

**PHASE II SITE INVESTIGATION REPORT
3455 & 3459 LONG BEACH BOULEVARD
LONG BEACH, CALIFORNIA 90807
(ASSESSOR'S PARCEL NUMBERS: 7141-004-033 AND -034)**

Prepared for:

Laserfiche

3545 Long Beach Boulevard
Long Beach, California 90807

Prepared by:

SCS ENGINEERS

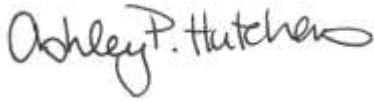
3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816
(562) 426-9544

March 17, 2017
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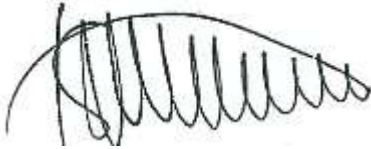
This Phase II Site Investigation Report dated March 17, 2017, for site located at 3455 and 3459 Long Beach Boulevard, California, was prepared, and reviewed by the following:



Cindy Hernandez
Staff Geologist
SCS ENGINEERS



Ashley Hutchens, R.E.P.A.
Project Manager
SCS ENGINEERS



Kenneth H. Lister, P.G., Ph.D.
Senior Technical Manager
SCS ENGINEERS

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DISCLAIMER

This report has been prepared for Laserfiche with specific application to a Phase II investigation conducted at 3455 and 3459 Long Beach Boulevard, Long Beach, California. The purpose of this investigation was to assess the potential methane migration associated with oil operations and the potential for impacts to the Property associated with historical operation of a UST and oil well.

The report has been prepared in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, express or implied, is made as to the professional opinions presented herein. No other party, known or unknown to SCS Engineers, is intended as a beneficiary of this work product, its content or information embedded therein. Third parties use this report at their own risk.

Changes in site conditions may occur due to variation in rainfall, temperature, water usage, or other factors. Additional information that was not available to the consultant at the time of this investigation or changes that may occur on the site or in the surrounding area may result in modification to the site that would impact the summary and recommendations presented herein. This report is not a legal opinion.

1 INTRODUCTION

SCS Engineers (SCS) was retained by Laserfiche to conduct a Phase II Site Investigation for the property located at 3455 and 3459 Long Beach Boulevard (the “Property”), Long Beach, California. Investigation activities were conducted in accordance with SCS’s proposal dated February 22, 2017 (Proposal No. 010179217).

The Property is located on the west side of Long Beach Boulevard south of the intersection with East 35th Street. A map showing the general location of the Property and surrounding area is provided as **Figure 1**.

BACKGROUND

The Property is approximately 0.57 acres and is currently developed with a single-story structure currently used as an office building, a detached structure used for storage, and associated parking area. The structures are located on the northern portion of the Property and the remainder of the Property, with the exception of the parking area, is vacant and unpaved.

SCS prepared a Phase I Environmental Site Assessment (Phase I ESA) report for the Property dated February 21, 2017. As part of the Phase I ESA, SCS identified the following Recognized Environmental Conditions (RECs) associated with the Property:

- A structure of unknown use was present on the central portion of the Property from 1972 to 2009. This unknown use of a portion of the Property is considered a data gap and a REC.
- The Property has a history of use for oil production. Based on information from the Division of Oil, Gas, and Geothermal Resources, an oil well (Wood-Callahan Oil Co., Ltd. Well #4 [API 03712426]) was drilled in 1925 and abandoned in 1937. The well is located beneath the current structure in the north/northeast portion of the Property. In addition, the Property is located within the Long Beach Oil Field and numerous wells and associated above ground storage tanks are present in the vicinity. Oil production in the vicinity and historically on the Property represents a REC.
- A 550 gallon underground storage tank (UST) containing unknown contents was previously located on the Property from 1944 through 1994. Although this UST received closure from the Long Beach Department of Health and Human Services (LBDHHS), the closure report was found to have numerous discrepancies and errors, including the number and location of samples collected, and units of concentration within the laboratory report. In addition, the analytical parameters in the 1994 closure report do not meet current regulatory standards. Based on these findings, the former UST represents a REC.

The purpose of this investigation was to evaluate the potential for impacts to the Property associated with historical operation of the UST and oil well and assess the potential for methane gas migration associated with oil operations.

2 GEOLOGIC AND HYDROGEOLOGIC CONDITIONS

PHYSIOGRAPHIC SETTING

According to the U.S. Geological Survey (USGS), Long Beach (1964, photorevised 1981), California 7.5-minute topographic map, the Property is located between the Vista del Mar and California Heights areas of Long Beach. It is located to the northwest of Signal Hill at an elevation of approximately 90 feet above mean sea level. The Property is situated approximately 0.85 miles east of the Los Angeles River and approximately 4 miles north of the San Pedro Bay. Site topography is generally flat. Local topography slopes to the south, with a more regional slope to the southwest.

GEOLOGY AND SOILS

Geologic maps indicate that surface sediments in this area consist of the Pleistocene-age Lakewood Formation, which is comprised of unconsolidated marine and continental deposits. In the area of the Property, surface deposits are primarily fine-grained sediments comprised of sands, silts, and clays. The Lakewood Formation is underlain by at least several thousand feet of mostly marine sediments of Tertiary age. During the current investigation, soil was interpreted to range from sandy and clayey silt to fine sand down to depths of 10 to 20 feet below ground surface (bgs).

GROUNDWATER

The Property is located within the West Coast Groundwater Basin. The first regional groundwater aquifer in the area is the Gage Aquifer within the Lakewood Formation. According to information reviewed on the California State Water Resources Control Board's GeoTracker website for the Bixby Knolls Car Wash (Global ID T0603701876 at 577 East Wardlow Road), located approximately 0.25 miles to the east-southeast, first groundwater is anticipated at approximately 31 feet bgs. Because the Property is located near the Long Beach Anticline and the Cherry Hill fault, groundwater flow directions may vary and difficult to predict.

3 SITE INVESTIGATION AND ANALYTICAL RESULTS

SUBSURFACE UTILITIES CLEARANCE

As required by law, SCS contacted Underground Service Alert prior to conducting any subsurface work (Dig Alert No. B70580029). Goldak Inc. of Glendale, California, conducted a geophysical survey to clear boring locations of subsurface utilities and other potential obstructions prior to initiating the investigation. A permit to conduct the sampling was obtained from the City of Long Beach Department of Health and Human Services. A copy of the permit is provided in **Appendix A**.

SOIL SAMPLE COLLECTION

On March 2, 2017, under the direction of SCS, H&P Mobile Geochemistry Inc. (H&P) of Carlsbad, California collected soil samples from seven boring locations using a truck-mounted

direct-push drill rig. Boring locations SB1 through SB7 are identified on **Figure 2**. Soil borings were drilled as follows:

- Borings SB1, SB3, and SB5 were placed in the area of the former oil well and presumed area of possible pipelines and/or sumps associated with the former oil well. Soil samples were collected from each of the borings at the 1, 5, 10, and 15 foot depths.
- Borings SB2 and SB4 were placed in the central portion of the Property where the previous use of the Property was not able to be determined resulting in a significant data gap. Soil samples were collected from each of these borings at the 1, 5, and 10 foot depths.
- Borings SB6 and SB7 were placed in the area of the former UST. Soil samples were collected from each of the borings at the 5, 10, 15, and 20 foot depths

The drill rig was equipped with a hydraulic hammer and a 2-foot long, 1.5-inch diameter solid core sampler. A pointed steel tip was fixed to the head of the solid core samplers and driven to the desired depth on a steel rod. Soil matrix samples were collected by retracting the drive tip through the center of the sampler with an inner rod, and hydraulically hammering the sampler an additional 1.5 to 2 feet. Soil samples were recovered in 2-foot long, 1-inch diameter pre-cleaned acetate sleeves that had been placed inside the sampler. At each sampling interval, an approximately 6-inch section was cut from the sample sleeve and retained for submittal to the laboratory.

Appropriate soil samples were prepared in the field using EPA Method 5035, which includes the collection of three aliquots of soil from each soil sample using a plunger/sub-sampler provided by the laboratory. The three aliquots of soil were immediately placed in 40 milliliter VOA (volatile organic analysis) vials as follows – two aliquots in VOAs with a sodium bisulfate preservative and one in a methanol preservative. The acetate sample sleeve ends were covered with Teflon squares and sealed with plastic end caps. New nitrile gloves were used and frequently replaced in the handling of all soil samples to prevent cross-contamination.

A solvent-free label noting the date of collection, sample number, and project number was affixed to each sample container. Immediately following labeling, samples were placed in a chilled cooler to be submitted to Chemtek Environmental Laboratories Inc. (Chemtek) of Santa Fe Springs, California, a California Department of Health Services-certified laboratory. Soil samples were selectively analyzed based on field observations, site history, and to provide representative data from across the Property. The selected soil samples (a total of nineteen) were analyzed for total petroleum hydrocarbons–carbon chain analysis (TPH) using EPA Method 8015M and for volatile organic compounds (VOCs) using EPA Method 8260B/5035. Five soil samples from the 1-foot depth were analyzed for Title 22 metals using EPA Methods 6010B/7471A. Samples were tracked from the point of collection through the laboratory using proper chain-of-custody protocol. Samples were collected and analyzed using generally accepted regulatory procedures.

A portion of each sample sleeve was observed for soil classification and to screen samples with a photoionization detector (PID), and for field indications of potential contamination, such as

discoloration and odor. Boring logs recording the lithology and associated PID readings are provided in **Appendix B**.

Soil Analytical Results

The Chemtek laboratory reports, including chain-of-custody forms and quality assurance/quality control (QA/QC) data, are provided in **Appendix D**. **Table 1** presents a summary of soil sample data for TPH and VOCs, and **Table 2** presents a summary of soil sample data for metals.

As shown in **Table 1**, TPH in the diesel range (C_{13} - C_{22} [TPH-D]) and heavy oil range (C_{23} - C_{40} [TPH-O]) were detected in one of 19 samples collected, SB5-5 (boring SB5 at 5 foot bgs). TPH-D was detected at a concentrations of 800 milligrams per kilogram (mg/kg) and TPH-O was detected at a concentrations of 1,300 mg/kg.

Of the twenty-one samples analyzed, one or more of five VOC analytes were detected in the following samples: SB5-5, SB6-5, SB6-15, SB7-5, and SB7-15. Benzene, ethylbenzene, toluene, methyl ethyl ketone (MEK), and acetone were detected at concentrations between 1.27 and 261 micrograms per kilogram ($\mu\text{g/kg}$).

As shown in **Table 2**, all five analyzed samples (SB1-1, SB2-1, SB3-1, SB4-1, and SB5-1) had detections of nine metals, including arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. Concentrations of these metals ranged from 2.04 and 195 mg/kg.

SOIL VAPOR SAMPLING AND ANALYSIS

Under the direction of SCS, H&P installed soil vapor probes to a depth of 5 feet bgs at seven locations designated SV1 through SV7. Soil vapor locations are depicted on **Figure 2**.

Soil vapor probes were installed using a direct-push drill rig. Stainless steel rods were advanced to the target depth. The steel rods were retracted from each boring and new (clean) 1/8-inch diameter Nylaflow tubing, with a polypropylene filter placed on the bottom end, was inserted to the desired depth. Clean #2/12 Monterey sand was placed in a 6-inch vertical interval around each filter. A bentonite seal was placed above the sand pack for each probe. The remaining annular space was then backfilled with bentonite and hydrated. Sampling was conducted in general accordance with the *Advisory – Active Soil Gas Investigations*, published by the Regional Water Quality Control Board and Department of Toxic Substance Control in April 2012.

Following a minimum of 30 minutes after being set, the probes were purged to remove ambient air from the sampling system and ensure that the collected soil vapor sample was representative of soil conditions

A total of eight soil vapor samples, including one replicate sample for quality control purposes, were collected and analyzed for VOCs using Method 8260SV (a modified version of EPA Method 8260B) and for methane by EPA Method 8015M. In addition, the probes were measured for pressure using a magnehelic gauge.

Samples were analyzed in an on-site mobile laboratory provided by H&P. H&P is certified by the California Department of Health Services to conduct the specified analysis. Chain-of-

custody documentation was completed in order to accurately track the samples from the point of collection through analysis. After all samples had been collected and the soil vapor analysis completed, the probes were removed and the surface repaired to match surrounding.

Soil Vapor Analytical Results

The H&P laboratory report, chain-of-custody documentation and quality assurance/control (QA/QC) data are included in **Appendix E**.

Analytical results of soil vapor samples are summarized in **Table 3**. As shown, three soil vapor samples (SV1-5, SV2-5, and SV7-5) had detections of one or more VOCs. Three VOCs (tetrachloroethene [PCE], toluene, and m,p-xylenes) were detected at concentrations between 0.14 and 65 micrograms per liter (µg/l). No other VOCs were detected in the soil vapor samples collected from the Property.

Methane was not detected at concentrations above the laboratory reporting limits in any of the samples (**Table 3**).

4 DISCUSSION OF ANALYTICAL RESULTS AND REGULATORY LIMITS

METALS IN SOIL

Regulatory guidance for metals in soil is based on an evaluation of both background and risk-based concentrations. The Kearney Foundation of Soil Science published a special report of background concentrations of trace and major elements in California soils (Bradford et al, 1996). The California Department of Toxic Substances Control (DTSC), Human and Ecological Risk Office (HERO) issued Human Health Risk Assessment Note Number 3 (Note No. 3), most recently updated in June 2016. Note No. 3 provides DTSC-modified Screening Levels (DTSC-SLs) for soil, tap water, and ambient air for use in evaluating human health risks at hazardous waste sites and permitted facilities. For the majority of the listed chemicals, HERO Note No. 3 recommends the use of the U.S. Environmental Protection Agency (EPA) Regional Screening Levels (RSLs; most recently updated in May 2016), except in cases where DTSC has calculated a more stringent screening level (DTSC-SL) or recommended using another screening level (e.g. California Human Health Screening Level [CHHSL] used for lead). Human health risks associated with contact of contaminated soil (dermal, ingestion, etc.) in California can be assessed by comparing concentrations detected at the Property to the most stringent (or conservative) of these values for each metal, referred to by SCS as the DTSC-Recommended SLs and presented on **Table 2**.

