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November 29, 2017

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ADDITIONAL ASSESSMENT ACTIVITIES

Property Identification:

401 Jackson Street,
Oakland, California 94607

Case No. RO0003262
AEI Project No. 372927

Prepared for:

Amaro Poultry Co, Inc
5134 Willowview Court,
Pleasanton, California 94588

Prepared by:

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November 29, 2017

Mr. Khatri Paresh
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Subject: Transmittal – Additional Assessment Report
401 Jackson Street, Oakland, California
Case No. RO0003262

Dear Mr. Paresh:

Please find enclosed the Additional Assessment Report prepared for the property located at 401 Jackson Street in Oakland, California. The report describes the activities and results of the additional subsurface investigation performed at the property, which was completed in general accordance with the Work Plan, additional Assessment dated October 30, 2017, approved by the Alameda County Department of Environmental Health (ACDEH) in their letter dated November 7, 2017. Per the ACDEH requirements, I am providing the following Acknowledgement Statement:

“I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH’s FTP server and the SWRCB’s GeoTracker website.”

If you have any questions or need additional information, please do not hesitate to call Mr. Trent Weise with AEI Consultants at (408) 559-7600.

Sincerely,



Ms. Ruth Amaro

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November 29, 2017

Mr. Khatri Paresh
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502

Subject: Additional Assessment Activities
401 Jackson Street, Oakland, California 94607
Case No. RO0003262
AEI Project No. 372927

Dear Mr. Paresh:

On behalf of Amaro Poultry Co, Inc., AEI Consultants (AEI) is pleased to provide this report which describes the activities and results of the additional subsurface investigation performed at 401 Jackson Street in Oakland, California ("the Site"). This assessment was completed in general accordance with the *Work Plan, Additional Assessment* dated October 30, 2017 which was approved by the Alameda County Department of Environmental Health (ACDEH) in their letter dated November 7, 2017.

1.0 SITE DESCRIPTION

The Site is located on the northwest corner of Fourth Street and Jackson Street in a mixed use commercial and residential area of Oakland, California. The Site consists of a one-story warehouse building and an asphalt paved parking area fronting Fourth Street. The interior of the warehouse is covered by concrete. The Site is currently vacant but was most recently occupied by Del Monte Meats, a meat distribution and storage facility. The Site location and vicinity are shown on Figure 1. Figure 2 presents the Site Plan. Available blueprints for the on-site building are provided in Appendix A.

The Site is relatively flat at an elevation of about 18 feet above mean sea level. The regional topographic gradient direction slopes south/southwest toward the Oakland Estuary and, therefore, the direction of groundwater flow beneath the Site is inferred to be to the south/southwest.

According to information obtained from the USGS, the area surrounding the Site is underlain by artificial fill deposits of the modern era. Based on a review of the USDA Soil Survey for the area of the subject property, the soils in the vicinity of the subject property are classified as the Urban land-Baywood complex series. Soils from this series are characterized as loamy sand. Refer to Section 4.1 below for additional information on the Site geology and groundwater conditions.

2.0 BACKGROUND

A *Phase I Environmental Site Assessment* (ESA) was performed by AEI as detailed in a report dated June 13, 2017. Per the Phase I ESA, a gasoline underground storage tank (UST) was reportedly installed near the southwest corner of the on-site building sometime in the 1960s and abandoned and filled in with concrete sometime in the 1980s. No further information concerning the UST was available and, as such, the former UST was considered a Recognized Environmental Concern (REC).

Due to the identified REC, AEI conducted an investigation at the Site on July 7, 2017, as detailed in AEI's *Limited Phase II Subsurface Investigation Report* dated July 14, 2017. Soil and groundwater samples collected and analyzed during the investigation detected petroleum hydrocarbons at concentrations that warranted further characterization. AEI conducted an additional investigation on August 1 and August 3, 2017, the results of which are presented in the *Additional Subsurface Investigation Report* by AEI and dated August 16, 2017. The scope of these two subsurface investigations included a geophysical survey, advancing a total of eight soil borings, and collecting and analyzing eight soil samples and six groundwater samples. A summary of the investigation findings is as follows:

- The geophysical survey did not identify the presence of the former gasoline UST that was reportedly filled in-place.
- Total petroleum hydrocarbons as gasoline (TPH-g) and total petroleum hydrocarbons as diesel (TPH-d) were not detected in the eight soil samples collected and analyzed.
- Total petroleum hydrocarbons as motor oil (TPH-mo) was detected in three of the eight soil samples collected and analyzed, observed at a maximum concentration of 12 milligrams per kilogram (mg/kg).
- One of the five groundwater samples collected and analyzed, sample SB-4, yielded TPH-g, benzene, and methyl tert butyl ether (MTBE) at concentrations of 3,800, 21, and 16 micrograms per liter ($\mu\text{g/L}$), respectively. The groundwater sample collected from soil boring SB-8 yielded MTBE at a concentration of 1.8 $\mu\text{g/L}$. The groundwater samples collected from the remaining soil borings did not yield TPH-g nor benzene at concentrations at or above their respective laboratory method detection limits.
- Five of the six groundwater samples collected and analyzed yielded elevated concentrations of TPH-d and TPH-mo, observed at maximum concentrations of 3,400 and 45,000 $\mu\text{g/L}$, respectively, in the sample collected from soil boring SB-7. The detections of TPH-d and TPH-mo are not consistent with the noted former gasoline UST at the Site.
- The samples collected from the Site between the two investigations did not identify a source of the TPH-d and TPH-mo observed in groundwater nor did the Phase I ESA performed identify a suspected source.

3.0 INVESTIGATION EFFORTS

The previous investigation data summarized above was provided to the ACDEH to perform a Preliminary Site Review, and the review was discussed in an in-person meeting at the ACDEH offices on September 21, 2017. In the meeting, it was discussed that additional characterization would be required by the ACDEH, including:



- Collecting soil vapor samples to characterize whether the residual petroleum hydrocarbons identified in soil and groundwater beneath the Site represented an unacceptable risk to indoor air quality;
- Further characterization of the nature and extent of TPH-mo in groundwater beneath the Site, and to identify whether a historical heating oil tank remained present at the Site; and
- Providing an addendum to the Phase I Environmental Site Assessment prepared for the Site specifically addressing potential for releases to the floor drains and the location of the refrigerant recirculation lines.

The additional assessment activities, as discussed below, were conducted to address the first two items. An addendum to the Phase I ESA will be submitted to the ACDEH under separate cover. The additional assessment was completed in general accordance with the *Work Plan, Additional Assessment* dated October 30, 2017 which was approved by the ACDEH in their letter dated November 7, 2017.

3.1 Health and Safety Plan

The Site-specific health and safety plan was updated for this additional scope of work, reviewed by on-site personnel, and kept on-site for the duration of the fieldwork.

3.2 Permitting and Utility Clearance

Drilling permits were obtained from Alameda County Public Works for this investigation (Appendix B). The public underground utility locating service USA North 811 was notified to identify public utilities in the work area. Private utility locating was conducted by GPRS of San Francisco, California to identify underground utilities on the subject property.

3.3 Geophysical Survey

On November 9, 2017, a geophysical survey was conducted by GPRS (Appendix C). The purpose of the survey was to evaluate the potential presence of a potential former heating oil UST on the southeast portion of the property. The geophysical survey was conducted using ground penetrating radar (GPR). The results from the geophysical survey did not detect the presence of the suspected historical heating oil UST in the locations where the GPR was performed.

3.4 Drilling and Soil Sample Collection

On November 9, 2017, four soil borings (SB-9 through SB-12) were advanced at the Site, at the locations shown on Figure 2. The locations of the soil borings were selected to further characterize the extent of TPH-mo beneath the Site, primarily between previous soil borings SB-7 and SB-8. AEI contracted Environmental Control Associates of Aptos, California to advance each of the soil borings. Each soil boring was advanced using a direct push rig to a depth of 15-feet below ground surface (bgs).

The soil borings were advanced using 2.25-inch outer diameter rods, and samples were collected by advancing the rods with acetate sample liners in approximately 4 to 5-foot intervals depending on the rig being used (truck rig for exterior borings SB-9 and SB-10, and track rig for interior borings SB-11 and SB-12). After each interval, the core was retrieved, core barrel disassembled, and the sample liner was removed and transferred to AEI's on-site field geologist.

The soil borings were logged using the Unified Soil Classification System. A photo ionization detector (PID) was used to screen soil samples in the field and the PID readings for each sample were included on the boring logs. Completed soil boring logs are included in Appendix D. Selected soil samples were sealed with Teflon tape and plastic end caps, appropriately labeled, placed into a cooler with ice, and entered onto a chain of custody for delivery to the laboratory.

Down-hole equipment was decontaminated using a triple rinse system containing detergent.

3.5 Groundwater Sample Collection

On November 9, 2017, groundwater samples were collected from the soil borings. Groundwater was collected from each of the soil borings using temporary PVC casing inserted into the borehole and collected using a peristaltic pump. Groundwater samples were collected directly into laboratory-supplied glassware, sealed, appropriately labeled, placed into a cooler with ice, and entered onto a chain of custody for delivery to the laboratory.

Down-hole equipment was decontaminated using a triple rinse system containing detergent.

3.6 Sub-Slab Soil Vapor Drilling and Sample Collection

On November 9, 2017, three temporary sub-slab soil vapor probes (SV-1, SV-2, and SV-3) were installed at the Site. The locations shown on Figure 2. Locations SV-1 and SV-2 were selected to be near the former gasoline UST to observed whether chemicals are present in soil gas from the gasoline UST. The third location, SV-3, was selected to assess whether there was a potential unknown release to the sanitary sewer lines at the Site. Each sub-slab soil vapor sample was collected in general conformance with the *Advisory – Active Soil Gas Investigation* by the California Department of Toxic Substances Control (DTSC) and Los Angeles and San Francisco Regional Water Quality Control Boards and dated July 2015.

A rotary hammer drill was used to drill through the concrete floor slab of the building, creating an approximately one-inch diameter hole. A temporary vapor probe consisting of 0.25-inch diameter Teflon™ tubing capped with a screen-lined point was inserted into the newly created hole, terminating just beneath the concrete. Upon installation, sand was poured around each probe tip. The annular space surrounding the tubing was then sealed with hydrated bentonite.

After waiting the *Advisory*-recommended equilibration time of a minimum of two-hours, soil vapor samples were collected. Prior to collecting the samples, a shut-in test was performed by placing a vacuum on the above-grade sampling train and vacuum canisters. The vacuum was observed for approximately six minutes and verified to not change. A helium atmosphere within a shroud covering the sampling apparatus was used as a leak-check compound. Prior to sampling, and following purging of the sampling lines, the purge valve was closed and the initial vacuum of the laboratory-supplied, batch certified clean, one-liter vacuum canister was recorded. The soil vapor samples were collected through laboratory-supplied, batch certified clean regulators at approximately 150-milliliters per minute. After approximately five minutes (depending on the down-hole vacuum), or -5 inches of mercury (in Hg) vacuum in the canister, each canister was closed and removed from the sampling line and the final canister vacuum recorded. The vacuum canister samples were sealed with a gas tight cap, appropriately labeled, and entered onto a chain of custody manifest for delivery to the laboratory.



3.7 Boring Destruction

Following completion of sample collection and removal of tooling and/or probe tubing, the borings were backfilled with neat cement grout as required by the permitting agency and completed at the surface with concrete to match the surrounding conditions.

3.8 Laboratory Analyses

The soil and groundwater samples collected were delivered to McCampbell Analytical Inc. of Pittsburgh, California, and the sub-slab soil vapor samples were sent to ESC Lab Sciences of Mt Juliet, Tennessee. Copies of the laboratory analytical documentation are provided in Appendix E.

Laboratory analysis of four soil samples consisted of the following:

- Volatile Organic Compounds (VOCs) using US EPA Testing Method 8260; and
- Total Petroleum Hydrocarbons (TPH) multirange using US EPA Testing Method 8015M.

Laboratory analysis of two groundwater samples consisted of the following:

- VOCs using US EPA Testing Method 8260; and
- TPH multirange using US EPA Testing Method 8015M.

Laboratory analysis of three sub-slab soil vapor samples consisted of the following:

- Low fraction TPH and VOCs using EPA Testing Method TO-15; and
- Helium using ASTM D 1946.

4.0 FINDINGS

4.1 Geology and Hydrogeology

The subsurface conditions encountered during the assessment were generally consistent with the previous investigations. Sediment encountered in each of the borings generally consisted of fine to medium sands with some fine-grained materials (e.g., silts and clays). Depth to groundwater ranged from approximately 7.63 to 8.35 feet bgs in the soil borings. Groundwater slowly entered the borings over time. The boring logs are provided in Appendix E.

4.2 Soil Sample Analytical Results

Table 1 presents a summary of the soil sample analytical results from the assessment activities as well as the previous investigations for reference. The soil samples with the highest PID reading was analyzed from each of the four soil borings advanced. The results can be summarized as follows:

- TPH-d and TPH-mo were detected in sample SB-10-2.5 at concentrations of 2.2 mg/kg and 25 mg/kg, respectively.
- TPH-g nor VOCs were detected in the soil samples collected and analyzed as part of this investigation.

4.3 Groundwater Sample Analytical Results

Table 2 presents a summary of the groundwater sample analytical results from the assessment activities as well as the previous investigations for reference. Figure 3 presents the posted groundwater sample results for select compounds. The results can be summarized as follows:

- TPH-d was observed in three of the four groundwater samples collected, observed at concentrations of 400, 260, and 290 µg/L, in samples SB-9, SB-10, and SB-12, respectively.
- TPH-mo was observed in three of the four groundwater samples collected, observed at concentrations of 5,200, 2,900, and 2,900 µg/L, in samples SB-9, SB-10, and SB-12, respectively.
- Chloroform was observed in the groundwater samples collected from SB-10 and SB-12, at concentrations of 2.5 and 3.6 µg/L, respectively.
- Xylenes were observed in the groundwater sample collected from SB-12, at a concentration of 0.80 µg/L.
- MTBE was observed in the groundwater sample collected from SB-11, at a concentration of 0.64 µg/L.
- 4-Methyl-2-Pentanone was observed in the groundwater sample collected from SB-12, at a concentration of 0.93 µg/L.
- TPH-g nor other VOCs were detected in the groundwater samples collected and analyzed as part of this investigation.

4.4 Sub-slab Soil Vapor Analytical Results

Table 3 presents a summary of the sub-slab soil vapor sample analytical results. The results can be summarized as follows:

- TPH in the low fraction range was observed in the sub-slab soil vapor sample SV-3 at a concentration of 457 micrograms per cubic meter (µg/m³).
- Benzene was detected in one of the three sub-slab soil vapor samples, observed in sample SV-3 at a concentration of 2.13 µg/m³.
- Ethylbenzene, toluene, and xylenes were detected in each of the three sub-slab soil vapor samples, observed at maximum concentrations of 2.44 µg/m³, 19.9 µg/m³, and 7.71 µg/m³ (m&p-xylene), respectively.
- Tetrachloroethylene (PCE) was detected in each of the in each of the three sub-slab soil vapor samples, observed at a maximum concentration of 19.9 µg/m³.
- Minor concentrations of several other VOCs were detected in the sub-slab soil vapor samples collected as shown in Table 3.
- Concentrations of each of the compounds detected were below Environmental Screening Levels (ESLs) for the protection of commercial/industrial vapor intrusion risk (ESLs, revision 3, as prepared by the San Francisco Bay Regional Water Quality Control Board dated February 2016).
- The leak check compound helium was not detected above laboratory reporting limits in the sub-slab soil vapor samples collected, indicating that the results are considered valid.

