,000 mg/kg

Restricted reuse / disposal on Lined areas

GRO < 1,000 mg/kg
DRO < 10,000 mg/kg

ORO < 50,000 mg/kg as total TPH

Appendix C
Noise Data

FIELD NOISE MEASUREMENT DATA

PROJECT: Roosevelt Stormwater Project PROJ. # 633.16

SITE IDENTIFICATION: <u>671</u>	OBSERVER(S): <u>JGM</u>
ADDRESS: <u>Roosevelt Park, Los Angeles</u>	END DATE / TIME: <u>9:30 AM 5/5/2017</u>
START DATE / TIME: <u>9:00 AM 5/3/2017</u>	

METEOROLOGICAL CONDITIONS:

TEMP: _____ °F	HUMIDITY: _____ %R.H.	WIND: CALM LIGHT MODERATE VARIABLE
WINDSPEED: _____ MPH	DIR: N NE E SE S SW W NW	STEADY GUSTY
SKY: <u>SUNNY</u> CLEAR OVRCAST	PRTLY CLOUDY FOG	RAIN OTHER: _____

ACOUSTIC MEASUREMENTS:

INSTRUMENT: Piccolo #3 TYPE: 1 2 SERIAL #: 140513018
 CALIBRATOR: LDG 1200 SERIAL #: 6645
 CALIBRATION CHECK: PRE-TEST 94.0 dBA SPL POST-TEST 93.9 dBA SPL WINDSCREEN

SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER: _____

REC #	START	END	L _{eq}	L _{max}	L _{min}	L ₉₀	L ₅₀	L ₂₅	L ₁₀	L _{8.33}	L _{1.67}

COMMENTS:
Useable start time → 10:00 AM 5/3/2017
Useable end time → 9:00 AM 5/6/2017

SOURCE INFO AND TRAFFIC COUNTS:

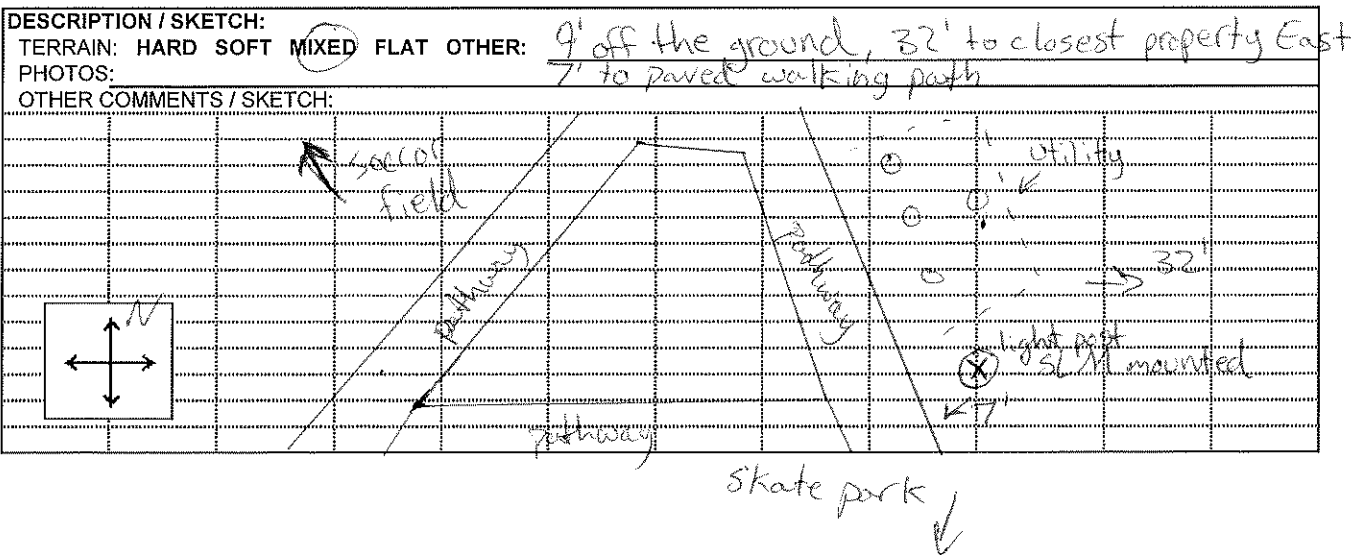
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER: _____

ROADWAY TYPE: _____

	TRAFFIC COUNT DURATION: _____ -MIN		SPEED		#2 COUNT		SPEED	
	NB / EB	SB / WB	NB / EB	SB / WB	NB / EB	SB / WB	NB / EB	SB / WB
AUTOS:								
MED. TRUCKS:								
HVY TRUCKS:								
BUSES:								
MOTORCYCLES:								

SPEED ESTIMATED BY: RADAR / DRIVING / OBSERVER

OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:



FIELD NOISE MEASUREMENT DATA

PROJECT: Roosevelt Stormwater Project PROJ. # 633.16

SITE IDENTIFICATION: 511 OBSERVER(S): JBM
 ADDRESS: 7303 Holmes Ave, Los Angeles
 START DATE / TIME: 10:57 AM 5/3/2017 END DATE / TIME: 11:21 AM 5/3/2017

METEROLOGICAL CONDITIONS:
 TEMP: 80 °F HUMIDITY: 55 %R.H. toward WIND: CALM LIGHT MODERATE VARIABLE
 WINDSPEED: 0-3 MPH DIR: (N) NE E SE S SW W NW STEADY GUSTY
 SKY: SUNNY CLEAR OVRCAST PRTLY CLOUDY FOG RAIN OTHER:

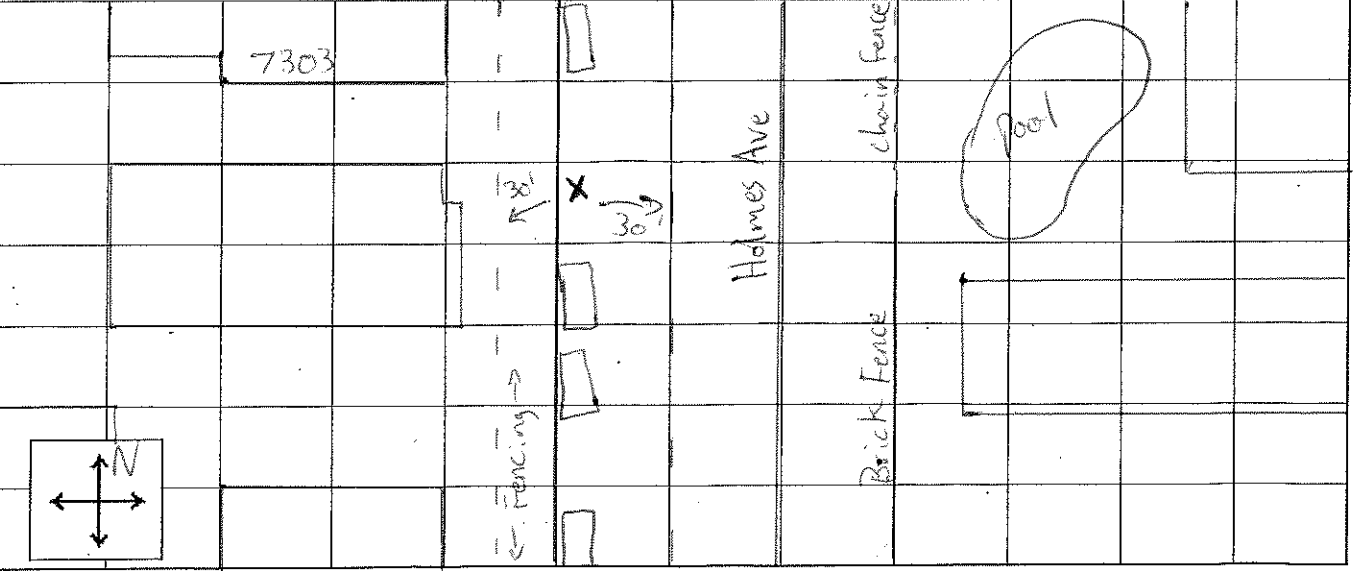
ACOUSTIC MEASUREMENTS:
 INSTRUMENT: LD 831 TYPE: (1) 2 SERIAL #: 3786
 CALIBRATOR: LD 200 SERIAL #: 6245
 CALIBRATION CHECK, BEFORE: 114.0 AFTER 113.99 WINDSCREEN
 SETTINGS: A-WEIGHTED (SLOW) FAST FRONTAL RANDOM (ANS) OTHER:

FILE / MEAS #	START TIME	END TIME	L _{eq}	max	1.67	8.33	25	L	50	90	99	min
393	11:21	10:57	60.2	73.5	70.6	64.5	59.0	54.7	50.8	49.0	47.7	

COMMENTS:

NOISE SOURCE INFO:
 PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
 ROADWAY TYPE:
 OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
 DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:
Aircraft L_{max} source, low flying 777 loudest L_{max} so far, 73.5

DESCRIPTION / SKETCH:
 TERRAIN: HARD SOFT MIXED FLAT OTHER: against street curb, 5' high, 30' to west property
 PHOTOS:
 OTHER COMMENTS / SKETCH: 30' to eastern fences



FIELD NOISE MEASUREMENT DATA

PROJECT: Roosevelt Stormwater Project PROJ. # 633.16

SITE IDENTIFICATION: STL OBSERVER(S): JLM
 ADDRESS: 7411 Beach St Los Angeles
 START DATE / TIME: 10:28 AM 5/3/2017 END DATE / TIME: 10:49 AM 5/3/2017

METEOROLOGICAL CONDITIONS:
 TEMP: 79 °F HUMIDITY: 56 %R.H. towards WIND: CALM LIGHT MODERATE VARIABLE
 WINDSPEED: 2-5 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
 SKY: SUNNY CLEAR OVRCAST PRTLY CLOUDY FOG RAIN OTHER:

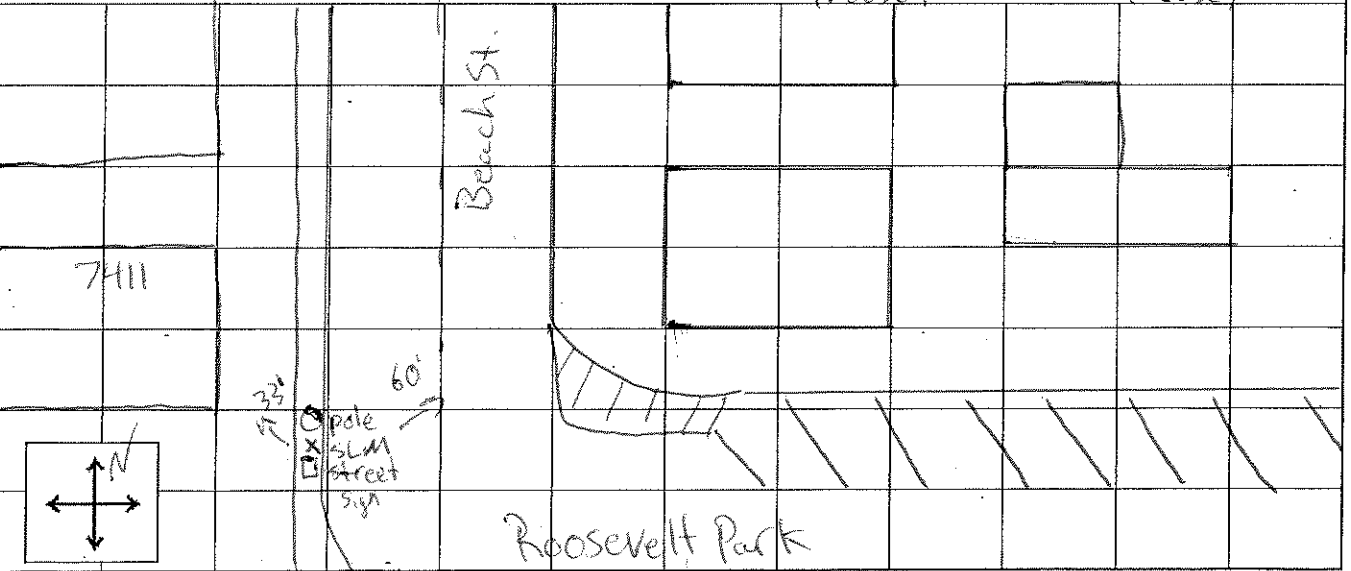
ACOUSTIC MEASUREMENTS:
 INSTRUMENT: LD 931 TYPE: 1 2 SERIAL #: 3786
 CALIBRATOR: 60200 SERIAL #: 6645
 CALIBRATION CHECK, BEFORE: 114.0 AFTER: 113.84 WINDSCREEN
 SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