As shown in **Table 2**, the analytical results for all metals in all samples analyzed (SB1-1, SB2-1, SB3-1, SB4-1, and SB5-1) were below or within the typical background concentration ranges for southern California soils (Bradford et al, 1996). With the exception of arsenic, all other metal concentrations were well below the risk based DTSC-Recommended SLs for residential and industrial land use. Although above the screening levels, arsenic in the five samples was detected (concentrations ranging from 2.16 to 5.28 mg/kg) is within background ranges, and further, is below the acceptable levels of arsenic in soil in the range of 8 to 12 mg/kg for school

sites in California as set by the Department of Toxic Substances Control. In summary, the concentrations of metals detected in soil are not indicative of a release at the Property.

TPH AND VOCs IN SOIL

There are no universal cleanup guidelines for TPH- and/or VOC-contaminated soils in California. Cleanup levels can vary based on a number of factors including the nature of the contamination, depth to groundwater, the beneficial uses of groundwater, soil type, human health risks (i.e., land use, residential vs. commercial/industrial scenarios), and regulatory oversight agency requirements. Actual cleanup goals are site-specific and based on applicable regulatory guidelines. Generally, regulatory guidelines that apply to the cleanup of specific chemical constituents in soil are related to one or more of the following issues:

- Potential impacts to groundwater
- Human health risks
- Waste disposal restrictions

Based on available information regarding the Property, the following guidelines may be applicable to the remediation and cleanup of impacted soils.

Potential Impacts to Groundwater

The Los Angeles Regional Water Quality Control Board (RWQCB) has established cleanup guidelines, also known as soil screening levels (SSLs), for hydrocarbon-impacted soils based on the potential for groundwater contamination (RWQCB, 1996). Where impacted soils are anticipated to be between 20 and 150 feet above groundwater (assuming conservatively that groundwater is at approximately 30 feet bgs at the Property), the SSLs for petroleum hydrocarbons are:

- TPH-G or gasoline-range hydrocarbons (C_4 - C_{12}) – 500 mg/kg
- TPH-D or diesel-range hydrocarbons (C_{13} - C_{22}) – 1,000 mg/kg
- TPH-O or oil/heavy-range hydrocarbons (C_{23} - C_{40}) – 10,000 mg/kg

These SSLs, along with the summary of analytical results, are provided in **Table 1**. As shown on **Table 1**, the one sample with detection of TPH (SB5-5), had concentration of diesel and oil range hydrocarbons below their respective SSLs of 1,000 and 10,000 mg/kg, respectively. Based on this information and data from this investigation, no releases have occurred at the Property that may represent a risk to groundwater.

The RWQCB has also developed groundwater protection SSLs for selected fuel-related aromatic compounds including benzene, toluene, and ethylbenzene in soils. The SSLs for these constituents in the sandy soil observed at the Property would be as follows:

- Benzene – 11 µg/kg
- Toluene – 300 µg/kg
- Ethylbenzene – 700 µg/kg

As shown in **Table 1**, benzene was detected in two samples (SB6-15 and SB7-15) at low concentrations ranging of 15.5 and 7.22 µg/kg. The first of which is slightly above its SSL of 11 µg/kg. The detection of ethylbenzene and toluene at low concentrations (less than 1.48 µg/kg) in sample SB6-15 were well below their respective SSLs of 700 and 300 µg/kg, respectively. The remaining VOCs detected (MEK and acetone) do not have calculated SSLs, however the concentrations detected were low and were only detected in shallow soils (these analytes were not detected in deeper samples analyzed). In addition, the 20-foot samples from SB6 and SB7 did not contain any detections of VOCs. The VOCs detected in samples are not considered a threat to impact groundwater.

Human Health Risks

Note No. 3 also describes DTSC-Recommended SLs for use in evaluating human health risks at hazardous waste sites and permitted facilities. The VOC results for soil samples from this investigation are compared to the DTSC-Recommended SLs in **Table 1**. No VOCs were detected above their respective DTSC-Recommended SLs.

Waste Disposal Restrictions

There are a number of state and federal regulations that relate to the disposal of contaminated soils. For the purposes of disposal, waste streams can be:

- Defined as hazardous in the regulations (e.g., soils containing spent solvents above specified limits for hazardous chemicals).
- Classified as hazardous on the basis of testing results for physical or chemical characteristics (i.e., toxic, reactive, ignitable, and/or corrosive).

In general soil containing petroleum hydrocarbons and/or solvents are not defined as “hazardous” under state and federal regulations. They may, however, exhibit “hazardous characteristics,” and should therefore be tested and characterized for disposal at an appropriate facility when excavated and removed. Under California regulations (Title 14 CCR, Division 7, Chapter 3, Article 5.6), contaminated soil that is excavated, and then either removed from or placed back on the Property, may be subject to the requirements of the RWQCB or a Local Enforcement Agency (such as the Long Beach Department of Human Health Services). Given the analytical results, there are not indicative of a release at the Property.

Although no significant impacted soil was encountered during this investigation, because a former oil well is located beneath the current structure on the Property, hydrocarbon-impacted soil could still be encountered during the redevelopment of the Property. If encountered during future site activities, potentially-impacted soil should be characterized and removed for proper disposal.

VOCs in Soil Vapor

Note No. 3 also makes recommendations regarding the methodology and use of the RSLs and DTSC-SLs for soil vapor screening under residential and commercial/industrial land use scenarios. The recommended values are intended to supersede the Office of Environmental

Health Hazard Assessment (OEHHA) CHHSLs, which are no longer updated by OEHHA or supported by DTSC.

The DTSC-Recommended SLs for evaluating soil vapor intrusion are calculated using indoor air screening levels and recommended attenuation factors. These calculated soil vapor screening levels are for samples collected near the source area either for existing buildings or future buildings (Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, October 2011, DTSC). The term “near the source area” is considered to be at or just above the contaminant source, generally no more than five feet beneath a building foundation. The values calculated using Note No. 3 recommendations are conservative. Chemical concentrations in excess of the calculated DTSC-Recommended SLs are not conclusive evidence of adverse risks to human health. Additional investigation – such as sub-slab sampling, indoor air assessments, site-specific health risk assessments, etc. – may be warranted to further assess site-specific health risks.

The soil vapor results from this investigation are compared to the residential and commercial DTSC-Recommended SLs for a future building in **Table 3**. As shown, no VOCs were detected above their corresponding residential or commercial SLs in the soil vapor samples collected.

Methane Results

As shown in **Table 3**, no methane was detected in any of the soil vapor samples collected. In addition to methane analysis, no subsurface gas pressure was detected during the investigation, indicating that there does not appear to be positive pressure or methane present as a result of the former oil well or presence of the Property in an oil field. A copy of the field monitoring data is provided in **Appendix C**.

5 CONCLUSIONS AND RECOMMENDATIONS

On March 2, 2017, SCS conducted soil and soil vapor investigation activities at 3455 and 3459 Long Beach Boulevard, Long Beach, California. Based on the results of this investigation, SCS has concluded the following:

- Concentrations of metals detected in select soil samples were consistent with typical background concentration ranges for southern California soil.
- TPH-D and TPH-O were detected in one of nineteen samples (SB5-5) at concentrations below their respective SSLs.
- Five VOCs (benzene, ethylbenzene, toluene, methyl ethyl ketone (MEK), and acetone) were detected in five out of the nineteen samples analyzed. Other than benzene in one sample, VOCs were detected above their respective DTSC-Recommended SLs. Benzene was detected in one 15-foot sample (SB6-15) at a concentration of 15.5 µg/kg of which is only slightly above its SSL of 11 µg/kg and was not detected in the 20-foot sample from this boring.

- Three out of the seven soil vapor samples had detections of one or more VOCs. No VOCs were detected above their corresponding residential or commercial DTSC-Recommended SLs for a future building.
- No methane or positive pressure were detected in any of the soil vapor probes installed on the Property.

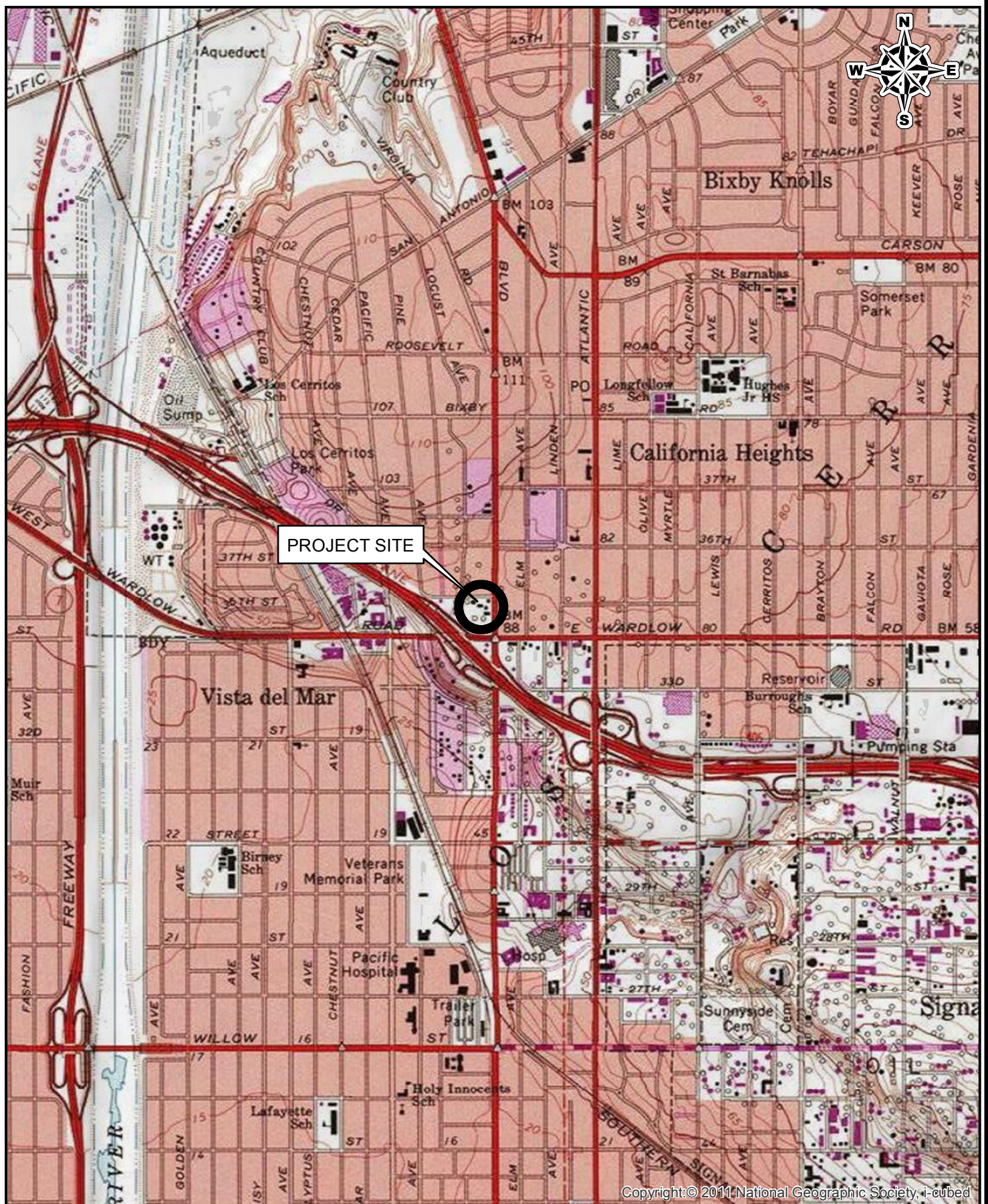
In summary, based on the results of this investigation there has been no significant impact to the subsurface as a result of historical activities at the Property. It is SCS's opinion, that no further investigation or remediation is warranted at this time, however, because the Property is to be redeveloped, it will be necessary to expose the location of the former oil well (currently beneath the structure) for re-abandonment to the current abandonment standards prior to redevelopment. In addition, the City of Long Beach may require a methane barrier as part of the design plan.

In addition, although no significantly impacted soil was encountered during this investigation, because of the location of a former oil well beneath the current structure on the Property, there is a potential that hydrocarbon-impacted soil to be encountered during the redevelopment of the Property. For this reason, preparation of a soils management plan to manage sampling and characterization of any impacted soil is recommended.

6 REFERENCES

- California Department of Toxic Substances Control and Regional Water Quality Control Board. *Advisory – Active Soil Gas Investigations*. July 2015.
- California Department of Toxic Substances Control (DTSC) and California Environmental Protection Agency (CalEPA). *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)*. October 2011.
- California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO). *Human Health Risk Assessment (HHRA) Note Number 3*. June 2016.
- California Environmental Protection Agency, January 2005. *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties*.
- Los Angeles Regional Water Quality Control Board (LARWQCB). *Interim Site Assessment and Cleanup Guidebook*. May 1996.
- California Environmental Protection Agency, State Water Resources Control Board. GeoTracker website; <http://geotracker.waterboards.ca.gov/>
- SCS Engineers, *Phase I Environmental Site Assessment, 3455 & 3459 Long Beach Boulevard, Long Beach, California 90801, (Assessor's Parcel Numbers: 7141-004-033 and -034)*, February 21, 2017.
- United States Geological Survey, Long Beach, CA 7.5 Minute Topographic Map, 1964 (Photorevised 1981).