5.0 CONCLUSIONS

AEI has completed an additional assessment at the Site in general accordance with the ACDEH-approved work plan. The investigation included an additional geophysical survey, advancing four additional soil borings to further characterize the nature and extent of petroleum hydrocarbons in soil and groundwater beneath the Site, and collecting soil vapor samples to characterize whether the residual petroleum hydrocarbons identified in soil and groundwater beneath the Site represent an unacceptable risk to indoor air quality. AEI has the following conclusions based upon the data collected during this investigation:


- The geophysical survey performed did not identify the presence of a historical heating oil tank at the Site. To date, no on-site source for the soil and groundwater TPH-mo impacts observed at the Site has been identified.
- The distribution of TPH-mo in groundwater as shown on Figure 3, which was further characterized with groundwater samples from soil borings SB-9 through SB-12, confirms our previous conclusion that the TPH-mo present in groundwater beneath the southeast corner of the Site is likely from an off-site source. The concentration gradient suggests on-site migration of TPH-mo.
- The sub-slab soil vapor sampling did not identify the presence of compounds at or above commercial/industrial ESLs for vapor intrusion indicating that residual petroleum hydrocarbons identified in soil and groundwater beneath the Site are unlikely to represent an unacceptable risk to indoor air assuming the continued commercial/industrial use of the Site.


The investigation performed in accordance with the ACDEH-approved work plan confirmed that there is no apparent source of the TPH-mo identified in groundwater beneath the Site and that the chemicals observed in the sub-surface do not pose an unacceptable risk to human health within the building at the Site. Therefore, no further work is recommended for the Site and a "No Further Action" letter is respectfully requested from the ACDEH.

6.0 CLOSING

AEI appreciates working with the ACDEH to characterize this Site and move it towards closure. If you have any questions or comments, please do not hesitate to contact Mr. Trent Weise at (408) 559-7600 or at tweise@aeiconsultants.com.

Sincerely,
AEI Consultants


Trent A. Weise, P.E.
Vice President



FIGURES



Legend: Approximate Property Boundary —

Source: USGS Topographic Map *Oakland West, California* (2015)



Figure 1: SITE MAP

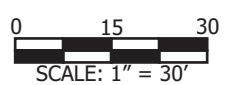
401 Jackson Street, Oakland, California 94607
 Project Number: 372927



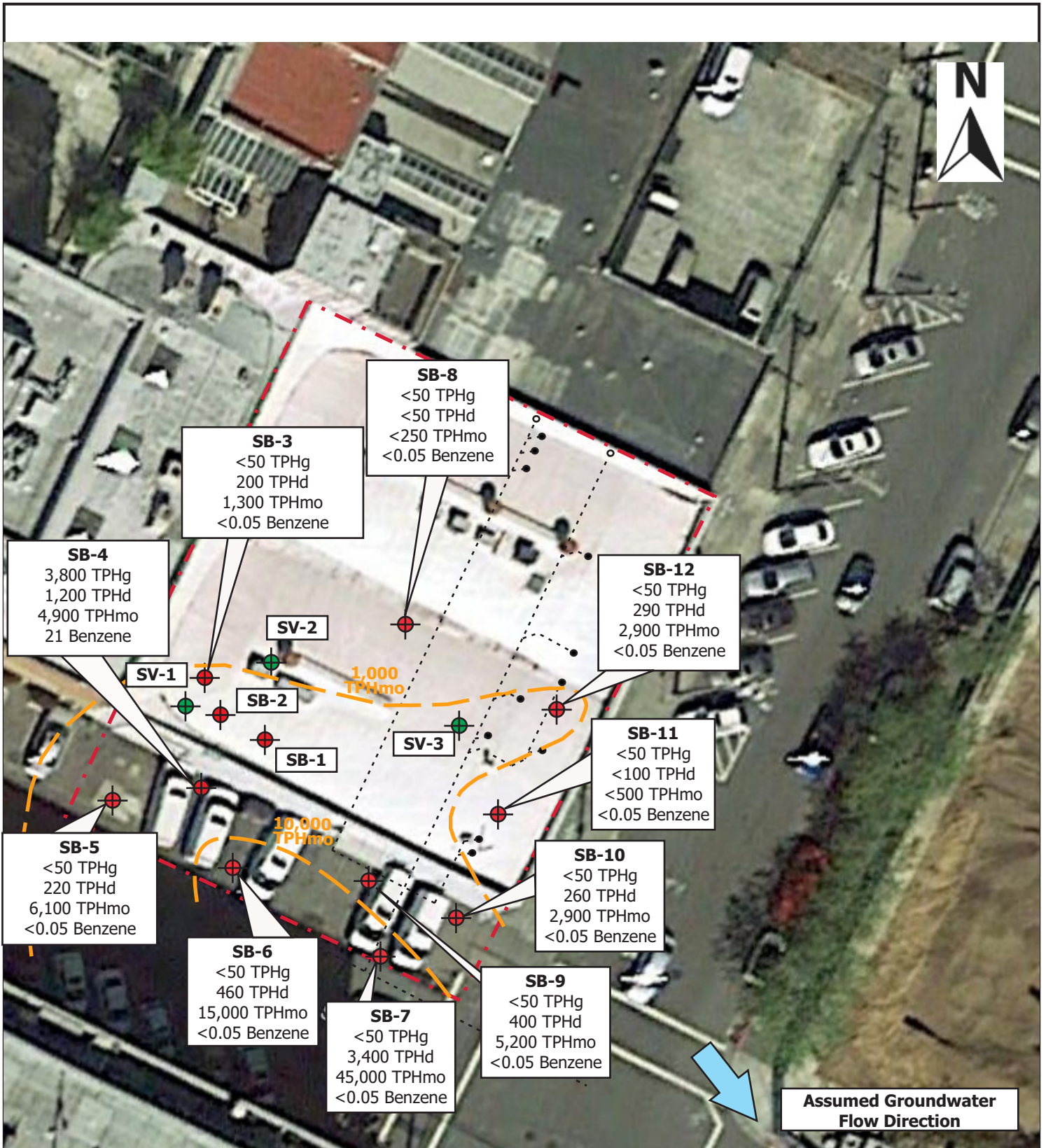


LEGEND

- - - Approximate Property Boundary
- - - Approximate Location of Sewer and Drain Lines
- Approximate Soil Boring Location
- Approximate Temporary Sub-Slab Probe Location

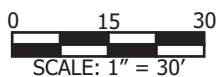


AEI Consultants	
2500 Camino Diablo, Walnut Creek, California	
Site Plan	
401 Jackson Street, Oakland, California	FIGURE 2 Project No. 372927



LEGEND

- - - Approximate Property Boundary
- - - Approximate Location of Sewer and Drain Lines
- Approximate Soil Boring Location
- Approximate Temporary Sub-Slab Probe Location



(Analyte concentrations shown in ug/L)

AEI Consultants

2500 Camino Diablo, Walnut Creek, California

Petroleum Hydrocarbon Concentrations in Groundwater

401 Jackson Street,
 Oakland, California

FIGURE 3
 Project No. 372927

TABLES



TABLE 1: SOIL SAMPLE DATA SUMMARY
401 Jackson Street, Oakland, California

Sample ID	Date	Depth (feet bgs)	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	VOCs (mg/kg)
SB-9-3.5	11/9/2017	3.5	<1.0	<1.0	<5.0	<RL
SB-10-2.5	11/9/2017	2.5	<1.0	2.2	25	<RL
SB-11-5.5	11/9/2017	5.5	<1.0	<1.0	<5.0	<RL
SB-12-5.5	11/9/2017	5.5	<1.0	<1.0	<5.0	<RL
SB-1-8	7/7/2017	8	<1.0	<1.0	<5.0	<RL
SB-2-9	7/7/2017	9	<1.0	<1.0	12	<RL
SB-3-9.5	7/7/2017	9.5	<1.0	<1.0	<5.0	<RL
SB-4-7	7/7/2017	7	<1.0	<1.0	<5.0	<RL
SB-5-9.5	8/1/2017	9.5	<1.0	<1.0	<5.0	<RL
SB-6-7	8/1/2017	7	<1.0	<1.0	5.8	<RL
SB-7-4.5	8/1/2017	4.5	<1.0	<1.0	5.7	<RL
SB-8-8.5	8/3/2017	8.5	<1.0	<1.0	<5.0	<RL
Comparison Values: ESL Tier 1			100	100	5,100	<RL

Notes:

- mg/kg milligrams per kilogram
- <RL less than the laboratory reporting limit
- bgs below ground surface
- TPH-g Total Petroleum Hydrocarbons as Gasoline
- TPH-d Total Petroleum Hydrocarbons as Diesel
- TPH-mo Total Petroleum Hydrocarbons as Motor Oil
- VOC Volatile Organic Compounds
- Bold** Analyte detected at or above the laboratory method reporting limit

Comparison Values:

ESL Tier 1: Tier 1 Environmental Screening Levels (ESLs) from February 2016 (Rev. 3) ESL Summary Tables, prepared by the San Francisco Bay Regional Water Quality Control Board.

**TABLE 2: GROUNDWATER SAMPLE DATA SUMMARY
401 Jackson Street, Oakland, California**

Location ID	Date	Depth (feet bgs)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Chloroform (µg/L)	Toluene (µg/L)	Ethylbenze (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	4-Methyl-2-Pentanone (µg/L)	TBA (µg/L)	Naphthalene (µg/L)	4-Isopropyl toluene (µg/L)	Methylene chloride (µg/L)	n-Propyl benzene (µg/L)	n-Butyl benzene (µg/L)	1,2,4-Trimethy-benzene (µg/L)	1,3,5-Trimethy-benzene (µg/L)	2-Butanone (MEK) (µg/L)	Remaining VOCs (µg/L)
SB-9	11/9/2017	7.88	<50	400	5,200	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<RL
SB-10	11/9/2017	7.63	<50	260	2,900	<0.50	2.5	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<RL
SB-11	11/9/2017	7.85	<50	<100	<500	<0.50	<0.50	<0.50	<0.50	<0.50	0.64	<0.50	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<RL
SB-12	11/9/2017	8.35	<50	290	2,900	<0.50	3.6	<0.50	<0.50	0.80	<0.50	0.93	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<RL
SB-3	7/7/2017	10.8	<50	200	1,300	<0.50	<0.50	<0.50	<0.50	0.52	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.58	<0.50	3.2	<RL
SB-4	7/7/2017	8.0	3,800	1,200	4,900	21	<5.0	150	50	410	16	<5.0	54	38	5.2	6.2	15	7.3	150	48	<20	<RL
SB-5	8/1/2017	9.92	<50	220	6,100	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<RL
SB-6	8/1/2017	9.95	<50	460	15,000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<RL
SB-7	8/1/2017	7.71	<50	3,400	45,000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<RL
SB-8	8/3/2017	10.5	<50	<50	<250	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<RL
Comparison Values: ESL Tier 1			100	100	50,000	1.0	2.3	40	13	20	5.0	120	12	0.17	--	5.0	--	--	--	--	5,600	--

Notes:

- µg/L micrograms per liter
- <RL less than the laboratory reporting limit
- bgs below ground surface
- not established or not applicable
- TPH-g Total Petroleum Hydrocarbons as Gasoline
- TPH-d Total Petroleum Hydrocarbons as Diesel
- TPH-mo Total Petroleum Hydrocarbons as Motor Oil
- MTBE Methyl tertiary butyl ether
- TBA tert-butyl alcohol
- MEK methyl ethyl ketone
- Bold** Analyte detected at or above the laboratory method reporting limit

Comparison Values:

ESL Tier 1: Tier 1 Environmental Screening Levels (ESLs) from February 2016 (Rev. 3) ESL Summary Tables, prepared by the San Francisco Bay Regional Water Quality Control Board.

TABLE 3: SOIL GAS SAMPLE DATA SUMMARY
401 Jackson Street, Oakland, California

Location ID	Date	Depth (feet bgs)	TPH (Low Fraction) (µg/m³)	Acetone (µg/m³)	Benzene (µg/m³)	Chloroform (µg/m³)	Chloromethane (µg/m³)	2-Chloro-Toluene (µg/m³)	Cyclohexane (µg/m³)	1,4-Dioxane (µg/m³)	Ethanol (µg/m³)	Ethyl-Benzene (µg/m³)	Trichloro-Fluoromethane (µg/m³)	Dichlorodifluo Methane (µg/m³)	n-Hexane (µg/m³)	Methylene chloride (µg/m³)	MEK (µg/m³)	2-Propanol (µg/m³)	Styrene (µg/m³)	PCE (µg/m³)	Tetrahydro-Furan (µg/m³)	Toluene (µg/m³)	2,2,4-Trimethyl-Pentane (µg/m³)	m&p-Xylene (µg/m³)	o-Xylene (µg/m³)	1,1-Difluoro-Ethane (µg/m³)	Remaining VOCs (µg/m³)	(Leak Check) Helium (%)
SV-1	11/9/2017	sub-slab	<413	104	<1.28	7.30	0.885	5.65	5.05	4.61	18.6	1.77	4.75	2.79	1.89	1.88	<7.37	<6.15	<1.70	19.9	1.88	19.9	4.11	7.71	3.06	55.0	<RL	<4.2
SV-2	11/9/2017	sub-slab	<413	187	<1.28	131	<0.826	<2.06	5.09	<1.44	<2.38	2.19	16.0	4.86	<1.41	<1.39	12.6	<6.15	<1.70	6.59	<1.18	2.56	<1.87	3.77	<1.73	11.7	<RL	<4.0
SV-3	11/9/2017	sub-slab	457	341 E	2.13	435	<0.826	<2.06	12.6	<1.44	<2.38	2.44	16.4	5.42	<1.41	<1.39	14.1	6.94	1.78	5.26	<1.18	4.96	<1.87	4.92	<1.73	11.5	<RL	<3.8
Comparison Values: ESL - Commercial/Industrial			2,500,000*	140,000,000	420	530	390,000	--	--	1,600	--	4,900	--	--	--	12,000	22,000,000	--	3,900,000	2,100	--	1,300,000	--	440,000**	440,000**	--	--	--

Notes:

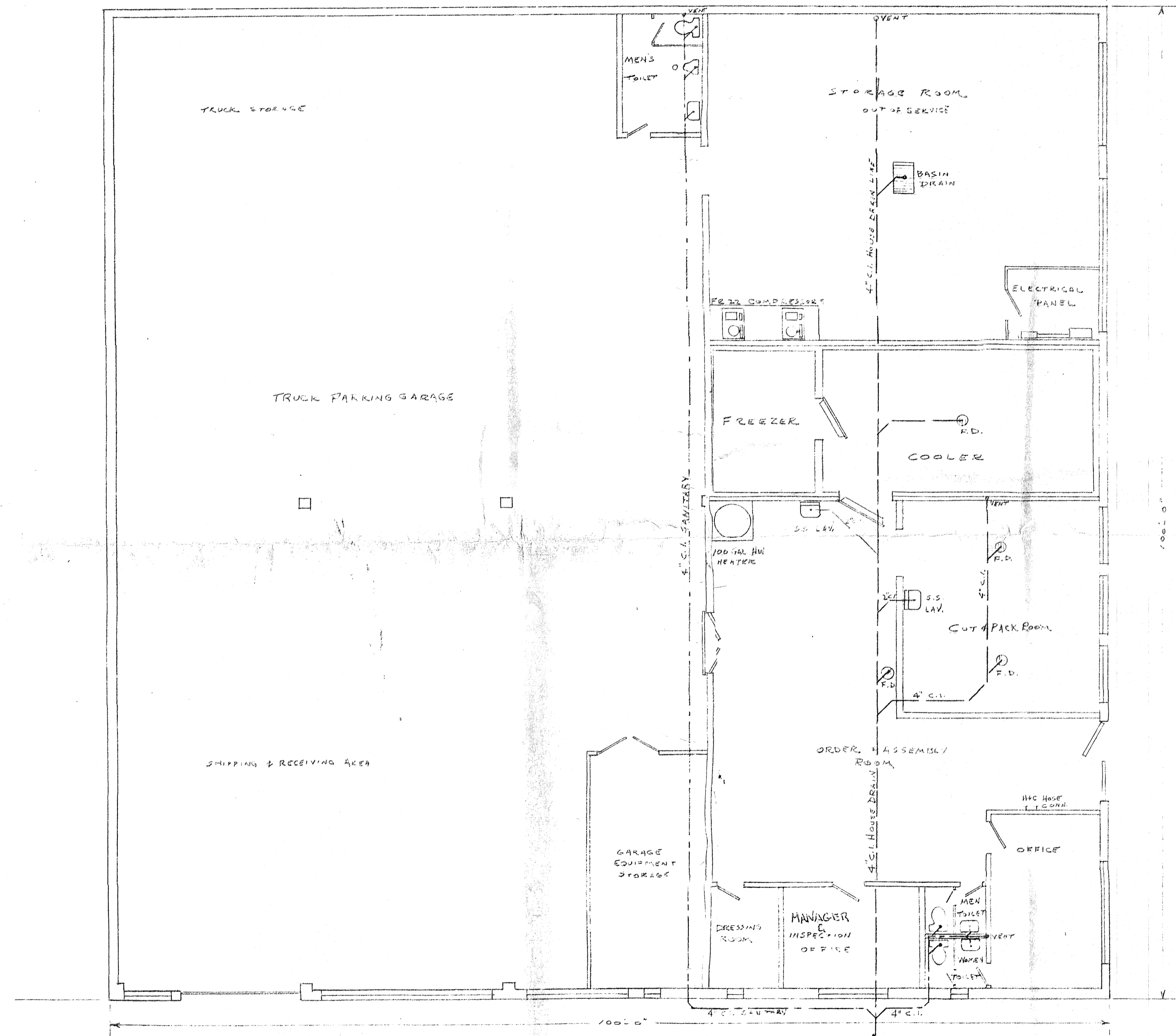
- µg/m³ micrograms per cubic meter
- <RL less than the laboratory reporting limit
- NA not analyzed
- bgs below ground surface
- not established or not applicable
- MEK Methyl Ethyl Ketone, also known as 2-Butanone
- PCE Tetrachloroethene
- E Laboratory qualifier indicating the analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration
- * Screening level provided is for Total Petroleum Hydrocarbons as Gasoline
- ** Screening level provided is for Total Xylenes

Comparison Values:

ESL - Commercial Industrial: Commercial Industrial Environmental Screening Levels (ESLs), based on vapor intrusion, human health risk levels (Table SG-1). From February 2016 (Rev. 3) ESL Summary Tables, prepared by the San Francisco Bay Regional Water Quality Control Board.

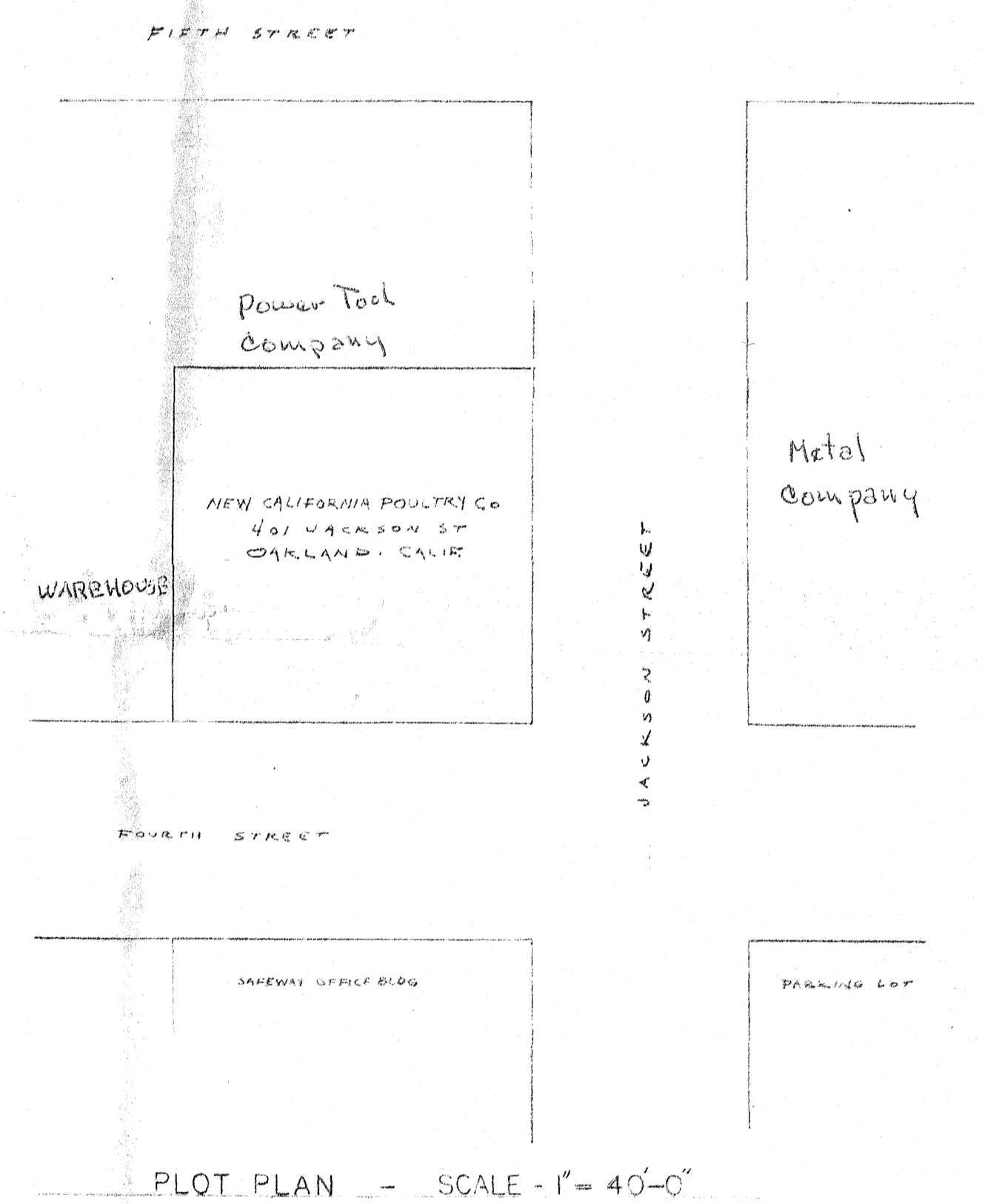
APPENDIX A

Available Building Blueprints



DRAINAGE SYSTEM LAYOUT
SCALE: 1/8" = 1'-0"

CITY OF OAKLAND SEWER MAIN



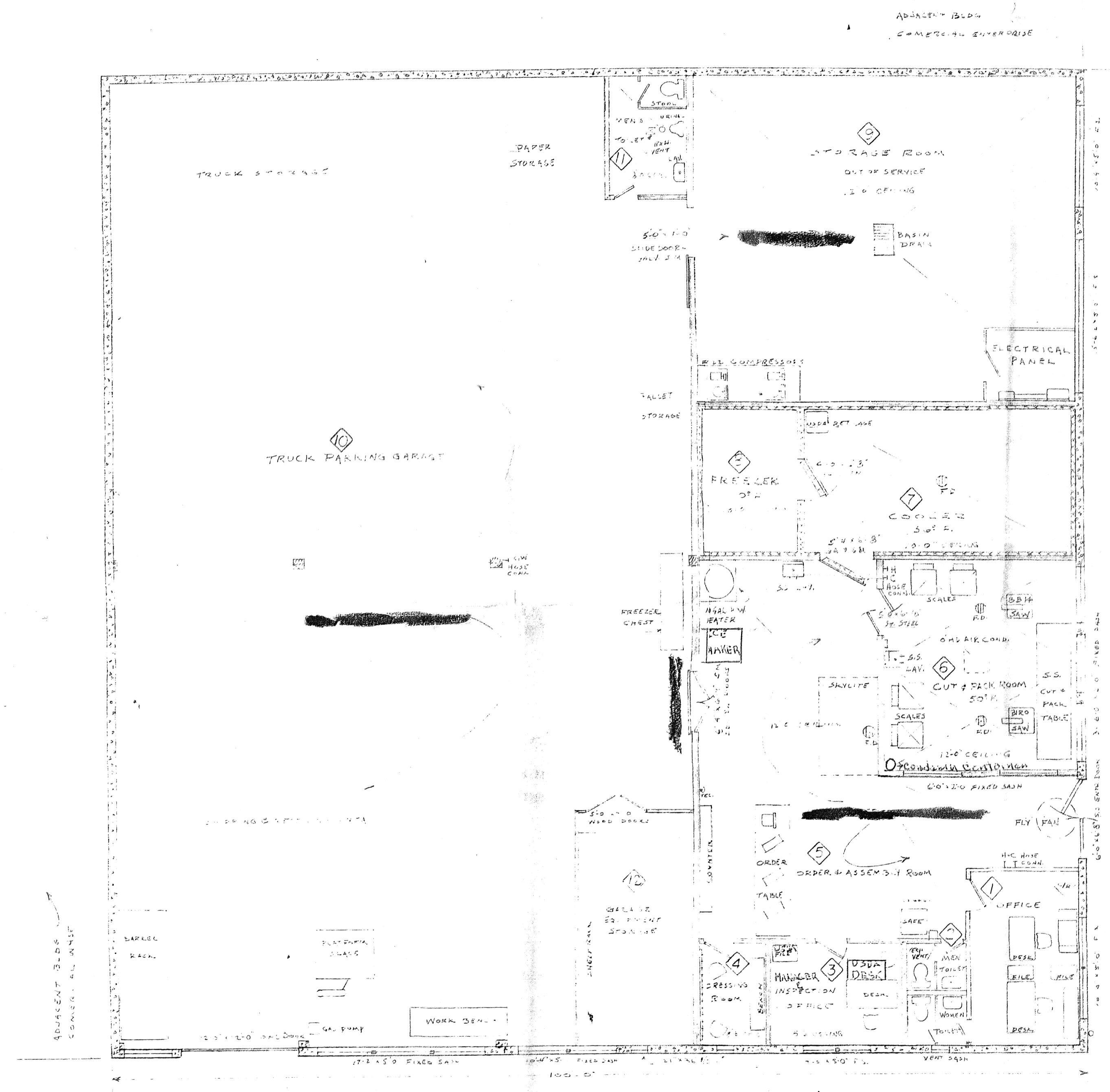
PLOT PLAN -- SCALE - 1" = 40'-0"

Approval does not imply compliance with Department of Labor Occupational Safety & Health Standards.

APPROVED FACILITIES STAFF
★ AUG 10 1977 ★
MEAT & POULTRY INSPECTION
U.S. DEPT. OF AGRICULTURE

SHEET NO. 2

USDA ACCEPT	NEW CALIFORNIA POULTRY CO
	401 JACKSON ST OAKLAND CA
	PLOT PLAN - DRAINAGE LAYOUT
REVISIONS	
DATE	6-10-77
DRAWN	S.I.L.

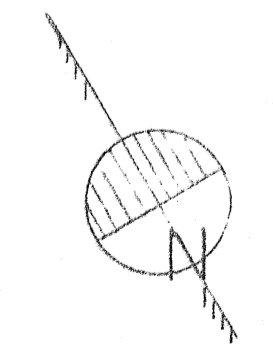


FOURTH STREET
 FLOOR PLAN LAYOUT
 SCALE - 1/8" = 1'-0"

NOTES & ROOM FINISH SPECIFICATIONS						
Room No	Room Name	WALLS	CEILING	FLOOR	Doors	FRAMES
1	OFFICE	CEM. PLASTER	CEM. PLASTER	TILE OVER CONG.	WOOD	WOOD
2	TOILET MEN/WOMEN	CEM. PL.	CEM. PL.	CONCRETE	WOOD	WOOD
3	OFFICE	CEM. PL.	CEM. PL.	TILE OVER CONG.	WOOD	WOOD
4	DRESSING ROOM	CEM. PL.	CEM. PL.	CONG. W/ STAINLESS S.	WOOD	WOOD
5	ORDER & ASSEMBLY ROOM	CEM. PL.	CEM. PL.	CONCRETE	GAUL. SM.	S.S. & GALV. S.
6	ROOM	CEM. PL.	CEM. PL.	CONCRETE	ST. STEEL	S.S.
7	COOLING ROOM	CEM. PL.	CEM. PL.	CONCRETE	GALV. SM.	GALV. SM.
8	FREEZER	CEM. PL.	CEM. PL.	CONCRETE	GALV. SM.	GALV. SM.
9	SHOE ROOM	CEM. PL.	CEM. PL.	CONG. W/ STAINLESS S.	GALV. SM.	STEEL
10	TRUCK GARAGE	CEM. PL.	CEM. PL.	CONCRETE	GALV. SM.	STEEL
11	MEN TOILET	CEM. PL.	CEM. PL.	CONCRETE	WOOD	WOOD
12	WOMEN TOILET	WOOD PLY.	WOOD PLY.	CONCRETE	WOOD	WOOD

Approval does not imply compliance with Department of Labor Occupational Safety & Health Standards.