FILE / MEAS #	START TIME	END TIME	L _{eq}	max	1.67	8.33	25	L	50	90	99	min
392	10:28	10:49	60.3	70.4	67.4	64.5	61.1	57.9	53.3	50.5	46.2	

COMMENTS:

NOISE SOURCE INFO:
 PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
 ROADWAY TYPE:
 OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
 DIST. CHILDREN-PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:
The birds are incredibly loud/audible but aircraft still dominant noise source / L_{max}.

DESCRIPTION / SKETCH:
 TERRAIN: HARD SOFT MIXED FLAT OTHER:
 PHOTOS:
 OTHER COMMENTS / SKETCH: On street curb/sidewalk, 5' high, 33' to western property, 60' to eastern property (house)



FIELD NOISE MEASUREMENT DATA

PROJECT: Roosevelt Stormwater Project PROJ. # 633.16

SITE IDENTIFICATION: ST-3 OBSERVER(S): JGM
ADDRESS: Roosevelt Park
START DATE / TIME: 10:01 AM 5/3/2017 **END DATE / TIME:** 10:21 AM 5/3/2017

METEROLOGICAL CONDITIONS:
 TEMP: 78 °F HUMIDITY: 55 %R.H. towards WIND: CALM LIGHT MODERATE VARIABLE
 WINDSPEED: 0-2 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
 SKY: SUNNY CLEAR OVRCAST PRTLY CLOUDY FOG RAIN OTHER:

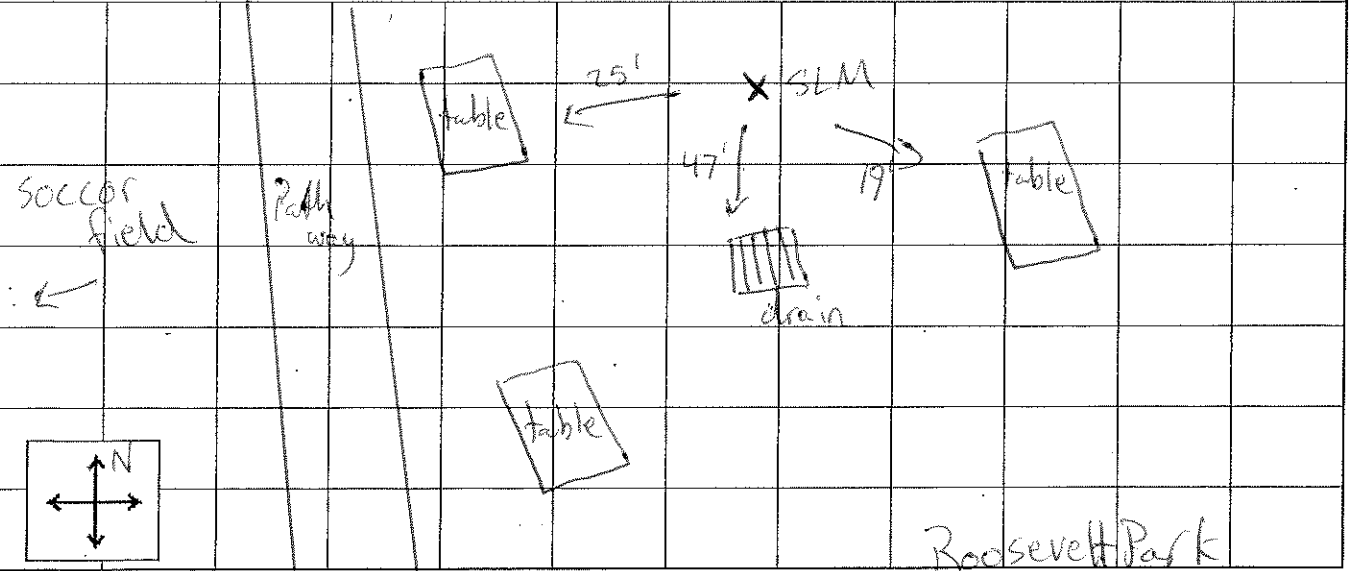
ACOUSTIC MEASUREMENTS:
 INSTRUMENT: LD 831 TYPE: 1 2 SERIAL #: 3786
 CALIBRATOR: LD 200 SERIAL #: 6645
 CALIBRATION CHECK, BEFORE: 14.0 AFTER 13.97 WINDSCREEN
 SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER:

FILE / MEAS #	START TIME	END TIME	L _{eq}	max	1.67	8.33	25	L	50	90	99	min
391	10:01	10:21	56.4	68.5	65.9	61.9	56.4	51.1	46.8	44.8	42.9	

COMMENTS:

NOISE SOURCE INFO:
 PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER:
 ROADWAY TYPE:
 OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
 DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER:
Passing metro trains aren't very loud. Cmax set by jet aircraft.