FIGURES



SCS ENGINEERS

3900 KILROY AIRPORT WAY, STE 100
LONG BEACH, CALIFORNIA 90806-6816

SITE: 3455 & 3459 Long Beach Boulevard
Long Beach, California 90807

Job No.: 01217033.00

Title: SITE LOCATION MAP

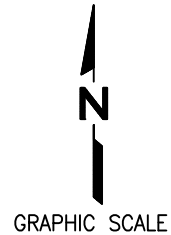
FIGURE

1



LEGEND

- PROPERTY LINE
- SOIL BORING LOCATIONS
- SOIL VAPOR LOCATIONS



SCALE IN FEET

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS

3900 KILROY AIRPORT WAY, SUITE 100
LONG BEACH, CA 90806
PH. (562) 426-9544 FAX. (562) 427-0805

PROJ. NO. 01217033 T2	DRAWN BY C.HERNANDEZ	ACAD FILE 2017
CHK. BY SCS	C.ROMANOWSKI	APP. BY A.HUTCHENS

CLIENT

LASERFICHE
3545 LONG BEACH BOULEVARD
LONG BEACH, CA 90807

SHEET TITLE AERIAL IMAGE SHOWING SOIL AND SOIL VAPOR
SAMPLING LOCATIONS

PROJECT TITLE
3455 & 3459 LONG BEACH BOULEVARD
LONG BEACH, CA 90807

DATE:
FEBRUARY 2017

SCALE:
1"=40'

FIGURE NO.
2

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES - TPH & VOCs
3455-3459 LONG BEACH BOULEVARD
LONG BEACH, CA 90807

Sample Location	Sample Depth (feet bgs)	Date of Collection	TPH (EPA Method 8015M)			Volatile Organic Compounds (EPA Method 8260B)					
			TPH as Gasoline-range Hydrocarbons (C4 - C12)	TPH as Diesel-range Hydrocarbons (C13 - C22)	TPH as Motor Oil-range Hydrocarbons (C23 - C40)	Benzene	Ethylbenzene	Toluene	Methyl ethyl ketone (MEK)	Acetone	
			milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)			micrograms per kilogram (µg/kg), equivalent to parts per billion (ppb)					
SB1	1	March 2, 2017	--	--	--	--	--	--	--	--	
	5		<0.2	<5.0	<10	<0.9	<0.9	<0.9	<9.0	<45	
	10		<0.2	<5.0	<10	<1.5	<1.5	<1.5	<15	<75	
	15		<0.2	<5.0	<10	<1.2	<1.2	<1.2	<12	<60	
SB2	1		--	--	--	--	--	--	--	--	
	5		<0.2	<5.0	<10	<1.0	<1.0	<1.0	<10	<50	
	10		<0.2	<5.0	<10	<1.6	<1.6	<1.6	<16	<80	
SB3	1		--	--	--	--	--	--	--	--	
	5		<0.2	<5.0	<10	<1.0	<1.0	<1.0	<10	<50	
	10		<0.2	<5.0	<10	<1.4	<1.4	<1.4	<14	<70	
	15		<0.2	<5.0	<10	<1.2	<1.2	<1.2	<12	<60	
SB4	1		--	--	--	--	--	--	--	--	
	5		<0.2	<5.0	<10	<1.0	<1.0	<1.0	<10	<50	
	10		<0.2	<5.0	<10	<1.1	<1.1	<1.1	<11	<55	
SB5	1		--	--	--	--	--	--	--	--	
	5		<0.2	800	1,300	<1.6	<1.6	<1.6	<16	122	
	10		<0.2	<5.0	<10	<1.0	<1.0	<1.0	<10	<50	
	15		<0.2	<5.0	<10	<1.3	<1.3	<1.3	<13	<65	
SB6	5		<0.2	<5.0	<10	<0.9	<0.9	<0.9	15.4	110	
	10		<0.2	<5.0	<10	<1.3	<1.3	<1.3	<13	<65	
	15		<0.2	<5.0	<10	15.5	1.48	1.27	<12	<60	
	20		--	--	--	<1.5	<1.5	<1.5	<15	<75	
SB7	5		<0.2	<5.0	<10	<1.9	<1.9	<1.9	35.9	261	
	10		<0.2	<5.0	<10	<1.9	<1.9	<1.9	<19	<95	
	15		<0.2	<5.0	<10	7.22	<2.2	<2.2	<22	<110	
	20		--	--	--	<1.1	<1.1	<1.1	<11	<55	
LARWQCB SSLs			500	1,000	10,000	11	700	300	--	--	
DTSC-Recommended SL (Residential)			--	--	--	330	5,800	1,100,000	27,000,000	61,000,000	
DTSC-Recommended SL (Commercial/Industrial)			--	--	--	1,400	25,000	5,400,000	190,000,000	670,000,000	

Notes:

VOCs = Volatile organic compounds

bgs = Below ground surface

NA = Not applicable because an MCL has not been defined for the VOC.

LARWQCB SSLs = Los Angeles Regional Water Quality Control Board Soil Screening Levels in sandy soils approximately 30 feet above groundwater (Interim Site Assessment and Cleanup Guidebook. May 1996).

DTSC-Recommended SL = Screening Level as recommended in California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), Human Health Risk Assessment (HHRA) Note No. 3 - Residential and industrial/commercial land use scenarios June 2016, Referencing U.S. Environmental Protection Agency Regional Screening Level Summary Table - May 2016).

-- = Not analyzed/calculated

TABLE 2
SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES - METALS
3455-3459 LONG BEACH BOULEVARD
LONG BEACH, CA 90807

Sample Number (or Boring ID)	Sample Depth (feet bgs)	Sampling Date	Title 22 Metals (EPA Method 6010B, except Mercury by EPA Method 7471A)																	
			Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury (elemental)	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	
			Milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)																	
SB1	1	March 2, 2017	<2.0	4.51	76.2	<1.0	<1.0	9.13	2.04	11.8	<2.0	<0.05	<2.0	7.16	<2.0	<1.0	<2.0	21.0	23.2	
	5		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	10		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	15		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SB2	1		<2.0	2.86	81.2	<1.0	<1.0	9.14	4.07	12.1	<2.0	<0.05	<2.0	7.03	<2.0	<1.0	<2.0	20.3	22.7	
	5		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	10		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SB3	1		<2.0	5.28	80.4	<1.0	<1.0	9.45	3.71	11.1	<2.0	<0.05	<2.0	8.10	<2.0	<1.0	<2.0	20.1	23.2	
	5		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	10		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	15		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SB4	1		<2.0	2.16	63.2	<1.0	<1.0	7.73	3.04	14.9	20.7	<0.05	<2.0	6.63	<2.0	<1.0	<2.0	17.6	98.8	
	5		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	10		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SB5	1		<2.0	3.95	157	<1.0	<1.0	12.5	4.57	20.8	29.9	<0.05	<2.0	14.4	<2.0	<1.0	<2.0	25.2	195	
	5		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	10		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	15		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SB6	5		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	10		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	15		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	20		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
SB7	5		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	10		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	15		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	20		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Typical Range for CA Soils*			0.15-1.95	0.6-11	133-1,400	0.25-2.7	0.05-1.7	23-1,579	2.7-46.9	9.1-96.4	12.4-97.1	0.1-0.9	0.1-9.6	9-509	0.015-0.430	0.1-8.3	0.17-1.1	39-288	88-236	
Source			RSL	HERO	RSL	HERO	HERO	RSL	RSL	HERO	HERO	RSL	HERO	RSL	HERO	RSL	HERO	RSL		
DTSC-Recommended SL (Residential)			31	0.11	15,000	15	5.2	36,000/0.3±	23	3,100	80	1.0	390	490	390	390	0.78	390	23,000	
DTSC-Recommended SL (Commercial/Industrial)			470	0.36	220,000	210	7.3	170,000/6.3±	350	47,000	320	4.5	5,800	3,100	5,800	1,500	12	1,000	350,000	
TTLC			500	500		75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000	
STLC**			15	5	100	0.75	1	5	80	25	5	0.2	350	20	1	5	7	24	250	
TCLP**			--	5	100	--	1	5	--	--	5	0.2	--	--	1	5	--	--	--	

Notes:

bgs = below ground surface

* = Bradford, G.R., Chang, A.C., Page, A.L., Bakhtar, D., Fampton, J.A., and Wright, H., 1996, *Background Concentrations of Trace and Major Elements in California Soils*, Kearney Foundation of Soil Science Special Report, Division of Agriculture and Natural Resources, University of California.

** = Values in milligrams per liter (mg/L)

± = Value for Chromium (III) / Value for Chromium (VI)

DTSC-Recommended SL = Screening Level as recommended in California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), Human Health Risk Assessment (HHRA) Note No. 3 - Residential and industrial/commercial land use scenarios (June 2016 Referencing U.S. Environmental Protection Agency Regional Screening Level [RSL] Summary Table - May 2016).

TTLC = Total Threshold Limit Concentration as identified in Title 22 of the California Code of Regulations. Wastes with concentrations above this value are considered hazardous for the purposes of disposal under California regulations.

STLC = Soluble Threshold Limit Concentration, in mg/L, as identified in Title 22 of the California Code of Regulations. A concentration of ten times the STLC is sometimes used as a trigger to conduct further analysis (i.e., the soluble analysis) of a sample to determine disposal requirements. Wastes with soluble concentrations above this value are considered hazardous for the purposes of disposal under California regulations.

TCPLP = Toxicity Characteristic Leaching Procedure concentration, in mg/L, as identified in the Code of Federal Regulations. Wastes with soluble concentrations above this value are considered hazardous for the purposes of disposal under federal regulations.

-- = Not analyzed/Not Applicable

TABLE 3
SUMMARY OF ANALYTICAL RESULTS FOR SOIL VAPOR SURVEY
3455-3459 LONG BEACH BOULEVARD
LONG BEACH, CA 90807

Sample Number (or Boring ID)	Sample Depth (feet bgs)	Sampling Date	Volatile Organic Compound (EPA Method 8260SV)			Methane (EPA Method 8015M)
			Tetrachloroethene (PCE) **	Toluene	m,p-Xylene	
			Micrograms per liter (µg/l)			
SV1	5	March 2, 2017	<0.08	7.4	<0.40	<10
SV2	5		<0.08	65	0.74	<10
SV3	5		<0.08	<0.80	<0.40	<10
SV4	5		<0.08	<0.80	<0.40	<10
	5-REP		<0.08	<0.80	<0.40	<10
SV5	5		<0.08	<0.80	<0.40	<10
SV6	5		<0.08	<0.80	<0.40	<10
SV7	5		0.14	23	<0.40	<10
Residential DTSC-Recommended SL			0.46	310	100	--
Commercial/Industrial DTSC-Recommended SL			4.0	2,600	880	--

Notes:

bgs = below ground surface

DTSC-Recommended SL (Existing Building) = Screening Level as recommended in California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), Human Health Risk Assessment (HHRA) Note No. 3 - Residential and commercial/industrial land use scenarios at a future building (June 2016, Referencing U.S. Environmental Protection Agency Regional Screening Level Reference Summary Table - May 2016).

** = DTSC Note No. 7 recommended modifications for tetrachloroethene risk screening level (October 17, 2016)

Three purge volumes were used for all sampling points.

APPENDIX A

PERMIT



CITY OF LONG BEACH
DEPARTMENT OF HEALTH AND HUMAN SERVICES
BUREAU OF ENVIRONMENTAL HEALTH
WATER QUALITY PROGRAM

2525 GRAND AVENUE, ROOM 220, LONG BEACH, CALIFORNIA CA 90815
562-570-4132



WELL PERMIT

PERMIT#: **2325**

DATE: **March 1, 2017**

**All work must be completed in accordance with Water Well Bulletin 74-81 and 74-90
PLEASE NOTIFY INSPECTOR 48 HOURS BEFORE DRILLING AND SUBMIT LOG(S) TO
vanna.kho@longbeach.gov , OR MAIL AT ADDRESS ABOVE.**

Site Address: **3455 & 3459 Long Beach Blvd
Long Beach, CA**

Owner: **Laserfiche**

Owner Address: **3545 Long Beach Blvd
Long Beach, Ca 90807
562-988-1688**

Consulting Firm: **SCS Engineers**

Consulting Firm Address **3900 Kilroy Airport Way Ste 100
Long Beach, Ca 90806
562-426-9544**

Drilling Company: **H & P Geochemistry**

Drilling Co. Address: **2470 Impala Drive
Carlsbad, Ca 92010
760-804-9678**

Type Of Permit: **Soil Boring**

Type Of Well:

Total Number Of Well/Soil Boring: **14 Borings**

This permit valid for one year from date above

Vanna Kho, R.E.H.S.
Cross-Connection/Water Quality

APPENDIX B

BORING LOGS

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816



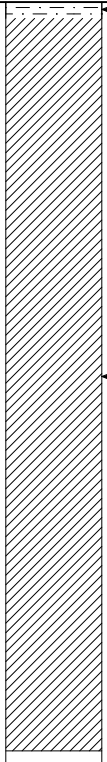






BORING NUMBER: SB1

Page 1 of 1

**3455-3459 Long Beach Boulevard
Long Beach, California**

JOB NUMBER: 01217033.00 Task 2

REMARKS:

Depth		Sample Information					Graphic Log	Description	Completion Detail
meters	feet	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.			
0	0		SB1-1		0.2	ML		Olive Brown, Clayey Silt, Moist.	 <p>Soil</p> <p>Hydrated Bentonite</p>
1	5		SB1-5		0.8	ML		Olive Brown, Clayey Silt, Moist.	
3	10		SB1-10		1.2	SM		Olive Brown, Silty (20%) Very Fine to Fine Sand, Dry.	
4	15		SB1-15		1.1	SP		Light Gray, Very Fine to Fine Sand, Dry.	
5									
6	20								
7									
25									

Drilling Company: **H & P Mobile Geochemistry**

Drilling Method: **Direct Push**

Logged By: **C. Hernandez**

Date Started: **3/2/17**

Date Ended: **3/2/17**

Boring Diameter: **1.5**

Total Depth: **15.0 ft**

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: SB2

Page 1 of 1

**3455-3459 Long Beach Boulevard
Long Beach, California**

JOB NUMBER: 01217033.00 Task 2

REMARKS:

Depth		Sample Information					Graphic Log	Description	Completion Detail
meters	feet	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.			
0	0		SB2-1		0.9	ML		Olive Brown, Sandy (30%) Silt, Moist.	0 Soil
1	5		SB2-5		0.6	SP		Olive Brown, Very Fine to Fine Sand, Moist.	5 Hydrated Bentonite
3	10		SB2-10		1.6	SP		Olive Brown, Very Fine to Fine Sand, Moist.	10
4	15								15
5	20								20
6	25								25

Drilling Company: **H & P Mobile Geochemistry**

Drilling Method: **Direct Push**

Logged By: **C. Hernandez**

Date Started: **3/2/17**

Date Ended: **3/2/17**

Boring Diameter: **1.5**

Total Depth: **10.0 ft**

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: SB3

Page 1 of 1

**3455-3459 Long Beach Boulevard
Long Beach, California**

JOB NUMBER: 01217033.00 Task 2

REMARKS:

Depth		Sample Information					Graphic Log	Description	Completion Detail
meters	feet	Sample Location	Sample Number	Blow Counts	OM (ppm)	USCS Soil Class.			
0	0		SB3-1		0.7	ML		Olive Brown, Sandy (20%) Silt, Moist.	0 Soil
1	5		SB3-5		0.9	SW		Brown with White Mottling, Very Fine to Medium Sand, Moist.	5 Hydrated Bentonite
3	10		SB3-10		1.0	SP		Light Gray with Orange Mottling, Very Fine to Fine Sand, Moist.	10
4	15		SB3-15		3.5	SP		Light Gray, Very Fine to Fine Sand, Moist.	15
5									
6	20								20
7									
25									

Drilling Company: **H & P Mobile Geochemistry**

Drilling Method: **Direct Push**

Logged By: **C. Hernandez**

Date Started: **3/2/17**

Date Ended: **3/2/17**

Boring Diameter: **1.5**

Total Depth: **15.0 ft**

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: SB4

Page 1 of 1

**3455-3459 Long Beach Boulevard
Long Beach, California**

JOB NUMBER: 01217033.00 Task 2

REMARKS:

Depth		Sample Information					Graphic Log	Description	Completion Detail
meters	feet	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.			
0	0		SB4-1		0.3	ML		Olive Gray, Sandy (20%) Silt with 3% Fine Gravel, Moist.	0 Soil
1	5		SB4-5		1.0	SM		Olive Gray, Silty (20%) Very Fine Sand, Moist.	5 Hydrated Bentonite
3	10		SB4-10		1.5	SP		Olive Brown, Fine Sand, Moist.	10
4									
5									
6	20								20
7									
25									

Drilling Company: **H & P Mobile Geochemistry**

Drilling Method: **Direct Push**

Logged By: **C. Hernandez**

Date Started: **3/2/17**

Date Ended: **3/2/17**

Boring Diameter: **1.5**

Total Depth: **10.0 ft**

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: SB5

Page 1 of 1

**3455-3459 Long Beach Boulevard
Long Beach, California**

JOB NUMBER: 01217033.00 Task 2

REMARKS:

Depth		Sample Information					Graphic Log	Description	Completion Detail
meters	feet	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.			
0	0		SB5-1		2.4	ML		Olive Brown, Clayey Silt, Moist.	
1	5		SB5-5		1.2	ML		Olive Brown, Clayey Silt, Moist.	
3	10		SB5-10		0.4	SP		Olive Brown, Very Fine to Fine Sand, Moist.	
4	15		SB5-15		12	SP		Light Gray, Fine Sand, Moist.	
5									
6	20								
7									
25									

Drilling Company: **H & P Mobile Geochemistry**

Drilling Method: **Direct Push**

Logged By: **C. Hernandez**

Date Started: **3/2/17**

Date Ended: **3/2/17**

Boring Diameter: **1.5**

Total Depth: **15.0 ft**

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: SB6

Page 1 of 1

**3455-3459 Long Beach Boulevard
Long Beach, California**

JOB NUMBER: 01217033.00 Task 2

REMARKS:

Depth		Sample Information					Graphic Log	Description	Completion Detail
meters	feet	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.			
0	0								0
1	5		SB6-5		1.6	SM		Olive Gray, Silty (30-40%) Very Fine Sand, Moist.	5
2									
3	10		SB6-10		1.3	SP		Light Gray, Fine Sand, Moist	10
4									
5	15		SB6-15		0.9	SP		Light Gray, Fine Sand, Moist	15
6	20		SB6-20		1.1	SM		Olive Brown, Silty (20%) Very Fine to Fine Sand, Moist.	20
7									
25									

Drilling Company: **H & P Mobile Geochemistry**

Drilling Method: **Direct Push**

Logged By: **C. Hernandez**

Date Started: **3/2/17**

Date Ended: **3/2/17**

Boring Diameter: **1.5**

Total Depth: **20.0 ft**

STANDARD_LOG_01217033.00 T2.GPJ STD_LOG.GDT 3/15/17

3900 Kilroy Airport Way, Suite 100
Long Beach, California 90806-6816

BORING NUMBER: SB7

Page 1 of 1

**3455-3459 Long Beach Boulevard
Long Beach, California**

JOB NUMBER: 01217033.00 Task 2

REMARKS:

Depth		Sample Information					Graphic Log	Description	Completion Detail
meters	feet	Sample Location	Sample Number	Blow Counts	OVM (ppm)	USCS Soil Class.			
0	0								0
1	5		SB7-5		1.4	SM		Brown, Silty (15%) Very Fine to Fine Sand, Moist.	5
2									
3	10		SB7-10		1.0	SP		Light Gray, Very Fine Sand, Moist.	10
4									
5	15		SB7-15		0.7	SP		Light Gray, Very Fine to Fine Sand, Moist.	15
6	20		SB7-20		0.9	SP		Light Gray, Very Fine to Fine Sand, Moist.	20
7									
25									

Drilling Company: **H & P Mobile Geochemistry**

Drilling Method: **Direct Push**

Logged By: **C. Hernandez**

Date Started: **3/2/17**

Date Ended: **3/2/17**

Boring Diameter: **1.5**

Total Depth: **20.0 ft**

STANDARD_LOG_01217033.00 T2.GPJ STD_LOG.GDT 3/15/17

APPENDIX C

METHANE MONITORING LOGS

Methane Monitoring Logs

Project Name: laserfiche - Phase II Date: 3/2/17 Personnel: C. Hernandez

Project Address: 3455-3459 Long Beach Blvd Barometric Pressure/Weather: _____

Monitoring Instruments/Serial Numbers: Magne helix

Last Calibration Date: N/A Job Number: 01217033.00 72

[illegible]

Values recorded on this table are actual field instrument reading. The detection limit (DL) of each constituent is provided in each column.

Reference for gas measurements:

100ppm=0.2%L.E.L.	=0.01%vol.
1,000ppm=2%L.E.L.	=0.1%vol.
10,000ppm=20%L.E.L.	=1%vol
50,000ppm=100%L.E.L.	=5%vol.

Reference for abbreviations: ppm=parts per million
L.E.L.=lower explosive limit
%vol.= percent per volume
iw=inches of water
DL=detection limit

APPENDIX D
CHEMTEK LABORATORY REPORT



Certificate of Analysis

Page 1

Client: SCS Engineers

3900 Kilroy Airport Way
Long Beach, CA

Project No. 01217033.00 T2

Project Site: Laserfiche

3455-3459 Long Beach Blvd
Long Beach, CA

Job No: 703022

Report Date: 03/07/17

Date Received: 03/02/17

Number of Samples: 26

Sample Matrix: Soil

Attention:

This is the Certificate of Analysis for the following samples:

SAMPLE IDENTIFICATION	DATE OF SAMPLE	LABORATORY IDENTIFICATION
SB1-1	03/02/17	703022-01A
SB1-5	03/02/17	703022-02A
SB1-10	03/02/17	703022-03A
SB1-15	03/02/17	703022-04A
SB2-1	03/02/17	703022-05A
SB2-5	03/02/17	703022-06A
SB2-10	03/02/17	703022-07A
SB3-1	03/02/17	703022-08A
SB3-5	03/02/17	703022-09A
SB3-10	03/02/17	703022-10A
SB3-15	03/02/17	703022-11A
SB4-1	03/02/17	703022-12A
SB4-5	03/02/17	703022-13A
SB4-10	03/02/17	703022-14A
SB5-1	03/02/17	703022-15A
SB5-5	03/02/17	703022-16A
SB5-10	03/02/17	703022-11A
SB5-15	03/02/17	703022-18A
SB6-5	03/02/17	703022-19A
SB6-10	03/02/17	703022-20A
SB6-15	03/02/17	703022-21A
SB6-20	03/02/17	703022-22A
SB7-5	03/02/17	703022-23A
SB7-10	03/02/17	703022-24A
SB7-15	03/02/17	703022-25A
SB7-20	03/02/17	703022-26A

Reviewed and Approved:

For

Michael C.C. Lu
Laboratory Director



Certificate of Analysis

Page 2

Client: SCS Engineers		EPA Method: 8260B		Units: µg/kg or ppb		Job No: 703022	
Project Site: Laserfiche		Matrix: Soil					
		Sample ID	Sample Date		Sample ID	Sample Date	
Project No. 01217033.00 T2		SB1-5	3/2/2017		SB1-10	3/2/2017	

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Bromobenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Bromochloromethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Bromoform	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Bromomethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
n-Butylbenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
sec-Butylbenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
tert-Butylbenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Carbon Tetrachloride	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Chlorobenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Chloroethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Chloroform	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Chloromethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
2-Chlorotoluene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
4-Chlorotoluene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
2-Chloroethyl vinyl ether	ND	µg/kg	0.9	1.8	ND	µg/kg	1.5	3
Dibromochloromethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,2-Dibromo-3-chloropropane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,2-Dibromoethane (EDB)	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Dibromomethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,2-Dichlorobenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,3-Dichlorobenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,4-Dichlorobenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Dichlorodifluoromethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,1-Dichloroethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,2-Dichloroethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,1-Dichloroethene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
cis-1,2 Dichloroethene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Trans-1,2-Dichloroethene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,2-Dichloropropane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,3-Dichloropropane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
2,2-Dichloropropane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,1-Dichloropropene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Cis-1,3-Dichloropropene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
trans-1,3-Dichloropropene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Ethylbenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Hexachlorobutadiene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Isopropylbenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
4-Isopropyltoluene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Methylene Chloride	ND	µg/kg	0.9	4.5	ND	µg/kg	1.5	7.5
Naphthalene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
n-propylbenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Styrene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,1,1,2-Tetrachloroethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,1,2,2-Tetrachloroethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Tetrachloroethene(PCE)	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Toluene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,2,3-Trichlorobenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,2,4-Trichlorobenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,1,1-Trichloroethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,1,2-Trichloroethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Trichloroethene(TCE)	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Trichlorofluoromethane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,2,3-Trichloropropane	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,2,4-Trimethylbenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
1,3,5-Trimethylbenzene	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Vinyl Chloride	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
Total Xylenes	ND	µg/kg	0.9	1.8	ND	µg/kg	1.5	3
Ethanol	ND	µg/kg	0.9	225	ND	µg/kg	1.5	375
MTBE	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
ETBE	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
DIPE	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
TAME	ND	µg/kg	0.9	0.9	ND	µg/kg	1.5	1.5
TBA	ND	µg/kg	0.9	45	ND	µg/kg	1.5	75
MEK	ND	µg/kg	0.9	9	ND	µg/kg	1.5	15
MIBK	ND	µg/kg	0.9	9	ND	µg/kg	1.5	15
2-Hexanone	ND	µg/kg	0.9	9	ND	µg/kg	1.5	15
Acetone	ND	µg/kg	0.9	45	ND	µg/kg	1.5	75

Analysis Date: 03/03/17

03/03/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers	EPA Method: 8260B	Units: µg/kg or ppb	Job No: 703022
Project Site: Laserfiche	Matrix: Soil		
	Sample ID	Sample Date	
Project No. 01217033.00 T2	SB1-15	3/2/2017	
	Sample ID	Sample Date	
	SB2-5	3/2/2017	

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Bromobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Bromochloromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Bromoform	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Bromomethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
n-Butylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
sec-Butylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
tert-Butylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Carbon Tetrachloride	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Chlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Chloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Chloroform	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Chloromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
2-Chlorotoluene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
4-Chlorotoluene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
2-Chloroethyl vinyl ether	ND	µg/kg	1.2	2.4	ND	µg/kg	1	2
Dibromochloromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,2-Dibromoethane (EDB)	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Dibromomethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,2-Dichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,3-Dichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,4-Dichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Dichlorodifluoromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,1-Dichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,2-Dichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,1-Dichloroethene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
cis-1,2 Dichloroethene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Trans-1,2-Dichloroethene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,2-Dichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,3-Dichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
2,2-Dichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,1-Dichloropropene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Cis-1,3-Dichloropropene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
trans-1,3-Dichloropropene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Ethylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Hexachlorobutadiene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Isopropylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
4-Isopropyltoluene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Methylene Chloride	ND	µg/kg	1.2	6	ND	µg/kg	1	5
Naphthalene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
n-propylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Styrene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Tetrachloroethene(PCE)	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Toluene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,2,3-Trichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,2,4-Trichlorobenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,1,1-Trichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,1,2-Trichloroethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Trichloroethene(TCE)	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Trichlorofluoromethane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,2,3-Trichloropropane	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,2,4-Trimethylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
1,3,5-Trimethylbenzene	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Vinyl Chloride	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
Total Xylenes	ND	µg/kg	1.2	2.4	ND	µg/kg	1	2
Ethanol	ND	µg/kg	1.2	300	ND	µg/kg	1	250
MTBE	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
ETBE	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
DIPE	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
TAME	ND	µg/kg	1.2	1.2	ND	µg/kg	1	1
TBA	ND	µg/kg	1.2	60	ND	µg/kg	1	50
MEK	ND	µg/kg	1.2	12	ND	µg/kg	1	10
MIBK	ND	µg/kg	1.2	12	ND	µg/kg	1	10
2-Hexanone	ND	µg/kg	1.2	12	ND	µg/kg	1	10
Acetone	ND	µg/kg	1.2	60	ND	µg/kg	1	50

Analysis Date: 03/03/17

03/03/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers	EPA Method: 8260B	Units: µg/kg or ppb	Job No: 703022
Project Site: Laserfiche	Matrix: Soil		
	Sample ID	Sample Date	
Project No. 01217033.00 T2	SB2-10	3/2/2017	
	Sample ID	Sample Date	
	SB3-5	3/2/2017	