APPROVED FACILITIES STAFF
 ★ AUG 10 1977 ★
 MEAT & POULTRY INSPECTION
 U. S. DEPT. OF AGRICULTURE

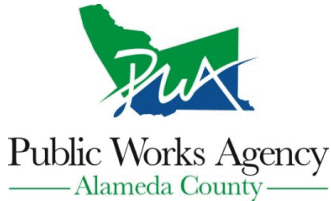


SHEET NO 1	
USDA ACCEPT	NEW CALIFORNIA POULTRY CO. 401-JACKSON ST.-OAKLAND, CA. FLOOR PLAN LAYOUT
DRW.	S.I.L.
DATE	6-10-77

APPENDIX B

Permits

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 11/08/2017 By jamesy

Permit Numbers: W2017-0837
Permits Valid from 11/09/2017 to 11/09/2017

Application Id: 1509056735821
Site Location: 401 Jackson St, Oakland, CA 94607, USA
Project Start Date: 11/09/2017
Assigned Inspector: Contact Eneyew Amberber at (510) 670-5759 or eneyew@acpwa.org

City of Project Site:Oakland

Completion Date:11/09/2017

Applicant: AEI Consultants - Veronica Statham
520 3rd Street, Suite 209, Oakland, CA 94607
Property Owner: Ruth Amaro
5134 Willowview Court, Pleasanton, CA 94588
Client: ** same as Property Owner **
Contact: Veronica Statham

Phone: 510-907-3145 x2101

Phone: 510-828-0930

Phone: --
Cell: --

Receipt Number: WR2017-0521 Total Due: \$265.00
Payer Name : Veronica T Statham Total Amount Paid: \$265.00
Paid By: VISA PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 4 Boreholes
Driller: ECA - Lic #: 695970 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2017-0837	11/08/2017	02/07/2018	4	2.00 in.	12.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned.
5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting,

Alameda County Public Works Agency - Water Resources Well Permit

once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

7. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

8. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX C

Geophysical Survey Report



**GROUND
PENETRATING
RADAR
SYSTEMS, INC.**

AEI Consultants

Attn: Veronica Statham

Site: 401 Jackson St, Oakland, CA

Re: GPR Investigation for possible Underground Storage Tanks

Purpose

The purpose of the investigation was to scan for possible UST's and UST related items at the address listed above.

Equipment

- **Ground Penetrating Radar (GPR), Manufacturer: GSSI, Model: SIR-3000 processing unit with 400 MHz antenna.** GPR works by sending pulses of energy into a material and recording the strength and the time require for the return of the reflected signal. Reflections are produced when the energy pulses enter into a material with different electrical conduction properties from the material it left. The strength of the reflection is determined by the contrast in conductivity between the two materials. The total depth achieved can be as much as 8' with this antenna but can vary widely depending on the dielectric properties of the materials. For more information, please visit: <http://www.geophysical.com/Documentation/Brochures/GSSI-UtilityScanBrochure.pdf>
- **RD7000 pipe locator, Manufacturer: Radiodetection.** The RD7000 can detect the electromagnetic fields from live power or radio frequency signals. It can also be used in conjunction with a trasmitter to connect directly to accessible, metallic pipes, risers, or tracer wires. A tone is sent through the pipe or tracer wire at a specific frequency which can then be detected by the receiver. For more information, please visit: <http://www.spx.com/en/radiodetection/pd-rd7000/>
- **Schonstedt GA-72cd Magnetic Locator (Magnetometer).** The magnetometer detects the magnetic field of a ferromagnetic object. It responds to the difference in the magnetic field between two sensors. It is interpreted in the field by listening to changes in frequency as emitted by a speaker on the device. For more information, please visit: <http://www.schonstedt.com/products/ga-52cx/>

Process

Our process begins with collecting scans with GPR across the areas in a grid pattern. Scans are typically spaced 2'-3' apart depending on the size of the targets being searched for. The GPR data is interpreted in real time and anomalies in the data are located and marked on the surface with spray paint, pin flags, etc.

The RD7000 is used to locate pipes or utilities at the soil boring locations. We first sweep all areas with the receiver to detect live power or radio frequency signals followed by connecting to any visible risers or tracer wires that may be in the area.

Findings

No apparent UST's or UST related items were found in the GPR data at time of scanning.

Limitations

Please keep in mind that there are limitations to any subsurface investigation. The equipment may not achieve maximum effectiveness due to soil conditions, above ground obstructions, reinforced concrete, and a variety of other factors. No subsurface investigation or equipment can provide a complete image of what lies below. Our results should always be used in conjunction with as many methods as possible including consulting existing plans and drawings, exploratory excavation or potholing, visual inspection of above ground features, and utilization of services such as Dig Alert/Underground Service Alert.

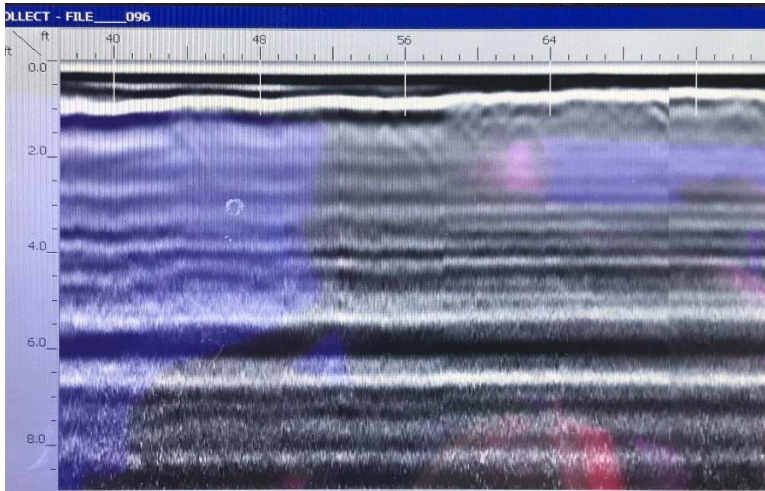
At this site, multiple areas contained reinforcement within the scan area. In these areas, GPR visibility was limited, as well as magnetometer readings due to the reinforcement.

The following pages will further explain the findings

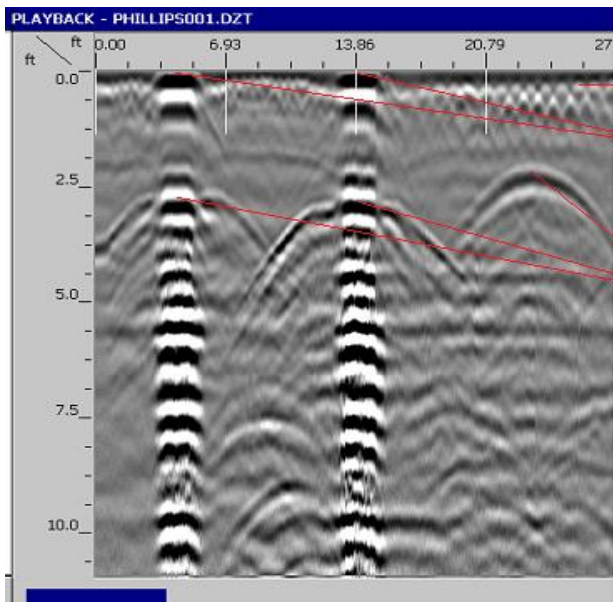
Signed,

A handwritten signature in black ink, appearing to read 'Greg Milburn', with a small arrow pointing to the right.

Greg Milburn
Project Manager | Northern California, San Francisco
GPRS, Inc.
Direct: 925.332.6472
Fax: 419-843-5829
Greg.milburn@gprsinc.com
www.gprsinc.com



The image to the left is GPR data collected in real time while scanning at this project. All GPR data was consistent, and no suspicious areas were detected while scanning on site.



Manhole Covers

UST's (3): Between 2'-3' Deep

The image to the left shows GPR data in which a possible UST was found, this example is from a different job site, and is an example of GPR data only, to show what possible UST's would look like if found on site.

APPENDIX D
Soil Boring Logs



AEI Consultants

BORING NUMBER SB-9

PAGE 1 OF 1

CLIENT Amaro Poultry Company **PROJECT NAME** _____
PROJECT NUMBER 372927 **PROJECT LOCATION** 401 Jackson Street, Oakland
DATE STARTED 11/9/17 **COMPLETED** 11/9/17 **GROUND ELEVATION** _____ **HOLE SIZE** 2.25 inches
DRILLING CONTRACTOR Environmental Control Associates, Inc. **GROUND WATER LEVELS:**
DRILLING METHOD Direct Push **AT TIME OF DRILLING** ---
LOGGED BY WBH **CHECKED BY** Veronica Statham **AT END OF DRILLING** ---
NOTES _____ **▼ AFTER DRILLING** 7.88 ft

AEI BORING - GINT STD US LAB.GDT - 11/10/17 13:07 - P:\COMPANYWIDE PROJECTS\372000 SERIES\372927 OAKLAND, CA\SMDELIVERABLES\2017-11 FURTHER INVESTIGATION\BORELOGS\BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
0.4				ASPHALT	ASPHALT	
1.5	SB-9-1.5			SANDY GRAVEL (GW), very dark grayish brown (10YR 3/2), loose, dry, fine to coarse sand, fine gravel	SANDY GRAVEL (GW), very dark grayish brown (10YR 3/2), loose, dry, fine to coarse sand, fine gravel	
3.5	SB-9-3.5		18.6	SAND (SP), brown (10YR 5/3), dense, moist, with coarse sand, some gray mottling, some silt	SAND (SP), brown (10YR 5/3), dense, moist, with coarse sand, some gray mottling, some silt	
5.0			10.5	▼		
7.5	SB-9-7.5		15.3			
10.5	SB-9-10.5		6.3			
12.5	SB-9-12.5		9.0			
14.5	SB-9-14.5		18.2			
15.0						

Bottom of borehole at 15.0 feet.



CLIENT Amaro Poultry Company
PROJECT NUMBER 372927
DATE STARTED 11/9/17 **COMPLETED** 11/9/17
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY WBH **CHECKED BY** Veronica Statham
NOTES _____

PROJECT NAME _____
PROJECT LOCATION 401 Jackson Street, Oakland
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
▼ AFTER DRILLING 7.63 ft

AEI BORING - GINT STD US LAB.GDT - 11/10/17 13:08 - P:\COMPANYWIDE PROJECTS\372000 SERIES\372927 OAKLAND. CA\SMDELIVERABLES\2017-11 FURTHER INVESTIGATION\BORESBORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
0.4					ASPHALT	
3.0					SANDY GRAVEL (GW), dark grayish brown (10YR 4/2), loose, dry, fine to coarse sand, fine gravel	
25.3	SB-10-2.5		25.3			
3.0					SAND (SP), brown (10YR 5/3), dense, moist, wet from 12 to 15 feet, fine sand, some gray mottling, no recovery from 12 to 15 feet, some silt	
18.0	SB-10-5.5		18.0			
17.2	SB-10-7.5		17.2			
16.0	SB-10-9.5		16.0			
27.9	SB-10-11.5		27.9			
15.0						

Bottom of borehole at 15.0 feet.



AEI Consultants

BORING NUMBER SB-11

PAGE 1 OF 1

CLIENT Amaro Poultry Company
 PROJECT NUMBER 372927
 DATE STARTED 11/9/17 COMPLETED 11/9/17
 DRILLING CONTRACTOR Environmental Control Associates, Inc.
 DRILLING METHOD Direct Push
 LOGGED BY WBH CHECKED BY Veronica Statham
 NOTES _____

PROJECT NAME _____
 PROJECT LOCATION 401 Jackson Street, Oakland
 GROUND ELEVATION _____ HOLE SIZE 2.25 inches
 GROUND WATER LEVELS:
 AT TIME OF DRILLING ---
 AT END OF DRILLING ---
 AFTER DRILLING 7.85 ft

AEI BORING - GINT STD US LAB.GDT - 11/10/17 13:08 - P:\COMPANYWIDE PROJECTS\372000 SERIES\372927 OAKLAND, CA\SMDELIVERABLES\2017-11 FURTHER INVESTIGATION\BORELOGS\BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
0.5				0.5	CONCRETE	
					SAND (SP), strong brown (7.5YR 5/8), color from 0.5 to 2 feet is very dark brown (7.5YR 5/3), dense, moist, fine sand, some medium sand	
	SB-11-2.5		35.1			
5						
	SB-11-5.5		31.1			
	SB-11-7.5		28.1			
				8.0		
					SILTY SAND (SM), strong brown (7.5YR 4/6), very stiff, moist, fine sand, some gray mottling	
10						
	SB-11-9.5		17.6			
	SB-11-12.5		15.2			
15						
	SB-11-14.5		24.0	15.0		

Bottom of borehole at 15.0 feet.



CLIENT Amaro Poultry Company
PROJECT NUMBER 372927
DATE STARTED 11/9/17 **COMPLETED** 11/9/17
DRILLING CONTRACTOR Environmental Control Associates, Inc.
DRILLING METHOD Direct Push
LOGGED BY WBH **CHECKED BY** Veronica Statham
NOTES _____

PROJECT NAME _____
PROJECT LOCATION 401 Jackson Street, Oakland
GROUND ELEVATION _____ **HOLE SIZE** 2.25 inches
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING ---
▼ AFTER DRILLING 8.35 ft

AEI BORING - GINT STD US LAB.GDT - 11/10/17 13:08 - P:\COMPANYWIDE PROJECTS\372000 SERIES\372927 OAKLAND, CA\SMDELIVERABLES\2017-11 FURTHER INVESTIGATION\BORELOGS\BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
0.5					CONCRETE	
2.0					SANDY GRAVEL (GW), gray (10YR 5/1), loose, moist, fine gravel, with fine to coarse sand, roots	
2.6	SB-12-2.5		2.6		SAND (SP), strong brown (7.5YR 5/8), dense, moist, fine sand, occasional gray mottling, changes to wet from 13 to 15 feet	
5						
24.1	SB-12-5.5		24.1			
20.6	SB-12-7.5		20.6			
10	SB-12-9.5		24.3			
22.5	SB-12-12.5		22.5			
15	SB-12-14.5		21.7			

Bottom of borehole at 15.0 feet.