DESCRIPTION / SKETCH:
 TERRAIN: HARD SOFT MIXED FLAT OTHER:
 PHOTOS:
 OTHER COMMENTS / SKETCH:



FIELD NOISE MEASUREMENT DATA

PROJECT: Roosevelt Stormwater Project PROJ. # 6316

SITE IDENTIFICATION: <u>ST4</u>	OBSERVER(S): <u>JGM</u>
ADDRESS: <u>7701 Whitsett Ave, Los Angeles</u>	
START DATE / TIME: <u>11:33 AM 5/3/2017</u>	END DATE / TIME: <u>11:55 AM 5/3/2017</u>

METEROLOGICAL CONDITIONS:

TEMP: 81 °F HUMIDITY: 54 %R.H. toward WIND: CALM LIGHT MODERATE VARIABLE
 WINDSPEED: 0-3 MPH DIR: N NE E SE S SW W NW STEADY GUSTY
 SKY: SUNNY CLEAR OVRCAST PRTLY CLOUDY FOG RAIN OTHER: _____

ACOUSTIC MEASUREMENTS:

INSTRUMENT: LD 831 TYPE: (1) 2 SERIAL #: 3786
 CALIBRATOR: LD 700 SERIAL #: 6649
 CALIBRATION CHECK, BEFORE: 114.0 AFTER: 113.97 WINDSCREEN: ✓
 SETTINGS: A-WEIGHTED SLOW FAST FRONTAL RANDOM ANSI OTHER: _____

FILE / MEAS #	START TIME	END TIME	L _{eq}	max	L							
					1.67	8.33	25	50	90	99	min	
<u>394</u>	<u>11:33</u>	<u>11:55</u>	<u>61.5</u>	<u>75.6</u>	<u>71.1</u>	<u>65.6</u>	<u>61.9</u>	<u>56.0</u>	<u>48.3</u>	<u>44.0</u>	<u>43:0</u>	

COMMENTS: _____

NOISE SOURCE INFO:

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL AMBIENT OTHER: _____
 ROADWAY TYPE: _____
 OTHER SOURCES: DIST. AIRCRAFT / RUSTLING LEAVES / DIST. BARKING DOGS / BIRDS / DIST. INDUSTRIAL
 DIST. CHILDREN PLAYING / DIST. TRAFFIC / DIST. LANDSCAPING ACTIVITIES / OTHER: _____

DESCRIPTION / SKETCH:

TERRAIN: HARD SOFT MIXED FLAT OTHER: next to fire hydrant, 5' high, 2' to curb, 25' to western house, 75' to eastern house
 PHOTOS: _____
 OTHER COMMENTS / SKETCH: _____



Table 6. Summary of Construction Noise Levels at Closest Receivers

Construction Phase	Work Activity	Location of Closest Receiver(s)														
		To North					To East					Other				
		Acoustical					Acoustical					Acoustical				
Closest Distance, feet	Farthest Distance, feet	Average Distance, feet	Leq, dBA	Max, dBA	Closest Distance, feet	Farthest Distance, feet	Average Distance, feet	Leq, dBA	Max, dBA	Closest Distance, feet	Farthest Distance, feet	Average Distance, feet	Leq, dBA	Max, dBA		
2.1	Tree removals	230	740	413	62	70	30	640	139	71	88	-	-	-	-	-
2.2	Construction of infiltration modules in the park	230	740	413	63	68	30	640	139	72	86	-	-	-	-	-
2.3	Construction of lights for soccer park	200	560	335	63	69	100	460	214	67	75	-	-	-	-	-
2.4	Construction of infiltration modules in the street	-	-	-	-	-	-	-	-	-	-	20	300	77	78	89
2.5	Construction of diversion pipes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Holmes Avenue (North Section)	-	-	-	-	-	-	-	-	-	-	20	660	115	76	89
	Whitsett Avenue (South Section)	-	-	-	-	-	-	-	-	-	-	20	440	94	78	89
	76th Street	-	-	-	-	-	-	-	-	-	-	20	130	51	83	89
2.6	Construction of landscape improvements	230	740	413	60	66	30	640	139	70	84	-	-	-	-	-

Notes: Leq calculated using acoustical average distance; Lmax calculated using closest distance

Table 7. Corresponding Ambient Noise Levels

Construction Phase	Work Activity	Range of Applicable Measured Ambient Noise Levels											
		To North				To East				Other			
		Leq, dBA		Lmax, dBA		Leq, dBA		Lmax, dBA		Leq, dBA		Lmax, dBA	
2.1	Tree removals	58	66	70	89	57	66	69	89	-	-	-	-
2.2	Construction of infiltration modules in the park	58	66	70	89	57	66	69	89	-	-	-	-
2.3	Construction of lights for soccer park	58	66	70	89	57	66	69	89	-	-	-	-
2.4	Construction of infiltration modules in the street	-	-	-	-	-	-	-	-	62	-	76	-
2.5	Construction of diversion pipes	-	-	-	-	-	-	-	-	-	-	-	-
	Holmes Avenue (North Section)	-	-	-	-	-	-	-	-	60	-	74	-
	Whitsett Avenue (South Section)	-	-	-	-	-	-	-	-	62	-	76	-
	76th Street	-	-	-	-	-	-	-	-	57	66	69	89
2.6	Construction of landscape improvements	58	66	70	89	57	66	69	89	-	-	-	-

Table 8. Estimated Noise Increases

Construction Phase	Work Activity	Combined Noise Levels, Ambient + Construction											
		To North				To East				Other			
		Leq	Lmax			Leq	Lmax			Leq	Lmax		
2.1	Tree removals	63.2	67.4	-	-	71.3	72.3	-	-	-	-	-	-
2.2	Construction of infiltration modules in the park	64.0	67.7	-	-	72.3	73.1	-	-	-	-	-	-
2.3	Construction of lights for soccer park	64.3	67.8	-	-	67.4	69.5	-	-	-	-	-	-
2.4	Construction of infiltration modules in the street	-	-	-	-	-	-	-	-	77.6	77.5	-	-
2.5	Construction of diversion pipes	-	-	-	-	-	-	-	-	-	-	-	-
	Holmes Avenue (North Section)	-	-	-	-	-	-	-	-	76.5	76.4	-	-
	Whitsett Avenue (South Section)	-	-	-	-	-	-	-	-	78.3	78.2	-	-
	76th Street	-	-	-	-	-	-	-	-	83.5	83.5	-	-
2.6	Construction of landscape improvements	62.3	67.0	-	-	70.0	71.3	-	-	-	-	-	-

Notes: Ambient and construction Leq are added to calculate combined levels; Lmax is based on discrete single events (1 second or less) from ambient or construction sources that typical do not overlap so are not added together