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Bromobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Bromochloromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Bromoform	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Bromomethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
n-Butylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
sec-Butylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
tert-Butylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Carbon Tetrachloride	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Chlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Chloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Chloroform	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Chloromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
2-Chlorotoluene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
4-Chlorotoluene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
2-Chloroethyl vinyl ether	ND	µg/kg	1.6	3.2	ND	µg/kg	1	2
Dibromochloromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dibromoethane (EDB)	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Dibromomethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,3-Dichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,4-Dichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Dichlorodifluoromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1-Dichloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dichloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1-Dichloroethene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
cis-1,2 Dichloroethene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Trans-1,2-Dichloroethene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dichloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,3-Dichloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
2,2-Dichloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1-Dichloropropene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Cis-1,3-Dichloropropene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
trans-1,3-Dichloropropene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Ethylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Hexachlorobutadiene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Isopropylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
4-Isopropyltoluene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Methylene Chloride	ND	µg/kg	1.6	8	ND	µg/kg	1	5
Naphthalene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
n-propylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Styrene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Tetrachloroethene(PCE)	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Toluene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2,3-Trichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2,4-Trichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1,1-Trichloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1,2-Trichloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Trichloroethene(TCE)	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Trichlorofluoromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2,3-Trichloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2,4-Trimethylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,3,5-Trimethylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Vinyl Chloride	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Total Xylenes	ND	µg/kg	1.6	3.2	ND	µg/kg	1	2
Ethanol	ND	µg/kg	1.6	400	ND	µg/kg	1	250
MTBE	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
ETBE	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
DIPE	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
TAME	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
TBA	ND	µg/kg	1.6	80	ND	µg/kg	1	50
MEK	ND	µg/kg	1.6	16	ND	µg/kg	1	10
MIBK	ND	µg/kg	1.6	16	ND	µg/kg	1	10
2-Hexanone	ND	µg/kg	1.6	16	ND	µg/kg	1	10
Acetone	ND	µg/kg	1.6	80	ND	µg/kg	1	50

Analysis Date: 03/03/17

03/03/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers	EPA Method: 8260B	Units: µg/kg or ppb	Job No: 703022
Project Site: Laserfiche	Matrix: Soil		
Project No. 01217033.00 T2	Sample ID SB3-10	Sample Date 3/2/2017	Sample ID SB3-15
			Sample Date 3/2/2017

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Bromobenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Bromochloromethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Bromoform	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Bromomethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
n-Butylbenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
sec-Butylbenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
tert-Butylbenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Carbon Tetrachloride	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Chlorobenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Chloroethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Chloroform	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Chloromethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
2-Chlorotoluene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
4-Chlorotoluene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
2-Chloroethyl vinyl ether	ND	µg/kg	1.4	2.8	ND	µg/kg	1.2	2.4
Dibromochloromethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,2-Dibromoethane (EDB)	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Dibromomethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,2-Dichlorobenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,3-Dichlorobenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,4-Dichlorobenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Dichlorodifluoromethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,1-Dichloroethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,2-Dichloroethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,1-Dichloroethene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
cis-1,2 Dichloroethene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Trans-1,2-Dichloroethene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,2-Dichloropropane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,3-Dichloropropane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
2,2-Dichloropropane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,1-Dichloropropene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Cis-1,3-Dichloropropene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
trans-1,3-Dichloropropene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Ethylbenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Hexachlorobutadiene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Isopropylbenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
4-Isopropyltoluene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Methylene Chloride	ND	µg/kg	1.4	7	ND	µg/kg	1.2	6
Naphthalene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
n-propylbenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Styrene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Tetrachloroethene(PCE)	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Toluene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,2,3-Trichlorobenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,2,4-Trichlorobenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,1,1-Trichloroethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,1,2-Trichloroethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Trichloroethene(TCE)	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Trichlorofluoromethane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,2,3-Trichloropropane	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,2,4-Trimethylbenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
1,3,5-Trimethylbenzene	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Vinyl Chloride	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
Total Xylenes	ND	µg/kg	1.4	2.8	ND	µg/kg	1.2	2.4
Ethanol	ND	µg/kg	1.4	350	ND	µg/kg	1.2	300
MTBE	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
ETBE	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
DIPE	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
TAME	ND	µg/kg	1.4	1.4	ND	µg/kg	1.2	1.2
TBA	ND	µg/kg	1.4	70	ND	µg/kg	1.2	60
MEK	ND	µg/kg	1.4	14	ND	µg/kg	1.2	12
MIBK	ND	µg/kg	1.4	14	ND	µg/kg	1.2	12
2-Hexanone	ND	µg/kg	1.4	14	ND	µg/kg	1.2	12
Acetone	ND	µg/kg	1.4	70	ND	µg/kg	1.2	60

Analysis Date: 03/03/17

03/03/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers	EPA Method: 8260B	Units: µg/kg or ppb	Job No: 703022
Project Site: Laserfiche	Matrix: Soil		
Project No. 01217033.00 T2	Sample ID SB4-5	Sample Date 3/2/2017	Sample ID SB4-10
			Sample Date 3/2/2017

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Bromobenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Bromochloromethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Bromoform	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Bromomethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
n-Butylbenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
sec-Butylbenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
tert-Butylbenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Carbon Tetrachloride	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Chlorobenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Chloroethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Chloroform	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Chloromethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
2-Chlorotoluene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
4-Chlorotoluene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
2-Chloroethyl vinyl ether	ND	µg/kg	1	2	ND	µg/kg	1.1	2.2
Dibromochloromethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,2-Dibromo-3-chloropropane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,2-Dibromoethane (EDB)	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Dibromomethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,2-Dichlorobenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,3-Dichlorobenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,4-Dichlorobenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Dichlorodifluoromethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,1-Dichloroethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,2-Dichloroethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,1-Dichloroethene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
cis-1,2 Dichloroethene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Trans-1,2-Dichloroethene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,2-Dichloropropane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,3-Dichloropropane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
2,2-Dichloropropane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,1-Dichloropropene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Cis-1,3-Dichloropropene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
trans-1,3-Dichloropropene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Ethylbenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Hexachlorobutadiene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Isopropylbenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
4-Isopropyltoluene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Methylene Chloride	ND	µg/kg	1	5	ND	µg/kg	1.1	5.5
Naphthalene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
n-propylbenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Styrene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,1,1,2-Tetrachloroethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,1,2,2-Tetrachloroethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Tetrachloroethene(PCE)	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Toluene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,2,3-Trichlorobenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,2,4-Trichlorobenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,1,1-Trichloroethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,1,2-Trichloroethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Trichloroethene(TCE)	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Trichlorofluoromethane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,2,3-Trichloropropane	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,2,4-Trimethylbenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
1,3,5-Trimethylbenzene	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Vinyl Chloride	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
Total Xylenes	ND	µg/kg	1	2	ND	µg/kg	1.1	2.2
Ethanol	ND	µg/kg	1	250	ND	µg/kg	1.1	275
MTBE	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
ETBE	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
DIPE	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
TAME	ND	µg/kg	1	1	ND	µg/kg	1.1	1.1
TBA	ND	µg/kg	1	50	ND	µg/kg	1.1	55
MEK	ND	µg/kg	1	10	ND	µg/kg	1.1	11
MIBK	ND	µg/kg	1	10	ND	µg/kg	1.1	11
2-Hexanone	ND	µg/kg	1	10	ND	µg/kg	1.1	11
Acetone	ND	µg/kg	1	50	ND	µg/kg	1.1	55

Analysis Date: 03/03/17

03/03/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers		EPA Method: 8260B		Units: µg/kg or ppb		Job No: 703022	
Project Site: Laserfiche		Matrix: Soil					
		Sample ID	Sample Date			Sample ID	Sample Date
Project No. 01217033.00 T2		SB5-5	3/2/2017			SB5-10	3/2/2017

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Bromobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Bromochloromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Bromoform	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Bromomethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
n-Butylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
sec-Butylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
tert-Butylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Carbon Tetrachloride	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Chlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Chloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Chloroform	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Chloromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
2-Chlorotoluene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
4-Chlorotoluene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
2-Chloroethyl vinyl ether	ND	µg/kg	1.6	3.2	ND	µg/kg	1	2
Dibromochloromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dibromoethane (EDB)	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Dibromomethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,3-Dichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,4-Dichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Dichlorodifluoromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1-Dichloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dichloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1-Dichloroethene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
cis-1,2 Dichloroethene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Trans-1,2-Dichloroethene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2-Dichloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,3-Dichloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
2,2-Dichloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1-Dichloropropene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Cis-1,3-Dichloropropene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
trans-1,3-Dichloropropene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Ethylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Hexachlorobutadiene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Isopropylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
4-Isopropyltoluene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Methylene Chloride	ND	µg/kg	1.6	8	ND	µg/kg	1	5
Naphthalene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
n-propylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Styrene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Tetrachloroethene(PCE)	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Toluene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2,3-Trichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2,4-Trichlorobenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1,1-Trichloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,1,2-Trichloroethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Trichloroethene(TCE)	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Trichlorofluoromethane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2,3-Trichloropropane	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,2,4-Trimethylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
1,3,5-Trimethylbenzene	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Vinyl Chloride	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
Total Xylenes	ND	µg/kg	1.6	3.2	ND	µg/kg	1	2
Ethanol	ND	µg/kg	1.6	400	ND	µg/kg	1	250
MTBE	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
ETBE	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
DIPE	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
TAME	ND	µg/kg	1.6	1.6	ND	µg/kg	1	1
TBA	ND	µg/kg	1.6	80	ND	µg/kg	1	50
MEK	ND	µg/kg	1.6	16	ND	µg/kg	1	10
MIBK	ND	µg/kg	1.6	16	ND	µg/kg	1	10
2-Hexanone	ND	µg/kg	1.6	16	ND	µg/kg	1	10
Acetone	122	µg/kg	1.6	80	ND	µg/kg	1	50

Analysis Date: 03/07/17

03/03/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers	EPA Method: 8260B	Units: µg/kg or ppb	Job No: 703022
Project Site: Laserfiche	Matrix: Soil		
	Sample ID	Sample Date	
Project No. 01217033.00 T2	SB5-15	3/2/2017	
	Sample ID	Sample Date	
	SB6-5	3/2/2017	

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Bromobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Bromochloromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Bromoform	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Bromomethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
n-Butylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
sec-Butylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
tert-Butylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Carbon Tetrachloride	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Chlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Chloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Chloroform	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Chloromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
2-Chlorotoluene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
4-Chlorotoluene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
2-Chloroethyl vinyl ether	ND	µg/kg	1.3	2.6	ND	µg/kg	0.9	1.8
Dibromochloromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,2-Dibromoethane (EDB)	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Dibromomethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,2-Dichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,3-Dichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,4-Dichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Dichlorodifluoromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,1-Dichloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,2-Dichloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,1-Dichloroethene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
cis-1,2 Dichloroethene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Trans-1,2-Dichloroethene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,2-Dichloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,3-Dichloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
2,2-Dichloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,1-Dichloropropene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Cis-1,3-Dichloropropene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
trans-1,3-Dichloropropene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Ethylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Hexachlorobutadiene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Isopropylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
4-Isopropyltoluene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Methylene Chloride	ND	µg/kg	1.3	6.5	ND	µg/kg	0.9	4.5
Naphthalene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
n-propylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Styrene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Tetrachloroethene(PCE)	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Toluene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,2,3-Trichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,2,4-Trichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,1,1-Trichloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,1,2-Trichloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Trichloroethene(TCE)	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Trichlorofluoromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,2,3-Trichloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,2,4-Trimethylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
1,3,5-Trimethylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Vinyl Chloride	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
Total Xylenes	ND	µg/kg	1.3	2.6	ND	µg/kg	0.9	1.8
Ethanol	ND	µg/kg	1.3	325	ND	µg/kg	0.9	225
MTBE	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
ETBE	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
DIPE	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
TAME	ND	µg/kg	1.3	1.3	ND	µg/kg	0.9	0.9
TBA	ND	µg/kg	1.3	65	ND	µg/kg	0.9	45
MEK	ND	µg/kg	1.3	13	15.4	µg/kg	0.9	9
MIBK	ND	µg/kg	1.3	13	ND	µg/kg	0.9	9
2-Hexanone	ND	µg/kg	1.3	13	ND	µg/kg	0.9	9
Acetone	ND	µg/kg	1.3	65	110	µg/kg	0.9	45

Analysis Date: 03/06/17

03/06/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers	EPA Method: 8260B	Units: µg/kg or ppb	Job No: 703022
Project Site: Laserfiche	Matrix: Soil		
Project No. 01217033.00 T2	Sample ID SB6-10	Sample Date 3/2/2017	Sample ID SB6-15
			Sample Date 3/2/2017

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.3	1.3	15.5	µg/kg	1.2	1.2
Bromobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Bromochloromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Bromoform	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Bromomethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
n-Butylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
sec-Butylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
tert-Butylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Carbon Tetrachloride	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Chlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Chloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Chloroform	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Chloromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
2-Chlorotoluene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
4-Chlorotoluene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
2-Chloroethyl vinyl ether	ND	µg/kg	1.3	2.6	ND	µg/kg	1.2	2.4
Dibromochloromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,2-Dibromoethane (EDB)	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Dibromomethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,2-Dichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,3-Dichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,4-Dichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Dichlorodifluoromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,1-Dichloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,2-Dichloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,1-Dichloroethene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
cis-1,2 Dichloroethene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Trans-1,2-Dichloroethene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,2-Dichloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,3-Dichloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
2,2-Dichloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,1-Dichloropropene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Cis-1,3-Dichloropropene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
trans-1,3-Dichloropropene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Ethylbenzene	ND	µg/kg	1.3	1.3	1.48	µg/kg	1.2	1.2
Hexachlorobutadiene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Isopropylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
4-Isopropyltoluene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Methylene Chloride	ND	µg/kg	1.3	6.5	ND	µg/kg	1.2	6
Naphthalene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
n-propylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Styrene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Tetrachloroethene(PCE)	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Toluene	ND	µg/kg	1.3	1.3	1.27	µg/kg	1.2	1.2
1,2,3-Trichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,2,4-Trichlorobenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,1,1-Trichloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,1,2-Trichloroethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Trichloroethene(TCE)	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Trichlorofluoromethane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,2,3-Trichloropropane	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,2,4-Trimethylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
1,3,5-Trimethylbenzene	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Vinyl Chloride	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
Total Xylenes	ND	µg/kg	1.3	2.6	ND	µg/kg	1.2	2.4
Ethanol	ND	µg/kg	1.3	325	ND	µg/kg	1.2	300
MTBE	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
ETBE	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
DIPE	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
TAME	ND	µg/kg	1.3	1.3	ND	µg/kg	1.2	1.2
TBA	ND	µg/kg	1.3	65	ND	µg/kg	1.2	60
MEK	ND	µg/kg	1.3	13	ND	µg/kg	1.2	12
MIBK	ND	µg/kg	1.3	13	ND	µg/kg	1.2	12
2-Hexanone	ND	µg/kg	1.3	13	ND	µg/kg	1.2	12
Acetone	ND	µg/kg	1.3	65	ND	µg/kg	1.2	60