APPENDIX E

Laboratory Analytical Reports



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1711448

Report Created for: AEI Consultants

2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597

Project Contact: William Hicks

Project P.O.: 145501

Project Name: 372927; 401 Jackson Street, Oakland

Project Received: 11/10/2017

Analytical Report reviewed & approved for release on 11/17/2017 by:

Angela Rydelius
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 372927; 401 Jackson Street, Oakland
WorkOrder: 1711448

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: AEI Consultants
Project: 372927; 401 Jackson Street, Oakland
WorkOrder: 1711448

Analytical Qualifiers

S	Surrogate spike recovery outside accepted recovery limits
a4	Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
b1	Aqueous sample that contains greater than ~1 vol. % sediment
c2	Surrogate recovery outside of the control limits due to matrix interference.
e2	Diesel range compounds are significant; no recognizable pattern
e7	Oil range compounds are significant



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9-3.5	1711448-002A	Soil	11/09/2017 10:48	GC18 11161727.D	148450

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/17/2017 00:47
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/17/2017 00:47
Benzene	ND	0.0050	1	11/17/2017 00:47
Bromobenzene	ND	0.0050	1	11/17/2017 00:47
Bromochloromethane	ND	0.0050	1	11/17/2017 00:47
Bromodichloromethane	ND	0.0050	1	11/17/2017 00:47
Bromoform	ND	0.0050	1	11/17/2017 00:47
Bromomethane	ND	0.0050	1	11/17/2017 00:47
2-Butanone (MEK)	ND	0.020	1	11/17/2017 00:47
t-Butyl alcohol (TBA)	ND	0.050	1	11/17/2017 00:47
n-Butyl benzene	ND	0.0050	1	11/17/2017 00:47
sec-Butyl benzene	ND	0.0050	1	11/17/2017 00:47
tert-Butyl benzene	ND	0.0050	1	11/17/2017 00:47
Carbon Disulfide	ND	0.0050	1	11/17/2017 00:47
Carbon Tetrachloride	ND	0.0050	1	11/17/2017 00:47
Chlorobenzene	ND	0.0050	1	11/17/2017 00:47
Chloroethane	ND	0.0050	1	11/17/2017 00:47
Chloroform	ND	0.0050	1	11/17/2017 00:47
Chloromethane	ND	0.0050	1	11/17/2017 00:47
2-Chlorotoluene	ND	0.0050	1	11/17/2017 00:47
4-Chlorotoluene	ND	0.0050	1	11/17/2017 00:47
Dibromochloromethane	ND	0.0050	1	11/17/2017 00:47
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/17/2017 00:47
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/17/2017 00:47
Dibromomethane	ND	0.0050	1	11/17/2017 00:47
1,2-Dichlorobenzene	ND	0.0050	1	11/17/2017 00:47
1,3-Dichlorobenzene	ND	0.0050	1	11/17/2017 00:47
1,4-Dichlorobenzene	ND	0.0050	1	11/17/2017 00:47
Dichlorodifluoromethane	ND	0.0050	1	11/17/2017 00:47
1,1-Dichloroethane	ND	0.0050	1	11/17/2017 00:47
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/17/2017 00:47
1,1-Dichloroethene	ND	0.0050	1	11/17/2017 00:47
cis-1,2-Dichloroethene	ND	0.0050	1	11/17/2017 00:47
trans-1,2-Dichloroethene	ND	0.0050	1	11/17/2017 00:47
1,2-Dichloropropane	ND	0.0050	1	11/17/2017 00:47
1,3-Dichloropropane	ND	0.0050	1	11/17/2017 00:47
2,2-Dichloropropane	ND	0.0050	1	11/17/2017 00:47

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9-3.5	1711448-002A	Soil	11/09/2017 10:48	GC18 11161727.D	148450

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/17/2017 00:47
cis-1,3-Dichloropropene	ND	0.0050	1	11/17/2017 00:47
trans-1,3-Dichloropropene	ND	0.0050	1	11/17/2017 00:47
Diisopropyl ether (DIPE)	ND	0.0050	1	11/17/2017 00:47
Ethylbenzene	ND	0.0050	1	11/17/2017 00:47
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/17/2017 00:47
Freon 113	ND	0.0050	1	11/17/2017 00:47
Hexachlorobutadiene	ND	0.0050	1	11/17/2017 00:47
Hexachloroethane	ND	0.0050	1	11/17/2017 00:47
2-Hexanone	ND	0.0050	1	11/17/2017 00:47
Isopropylbenzene	ND	0.0050	1	11/17/2017 00:47
4-Isopropyl toluene	ND	0.0050	1	11/17/2017 00:47
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/17/2017 00:47
Methylene chloride	ND	0.0050	1	11/17/2017 00:47
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/17/2017 00:47
Naphthalene	ND	0.0050	1	11/17/2017 00:47
n-Propyl benzene	ND	0.0050	1	11/17/2017 00:47
Styrene	ND	0.0050	1	11/17/2017 00:47
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/17/2017 00:47
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/17/2017 00:47
Tetrachloroethene	ND	0.0050	1	11/17/2017 00:47
Toluene	ND	0.0050	1	11/17/2017 00:47
1,2,3-Trichlorobenzene	ND	0.0050	1	11/17/2017 00:47
1,2,4-Trichlorobenzene	ND	0.0050	1	11/17/2017 00:47
1,1,1-Trichloroethane	ND	0.0050	1	11/17/2017 00:47
1,1,2-Trichloroethane	ND	0.0050	1	11/17/2017 00:47
Trichloroethene	ND	0.0050	1	11/17/2017 00:47
Trichlorofluoromethane	ND	0.0050	1	11/17/2017 00:47
1,2,3-Trichloropropane	ND	0.0050	1	11/17/2017 00:47
1,2,4-Trimethylbenzene	ND	0.0050	1	11/17/2017 00:47
1,3,5-Trimethylbenzene	ND	0.0050	1	11/17/2017 00:47
Vinyl Chloride	ND	0.0050	1	11/17/2017 00:47
Xylenes, Total	ND	0.0050	1	11/17/2017 00:47

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9-3.5	1711448-002A	Soil	11/09/2017 10:48	GC18 11161727.D	148450

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	101		82-136		11/17/2017 00:47
Toluene-d8	111		92-139		11/17/2017 00:47
4-BFB	86		82-135		11/17/2017 00:47
Benzene-d6	12	S	55-122		11/17/2017 00:47
Ethylbenzene-d10	14	S	58-141		11/17/2017 00:47
1,2-DCB-d4	46	S	51-107		11/17/2017 00:47

Analyst(s): AK

Analytical Comments: c2



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10-2.5	1711448-008A	Soil	11/09/2017 11:27	GC18 11161728.D	148450

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/17/2017 01:26
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/17/2017 01:26
Benzene	ND	0.0050	1	11/17/2017 01:26
Bromobenzene	ND	0.0050	1	11/17/2017 01:26
Bromochloromethane	ND	0.0050	1	11/17/2017 01:26
Bromodichloromethane	ND	0.0050	1	11/17/2017 01:26
Bromoform	ND	0.0050	1	11/17/2017 01:26
Bromomethane	ND	0.0050	1	11/17/2017 01:26
2-Butanone (MEK)	ND	0.020	1	11/17/2017 01:26
t-Butyl alcohol (TBA)	ND	0.050	1	11/17/2017 01:26
n-Butyl benzene	ND	0.0050	1	11/17/2017 01:26
sec-Butyl benzene	ND	0.0050	1	11/17/2017 01:26
tert-Butyl benzene	ND	0.0050	1	11/17/2017 01:26
Carbon Disulfide	ND	0.0050	1	11/17/2017 01:26
Carbon Tetrachloride	ND	0.0050	1	11/17/2017 01:26
Chlorobenzene	ND	0.0050	1	11/17/2017 01:26
Chloroethane	ND	0.0050	1	11/17/2017 01:26
Chloroform	ND	0.0050	1	11/17/2017 01:26
Chloromethane	ND	0.0050	1	11/17/2017 01:26
2-Chlorotoluene	ND	0.0050	1	11/17/2017 01:26
4-Chlorotoluene	ND	0.0050	1	11/17/2017 01:26
Dibromochloromethane	ND	0.0050	1	11/17/2017 01:26
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/17/2017 01:26
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/17/2017 01:26
Dibromomethane	ND	0.0050	1	11/17/2017 01:26
1,2-Dichlorobenzene	ND	0.0050	1	11/17/2017 01:26
1,3-Dichlorobenzene	ND	0.0050	1	11/17/2017 01:26
1,4-Dichlorobenzene	ND	0.0050	1	11/17/2017 01:26
Dichlorodifluoromethane	ND	0.0050	1	11/17/2017 01:26
1,1-Dichloroethane	ND	0.0050	1	11/17/2017 01:26
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/17/2017 01:26
1,1-Dichloroethene	ND	0.0050	1	11/17/2017 01:26
cis-1,2-Dichloroethene	ND	0.0050	1	11/17/2017 01:26
trans-1,2-Dichloroethene	ND	0.0050	1	11/17/2017 01:26
1,2-Dichloropropane	ND	0.0050	1	11/17/2017 01:26
1,3-Dichloropropane	ND	0.0050	1	11/17/2017 01:26
2,2-Dichloropropane	ND	0.0050	1	11/17/2017 01:26

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10-2.5	1711448-008A	Soil	11/09/2017 11:27	GC18 11161728.D	148450

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/17/2017 01:26
cis-1,3-Dichloropropene	ND	0.0050	1	11/17/2017 01:26
trans-1,3-Dichloropropene	ND	0.0050	1	11/17/2017 01:26
Diisopropyl ether (DIPE)	ND	0.0050	1	11/17/2017 01:26
Ethylbenzene	ND	0.0050	1	11/17/2017 01:26
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/17/2017 01:26
Freon 113	ND	0.0050	1	11/17/2017 01:26
Hexachlorobutadiene	ND	0.0050	1	11/17/2017 01:26
Hexachloroethane	ND	0.0050	1	11/17/2017 01:26
2-Hexanone	ND	0.0050	1	11/17/2017 01:26
Isopropylbenzene	ND	0.0050	1	11/17/2017 01:26
4-Isopropyl toluene	ND	0.0050	1	11/17/2017 01:26
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/17/2017 01:26
Methylene chloride	ND	0.0050	1	11/17/2017 01:26
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/17/2017 01:26
Naphthalene	ND	0.0050	1	11/17/2017 01:26
n-Propyl benzene	ND	0.0050	1	11/17/2017 01:26
Styrene	ND	0.0050	1	11/17/2017 01:26
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/17/2017 01:26
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/17/2017 01:26
Tetrachloroethene	ND	0.0050	1	11/17/2017 01:26
Toluene	ND	0.0050	1	11/17/2017 01:26
1,2,3-Trichlorobenzene	ND	0.0050	1	11/17/2017 01:26
1,2,4-Trichlorobenzene	ND	0.0050	1	11/17/2017 01:26
1,1,1-Trichloroethane	ND	0.0050	1	11/17/2017 01:26
1,1,2-Trichloroethane	ND	0.0050	1	11/17/2017 01:26
Trichloroethene	ND	0.0050	1	11/17/2017 01:26
Trichlorofluoromethane	ND	0.0050	1	11/17/2017 01:26
1,2,3-Trichloropropane	ND	0.0050	1	11/17/2017 01:26
1,2,4-Trimethylbenzene	ND	0.0050	1	11/17/2017 01:26
1,3,5-Trimethylbenzene	ND	0.0050	1	11/17/2017 01:26
Vinyl Chloride	ND	0.0050	1	11/17/2017 01:26
Xylenes, Total	ND	0.0050	1	11/17/2017 01:26

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10-2.5	1711448-008A	Soil	11/09/2017 11:27	GC18 11161728.D	148450

Analytes	Result		RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	100		82-136		11/17/2017 01:26
Toluene-d8	111		92-139		11/17/2017 01:26
4-BFB	90		82-135		11/17/2017 01:26
Benzene-d6	29	S	55-122		11/17/2017 01:26
Ethylbenzene-d10	40	S	58-141		11/17/2017 01:26
1,2-DCB-d4	60		51-107		11/17/2017 01:26

Analyst(s): AK

Analytical Comments: c2



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11-5.5	1711448-014A	Soil	11/09/2017 09:35	GC18 11161729.D	148450

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/17/2017 02:06
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/17/2017 02:06
Benzene	ND	0.0050	1	11/17/2017 02:06
Bromobenzene	ND	0.0050	1	11/17/2017 02:06
Bromochloromethane	ND	0.0050	1	11/17/2017 02:06
Bromodichloromethane	ND	0.0050	1	11/17/2017 02:06
Bromoform	ND	0.0050	1	11/17/2017 02:06
Bromomethane	ND	0.0050	1	11/17/2017 02:06
2-Butanone (MEK)	ND	0.020	1	11/17/2017 02:06
t-Butyl alcohol (TBA)	ND	0.050	1	11/17/2017 02:06
n-Butyl benzene	ND	0.0050	1	11/17/2017 02:06
sec-Butyl benzene	ND	0.0050	1	11/17/2017 02:06
tert-Butyl benzene	ND	0.0050	1	11/17/2017 02:06
Carbon Disulfide	ND	0.0050	1	11/17/2017 02:06
Carbon Tetrachloride	ND	0.0050	1	11/17/2017 02:06
Chlorobenzene	ND	0.0050	1	11/17/2017 02:06
Chloroethane	ND	0.0050	1	11/17/2017 02:06
Chloroform	ND	0.0050	1	11/17/2017 02:06
Chloromethane	ND	0.0050	1	11/17/2017 02:06
2-Chlorotoluene	ND	0.0050	1	11/17/2017 02:06
4-Chlorotoluene	ND	0.0050	1	11/17/2017 02:06
Dibromochloromethane	ND	0.0050	1	11/17/2017 02:06
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/17/2017 02:06
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/17/2017 02:06
Dibromomethane	ND	0.0050	1	11/17/2017 02:06
1,2-Dichlorobenzene	ND	0.0050	1	11/17/2017 02:06
1,3-Dichlorobenzene	ND	0.0050	1	11/17/2017 02:06
1,4-Dichlorobenzene	ND	0.0050	1	11/17/2017 02:06
Dichlorodifluoromethane	ND	0.0050	1	11/17/2017 02:06
1,1-Dichloroethane	ND	0.0050	1	11/17/2017 02:06
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/17/2017 02:06
1,1-Dichloroethene	ND	0.0050	1	11/17/2017 02:06
cis-1,2-Dichloroethene	ND	0.0050	1	11/17/2017 02:06
trans-1,2-Dichloroethene	ND	0.0050	1	11/17/2017 02:06
1,2-Dichloropropane	ND	0.0050	1	11/17/2017 02:06
1,3-Dichloropropane	ND	0.0050	1	11/17/2017 02:06
2,2-Dichloropropane	ND	0.0050	1	11/17/2017 02:06

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11-5.5	1711448-014A	Soil	11/09/2017 09:35	GC18 11161729.D	148450

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/17/2017 02:06
cis-1,3-Dichloropropene	ND	0.0050	1	11/17/2017 02:06
trans-1,3-Dichloropropene	ND	0.0050	1	11/17/2017 02:06
Diisopropyl ether (DIPE)	ND	0.0050	1	11/17/2017 02:06
Ethylbenzene	ND	0.0050	1	11/17/2017 02:06
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/17/2017 02:06
Freon 113	ND	0.0050	1	11/17/2017 02:06
Hexachlorobutadiene	ND	0.0050	1	11/17/2017 02:06
Hexachloroethane	ND	0.0050	1	11/17/2017 02:06
2-Hexanone	ND	0.0050	1	11/17/2017 02:06
Isopropylbenzene	ND	0.0050	1	11/17/2017 02:06
4-Isopropyl toluene	ND	0.0050	1	11/17/2017 02:06
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/17/2017 02:06
Methylene chloride	ND	0.0050	1	11/17/2017 02:06
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/17/2017 02:06
Naphthalene	ND	0.0050	1	11/17/2017 02:06
n-Propyl benzene	ND	0.0050	1	11/17/2017 02:06
Styrene	ND	0.0050	1	11/17/2017 02:06
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/17/2017 02:06
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/17/2017 02:06
Tetrachloroethene	ND	0.0050	1	11/17/2017 02:06
Toluene	ND	0.0050	1	11/17/2017 02:06
1,2,3-Trichlorobenzene	ND	0.0050	1	11/17/2017 02:06
1,2,4-Trichlorobenzene	ND	0.0050	1	11/17/2017 02:06
1,1,1-Trichloroethane	ND	0.0050	1	11/17/2017 02:06
1,1,2-Trichloroethane	ND	0.0050	1	11/17/2017 02:06
Trichloroethene	ND	0.0050	1	11/17/2017 02:06
Trichlorofluoromethane	ND	0.0050	1	11/17/2017 02:06
1,2,3-Trichloropropane	ND	0.0050	1	11/17/2017 02:06
1,2,4-Trimethylbenzene	ND	0.0050	1	11/17/2017 02:06
1,3,5-Trimethylbenzene	ND	0.0050	1	11/17/2017 02:06
Vinyl Chloride	ND	0.0050	1	11/17/2017 02:06
Xylenes, Total	ND	0.0050	1	11/17/2017 02:06