Construction Phase	Work Activity	Range of Noise Increases											
		To North				To East				Other			
		Leq	Lmax			Leq	Lmax			Leq	Lmax		
2.1	Tree removals	1	5	0	0	6	14	0	19	-	-	-	-
2.2	Construction of infiltration modules in the park	2	6	0	0	7	15	0	17	-	-	-	-
2.3	Construction of lights for soccer park	2	6	0	0	4	10	0	6	-	-	-	-
2.4	Construction of infiltration modules in the street	-	-	-	-	-	-	-	-	-	16	13	-
2.5	Construction of diversion pipes	-	-	-	-	-	-	-	-	-	-	-	-
	Holmes Avenue (North Section)	-	-	-	-	-	-	-	-	-	17	15	-
	Whitsett Avenue (South Section)	-	-	-	-	-	-	-	-	-	16	13	-
	76th Street	-	-	-	-	-	-	-	-	18	26	20	0
2.6	Construction of landscape improvements	1	4	0	0	5	13	0	15	-	-	-	-

Table 10. Calculation of Noise Levels from Stationary Source(s), part 1 of 2

Source Noise Level Data

Source #	Description	Single Distance (S), or Acoustical Average (A)?			Acoustical Average Distance, ft	Single Distance, ft	Hard or Soft Site?	Measured/Stated Noise Level, dBA	Reference Noise Level @ 50 feet, dBA
		Closest Distance, ft	Farthest Distance, ft						
S1	Little league soccer game (Leq)	S				100	Hard	61.1	67.1
S2									
S3									
S4									
S5									
S6									

Distance to Receptors

Receptor	Description	Single Distance (S), or Acoustical Average (A)?			Acoustical Average Distance, ft	Single Distance, ft	Hard or Soft Site?	Distance Correction vs. 50 feet, dB
		Closest Distance, ft	Farthest Distance, ft					
R1	Res. to north	A	195	555	329		Hard	-16.4
R2	Res. to east	A	100	460	214		Hard	-12.6
R3								
R4								
R5								
R6								

Resultant Noise Levels and Increases in Ambient Noise

Receptor	Daytime	Source		Reference Noise Level @ 50 feet	Distance Correction vs. 50 feet	Barrier Attenuation, dB	Resulting Noise Level, dBA	Existing Ambient	Combined Noise Level	Ambient Increase
R1	Res. to north	S1	Little league soccer game (Leq)	67.1	-16.4	0	51	61	61	0
R2	Res. to east	S1	Little league soccer game (Leq)	67.1	-12.6	0	54	61	62	1

Notes:

Table 11. Calculation of Noise Levels from Stationary Source(s), part 2 of 2

Relationship between Ln and Leq noise levels as measured during a competitive soccer game

Measured Leq

59.9

Measured Ln Statistics

Delta to Leq

Lmax	80	-20.1
L1.67	68.5	-8.6
L8.33	63.5	-3.6
L25	58.1	1.8
L50	52.8	7.1

Resulting Noise Levels at Modeled Receptors

R1 - Residential north of park

Modeled Leq

51

Modeled Ln Statistics

Applicable Standard

Complies?

Lmax	71	75	Yes
L1.67	60	70	Yes
L8.33	55	65	Yes
L25	49	60	Yes
L50	44	55	Yes

R2 - Residential east of park

Modeled Leq

54

Modeled Ln Statistics

Lmax	74	75	Yes
L1.67	63	70	Yes
L8.33	58	65	Yes
L25	52	60	Yes
L50	47	55	Yes

Appendix D
Tribal Consultation Letters



March 28, 2017

Mr. Daniel F. McCarthy
Director-CRM Department
San Manuel Band of Mission Indians
26569 Community Center Drive
Highland, CA 92346

RE: Proposed Roosevelt Park Stormwater Project

Dear Mr. McCarthy:

This letter is to inform you that the Los Angeles County Department of Public Works (DPW) is conducting an environmental review of the proposed project described below. Per AB 52, the tribe has the right to consult on a proposed project prior to the release of a California Environmental Quality Act (CEQA) Mitigated Negative Declaration or Environmental Impact Report. A brief project description is as follows:

The proposed project includes stormwater infiltration infrastructure along with several recreation improvements to the Franklin D. Roosevelt Park, located at 7600 Graham Avenue, on unincorporated County land in the Florence-Graham portion of Los Angeles. Specifically, the project involves the construction of three diversions from existing storm drains on East 71st Street, East 76th Place, and Nadeau Street, as well as the construction of three infiltration galleries. The project is intended to provide infiltration capacity through two galleries below the park field and one gallery below the residential street of Whitsett Avenue. The project would also include park amenity upgrades such as re-design of soccer field and skate park, construction of a healthy court with ADA accessible exercise equipment, kids' play mounts, picnic areas, decomposed granite walking path, educational low impact development garden and interpretive signs to educate park users about sustainable infrastructure. See attached Figure 1, Project Location Map.

You have 30 calendar days from receipt of this letter to notify us in writing that you want to consult on this project. Please contact Rick Sun at (626) 300-3259. Please email your request to RSUN@dpw.lacounty.gov or mail to the address:

Rick Sun, PE, MS, MBA, LEED AP
Project Management Division II
County of Los Angeles Department of Public Works
900 South Fremont Avenue, 5th Floor
Alhambra, CA 91803