Analysis Date: 03/06/17

03/06/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers		EPA Method: 8260B		Units: µg/kg or ppb		Job No: 703022	
Project Site: Laserfiche		Matrix: Soil					
		Sample ID	Sample Date			Sample ID	Sample Date
Project No. 01217033.00 T2		SB7-5	3/2/2017			SB7-10	3/2/2017

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Bromobenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Bromochloromethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Bromoform	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Bromomethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
n-Butylbenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
sec-Butylbenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
tert-Butylbenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Carbon Tetrachloride	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Chlorobenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Chloroethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Chloroform	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Chloromethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
2-Chlorotoluene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
4-Chlorotoluene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
2-Chloroethyl vinyl ether	ND	µg/kg	1.9	3.8	ND	µg/kg	1.9	3.8
Dibromochloromethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,2-Dibromoethane (EDB)	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Dibromomethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,2-Dichlorobenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,3-Dichlorobenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,4-Dichlorobenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Dichlorodifluoromethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,1-Dichloroethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,2-Dichloroethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,1-Dichloroethene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
cis-1,2 Dichloroethene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Trans-1,2-Dichloroethene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,2-Dichloropropane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,3-Dichloropropane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
2,2-Dichloropropane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,1-Dichloropropene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Cis-1,3-Dichloropropene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
trans-1,3-Dichloropropene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Ethylbenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Hexachlorobutadiene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Isopropylbenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
4-Isopropyltoluene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Methylene Chloride	ND	µg/kg	1.9	9.5	ND	µg/kg	1.9	9.5
Naphthalene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
n-propylbenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Styrene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Tetrachloroethene(PCE)	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Toluene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,2,3-Trichlorobenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,2,4-Trichlorobenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,1,1-Trichloroethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,1,2-Trichloroethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Trichloroethene(TCE)	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Trichlorofluoromethane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,2,3-Trichloropropane	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,2,4-Trimethylbenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
1,3,5-Trimethylbenzene	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Vinyl Chloride	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
Total Xylenes	ND	µg/kg	1.9	3.8	ND	µg/kg	1.9	3.8
Ethanol	ND	µg/kg	1.9	475	ND	µg/kg	1.9	475
MTBE	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
ETBE	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
DIPE	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
TAME	ND	µg/kg	1.9	1.9	ND	µg/kg	1.9	1.9
TBA	ND	µg/kg	1.9	95	ND	µg/kg	1.9	95
MEK	35.9	µg/kg	1.9	19	ND	µg/kg	1.9	19
MIBK	ND	µg/kg	1.9	19	ND	µg/kg	1.9	19
2-Hexanone	ND	µg/kg	1.9	19	ND	µg/kg	1.9	19
Acetone	261	µg/kg	1.9	95	ND	µg/kg	1.9	95

Analysis Date: 03/07/17

03/07/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers	EPA Method: 8260B	Units: µg/kg or ppb	Job No: 703022
Project Site: Laserfiche	Matrix: Soil		
Project No. 01217033.00 T2	Sample ID SB7-15	Sample Date 3/2/2017	

Analyte	Results	Units	DF	DLR
Benzene	7.22	µg/kg	2.2	2.2
Bromobenzene	ND	µg/kg	2.2	2.2
Bromochloromethane	ND	µg/kg	2.2	2.2
Bromoform	ND	µg/kg	2.2	2.2
Bromomethane	ND	µg/kg	2.2	2.2
n-Butylbenzene	ND	µg/kg	2.2	2.2
sec-Butylbenzene	ND	µg/kg	2.2	2.2
tert-Butylbenzene	ND	µg/kg	2.2	2.2
Carbon Tetrachloride	ND	µg/kg	2.2	2.2
Chlorobenzene	ND	µg/kg	2.2	2.2
Chloroethane	ND	µg/kg	2.2	2.2
Chloroform	ND	µg/kg	2.2	2.2
Chloromethane	ND	µg/kg	2.2	2.2
2-Chlorotoluene	ND	µg/kg	2.2	2.2
4-Chlorotoluene	ND	µg/kg	2.2	2.2
2-Chloroethyl vinyl ether	ND	µg/kg	2.2	4.4
Dibromochloromethane	ND	µg/kg	2.2	2.2
1,2-Dibromo-3-chloropropane	ND	µg/kg	2.2	2.2
1,2-Dibromoethane (EDB)	ND	µg/kg	2.2	2.2
Dibromomethane	ND	µg/kg	2.2	2.2
1,2-Dichlorobenzene	ND	µg/kg	2.2	2.2
1,3-Dichlorobenzene	ND	µg/kg	2.2	2.2
1,4-Dichlorobenzene	ND	µg/kg	2.2	2.2
Dichlorodifluoromethane	ND	µg/kg	2.2	2.2
1,1-Dichloroethane	ND	µg/kg	2.2	2.2
1,2-Dichloroethane	ND	µg/kg	2.2	2.2
1,1-Dichloroethene	ND	µg/kg	2.2	2.2
cis-1,2 Dichloroethene	ND	µg/kg	2.2	2.2
Trans-1,2-Dichloroethene	ND	µg/kg	2.2	2.2
1,2-Dichloropropane	ND	µg/kg	2.2	2.2
1,3-Dichloropropane	ND	µg/kg	2.2	2.2
2,2-Dichloropropane	ND	µg/kg	2.2	2.2
1,1-Dichloropropene	ND	µg/kg	2.2	2.2
Cis-1,3-Dichloropropene	ND	µg/kg	2.2	2.2
trans-1,3-Dichloropropene	ND	µg/kg	2.2	2.2
Ethylbenzene	ND	µg/kg	2.2	2.2
Hexachlorobutadiene	ND	µg/kg	2.2	2.2
Isopropylbenzene	ND	µg/kg	2.2	2.2
4-Isopropyltoluene	ND	µg/kg	2.2	2.2
Methylene Chloride	ND	µg/kg	2.2	11
Naphthalene	ND	µg/kg	2.2	2.2
n-propylbenzene	ND	µg/kg	2.2	2.2
Styrene	ND	µg/kg	2.2	2.2
1,1,1,2-Tetrachloroethane	ND	µg/kg	2.2	2.2
1,1,2,2-Tetrachloroethane	ND	µg/kg	2.2	2.2
Tetrachloroethene(PCE)	ND	µg/kg	2.2	2.2
Toluene	ND	µg/kg	2.2	2.2
1,2,3-Trichlorobenzene	ND	µg/kg	2.2	2.2
1,2,4-Trichlorobenzene	ND	µg/kg	2.2	2.2
1,1,1-Trichloroethane	ND	µg/kg	2.2	2.2
1,1,2-Trichloroethane	ND	µg/kg	2.2	2.2
Trichloroethene(TCE)	ND	µg/kg	2.2	2.2
Trichlorofluoromethane	ND	µg/kg	2.2	2.2
1,2,3-Trichloropropane	ND	µg/kg	2.2	2.2
1,2,4-Trimethylbenzene	ND	µg/kg	2.2	2.2
1,3,5-Trimethylbenzene	ND	µg/kg	2.2	2.2
Vinyl Chloride	ND	µg/kg	2.2	2.2
Total Xylenes	ND	µg/kg	2.2	4.4
Ethanol	ND	µg/kg	2.2	550
MTBE	ND	µg/kg	2.2	2.2
ETBE	ND	µg/kg	2.2	2.2
DIPE	ND	µg/kg	2.2	2.2
TAME	ND	µg/kg	2.2	2.2
TBA	ND	µg/kg	2.2	110
MEK	ND	µg/kg	2.2	22
MIBK	ND	µg/kg	2.2	22
2-Hexanone	ND	µg/kg	2.2	22
Acetone	ND	µg/kg	2.2	110

Analysis Date: 03/07/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers
Project Site: Laserfiche
Project No: 01217033.00 T2

EPA Method: 8015M
units: mg/kg or ppm

Job No: 703022
Report Date: 03/07/17
Date of Sample: 03/02/17
Date Received: 03/02/17
Sample Matrix: Soil

Sample ID	UNITS	Gas Range (C4-C12)	DF	DLR	Diesel Range (C13-C22)	DF	DLR	Oil Range (C23-36)	DF	DLR
SB1-5	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB1-10	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB1-15	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB2-5	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB2-10	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB3-5	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB3-10	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB3-15	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB4-5	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB4-10	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB5-5	mg/kg	ND	1	0.2	800	1	5.0	1,300	1	10
SB5-10	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB5-15	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB6-5	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB6-10	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB6-15	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB7-5	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB7-10	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
SB7-15	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10

Method Blank	mg/kg	ND	1	0.2	ND	1	5.0	ND	1	10
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Sample Date: 03/02/17
Analysis Date: 03/03-07/17

03/02/17
03/03/17

03/02/17
03/03/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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Client: SCS Engineers
Project Site: Laserfiche
Project No: 01217033.00 T2

Job No: 703022
Report Date: 03/07/17
Date of Sample: 03/02/17
Date Received: 03/02/17
Sample Matrix: Soil

EPA Method: 6010B Metals Units: ppm or mg/Kg

Client Sample ID:	SB1-1	SB2-1	SB3-1	SB4-1	SB5-1	Detection
Dilution Factor:	1	1	1	1	1	Limit
Analyte	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Antimony	ND	ND	ND	ND	ND	2.0
Arsenic	4.51	2.86	5.28	2.16	3.95	2.0
Barium	76.2	81.2	80.4	63.2	157	1.0
Beryllium	ND	ND	ND	ND	ND	1.0
Cadmium	ND	ND	ND	ND	ND	1.0
Chromium	9.13	9.14	9.45	7.73	12.5	1.0
Cobalt	2.04	4.07	3.71	3.04	4.57	2.0
Copper	11.8	12.1	11.1	14.9	20.8	2.0
Lead	ND	ND	ND	20.7	29.9	2.0
Molybdenum	ND	ND	ND	ND	ND	2.0
Nickel	7.16	7.03	8.10	6.63	14.4	2.0
Selenium	ND	ND	ND	ND	ND	2.0
Silver	ND	ND	ND	ND	ND	1.0
Thallium	ND	ND	ND	ND	ND	2.0
Vanadium	21.0	20.3	20.1	17.6	25.2	2.0
Zinc	23.2	22.7	23.2	98.8	195	5.0

Analysis Date: 3/3/17 3/3/17 3/3/17 3/3/17 3/3/17

EPA Method: 7471A Mercury Units: ppm or mg/Kg

Client Sample ID:	SB1-1	SB2-1	SB3-1	SB4-1	SB5-1	Detection
Dilution Factor:	1	1	1	1	1	Limit
Analyte	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Mercury	ND	ND	ND	ND	ND	0.05

Analysis Date: 3/3/17 3/3/17 3/3/17 3/3/17 3/3/17

ND: Not Detected Below (DF x Detection Limit)

DF: Dilution Factor



Certificate of Analysis

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QC Analysis Date: 03/06/17
QC Lab ID: 703022-3A
Units: ppb

Job No: 703022

QUALITY CONTROL DATA

EPA METHOD: 8260B(VOC's)

ANALYTE	BLANK RESULT	SPIKE CONC.	MS % REC	MSD % REC	% RPD	% RPD ACCEPT LIMITS	% REC ACCEPT LIMITS
1,1-Dichloroethene	ND	25	96.2	98.3	2.2%	30	70-130
Benzene	ND	25	100.9	102.6	1.7%	30	70-130
Trichloroethylene	ND	25	101.6	103.3	1.7%	30	70-130
Toluene	ND	25	116.7	118.4	1.4%	30	70-130
Chlorobenzene	ND	25	113.9	114.8	0.8%	30	70-130

QC Analysis Date: 03/03/17
QC Lab ID: 703022-2A
Units: ppm

QUALITY CONTROL DATA

EPA METHOD: 8015B(TPH Gas Range Organics)

ANALYTE	BLANK RESULT	SPIKE CONC.	MS % REC	MSD % REC	% RPD	% RPD ACCEPT LIMITS	% REC ACCEPT LIMITS
GRO (TPH)	ND	0.5	93.4	94.9	1.6%	30	70-130

QC Analysis Date: 03/03/17
QC Lab ID: 703022-1A
Units: ppm

QUALITY CONTROL DATA

EPA METHOD: 8015B(TPH Diesel Range Organics)

ANALYTE	BLANK RESULT	SPIKE CONC.	MS % REC	MSD % REC	% RPD	% RPD ACCEPT LIMITS	% REC ACCEPT LIMITS
DRO (TPH)	ND	100	85.3	80.5	5.8%	30	70-130



QC Analysis Date: 03/03/17
QC Lab ID: 702073-1A
Units: ppm

Job No: 703022

QUALITY CONTROL DATA (MS/MSD)

EPA METHOD: 6010B

ANALYTE	BLANK RESULT	SPIKE CONC.	MS % REC	MSD % REC	% RPD	% RPD ACCEPT LIMITS	% REC ACCEPT LIMITS
Antimony	ND	1.00	99.0	99.0	0.0%	30	70-130
Arsenic	ND	1.00	95.0	99.0	4.1%	30	70-130
Barium	ND	1.00	97.0	96.0	1.0%	30	70-130
Beryllium	ND	1.00	97.0	99.0	2.0%	30	70-130
Cadmium	ND	1.00	103.0	99.0	4.0%	30	70-130
Chromium	ND	1.00	100.0	102.0	2.0%	30	70-130
Cobalt	ND	1.00	103.0	103.0	0.0%	30	70-130
Copper	ND	1.00	100.0	103.0	3.0%	30	70-130
Lead	ND	1.00	99.0	99.0	0.0%	30	70-130
Molybdenum	ND	1.00	102.0	100.0	2.0%	30	70-130
Nickel	ND	1.00	97.0	96.0	1.0%	30	70-130
Selenium	ND	1.00	97.0	97.0	0.0%	30	70-130
Silver	ND	1.00	101.0	114.0	12.1%	30	70-130
Thallium	ND	1.00	99.0	99.0	0.0%	30	70-130
Vanadium	ND	1.00	103.0	103.0	0.0%	30	70-130
Zinc	ND	1.00	101.0	100.0	1.0%	30	70-130