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Analytical Report

Client: AEI Consultants

WorkOrder: 1711448

Date Received: 11/10/17 14:08

Extraction Method: SW5030B

Date Prepared: 11/10/17

Analytical Method: SW8260B

Project: 372927; 401 Jackson Street, Oakland

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11-5.5	1711448-014A	Soil	11/09/2017 09:35	GC18 11161729.D	148450

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	101		82-136	11/17/2017 02:06
Toluene-d8	110		92-139	11/17/2017 02:06
4-BFB	87		82-135	11/17/2017 02:06
Benzene-d6	94		55-122	11/17/2017 02:06
Ethylbenzene-d10	92		58-141	11/17/2017 02:06
1,2-DCB-d4	69		51-107	11/17/2017 02:06

Analyst(s): AK



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-12-5.5	1711448-020A	Soil	11/09/2017 08:58	GC18 11161724.D	148450

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/16/2017 22:48
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/16/2017 22:48
Benzene	ND	0.0050	1	11/16/2017 22:48
Bromobenzene	ND	0.0050	1	11/16/2017 22:48
Bromochloromethane	ND	0.0050	1	11/16/2017 22:48
Bromodichloromethane	ND	0.0050	1	11/16/2017 22:48
Bromoform	ND	0.0050	1	11/16/2017 22:48
Bromomethane	ND	0.0050	1	11/16/2017 22:48
2-Butanone (MEK)	ND	0.020	1	11/16/2017 22:48
t-Butyl alcohol (TBA)	ND	0.050	1	11/16/2017 22:48
n-Butyl benzene	ND	0.0050	1	11/16/2017 22:48
sec-Butyl benzene	ND	0.0050	1	11/16/2017 22:48
tert-Butyl benzene	ND	0.0050	1	11/16/2017 22:48
Carbon Disulfide	ND	0.0050	1	11/16/2017 22:48
Carbon Tetrachloride	ND	0.0050	1	11/16/2017 22:48
Chlorobenzene	ND	0.0050	1	11/16/2017 22:48
Chloroethane	ND	0.0050	1	11/16/2017 22:48
Chloroform	ND	0.0050	1	11/16/2017 22:48
Chloromethane	ND	0.0050	1	11/16/2017 22:48
2-Chlorotoluene	ND	0.0050	1	11/16/2017 22:48
4-Chlorotoluene	ND	0.0050	1	11/16/2017 22:48
Dibromochloromethane	ND	0.0050	1	11/16/2017 22:48
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/16/2017 22:48
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/16/2017 22:48
Dibromomethane	ND	0.0050	1	11/16/2017 22:48
1,2-Dichlorobenzene	ND	0.0050	1	11/16/2017 22:48
1,3-Dichlorobenzene	ND	0.0050	1	11/16/2017 22:48
1,4-Dichlorobenzene	ND	0.0050	1	11/16/2017 22:48
Dichlorodifluoromethane	ND	0.0050	1	11/16/2017 22:48
1,1-Dichloroethane	ND	0.0050	1	11/16/2017 22:48
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/16/2017 22:48
1,1-Dichloroethene	ND	0.0050	1	11/16/2017 22:48
cis-1,2-Dichloroethene	ND	0.0050	1	11/16/2017 22:48
trans-1,2-Dichloroethene	ND	0.0050	1	11/16/2017 22:48
1,2-Dichloropropane	ND	0.0050	1	11/16/2017 22:48
1,3-Dichloropropane	ND	0.0050	1	11/16/2017 22:48
2,2-Dichloropropane	ND	0.0050	1	11/16/2017 22:48

(Cont.)



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-12-5.5	1711448-020A	Soil	11/09/2017 08:58	GC18 11161724.D	148450

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/16/2017 22:48
cis-1,3-Dichloropropene	ND	0.0050	1	11/16/2017 22:48
trans-1,3-Dichloropropene	ND	0.0050	1	11/16/2017 22:48
Diisopropyl ether (DIPE)	ND	0.0050	1	11/16/2017 22:48
Ethylbenzene	ND	0.0050	1	11/16/2017 22:48
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/16/2017 22:48
Freon 113	ND	0.0050	1	11/16/2017 22:48
Hexachlorobutadiene	ND	0.0050	1	11/16/2017 22:48
Hexachloroethane	ND	0.0050	1	11/16/2017 22:48
2-Hexanone	ND	0.0050	1	11/16/2017 22:48
Isopropylbenzene	ND	0.0050	1	11/16/2017 22:48
4-Isopropyl toluene	ND	0.0050	1	11/16/2017 22:48
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/16/2017 22:48
Methylene chloride	ND	0.0050	1	11/16/2017 22:48
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/16/2017 22:48
Naphthalene	ND	0.0050	1	11/16/2017 22:48
n-Propyl benzene	ND	0.0050	1	11/16/2017 22:48
Styrene	ND	0.0050	1	11/16/2017 22:48
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/16/2017 22:48
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/16/2017 22:48
Tetrachloroethene	ND	0.0050	1	11/16/2017 22:48
Toluene	ND	0.0050	1	11/16/2017 22:48
1,2,3-Trichlorobenzene	ND	0.0050	1	11/16/2017 22:48
1,2,4-Trichlorobenzene	ND	0.0050	1	11/16/2017 22:48
1,1,1-Trichloroethane	ND	0.0050	1	11/16/2017 22:48
1,1,2-Trichloroethane	ND	0.0050	1	11/16/2017 22:48
Trichloroethene	ND	0.0050	1	11/16/2017 22:48
Trichlorofluoromethane	ND	0.0050	1	11/16/2017 22:48
1,2,3-Trichloropropane	ND	0.0050	1	11/16/2017 22:48
1,2,4-Trimethylbenzene	ND	0.0050	1	11/16/2017 22:48
1,3,5-Trimethylbenzene	ND	0.0050	1	11/16/2017 22:48
Vinyl Chloride	ND	0.0050	1	11/16/2017 22:48
Xylenes, Total	ND	0.0050	1	11/16/2017 22:48

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-12-5.5	1711448-020A	Soil	11/09/2017 08:58	GC18 11161724.D	148450

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	100		82-136	11/16/2017 22:48
Toluene-d8	110		92-139	11/16/2017 22:48
4-BFB	90		82-135	11/16/2017 22:48
Benzene-d6	98		55-122	11/16/2017 22:48
Ethylbenzene-d10	100		58-141	11/16/2017 22:48
1,2-DCB-d4	68		51-107	11/16/2017 22:48

Analyst(s): AK



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9	1711448-025B	Water	11/09/2017 11:50	GC16 11161728.D	148891

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	11/17/2017 01:45
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/17/2017 01:45
Benzene	ND	0.50	1	11/17/2017 01:45
Bromobenzene	ND	0.50	1	11/17/2017 01:45
Bromochloromethane	ND	0.50	1	11/17/2017 01:45
Bromodichloromethane	ND	0.50	1	11/17/2017 01:45
Bromoform	ND	0.50	1	11/17/2017 01:45
Bromomethane	ND	0.50	1	11/17/2017 01:45
2-Butanone (MEK)	ND	2.0	1	11/17/2017 01:45
t-Butyl alcohol (TBA)	ND	2.0	1	11/17/2017 01:45
n-Butyl benzene	ND	0.50	1	11/17/2017 01:45
sec-Butyl benzene	ND	0.50	1	11/17/2017 01:45
tert-Butyl benzene	ND	0.50	1	11/17/2017 01:45
Carbon Disulfide	ND	0.50	1	11/17/2017 01:45
Carbon Tetrachloride	ND	0.50	1	11/17/2017 01:45
Chlorobenzene	ND	0.50	1	11/17/2017 01:45
Chloroethane	ND	0.50	1	11/17/2017 01:45
Chloroform	ND	0.50	1	11/17/2017 01:45
Chloromethane	ND	0.50	1	11/17/2017 01:45
2-Chlorotoluene	ND	0.50	1	11/17/2017 01:45
4-Chlorotoluene	ND	0.50	1	11/17/2017 01:45
Dibromochloromethane	ND	0.50	1	11/17/2017 01:45
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/17/2017 01:45
1,2-Dibromoethane (EDB)	ND	0.50	1	11/17/2017 01:45
Dibromomethane	ND	0.50	1	11/17/2017 01:45
1,2-Dichlorobenzene	ND	0.50	1	11/17/2017 01:45
1,3-Dichlorobenzene	ND	0.50	1	11/17/2017 01:45
1,4-Dichlorobenzene	ND	0.50	1	11/17/2017 01:45
Dichlorodifluoromethane	ND	0.50	1	11/17/2017 01:45
1,1-Dichloroethane	ND	0.50	1	11/17/2017 01:45
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/17/2017 01:45
1,1-Dichloroethene	ND	0.50	1	11/17/2017 01:45
cis-1,2-Dichloroethene	ND	0.50	1	11/17/2017 01:45
trans-1,2-Dichloroethene	ND	0.50	1	11/17/2017 01:45
1,2-Dichloropropane	ND	0.50	1	11/17/2017 01:45
1,3-Dichloropropane	ND	0.50	1	11/17/2017 01:45
2,2-Dichloropropane	ND	0.50	1	11/17/2017 01:45

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9	1711448-025B	Water	11/09/2017 11:50	GC16 11161728.D	148891

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	11/17/2017 01:45
cis-1,3-Dichloropropene	ND	0.50	1	11/17/2017 01:45
trans-1,3-Dichloropropene	ND	0.50	1	11/17/2017 01:45
Diisopropyl ether (DIPE)	ND	0.50	1	11/17/2017 01:45
Ethylbenzene	ND	0.50	1	11/17/2017 01:45
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/17/2017 01:45
Freon 113	ND	0.50	1	11/17/2017 01:45
Hexachlorobutadiene	ND	0.50	1	11/17/2017 01:45
Hexachloroethane	ND	0.50	1	11/17/2017 01:45
2-Hexanone	ND	0.50	1	11/17/2017 01:45
Isopropylbenzene	ND	0.50	1	11/17/2017 01:45
4-Isopropyl toluene	ND	0.50	1	11/17/2017 01:45
Methyl-t-butyl ether (MTBE)	ND	0.50	1	11/17/2017 01:45
Methylene chloride	ND	0.50	1	11/17/2017 01:45
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	11/17/2017 01:45
Naphthalene	ND	0.50	1	11/17/2017 01:45
n-Propyl benzene	ND	0.50	1	11/17/2017 01:45
Styrene	ND	0.50	1	11/17/2017 01:45
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/17/2017 01:45
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/17/2017 01:45
Tetrachloroethene	ND	0.50	1	11/17/2017 01:45
Toluene	ND	0.50	1	11/17/2017 01:45
1,2,3-Trichlorobenzene	ND	0.50	1	11/17/2017 01:45
1,2,4-Trichlorobenzene	ND	0.50	1	11/17/2017 01:45
1,1,1-Trichloroethane	ND	0.50	1	11/17/2017 01:45
1,1,2-Trichloroethane	ND	0.50	1	11/17/2017 01:45
Trichloroethene	ND	0.50	1	11/17/2017 01:45
Trichlorofluoromethane	ND	0.50	1	11/17/2017 01:45
1,2,3-Trichloropropane	ND	0.50	1	11/17/2017 01:45
1,2,4-Trimethylbenzene	ND	0.50	1	11/17/2017 01:45
1,3,5-Trimethylbenzene	ND	0.50	1	11/17/2017 01:45
Vinyl Chloride	ND	0.50	1	11/17/2017 01:45
Xylenes, Total	ND	0.50	1	11/17/2017 01:45

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9	1711448-025B	Water	11/09/2017 11:50	GC16 11161728.D	148891

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	118	78-134		11/17/2017 01:45
Toluene-d8	108	82-120		11/17/2017 01:45
4-BFB	84	69-131		11/17/2017 01:45

Analyst(s): KF **Analytical Comments:** b1



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10	1711448-026B	Water	11/09/2017 12:10	GC18 11171709.D	148891
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	10	1	11/17/2017 12:37	
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/17/2017 12:37	
Benzene	ND	0.50	1	11/17/2017 12:37	
Bromobenzene	ND	0.50	1	11/17/2017 12:37	
Bromochloromethane	ND	0.50	1	11/17/2017 12:37	
Bromodichloromethane	ND	0.50	1	11/17/2017 12:37	
Bromoform	ND	0.50	1	11/17/2017 12:37	
Bromomethane	ND	0.50	1	11/17/2017 12:37	
2-Butanone (MEK)	ND	2.0	1	11/17/2017 12:37	
t-Butyl alcohol (TBA)	ND	2.0	1	11/17/2017 12:37	
n-Butyl benzene	ND	0.50	1	11/17/2017 12:37	
sec-Butyl benzene	ND	0.50	1	11/17/2017 12:37	
tert-Butyl benzene	ND	0.50	1	11/17/2017 12:37	
Carbon Disulfide	ND	0.50	1	11/17/2017 12:37	
Carbon Tetrachloride	ND	0.50	1	11/17/2017 12:37	
Chlorobenzene	ND	0.50	1	11/17/2017 12:37	
Chloroethane	ND	0.50	1	11/17/2017 12:37	
Chloroform	2.5	0.50	1	11/17/2017 12:37	
Chloromethane	ND	0.50	1	11/17/2017 12:37	
2-Chlorotoluene	ND	0.50	1	11/17/2017 12:37	
4-Chlorotoluene	ND	0.50	1	11/17/2017 12:37	
Dibromochloromethane	ND	0.50	1	11/17/2017 12:37	
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/17/2017 12:37	
1,2-Dibromoethane (EDB)	ND	0.50	1	11/17/2017 12:37	
Dibromomethane	ND	0.50	1	11/17/2017 12:37	
1,2-Dichlorobenzene	ND	0.50	1	11/17/2017 12:37	
1,3-Dichlorobenzene	ND	0.50	1	11/17/2017 12:37	
1,4-Dichlorobenzene	ND	0.50	1	11/17/2017 12:37	
Dichlorodifluoromethane	ND	0.50	1	11/17/2017 12:37	
1,1-Dichloroethane	ND	0.50	1	11/17/2017 12:37	
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/17/2017 12:37	
1,1-Dichloroethene	ND	0.50	1	11/17/2017 12:37	
cis-1,2-Dichloroethene	ND	0.50	1	11/17/2017 12:37	
trans-1,2-Dichloroethene	ND	0.50	1	11/17/2017 12:37	
1,2-Dichloropropane	ND	0.50	1	11/17/2017 12:37	
1,3-Dichloropropane	ND	0.50	1	11/17/2017 12:37	
2,2-Dichloropropane	ND	0.50	1	11/17/2017 12:37	

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10	1711448-026B	Water	11/09/2017 12:10	GC18 11171709.D	148891