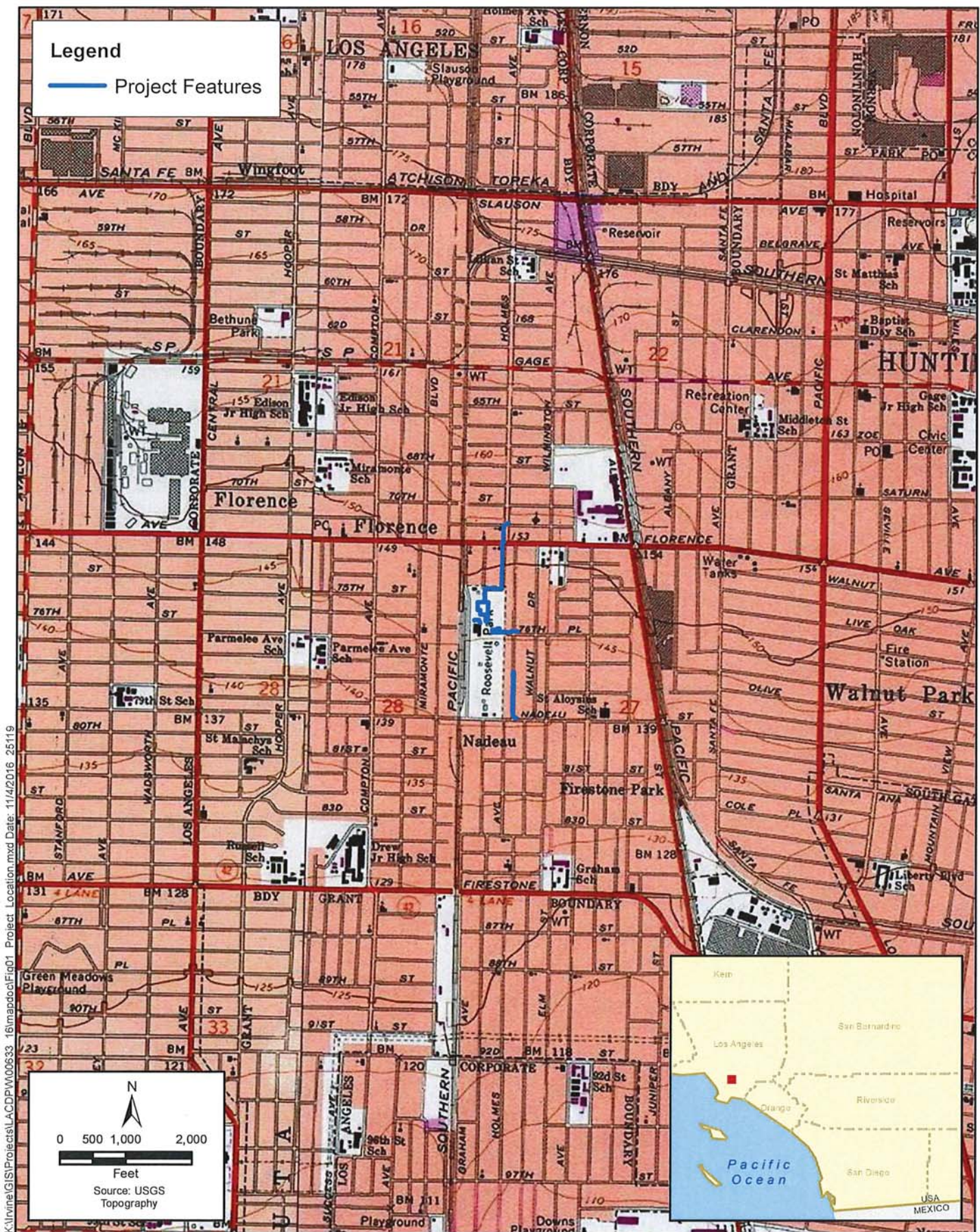


Sincerely,

Stephen Byrne

Stephen Byrne

Attachment: Figure 1, Project Location Map



K:\In\GIS\Projects\LACDP\W00633_16\mapdoc\Fig01_Project_Location.mxd Date: 11/4/2016 2:51:19

Figure 1
Project Location
Roosevelt Park Stormwater Project

Rocha, Laura

From: Rick Sun <RSUN@dpw.lacounty.gov>
Sent: Monday, April 03, 2017 2:44 PM
To: Pirouz Bozorgnia; Rocha, Laura
Subject: Fwd: Proposed Roosevelt Park Stormwater Project, Los Angeles County, CA

FYI

Rick Sun, P.E.
Project Manager
Los Angeles County Public Works
Office: (626) 300-3259
Mobile: (626) 476-0246

Begin forwarded message:

From: Diane Versaggi <dversaggi@sanmanuel-nsn.gov>
Date: April 3, 2017 at 2:31:53 PM PDT
To: "rsun@dpw.lacounty.gov" <rsun@dpw.lacounty.gov>
Subject: **Proposed Roosevelt Park Stormwater Project, Los Angeles County, CA**

Dear Mr. Sun:

On March 31, 2017, the Cultural Resources Management Department for San Manuel Band of Mission Indians (SMBMI) received correspondence regarding the proposed Roosevelt Park Stormwater Project located on unincorporated County land in the City and County of Los Angeles, CA, from Stephen Bryne of ICF. I am writing today to inform you, the County, and ICF that the above-referenced project exists outside of Serrano ancestral territory and, as such, SMBMI will not be requesting consulting party status under CEQA nor requesting to participate in the scoping, development, and/or review of documents created pursuant to these legal and regulatory mandates.

Should you have any questions about the content of this communication, please do not hesitate to contact Ms. Lee Clauss at your convenience.

Respectfully,

Diane Versaggi on Behalf of
Lee Clauss
Cultural Resources Management Director



O: (909) 864-8933 x3248
M: (909) 633-5851
lclauss@sanmanuel-nsn.gov
26569 Community Center Drive
Highland, CA 92346

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. If the reader of this message is not the intended recipient or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination or copying of this communication is strictly prohibited. If you have received this electronic transmission in error, please delete it from your system without copying it and notify the sender by reply e-mail so that the email address record can be corrected. Thank You



March 28, 2017

Ms. Kathryn Montes Morgan
Tribal Chair
Tejon Indian Tribe
1731 Hasti Acres Drive
Suite 108
Bakersfield, CA 93309

RE: Proposed Roosevelt Park Stormwater Project

Dear Ms. Morgan:

This letter is to inform you that the Los Angeles County Department of Public Works (DPW) is conducting an environmental review of the proposed project described below. Per AB 52, the tribe has the right to consult on a proposed project prior to the release of a California Environmental Quality Act (CEQA) Mitigated Negative Declaration or Environmental Impact Report. A brief project description is as follows:

The proposed project includes stormwater infiltration infrastructure along with several recreation improvements to the Franklin D. Roosevelt Park, located at 7600 Graham Avenue, on unincorporated County land in the Florence-Graham portion of Los Angeles. Specifically, the project involves the construction of three diversions from existing storm drains on East 71st Street, East 76th Place, and Nadeau Street, as well as the construction of three infiltration galleries. The project is intended to provide infiltration capacity through two galleries below the park field and one gallery below the residential street of Whitsett Avenue. The project would also include park amenity upgrades such as re-design of soccer field and skate park, construction of a healthy court with ADA accessible exercise equipment, kids' play mounts, picnic areas, decomposed granite walking path, educational low impact development garden and interpretive signs to educate park users about sustainable infrastructure. See attached Figure 1, Project Location Map.