CUSTOMER INFORMATION								ANALYSIS REQUIRED																		
COMPANY NAME: SCS Engineers.								8015M TPH G or GRO	8015M TPH D or DRO	CARBON CHAIN (B015M)	VOCs (8260 B) FULL	OXYGENATES (8260 B) SHORT	COD / TSS / BOD / TDS	pH, Conductivity, Turbidity	Sulfide, Cyanide, O&G	EPA method CAM 17 Metals 6010/7471										
PROJECT CONTACT: Cindy Hernandez Email: Chernandez@scsengineers.com																										
ADDRESS: 3900 Kirtby Airport Way Suite 100																										
PHONE: (562) 426-9544 FAX:																										
PROJECT INFORMATION																										
PROJECT NAME: Laserfiche - Phase II P.O. No.																										
SITE ADDRESS: 3455-3459 Long Beach Blvd, Long Beach, CA																										
SAMPLED BY: C. Hernandez <input type="checkbox"/> EDF Turn Around Time NORM <input type="checkbox"/> 24 hr <input checked="" type="checkbox"/> 48 hr Other <input type="checkbox"/>																										
SAMPLE ID	DATE	TIME	TYPE *	pH/Time	REMARKS	Preserved	NO. OF CONT																			
1 SB1-1	3/2/17	11:12	SO				1																			
2 SB1-5		11:14				5035	4			X	X															
3 SB1-10		11:17				5035	4			X	X															
4 SB1-15		11:25				5035	4			X	X															
5 SB2-1		10:59					1																			
6 SB2-5		11:02				5035	4			X	X															
7 SB2-10		11:06				5035	4			X	X															
8 SB3-1		8:48					1																			
9 SB3-5		8:52				5035	4			X	X															
10 SB3-10		8:54				5035	4			X	X															
11 SB3-15		9:02				5035	4			X	X															
12 SB4-1		8:35					1																			
13 SB4-5		8:37				5035	4			X	X															
14 SB4-10		8:41				5035	4			X	X															
15 SB5-1		10:33					1																			
16 SB5-5		10:33				5035	4			X	X															
SIGNATURE								PRINT NAME								COMPANY NAME		DATE		TIME						
RELINQUISHED BY: Cindy Hernandez								Cindy Hernandez								scs engineers		3/2/17		15:30						
RECEIVED BY: M								Mortul								Chut		3/2/17		1530						
RELINQUISHED BY: H								mm								chut		3/2/17		430						
RECEIVED FOR LABORATORY BY: 4								m								chemte		3/2/17		430						

NOTE: Samples are discarded 30 days after results are reported unless other arrangements are made.

Distribution : WHITE with report / YELLOW to CHEMTEK / PINK to courier

*Type: SO-Soil GW-Ground Water WW-Waste Water AQ-Aqueous A-Air OT-Other

703022

Job No.: 01217033.00 T2

Page: 2 of 2

[illegible]

NOTE: Samples are discarded 30 days after results are reported unless other arrangements are made.

Distribution : WHITE with report / YELLOW to CHEMTEK / PINK to courier

*Type: so-Soil GW-Ground Water WW-Waste Water AQ-Aqueous A-Air OT-Other



Certificate of Analysis

Page 1

Client: SCS Engineers
3900 Kilroy Airport Way
Long Beach, CA

Project No. 01217033.00 T2
Project Site: Laserfiche
3455-3459 Long Beach Blvd
Long Beach, CA

Job No: 703022A
Report Date: 03/20/17
Date Received: 03/02/17
Number of Samples: 26
Sample Matrix: Soil

Attention:

This is the Certificate of Analysis for the following samples:

SAMPLE IDENTIFICATION	DATE OF SAMPLE	LABORATORY IDENTIFICATION
SB1-1	03/02/17	703022-01A
SB1-5	03/02/17	703022-02A
SB1-10	03/02/17	703022-03A
SB1-15	03/02/17	703022-04A
SB2-1	03/02/17	703022-05A
SB2-5	03/02/17	703022-06A
SB2-10	03/02/17	703022-07A
SB3-1	03/02/17	703022-08A
SB3-5	03/02/17	703022-09A
SB3-10	03/02/17	703022-10A
SB3-15	03/02/17	703022-11A
SB4-1	03/02/17	703022-12A
SB4-5	03/02/17	703022-13A
SB4-10	03/02/17	703022-14A
SB5-1	03/02/17	703022-15A
SB5-5	03/02/17	703022-16A
SB5-10	03/02/17	703022-11A
SB5-15	03/02/17	703022-18A
SB6-5	03/02/17	703022-19A
SB6-10	03/02/17	703022-20A
SB6-15	03/02/17	703022-21A
SB6-20	03/02/17	703022-22A
SB7-5	03/02/17	703022-23A
SB7-10	03/02/17	703022-24A
SB7-15	03/02/17	703022-25A
SB7-20	03/02/17	703022-26A

Reviewed and Approved:

For

Michael C.C. Lu
Laboratory Director



Certificate of Analysis

Page 2

Client: SCS Engineers	EPA Method: 8260B	Units: µg/kg or ppb	Job No: 703022A
Project Site: Laserfiche	Matrix: Soil		
	Sample ID	Sample Date	
Project No. 01217033.00 T2	SB6-20	3/2/2017	
	Sample ID	Sample Date	
	SB7-20	3/2/2017	

Analyte	Results	Units	DF	DLR	Results	Units	DF	DLR
Benzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Bromobenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Bromochloromethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Bromoform	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Bromomethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
n-Butylbenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
sec-Butylbenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
tert-Butylbenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Carbon Tetrachloride	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Chlorobenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Chloroethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Chloroform	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Chloromethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
2-Chlorotoluene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
4-Chlorotoluene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
2-Chloroethyl vinyl ether	ND	µg/kg	1.5	3	ND	µg/kg	1.1	2.2
Dibromochloromethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,2-Dibromo-3-chloropropane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,2-Dibromoethane (EDB)	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Dibromomethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,2-Dichlorobenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,3-Dichlorobenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,4-Dichlorobenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Dichlorodifluoromethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,1-Dichloroethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,2-Dichloroethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,1-Dichloroethene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
cis-1,2 Dichloroethene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Trans-1,2-Dichloroethene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,2-Dichloropropane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,3-Dichloropropane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
2,2-Dichloropropane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,1-Dichloropropene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Cis-1,3-Dichloropropene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
trans-1,3-Dichloropropene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Ethylbenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Hexachlorobutadiene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Isopropylbenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
4-Isopropyltoluene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Methylene Chloride	ND	µg/kg	1.5	7.5	ND	µg/kg	1.1	5.5
Naphthalene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
n-propylbenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Styrene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,1,1,2-Tetrachloroethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,1,2,2-Tetrachloroethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Tetrachloroethene(PCE)	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Toluene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,2,3-Trichlorobenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,2,4-Trichlorobenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,1,1-Trichloroethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,1,2-Trichloroethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Trichloroethene(TCE)	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Trichlorofluoromethane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,2,3-Trichloropropane	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,2,4-Trimethylbenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
1,3,5-Trimethylbenzene	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Vinyl Chloride	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
Total Xylenes	ND	µg/kg	1.5	3	ND	µg/kg	1.1	2.2
Ethanol	ND	µg/kg	1.5	375	ND	µg/kg	1.1	275
MTBE	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
ETBE	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
DIPE	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
TAME	ND	µg/kg	1.5	1.5	ND	µg/kg	1.1	1.1
TBA	ND	µg/kg	1.5	75	ND	µg/kg	1.1	55
MEK	ND	µg/kg	1.5	15	ND	µg/kg	1.1	11
MIBK	ND	µg/kg	1.5	15	ND	µg/kg	1.1	11
2-Hexanone	ND	µg/kg	1.5	15	ND	µg/kg	1.1	11
Acetone	ND	µg/kg	1.5	75	ND	µg/kg	1.1	55

Analysis Date: 03/17/17

03/17/17

ND : Not detected at or above DLR

DLR: Detection Limit for Reporting Purposes



Certificate of Analysis

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QC Analysis Date: 03/17/17

Job No: 703022A

QC Lab ID: LCS,LCSD

Units: ppb

QUALITY CONTROL DATA

EPA METHOD: 8260B(VOC's)

ANALYTE	BLANK RESULT	SPIKE CONC.	MS % REC	MSD % REC	% RPD	% RPD ACCEPT LIMITS	% REC ACCEPT LIMITS
1,1-Dichloroethene	ND	25	77.4	97.9	23.4%	30	70-130
Benzene	ND	25	77.9	91.8	16.4%	30	70-130
Trichloroethylene	ND	25	71.4	88.9	21.8%	30	70-130
Toluene	ND	25	79.3	93.2	16.1%	30	70-130
Chlorobenzene	ND	25	84.1	92.3	9.3%	30	70-130

APPENDIX E
H&P LABORATORY REPORT

09 March 2017

Ms. Ashley Hutchens
SCS Engineers - Long Beach
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806-6816



H&P Project: SCS030217-L6
Client Project: 01217033.00 Task 2/ N Long Beach Blvd

Dear Ms. Ashley Hutchens:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 02-Mar-17 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,



Janis La Roux
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP, the National Environmental Laboratory Accreditation Conference (NELAC) and the Department of Defense Accreditation Programs.

SCS Engineers - Long Beach
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806-6816

Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV6-5	E703009-01	Vapor	02-Mar-17	02-Mar-17
SV7-5	E703009-02	Vapor	02-Mar-17	02-Mar-17
SV2-5	E703009-03	Vapor	02-Mar-17	02-Mar-17
SV1-5	E703009-04	Vapor	02-Mar-17	02-Mar-17
SV4-5	E703009-05	Vapor	02-Mar-17	02-Mar-17
SV4-5 REP	E703009-06	Vapor	02-Mar-17	02-Mar-17
SV3-5	E703009-07	Vapor	02-Mar-17	02-Mar-17
SV5-5	E703009-08	Vapor	02-Mar-17	02-Mar-17

SCS Engineers - Long Beach
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806-6816

Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

DETECTIONS SUMMARY

Sample ID: **SV6-5**

Laboratory ID: **E703009-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
No Detections Reported					

Sample ID: **SV7-5**

Laboratory ID: **E703009-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	23	0.80	ug/l	H&P 8260SV	
Tetrachloroethene	0.14	0.08	ug/l	H&P 8260SV	

Sample ID: **SV2-5**

Laboratory ID: **E703009-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	65	0.80	ug/l	H&P 8260SV	
m,p-Xylene	0.74	0.40	ug/l	H&P 8260SV	

Sample ID: **SV1-5**

Laboratory ID: **E703009-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Toluene	7.4	0.80	ug/l	H&P 8260SV	

Sample ID: **SV4-5**

Laboratory ID: **E703009-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
No Detections Reported					

Sample ID: **SV4-5 REP**

Laboratory ID: **E703009-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
No Detections Reported					

Sample ID: **SV3-5**

Laboratory ID: **E703009-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
No Detections Reported					

Sample ID: **SV5-5**

Laboratory ID: **E703009-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
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Reported:
09-Mar-17 09:18

Laboratory ID: **E703009-08**

Notes

No Detections Reported

SCS Engineers - Long Beach
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Long Beach, CA 90806-6816

Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Soil Gas and Vapor Analysis
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV6-5 (E703009-01) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
Methane	ND	10	ppmv	1	EC70210	02-Mar-17	02-Mar-17	EPA 8015M	
SV7-5 (E703009-02) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
Methane	ND	10	ppmv	1	EC70210	02-Mar-17	02-Mar-17	EPA 8015M	
SV2-5 (E703009-03) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
Methane	ND	10	ppmv	1	EC70210	02-Mar-17	02-Mar-17	EPA 8015M	
SV1-5 (E703009-04) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
Methane	ND	10	ppmv	1	EC70210	02-Mar-17	02-Mar-17	EPA 8015M	
SV4-5 (E703009-05) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
Methane	ND	10	ppmv	1	EC70210	02-Mar-17	02-Mar-17	EPA 8015M	
SV4-5 REP (E703009-06) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
Methane	ND	10	ppmv	1	EC70210	02-Mar-17	02-Mar-17	EPA 8015M	
SV3-5 (E703009-07) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
Methane	ND	10	ppmv	1	EC70210	02-Mar-17	02-Mar-17	EPA 8015M	
SV5-5 (E703009-08) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
Methane	ND	10	ppmv	1	EC70210	02-Mar-17	02-Mar-17	EPA 8015M	

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Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV6-5 (E703009-01) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
1,1,1,2-Tetrafluoroethane (LCC)	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	ND	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV6-5 (E703009-01) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
o-Xylene	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		111 %	75-125		"	"	"	"	
Surrogate: Toluene-d8		100 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.5 %	75-125		"	"	"	"	

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Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV7-5 (E703009-02) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
1,1,1,2-Tetrafluoroethane (LCC)	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	23	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	0.14	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV7-5 (E703009-02) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
o-Xylene	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		108 %	75-125		"	"	"	"	
Surrogate: Toluene-d8		103 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	75-125		"	"	"	"	

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Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV2-5 (E703009-03) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
1,1,1,2-Tetrafluoroethane (LCC)	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	65	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	ND	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	0.74	0.40	"	"	"	"	"	"	

SCS Engineers - Long Beach
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Long Beach, CA 90806-6816

Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV2-5 (E703009-03) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
o-Xylene	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		102 %	75-125		"	"	"	"	
Surrogate: Toluene-d8		108 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.1 %	75-125		"	"	"	"	

SCS Engineers - Long Beach
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Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV1-5 (E703009-04) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
1,1,1,2-Tetrafluoroethane (LCC)	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	7.4	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	ND	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

SCS Engineers - Long Beach
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Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV1-5 (E703009-04) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
o-Xylene	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
<hr/>									
Surrogate: Dibromofluoromethane		113 %	75-125		"	"	"	"	
Surrogate: Toluene-d8		103 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.1 %	75-125		"	"	"	"	

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Project: SCS030217-L6
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Project Manager: Ms. Ashley Hutchens

Reported:
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Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV4-5 (E703009-05) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
1,1,1,2-Tetrafluoroethane (LCC)	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	ND	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Project: SCS030217-L6
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Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV4-5 (E703009-05) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
o-Xylene	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		114 %	75-125		"	"	"	"	
Surrogate: Toluene-d8		102 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.3 %	75-125		"	"	"	"	

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Project: SCS030217-L6
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Project Manager: Ms. Ashley Hutchens

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Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV4-5 REP (E703009-06) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
1,1,1,2-Tetrafluoroethane (LCC)	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	ND	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV4-5 REP (E703009-06) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
o-Xylene	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		115 %	75-125		"	"	"	"	
Surrogate: Toluene-d8		103 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.2 %	75-125		"	"	"	"	