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	11/17/2017 12:37
cis-1,3-Dichloropropene	ND	0.50	1	11/17/2017 12:37
trans-1,3-Dichloropropene	ND	0.50	1	11/17/2017 12:37
Diisopropyl ether (DIPE)	ND	0.50	1	11/17/2017 12:37
Ethylbenzene	ND	0.50	1	11/17/2017 12:37
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/17/2017 12:37
Freon 113	ND	0.50	1	11/17/2017 12:37
Hexachlorobutadiene	ND	0.50	1	11/17/2017 12:37
Hexachloroethane	ND	0.50	1	11/17/2017 12:37
2-Hexanone	ND	0.50	1	11/17/2017 12:37
Isopropylbenzene	ND	0.50	1	11/17/2017 12:37
4-Isopropyl toluene	ND	0.50	1	11/17/2017 12:37
Methyl-t-butyl ether (MTBE)	ND	0.50	1	11/17/2017 12:37
Methylene chloride	ND	0.50	1	11/17/2017 12:37
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	11/17/2017 12:37
Naphthalene	ND	0.50	1	11/17/2017 12:37
n-Propyl benzene	ND	0.50	1	11/17/2017 12:37
Styrene	ND	0.50	1	11/17/2017 12:37
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/17/2017 12:37
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/17/2017 12:37
Tetrachloroethene	ND	0.50	1	11/17/2017 12:37
Toluene	ND	0.50	1	11/17/2017 12:37
1,2,3-Trichlorobenzene	ND	0.50	1	11/17/2017 12:37
1,2,4-Trichlorobenzene	ND	0.50	1	11/17/2017 12:37
1,1,1-Trichloroethane	ND	0.50	1	11/17/2017 12:37
1,1,2-Trichloroethane	ND	0.50	1	11/17/2017 12:37
Trichloroethene	ND	0.50	1	11/17/2017 12:37
Trichlorofluoromethane	ND	0.50	1	11/17/2017 12:37
1,2,3-Trichloropropane	ND	0.50	1	11/17/2017 12:37
1,2,4-Trimethylbenzene	ND	0.50	1	11/17/2017 12:37
1,3,5-Trimethylbenzene	ND	0.50	1	11/17/2017 12:37
Vinyl Chloride	ND	0.50	1	11/17/2017 12:37
Xylenes, Total	ND	0.50	1	11/17/2017 12:37

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10	1711448-026B	Water	11/09/2017 12:10	GC18 11171709.D	148891

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	104	78-134		11/17/2017 12:37
Toluene-d8	103	82-120		11/17/2017 12:37
4-BFB	77	69-131		11/17/2017 12:37

Analyst(s): KF **Analytical Comments:** b1



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11	1711448-027B	Water	11/09/2017 12:00	GC16 11161730.D	148891

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	11/17/2017 03:03
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/17/2017 03:03
Benzene	ND	0.50	1	11/17/2017 03:03
Bromobenzene	ND	0.50	1	11/17/2017 03:03
Bromochloromethane	ND	0.50	1	11/17/2017 03:03
Bromodichloromethane	ND	0.50	1	11/17/2017 03:03
Bromoform	ND	0.50	1	11/17/2017 03:03
Bromomethane	ND	0.50	1	11/17/2017 03:03
2-Butanone (MEK)	ND	2.0	1	11/17/2017 03:03
t-Butyl alcohol (TBA)	ND	2.0	1	11/17/2017 03:03
n-Butyl benzene	ND	0.50	1	11/17/2017 03:03
sec-Butyl benzene	ND	0.50	1	11/17/2017 03:03
tert-Butyl benzene	ND	0.50	1	11/17/2017 03:03
Carbon Disulfide	ND	0.50	1	11/17/2017 03:03
Carbon Tetrachloride	ND	0.50	1	11/17/2017 03:03
Chlorobenzene	ND	0.50	1	11/17/2017 03:03
Chloroethane	ND	0.50	1	11/17/2017 03:03
Chloroform	ND	0.50	1	11/17/2017 03:03
Chloromethane	ND	0.50	1	11/17/2017 03:03
2-Chlorotoluene	ND	0.50	1	11/17/2017 03:03
4-Chlorotoluene	ND	0.50	1	11/17/2017 03:03
Dibromochloromethane	ND	0.50	1	11/17/2017 03:03
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/17/2017 03:03
1,2-Dibromoethane (EDB)	ND	0.50	1	11/17/2017 03:03
Dibromomethane	ND	0.50	1	11/17/2017 03:03
1,2-Dichlorobenzene	ND	0.50	1	11/17/2017 03:03
1,3-Dichlorobenzene	ND	0.50	1	11/17/2017 03:03
1,4-Dichlorobenzene	ND	0.50	1	11/17/2017 03:03
Dichlorodifluoromethane	ND	0.50	1	11/17/2017 03:03
1,1-Dichloroethane	ND	0.50	1	11/17/2017 03:03
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/17/2017 03:03
1,1-Dichloroethene	ND	0.50	1	11/17/2017 03:03
cis-1,2-Dichloroethene	ND	0.50	1	11/17/2017 03:03
trans-1,2-Dichloroethene	ND	0.50	1	11/17/2017 03:03
1,2-Dichloropropane	ND	0.50	1	11/17/2017 03:03
1,3-Dichloropropane	ND	0.50	1	11/17/2017 03:03
2,2-Dichloropropane	ND	0.50	1	11/17/2017 03:03

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Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11	1711448-027B	Water	11/09/2017 12:00	GC16 11161730.D	148891

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	11/17/2017 03:03
cis-1,3-Dichloropropene	ND	0.50	1	11/17/2017 03:03
trans-1,3-Dichloropropene	ND	0.50	1	11/17/2017 03:03
Diisopropyl ether (DIPE)	ND	0.50	1	11/17/2017 03:03
Ethylbenzene	ND	0.50	1	11/17/2017 03:03
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/17/2017 03:03
Freon 113	ND	0.50	1	11/17/2017 03:03
Hexachlorobutadiene	ND	0.50	1	11/17/2017 03:03
Hexachloroethane	ND	0.50	1	11/17/2017 03:03
2-Hexanone	ND	0.50	1	11/17/2017 03:03
Isopropylbenzene	ND	0.50	1	11/17/2017 03:03
4-Isopropyl toluene	ND	0.50	1	11/17/2017 03:03
Methyl-t-butyl ether (MTBE)	0.64	0.50	1	11/17/2017 03:03
Methylene chloride	ND	0.50	1	11/17/2017 03:03
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	11/17/2017 03:03
Naphthalene	ND	0.50	1	11/17/2017 03:03
n-Propyl benzene	ND	0.50	1	11/17/2017 03:03
Styrene	ND	0.50	1	11/17/2017 03:03
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/17/2017 03:03
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/17/2017 03:03
Tetrachloroethene	ND	0.50	1	11/17/2017 03:03
Toluene	ND	0.50	1	11/17/2017 03:03
1,2,3-Trichlorobenzene	ND	0.50	1	11/17/2017 03:03
1,2,4-Trichlorobenzene	ND	0.50	1	11/17/2017 03:03
1,1,1-Trichloroethane	ND	0.50	1	11/17/2017 03:03
1,1,2-Trichloroethane	ND	0.50	1	11/17/2017 03:03
Trichloroethene	ND	0.50	1	11/17/2017 03:03
Trichlorofluoromethane	ND	0.50	1	11/17/2017 03:03
1,2,3-Trichloropropane	ND	0.50	1	11/17/2017 03:03
1,2,4-Trimethylbenzene	ND	0.50	1	11/17/2017 03:03
1,3,5-Trimethylbenzene	ND	0.50	1	11/17/2017 03:03
Vinyl Chloride	ND	0.50	1	11/17/2017 03:03
Xylenes, Total	ND	0.50	1	11/17/2017 03:03

(Cont.)



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11	1711448-027B	Water	11/09/2017 12:00	GC16 11161730.D	148891

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	120	78-134		11/17/2017 03:03
Toluene-d8	108	82-120		11/17/2017 03:03
4-BFB	84	69-131		11/17/2017 03:03

Analyst(s): KF **Analytical Comments:** b1



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-12	1711448-028B	Water	11/09/2017 11:40	GC16 11161731.D	148891
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	10	1	11/17/2017 03:42	
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/17/2017 03:42	
Benzene	ND	0.50	1	11/17/2017 03:42	
Bromobenzene	ND	0.50	1	11/17/2017 03:42	
Bromochloromethane	ND	0.50	1	11/17/2017 03:42	
Bromodichloromethane	ND	0.50	1	11/17/2017 03:42	
Bromoform	ND	0.50	1	11/17/2017 03:42	
Bromomethane	ND	0.50	1	11/17/2017 03:42	
2-Butanone (MEK)	ND	2.0	1	11/17/2017 03:42	
t-Butyl alcohol (TBA)	ND	2.0	1	11/17/2017 03:42	
n-Butyl benzene	ND	0.50	1	11/17/2017 03:42	
sec-Butyl benzene	ND	0.50	1	11/17/2017 03:42	
tert-Butyl benzene	ND	0.50	1	11/17/2017 03:42	
Carbon Disulfide	ND	0.50	1	11/17/2017 03:42	
Carbon Tetrachloride	ND	0.50	1	11/17/2017 03:42	
Chlorobenzene	ND	0.50	1	11/17/2017 03:42	
Chloroethane	ND	0.50	1	11/17/2017 03:42	
Chloroform	3.6	0.50	1	11/17/2017 03:42	
Chloromethane	ND	0.50	1	11/17/2017 03:42	
2-Chlorotoluene	ND	0.50	1	11/17/2017 03:42	
4-Chlorotoluene	ND	0.50	1	11/17/2017 03:42	
Dibromochloromethane	ND	0.50	1	11/17/2017 03:42	
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/17/2017 03:42	
1,2-Dibromoethane (EDB)	ND	0.50	1	11/17/2017 03:42	
Dibromomethane	ND	0.50	1	11/17/2017 03:42	
1,2-Dichlorobenzene	ND	0.50	1	11/17/2017 03:42	
1,3-Dichlorobenzene	ND	0.50	1	11/17/2017 03:42	
1,4-Dichlorobenzene	ND	0.50	1	11/17/2017 03:42	
Dichlorodifluoromethane	ND	0.50	1	11/17/2017 03:42	
1,1-Dichloroethane	ND	0.50	1	11/17/2017 03:42	
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/17/2017 03:42	
1,1-Dichloroethene	ND	0.50	1	11/17/2017 03:42	
cis-1,2-Dichloroethene	ND	0.50	1	11/17/2017 03:42	
trans-1,2-Dichloroethene	ND	0.50	1	11/17/2017 03:42	
1,2-Dichloropropane	ND	0.50	1	11/17/2017 03:42	
1,3-Dichloropropane	ND	0.50	1	11/17/2017 03:42	
2,2-Dichloropropane	ND	0.50	1	11/17/2017 03:42	

(Cont.)



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-12	1711448-028B	Water	11/09/2017 11:40	GC16 11161731.D	148891

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	11/17/2017 03:42
cis-1,3-Dichloropropene	ND	0.50	1	11/17/2017 03:42
trans-1,3-Dichloropropene	ND	0.50	1	11/17/2017 03:42
Diisopropyl ether (DIPE)	ND	0.50	1	11/17/2017 03:42
Ethylbenzene	ND	0.50	1	11/17/2017 03:42
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/17/2017 03:42
Freon 113	ND	0.50	1	11/17/2017 03:42
Hexachlorobutadiene	ND	0.50	1	11/17/2017 03:42
Hexachloroethane	ND	0.50	1	11/17/2017 03:42
2-Hexanone	ND	0.50	1	11/17/2017 03:42
Isopropylbenzene	ND	0.50	1	11/17/2017 03:42
4-Isopropyl toluene	ND	0.50	1	11/17/2017 03:42
Methyl-t-butyl ether (MTBE)	ND	0.50	1	11/17/2017 03:42
Methylene chloride	ND	0.50	1	11/17/2017 03:42
4-Methyl-2-pentanone (MIBK)	0.93	0.50	1	11/17/2017 03:42
Naphthalene	ND	0.50	1	11/17/2017 03:42
n-Propyl benzene	ND	0.50	1	11/17/2017 03:42
Styrene	ND	0.50	1	11/17/2017 03:42
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/17/2017 03:42
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/17/2017 03:42
Tetrachloroethene	ND	0.50	1	11/17/2017 03:42
Toluene	ND	0.50	1	11/17/2017 03:42
1,2,3-Trichlorobenzene	ND	0.50	1	11/17/2017 03:42
1,2,4-Trichlorobenzene	ND	0.50	1	11/17/2017 03:42
1,1,1-Trichloroethane	ND	0.50	1	11/17/2017 03:42
1,1,2-Trichloroethane	ND	0.50	1	11/17/2017 03:42
Trichloroethene	ND	0.50	1	11/17/2017 03:42
Trichlorofluoromethane	ND	0.50	1	11/17/2017 03:42
1,2,3-Trichloropropane	ND	0.50	1	11/17/2017 03:42
1,2,4-Trimethylbenzene	ND	0.50	1	11/17/2017 03:42
1,3,5-Trimethylbenzene	ND	0.50	1	11/17/2017 03:42
Vinyl Chloride	ND	0.50	1	11/17/2017 03:42
Xylenes, Total	0.80	0.50	1	11/17/2017 03:42

(Cont.)



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/17/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-12	1711448-028B	Water	11/09/2017 11:40	GC16 11161731.D	148891

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	120	78-134		11/17/2017 03:42
Toluene-d8	107	82-120		11/17/2017 03:42
4-BFB	85	69-131		11/17/2017 03:42

Analyst(s): KF

Analytical Comments: b1



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9-3.5	1711448-002A	Soil	11/09/2017 10:48	GC19 11161735.D	148439

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	11/17/2017 09:53
MTBE	---	0.050	1	11/17/2017 09:53
Benzene	---	0.0050	1	11/17/2017 09:53
Toluene	---	0.0050	1	11/17/2017 09:53
Ethylbenzene	---	0.0050	1	11/17/2017 09:53
Xylenes	---	0.015	1	11/17/2017 09:53

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	90	62-126	11/17/2017 09:53

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10-2.5	1711448-008A	Soil	11/09/2017 11:27	GC7 11171708.D	148439

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	11/17/2017 13:30
MTBE	---	0.050	1	11/17/2017 13:30
Benzene	---	0.0050	1	11/17/2017 13:30
Toluene	---	0.0050	1	11/17/2017 13:30
Ethylbenzene	---	0.0050	1	11/17/2017 13:30
Xylenes	---	0.015	1	11/17/2017 13:30

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	87	62-126	11/17/2017 13:30

Analyst(s): IA



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11-5.5	1711448-014A	Soil	11/09/2017 09:35	GC7 11171709.D	148439

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	11/17/2017 13:59
MTBE	---	0.050	1	11/17/2017 13:59
Benzene	---	0.0050	1	11/17/2017 13:59
Toluene	---	0.0050	1	11/17/2017 13:59
Ethylbenzene	---	0.0050	1	11/17/2017 13:59
Xylenes	---	0.015	1	11/17/2017 13:59
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	77	62-126		11/17/2017 13:59

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-12-5.5	1711448-020A	Soil	11/09/2017 08:58	GC7 11171707.D	148439

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	11/17/2017 13:00
MTBE	---	0.050	1	11/17/2017 13:00
Benzene	---	0.0050	1	11/17/2017 13:00
Toluene	---	0.0050	1	11/17/2017 13:00
Ethylbenzene	---	0.0050	1	11/17/2017 13:00
Xylenes	---	0.015	1	11/17/2017 13:00
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	83	62-126		11/17/2017 13:00

Analyst(s): IA



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/14/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9	1711448-025A	Water	11/09/2017 11:50	GC12 11141719.D	148643

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	11/14/2017 20:22
MTBE	---	5.0	1	11/14/2017 20:22
Benzene	---	0.50	1	11/14/2017 20:22
Toluene	---	0.50	1	11/14/2017 20:22
Ethylbenzene	---	0.50	1	11/14/2017 20:22
Xylenes	---	1.5	1	11/14/2017 20:22

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	114	89-115	11/14/2017 20:22

Analyst(s): IA

Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10	1711448-026A	Water	11/09/2017 12:10	GC12 11141720.D	148643

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	11/14/2017 20:53
MTBE	---	5.0	1	11/14/2017 20:53
Benzene	---	0.50	1	11/14/2017 20:53
Toluene	---	0.50	1	11/14/2017 20:53
Ethylbenzene	---	0.50	1	11/14/2017 20:53
Xylenes	---	1.5	1	11/14/2017 20:53

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	112	89-115	11/14/2017 20:53

Analyst(s): IA

Analytical Comments: b1

(Cont.)