You have 30 calendar days from receipt of this letter to notify us in writing that you want to consult on this project. Please contact Rick Sun at (626) 300-3259. Please email your request to RSUN@dpw.lacounty.gov or mail to the address:

Rick Sun, PE, MS, MBA, LEED AP
Project Management Division II
County of Los Angeles Department of Public Works
900 South Fremont Avenue, 5th Floor
Alhambra, CA 91803

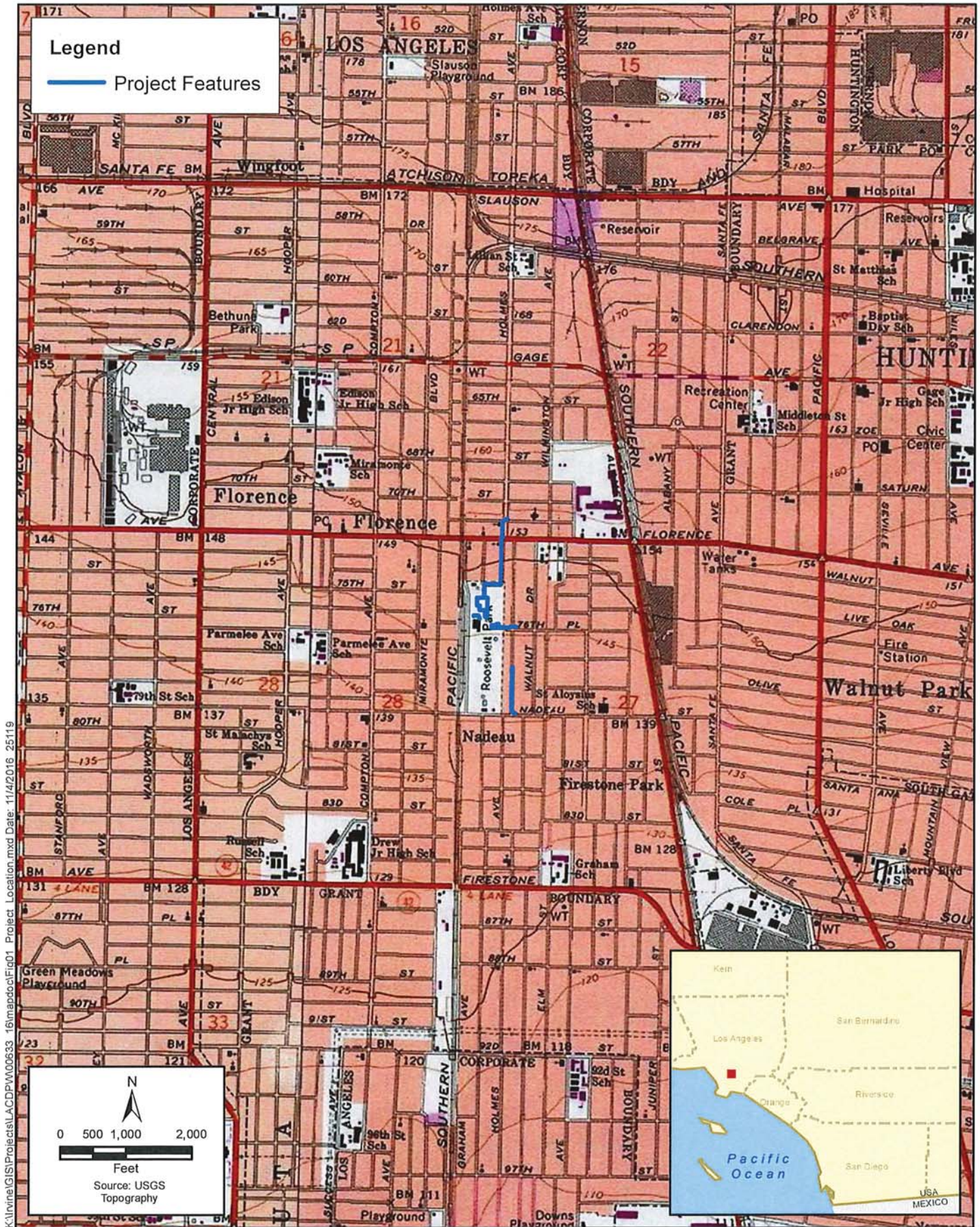


Sincerely,

Stephen Bryne

Stephen Bryne

Attachment: Figure 1, Project Location Map



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Figure 1
Project Location
Roosevelt Park Stormwater Project



March 28, 2017

Ms. Kimia Fatehi
Tribal Historic and Cultural Preservation Officer
Fernandeño Tataviam Band of Mission Indians
1019 Second Street
San Fernando, CA 91340

RE: AB 52 TRIBAL CONSULTATION NOTICE

Dear Ms. Fatehi:

This letter is to inform you that the Los Angeles County Department of Public Works (DPW) is conducting an environmental review of the proposed project described below. Per AB 52, the tribe has the right to consult on a proposed project prior to the release of a California Environmental Quality Act (CEQA) Mitigated Negative Declaration or Environmental Impact Report. A brief project description is as follows:

The proposed project includes stormwater infiltration infrastructure along with several recreation improvements to the Franklin D. Roosevelt Park, located at 7600 Graham Avenue, on unincorporated County land in the Florence-Graham portion of Los Angeles. Specifically, the project involves the construction of three diversions from existing storm drains on East 71st Street, East 76th Place, and Nadeau Street, as well as the construction of three infiltration galleries. The project is intended to provide infiltration capacity through two galleries below the park field and one gallery below the residential street of Whitsett Avenue. The project would also include park amenity upgrades such as re-design of soccer field and skate park, construction of a healthy court with ADA accessible exercise equipment, kids' play mounts, picnic areas, decomposed granite walking path, educational low impact development garden and interpretive signs to educate park users about sustainable infrastructure. See attached Figure 1, Project Location Map.