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Project Manager: Ms. Ashley Hutchens

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Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV3-5 (E703009-07) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
1,1,1,2-Tetrafluoroethane (LCC)	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	ND	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Long Beach, CA 90806-6816

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Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV3-5 (E703009-07) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
o-Xylene	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		116 %	75-125		"	"	"	"	
Surrogate: Toluene-d8		102 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		87.1 %	75-125		"	"	"	"	

SCS Engineers - Long Beach
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806-6816

Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV5-5 (E703009-08) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
1,1,1,2-Tetrafluoroethane (LCC)	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	ND	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

SCS Engineers - Long Beach
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806-6816

Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV5-5 (E703009-08) Vapor Sampled: 02-Mar-17 Received: 02-Mar-17									
o-Xylene	ND	0.40	ug/l	0.04	EC70209	02-Mar-17	02-Mar-17	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		113 %	75-125		"	"	"	"	
Surrogate: Toluene-d8		103 %	75-125		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.2 %	75-125		"	"	"	"	

SCS Engineers - Long Beach 3900 Kilroy Airport Way, Suite 100 Long Beach, CA 90806-6816	Project: SCS030217-L6 Project Number: 01217033.00 Task 2/ N Long Beach Blvd Project Manager: Ms. Ashley Hutchens	Reported: 09-Mar-17 09:18
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Soil Gas and Vapor Analysis - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EC70210 - GC

Blank (EC70210-BLK1)	Prepared & Analyzed: 02-Mar-17									
Methane	ND	10	ppmv							

SCS Engineers - Long Beach
3900 Kilroy Airport Way, Suite 100
Long Beach, CA 90806-6816

Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EC70209 - EPA 5030

Blank (EC70209-BLK1)

Prepared & Analyzed: 02-Mar-17

1,1,1,2-Tetrafluoroethane (LCC)	ND	0.40	ug/l
Dichlorodifluoromethane (F12)	ND	0.40	"
Chloromethane	ND	0.40	"
Vinyl chloride	ND	0.04	"
Bromomethane	ND	0.40	"
Chloroethane	ND	0.40	"
Trichlorofluoromethane (F11)	ND	0.40	"
1,1-Dichloroethene	ND	0.40	"
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"
Methylene chloride (Dichloromethane)	ND	0.40	"
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"
trans-1,2-Dichloroethene	ND	0.40	"
1,1-Dichloroethane	ND	0.40	"
2,2-Dichloropropane	ND	0.40	"
cis-1,2-Dichloroethene	ND	0.40	"
Chloroform	ND	0.08	"
Bromochloromethane	ND	0.40	"
1,1,1-Trichloroethane	ND	0.40	"
1,1-Dichloropropene	ND	0.40	"
Carbon tetrachloride	ND	0.08	"
1,2-Dichloroethane (EDC)	ND	0.08	"
Benzene	ND	0.08	"
Trichloroethene	ND	0.08	"
1,2-Dichloropropane	ND	0.40	"
Bromodichloromethane	ND	0.40	"
Dibromomethane	ND	0.40	"
cis-1,3-Dichloropropene	ND	0.40	"
Toluene	ND	0.80	"
trans-1,3-Dichloropropene	ND	0.40	"
1,1,2-Trichloroethane	ND	0.40	"
1,2-Dibromoethane (EDB)	ND	0.40	"
1,3-Dichloropropane	ND	0.40	"
Tetrachloroethene	ND	0.08	"
Dibromochloromethane	ND	0.40	"

SCS Engineers - Long Beach
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Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EC70209 - EPA 5030

Blank (EC70209-BLK1)

Prepared & Analyzed: 02-Mar-17

Chlorobenzene	ND	0.08	ug/l
Ethylbenzene	ND	0.40	"
1,1,1,2-Tetrachloroethane	ND	0.40	"
m,p-Xylene	ND	0.40	"
o-Xylene	ND	0.40	"
Styrene	ND	0.40	"
Bromoform	ND	0.40	"
Isopropylbenzene (Cumene)	ND	0.40	"
1,1,2,2-Tetrachloroethane	ND	0.40	"
1,2,3-Trichloropropane	ND	0.40	"
n-Propylbenzene	ND	0.40	"
Bromobenzene	ND	0.40	"
1,3,5-Trimethylbenzene	ND	0.40	"
2-Chlorotoluene	ND	0.40	"
4-Chlorotoluene	ND	0.40	"
tert-Butylbenzene	ND	0.40	"
1,2,4-Trimethylbenzene	ND	0.40	"
sec-Butylbenzene	ND	0.40	"
p-Isopropyltoluene	ND	0.40	"
1,3-Dichlorobenzene	ND	0.40	"
1,4-Dichlorobenzene	ND	0.40	"
n-Butylbenzene	ND	0.40	"
1,2-Dichlorobenzene	ND	0.40	"
1,2-Dibromo-3-chloropropane	ND	4.0	"
1,2,4-Trichlorobenzene	ND	0.40	"
Hexachlorobutadiene	ND	0.40	"
Naphthalene	ND	0.08	"
1,2,3-Trichlorobenzene	ND	0.40	"

Surrogate: Dibromofluoromethane	2.26	"	2.00	113	75-125
Surrogate: Toluene-d8	2.01	"	2.00	101	75-125
Surrogate: 4-Bromofluorobenzene	1.76	"	2.00	87.9	75-125

SCS Engineers - Long Beach
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Long Beach, CA 90806-6816

Project: SCS030217-L6
Project Number: 01217033.00 Task 2/ N Long Beach Blvd
Project Manager: Ms. Ashley Hutchens

Reported:
09-Mar-17 09:18

Volatile Organic Compounds by H&P 8260SV - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EC70209 - EPA 5030

LCS (EC70209-BS1)

Prepared & Analyzed: 02-Mar-17

Dichlorodifluoromethane (F12)	3.4	0.50	ug/l	5.00		67.2	70-130			QL-1L
Vinyl chloride	5.3	0.05	"	5.00		105	70-130			
Chloroethane	5.1	0.50	"	5.00		102	70-130			
Trichlorofluoromethane (F11)	6.1	0.50	"	5.00		122	70-130			
1,1-Dichloroethene	3.8	0.50	"	5.00		75.7	70-130			
1,1,2 Trichlorotrifluoroethane (F113)	4.2	0.50	"	5.00		85.0	70-130			
Methylene chloride (Dichloromethane)	6.0	0.50	"	5.00		120	70-130			
trans-1,2-Dichloroethene	5.6	0.50	"	5.00		113	70-130			
1,1-Dichloroethane	5.6	0.50	"	5.00		112	70-130			
cis-1,2-Dichloroethene	5.8	0.50	"	5.00		115	70-130			
Chloroform	5.7	0.10	"	5.00		115	70-130			
1,1,1-Trichloroethane	5.4	0.50	"	5.00		107	70-130			
Carbon tetrachloride	5.6	0.10	"	5.00		111	70-130			
1,2-Dichloroethane (EDC)	6.3	0.10	"	5.00		126	70-130			
Benzene	5.2	0.10	"	5.00		104	70-130			
Trichloroethene	5.7	0.10	"	5.00		113	70-130			
Toluene	5.7	1.0	"	5.00		114	70-130			
1,1,2-Trichloroethane	6.8	0.50	"	5.00		135	70-130			QL-1H
Tetrachloroethene	5.0	0.10	"	5.00		101	70-130			
Ethylbenzene	5.0	0.50	"	5.00		99.0	70-130			
1,1,1,2-Tetrachloroethane	5.6	0.50	"	5.00		111	70-130			
m,p-Xylene	10	0.50	"	10.0		104	70-130			
o-Xylene	4.9	0.50	"	5.00		98.1	70-130			
1,1,2,2-Tetrachloroethane	6.4	0.50	"	5.00		128	70-130			

Surrogate: Dibromofluoromethane	2.74		"	2.50		110	75-125			
Surrogate: 1,2-Dichloroethane-d4	3.01		"	2.50		121	75-125			
Surrogate: Toluene-d8	2.69		"	2.50		108	75-125			
Surrogate: 4-Bromofluorobenzene	2.36		"	2.50		94.5	75-125			

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Project: SCS030217-L6
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Reported:
09-Mar-17 09:18

Notes and Definitions

QL-1L	The LCS and/or LCSD recoveries fell below the established control specifications for this analyte. Any result for this compound is qualified and should be considered biased low.
QL-1H	The LCS and/or LCSD recoveries fell above the established control specifications for this analyte. Any result for this compound is qualified and should be considered biased high.
LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP and the ISO 17025 programs, certification number L15-279-R1

H&P is approved by the State of Arizona as an Environmental Testing Laboratory and Mobile Laboratory, certification numbers AZM758 and AZ0779.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification numbers 2740, 2741, 2743, 2744, 2745, 2754 & 2930.

H&P is approved by the State of Florida Department of Health under the National Environmental Laboratory Accreditation Conference (NELAC) certification number E871100.

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.



2470 Impala Drive, Carlsbad, CA 92010
 & Field Office - Signal Hill, CA
 W handpmsg.com E info@handpmsg.com
 P 760.804.9678 F 760.804.9159

DATE: 3/2/17

Page 1 of 1

Sample Receipt (Lab Use Only)	
Date Rec'd: 3/2/17	Control #: 170199.00
H&P Project #: SC5030217-L6	
Lab Work Order #: E703009	
Sample Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID:	Temp:
Outside Lab:	
Receipt Notes/Tracking #:	
<div style="text-align: right;">Lab PM Initials:</div>	

Additional Instructions to Laboratory:																					
* Preferred VOC units (please choose one):																					
<input checked="" type="checkbox"/> µg/L <input type="checkbox"/> µg/m ³ <input type="checkbox"/> ppbv <input type="checkbox"/> ppmv																					
SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List <input checked="" type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	VOCs Short List / Project List <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Oxygenates <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Naphthalene <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	TPHv as Gas <input type="checkbox"/> 8260SVm <input type="checkbox"/> TO-15m	Aromatic/Aliphatic Fractions <input type="checkbox"/> 8260SVm <input type="checkbox"/> TO-15m	Leak Check Compound <input type="checkbox"/> DFA <input type="checkbox"/> IPA <input type="checkbox"/> He <input type="checkbox"/> H ₂	Methane by EPA 8015m	Fixed Gases by ASTM D1945 <input type="checkbox"/> CO ₂ <input type="checkbox"/> O ₂ <input type="checkbox"/> N ₂					
SVG-5		3/2/17	8:22	SV	6/400 S.			X						X	X						
SV7-5			8:50					X						X	X						
SV2-5			9:19					X						X	X						
SV1-5			10:03					X						X	X						
SV4-5			10:26					X						X	X						
SV4-5 REP			10:27					X						X	X						
SV3-5			11:11					X						X	X						
SV5-5			11:27					X						X	X						
Approved/Relinquished by: <i>Carol A. [Signature]</i>				Company: SCS Engineers		Date: 3/2/17		Time: 11:50		Received by: <i>Chen [Signature]</i>				Company: H-70		Date: 3/2/17		Time:			
Approved/Relinquished by:				Company:		Date:		Time:		Received by:				Company:		Date:		Time:			
Approved/Relinquished by:				Company:		Date:		Time:		Received by:				Company:		Date:		Time:			

Log Sheet: Soil Vapor Sampling with Syringe

H&P Project #: SCS030217-L6

Date: 3/2/17

Site Address: 3455-3459 N. Long Beach Blvd

Page: 1 of 1

Consultant: SCS Engineers

H&P Rep(s): Tam Andrew Mike

Reviewed: DB

Consultant Rep(s): Cindy

Scanned: DB

Equipment Info

Inline Gauge ID#: T37

Pump ID#:

Purge Volume Information

PV Amount: 3PV PV Includes: ☒ Tubing

☒ Sand 40%

☒ Dry Bent 50%

Leak Check Compound

☐ 1,1-DFA

☒ 1,1,1,2-TFA

☐ IPA

☐ Other:

A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.

Sample Information				Probe Specs							Purge & Collection Information						
Point ID	Syringe ID	Sample Volume (cc)	Sample Time	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac <input checked="" type="checkbox"/> Hg <input type="checkbox"/> H ₂ O
1 <u>SV6-S</u>	<u>214</u>	<u>50</u>	<u>8:22</u>	<u>5</u>	<u>7</u>	<u>1/8</u>	<u>12</u>	<u>1.5</u>	<u>6</u>	<u>1.5</u>	<u>-</u>	<u>-</u>	<u>697</u>	<u>620</u>	<u>-</u>	<u>620</u>	<u>0</u>
2 <u>SV7-S</u>	<u>109</u>	<u>50</u>	<u>8:50</u>	<u>5</u>	<u>7</u>						<u>-</u>	<u>-</u>	<u>697</u>		<u>-</u>		<u>0</u>
3 <u>SV2-S</u>	<u>226</u>	<u>50</u>	<u>9:19</u>	<u>5</u>	<u>7</u>						<u>-</u>	<u>-</u>	<u>697</u>		<u>-</u>		<u>0</u>
4 <u>SV1-S</u>	<u>150</u>	<u>50</u>	<u>10:03</u>	<u>5</u>	<u>7</u>						<u>-</u>	<u>-</u>	<u>697</u>		<u>-</u>		<u>0</u>
5 <u>SV4-S</u>	<u>247</u>	<u>50</u>	<u>10:20</u>	<u>5</u>	<u>7</u>						<u>-</u>	<u>-</u>	<u>697</u>		<u>-</u>		<u>0</u>
6 <u>SV4-S REP</u>	<u>249</u>	<u>50</u>	<u>10:27</u>	<u>5</u>	<u>7</u>						<u>-</u>	<u>-</u>	<u>747</u>		<u>-</u>		<u>0</u>
7 <u>SV3-S</u>	<u>179</u>	<u>50</u>	<u>11:11</u>	<u>5</u>	<u>7</u>						<u>-</u>	<u>-</u>	<u>697</u>		<u>-</u>		<u>0</u>
8 <u>SV5-S</u>	<u>232</u>	<u>50</u>	<u>11:27</u>	<u>5</u>	<u>7</u>						<u>-</u>	<u>-</u>	<u>697</u>		<u>-</u>		<u>0</u>
9																	
10																	
11																	
12																	

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):