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Rick Sun, PE, MS, MBA, LEED AP
Project Management Division II
County of Los Angeles Department of Public Works
900 South Fremont Avenue, 5th Floor
Alhambra, CA 91803



Sincerely,

A handwritten signature in blue ink that reads "Stephen Bryne". The signature is written in a cursive, flowing style.

Stephen Bryne

Attachment: Figure 1, Project Location Map



K:\irvine\GIS\Projects\LACDP\W00633_16\mapadoc\Fig01_Project_Location.mxd Date: 11/4/2016 2:51:19

Figure 1
Project Location
Roosevelt Park Stormwater Project



May 2, 2017

Gabrieleno Band of Mission Indians-Kizh Nation
Andrew Salas, Chairman
P.O. Box 393
Covina, CA 91723

RE: AB 52 TRIBAL CONSULTATION NOTICE

Dear Mr. Salas:

This letter is to inform you that the Los Angeles County Department of Public Works (DPW) is conducting an environmental review of the proposed project described below. Per AB 52, the tribe has the right to consult on a proposed project prior to the release of a California Environmental Quality Act (CEQA) Mitigated Negative Declaration or Environmental Impact Report. A brief project description is as follows:

The proposed project includes stormwater infiltration infrastructure along with several recreation improvements to the Franklin D. Roosevelt Park, located at 7600 Graham Avenue, on unincorporated County land in the Florence-Graham portion of Los Angeles. Specifically, the project involves the construction of three diversions from existing storm drains on East 71st Street, East 76th Place, and Nadeau Street, as well as the construction of three infiltration galleries. The project is intended to provide infiltration capacity through two galleries below the park field and one gallery below the residential street of Whitsett Avenue. The project would also include park amenity upgrades such as re-design of soccer field and skate park, construction of a healthy court with ADA accessible exercise equipment, kids' play mounts, picnic areas, decomposed granite walking path, educational low impact development garden and interpretive signs to educate park users about sustainable infrastructure. See attached Figure 1, Project Location Map.

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Rick Sun, PE, MS, MBA, LEED AP
Project Management Division II
County of Los Angeles Department of Public Works
900 South Fremont Avenue, 5th Floor
Alhambra, CA 91803



Sincerely,

A handwritten signature in black ink that reads "Stephen Bryne". The signature is fluid and cursive, written in a professional style.

Stephen Bryne

Attachment: Figure 1, Project Location Map



GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION

Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

Los Angeles County of Public Works
City of Los Angeles

May 31, 2017

Re: AB52 Consultation request for the Stormwater infiltration infrastructure along with several recreation improvements to the Franklin D. Roosevelt Park, Located at 7600 Graham ave on unincorporated county land in the Florence -Graham Portion of Los Angeles

Dear Rick Sun,

Please find this letter as a written request for consultation regarding the above-mentioned project pursuant to Public Resources Code § 21080.3.1, subd. (d). Your project lies within our ancestral tribal territory, meaning descending from, or a higher degree of kinship than traditional or cultural affiliation. Your project is located within a sensitive area and may cause a substantial adverse change in the significance of our tribal cultural resources. Most often, a records search for our tribal cultural resources will result in a "no records found" for the project area. The Native American Heritage Commission, ethnographers, historians, and professional archaeologists can only provide limited information that has been previously documented about California Native Tribes. This is the reason the Native American Heritage Commission (NAHC) will always refer the lead agency to the respective Native American Tribe of the area because the NAHC is only aware of general information and are not the experts on each California Tribe. Our Elder Committee & tribal historians are the experts for our Tribe and are able to provide a more complete history (both written and oral) regarding the location of historic villages, trade routes, cemeteries and sacred/religious sites in the project area. Therefore, to avoid adverse effects to our tribal cultural resources, we would like to consult with you and your staff to provide you with a more complete understanding of the prehistoric use(s) of the project area and the potential risks for causing a substantial adverse change to the significance of our tribal cultural resources.

Consultation appointments are available on Wednesdays and Thursdays at our offices at 901 N. Citrus Ave. Covina, CA 91722 or over the phone. Please call toll free 1-844-390-0787 or email gabrielenoindians@yahoo.com to schedule an appointment.

** Prior to the first consultation with our Tribe, we require all those individuals participating in the consultation to view a video produced and provided by CalEPA and the NAHC for sensitivity and understanding of AB52. You can view the video at: <http://nahc.ca.gov/2015/12/ab-52-tribal-training/>

With Respect,

Andrew Salas, Chairman

Andrew Salas, Chairman

Albert Perez, treasurer |

PO Box 393, Covina, CA 91723

Nadine Salas, Vice-Chairman

Martha Gonzalez Lemos, treasurer ||

www.gabrielenoindians.org

Christina Swindall Martinez, secretary

Richard Gradias, Chairman of the Council of Elders

gabrielenoindians@yahoo.com



May 2, 2017

Gabrieleno Tongva
San Gabriel Band of Mission Indians
Anthony Morales, Chief
P.O. Box 693
San Gabriel, CA 91778

RE: AB 52 TRIBAL CONSULTATION NOTICE

Dear Mr. Morales:

This letter is to inform you that the Los Angeles County Department of Public Works (DPW) is conducting an environmental review of the proposed project described below. Per AB 52, the tribe has the right to consult on a proposed project prior to the release of a California Environmental Quality Act (CEQA) Mitigated Negative Declaration or Environmental Impact Report. A brief project description is as follows:

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Rick Sun, PE, MS, MBA, LEED AP
Project Management Division II
County of Los Angeles Department of Public Works
900 South Fremont Avenue, 5th Floor
Alhambra, CA 91803



Sincerely,

A handwritten signature in black ink that reads "Stephen Bryne".

Stephen Bryne

Attachment: Figure 1, Project Location Map