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/14/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11	1711448-027A	Water	11/09/2017 12:00	GC12 11141721.D	148643

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	11/14/2017 21:23
MTBE	---	5.0	1	11/14/2017 21:23
Benzene	---	0.50	1	11/14/2017 21:23
Toluene	---	0.50	1	11/14/2017 21:23
Ethylbenzene	---	0.50	1	11/14/2017 21:23
Xylenes	---	1.5	1	11/14/2017 21:23

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	113	89-115	11/14/2017 21:23

Analyst(s): IA

Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-12	1711448-028A	Water	11/09/2017 11:40	GC12 11141722.D	148643

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	11/14/2017 21:54
MTBE	---	5.0	1	11/14/2017 21:54
Benzene	---	0.50	1	11/14/2017 21:54
Toluene	---	0.50	1	11/14/2017 21:54
Ethylbenzene	---	0.50	1	11/14/2017 21:54
Xylenes	---	1.5	1	11/14/2017 21:54

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	111	89-115	11/14/2017 21:54

Analyst(s): IA

Analytical Comments: b1



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9-3.5	1711448-002A	Soil	11/09/2017 10:48	GC39A 11151776.D	148461
<u>Analytes</u>					
	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		1.0	1	11/17/2017 00:17
TPH-Motor Oil (C18-C36)	ND		5.0	1	11/17/2017 00:17
<u>Surrogates</u>					
	<u>REC (%)</u>		<u>Limits</u>		
C9	89		78-126		11/17/2017 00:17
<u>Analyst(s):</u> TK					

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10-2.5	1711448-008A	Soil	11/09/2017 11:27	GC11A 11151750.D	148461
<u>Analytes</u>					
	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	2.2		1.0	1	11/16/2017 03:46
TPH-Motor Oil (C18-C36)	25		5.0	1	11/16/2017 03:46
<u>Surrogates</u>					
	<u>REC (%)</u>		<u>Limits</u>		
C9	106		78-126		11/16/2017 03:46
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e7,e2		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11-5.5	1711448-014A	Soil	11/09/2017 09:35	GC39A 11151780.D	148461
<u>Analytes</u>					
	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		1.0	1	11/17/2017 01:34
TPH-Motor Oil (C18-C36)	ND		5.0	1	11/17/2017 01:34
<u>Surrogates</u>					
	<u>REC (%)</u>		<u>Limits</u>		
C9	89		78-126		11/17/2017 01:34
<u>Analyst(s):</u> TK					

(Cont.)



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-12-5.5	1711448-020A	Soil	11/09/2017 08:58	GC9b 11151775.D	148461

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/16/2017 23:48
TPH-Motor Oil (C18-C36)	ND	5.0	1	11/16/2017 23:48

Surrogates	REC (%)	Limits	Date Analyzed
C9	97	78-126	11/16/2017 23:48

Analyst(s): TK



Analytical Report

Client: AEI Consultants
Date Received: 11/10/17 14:08
Date Prepared: 11/10/17-11/14/17
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-9	1711448-025A	Water	11/09/2017 11:50	GC11A 11151732.D	148652
<u>Analytes</u>					
	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	400		250	5	11/15/2017 21:55
TPH-Motor Oil (C18-C36)	5200		1200	5	11/15/2017 21:55
<u>Surrogates</u>					
	<u>REC (%)</u>		<u>Limits</u>		
C9	103		61-139		11/15/2017 21:55
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e7,e2,b1		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-10	1711448-026A	Water	11/09/2017 12:10	GC39B 11141749.D	148466
<u>Analytes</u>					
	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	260		100	1	11/15/2017 03:46
TPH-Motor Oil (C18-C36)	2900		500	1	11/15/2017 03:46
<u>Surrogates</u>					
	<u>REC (%)</u>		<u>Limits</u>		
C9	99		61-139		11/15/2017 03:46
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e7,e2,b1		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-11	1711448-027A	Water	11/09/2017 12:00	GC6A 11121716.D	148466
<u>Analytes</u>					
	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		100	1	11/12/2017 13:03
TPH-Motor Oil (C18-C36)	ND		500	1	11/12/2017 13:03
<u>Surrogates</u>					
	<u>REC (%)</u>		<u>Limits</u>		
C9	99		61-139		11/12/2017 13:03
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> a4,b1		

(Cont.)



Quality Control Report

Client: AEI Consultants
Date Prepared: 11/9/17
Date Analyzed: 11/11/17 - 11/12/17
Instrument: GC28, GC38
Matrix: Soil
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
BatchID: 148450
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-148450
 1711383-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	0.878	0.10	1	-	88	48-156
tert-Amyl methyl ether (TAME)	ND	0.0385	0.0050	0.050	-	77	56-115
Benzene	ND	0.0444	0.0050	0.050	-	89	63-131
Bromobenzene	ND	0.0450	0.0050	0.050	-	90	66-127
Bromochloromethane	ND	0.0438	0.0050	0.050	-	88	64-124
Bromodichloromethane	ND	0.0426	0.0050	0.050	-	85	64-120
Bromoform	ND	0.0338	0.0050	0.050	-	68	48-92
Bromomethane	ND	0.0460	0.0050	0.050	-	92	25-163
2-Butanone (MEK)	ND	0.167	0.020	0.20	-	84	51-133
t-Butyl alcohol (TBA)	ND	0.150	0.050	0.20	-	75	52-129
n-Butyl benzene	ND	0.0560	0.0050	0.050	-	112	83-200
sec-Butyl benzene	ND	0.0566	0.0050	0.050	-	113	81-199
tert-Butyl benzene	ND	0.0554	0.0050	0.050	-	111	79-178
Carbon Disulfide	ND	0.0441	0.0050	0.050	-	88	64-136
Carbon Tetrachloride	ND	0.0442	0.0050	0.050	-	88	66-140
Chlorobenzene	ND	0.0447	0.0050	0.050	-	89	73-116
Chloroethane	ND	0.0450	0.0050	0.050	-	90	35-147
Chloroform	ND	0.0442	0.0050	0.050	-	88	65-130
Chloromethane	ND	0.0442	0.0050	0.050	-	88	30-137
2-Chlorotoluene	ND	0.0529	0.0050	0.050	-	106	75-152
4-Chlorotoluene	ND	0.0495	0.0050	0.050	-	99	71-148
Dibromochloromethane	ND	0.0417	0.0050	0.050	-	83	61-106
1,2-Dibromo-3-chloropropane	ND	0.0134	0.0040	0.020	-	67	36-120
1,2-Dibromoethane (EDB)	ND	0.0409	0.0040	0.050	-	82	67-118
Dibromomethane	ND	0.0408	0.0050	0.050	-	82	61-116
1,2-Dichlorobenzene	ND	0.0401	0.0050	0.050	-	80	59-106
1,3-Dichlorobenzene	ND	0.0502	0.0050	0.050	-	100	75-129
1,4-Dichlorobenzene	ND	0.0455	0.0050	0.050	-	91	66-127
Dichlorodifluoromethane	ND	0.0200	0.0050	0.050	-	40	13-74
1,1-Dichloroethane	ND	0.0443	0.0050	0.050	-	89	65-134
1,2-Dichloroethane (1,2-DCA)	ND	0.0417	0.0040	0.050	-	83	57-131
1,1-Dichloroethene	ND	0.0436	0.0050	0.050	-	87	62-127
cis-1,2-Dichloroethene	ND	0.0435	0.0050	0.050	-	87	66-130
trans-1,2-Dichloroethene	ND	0.0439	0.0050	0.050	-	88	60-131
1,2-Dichloropropane	ND	0.0429	0.0050	0.050	-	86	63-127
1,3-Dichloropropane	ND	0.0417	0.0050	0.050	-	83	68-124
2,2-Dichloropropane	ND	0.0456	0.0050	0.050	-	91	63-150

(Cont.)



Quality Control Report

Client: AEI Consultants
Date Prepared: 11/9/17
Date Analyzed: 11/11/17 - 11/12/17
Instrument: GC28, GC38
Matrix: Soil
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
BatchID: 148450
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-148450
 1711383-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	0.0444	0.0050	0.050	-	89	67-134
cis-1,3-Dichloropropene	ND	0.0458	0.0050	0.050	-	92	65-138
trans-1,3-Dichloropropene	ND	0.0458	0.0050	0.050	-	92	66-124
Diisopropyl ether (DIPE)	ND	0.0417	0.0050	0.050	-	83	58-129
Ethylbenzene	ND	0.0476	0.0050	0.050	-	95	73-145
Ethyl tert-butyl ether (ETBE)	ND	0.0413	0.0050	0.050	-	83	62-125
Freon 113	ND	0.0366	0.0050	0.050	-	73	55-116
Hexachlorobutadiene	ND	0.0553	0.0050	0.050	-	111	75-178
Hexachloroethane	ND	0.0569	0.0050	0.050	-	114	75-152
2-Hexanone	ND	0.0335	0.0050	0.050	-	67	41-113
Isopropylbenzene	ND	0.0590	0.0050	0.050	-	118	67-172
4-Isopropyl toluene	ND	0.0578	0.0050	0.050	-	116	88-171
Methyl-t-butyl ether (MTBE)	ND	0.0399	0.0050	0.050	-	80	58-122
Methylene chloride	ND	0.0455	0.0050	0.050	-	91	57-140
4-Methyl-2-pentanone (MIBK)	ND	0.0335	0.0050	0.050	-	67	42-117
Naphthalene	ND	0.0223	0.0050	0.050	-	45	29-65
n-Propyl benzene	ND	0.0583	0.0050	0.050	-	117	85-174
Styrene	ND	0.0450	0.0050	0.050	-	90	63-126
1,1,1,2-Tetrachloroethane	ND	0.0446	0.0050	0.050	-	89	68-131
1,1,2,2-Tetrachloroethane	ND	0.0358	0.0050	0.050	-	72	45-121
Tetrachloroethene	ND	0.0475	0.0050	0.050	-	95	65-150
Toluene	ND	0.0460	0.0050	0.050	-	92	72-135
1,2,3-Trichlorobenzene	ND	0.0280	0.0050	0.050	-	56	35-80
1,2,4-Trichlorobenzene	ND	0.0356	0.0050	0.050	-	71	45-103
1,1,1-Trichloroethane	ND	0.0440	0.0050	0.050	-	88	67-137
1,1,2-Trichloroethane	ND	0.0407	0.0050	0.050	-	81	67-117
Trichloroethene	ND	0.0456	0.0050	0.050	-	91	62-135
Trichlorofluoromethane	ND	0.0395	0.0050	0.050	-	79	56-124
1,2,3-Trichloropropane	ND	0.0419	0.0050	0.050	-	84	58-133
1,2,4-Trimethylbenzene	ND	0.0558	0.0050	0.050	-	112	78-161
1,3,5-Trimethylbenzene	ND	0.0579	0.0050	0.050	-	116	85-170
Vinyl Chloride	ND	0.0415	0.0050	0.050	-	83	32-142
Xylenes, Total	ND	0.142	0.0050	0.15	-	95	70-137

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Quality Control Report

Client: AEI Consultants
Date Prepared: 11/9/17
Date Analyzed: 11/11/17 - 11/12/17
Instrument: GC28, GC38
Matrix: Soil
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
BatchID: 148450
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-148450
 1711383-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.1377	0.140		0.12	110	112	87-127
Toluene-d8	0.1519	0.149		0.12	121	119	93-141
4-BFB	0.01424	0.0137		0.012	114	110	84-137
Benzene-d6	0.1092	0.108		0.10	109	108	67-131
Ethylbenzene-d10	0.1083	0.106		0.10	108	106	78-153
1,2-DCB-d4	0.08752	0.0884		0.10	88	88	63-109



Quality Control Report

Client:	AEI Consultants	WorkOrder:	1711448
Date Prepared:	11/9/17	BatchID:	148450
Date Analyzed:	11/11/17 - 11/12/17	Extraction Method:	SW5030B
Instrument:	GC28, GC38	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	372927; 401 Jackson Street, Oakland	Sample ID:	MB/LCS-148450 1711383-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acetone	0.937	0.939	1	ND	94	94	36-141	0	20
tert-Amyl methyl ether (TAME)	0.0370	0.0374	0.050	ND	74	75	46-105	1.03	20
Benzene	0.0414	0.0421	0.050	ND	83	84	46-124	1.80	20
Bromobenzene	0.0442	0.0450	0.050	ND	88	90	50-119	1.68	20
Bromochloromethane	0.0425	0.0421	0.050	ND	85	84	42-122	0.819	20
Bromodichloromethane	0.0415	0.0420	0.050	ND	83	84	48-112	1.09	20
Bromoform	0.0299	0.0303	0.050	ND	60	61	36-90	1.32	20
Bromomethane	0.0490	0.0496	0.050	ND	98	99	10-149	1.26	20
2-Butanone (MEK)	0.149	0.152	0.20	ND	75	76	43-114	1.70	20
t-Butyl alcohol (TBA)	0.149	0.152	0.20	ND	74	76	33-123	2.39	20
n-Butyl benzene	0.0491	0.0496	0.050	ND	98	99	40-185	1.20	20
sec-Butyl benzene	0.0500	0.0513	0.050	ND	100	103	40-183	2.74	20
tert-Butyl benzene	0.0515	0.0527	0.050	ND	103	105	44-168	2.28	20
Carbon Disulfide	0.0406	0.0406	0.050	ND	81	81	23-139	0	20
Carbon Tetrachloride	0.0414	0.0416	0.050	ND	83	83	43-133	0	20
Chlorobenzene	0.0428	0.0438	0.050	ND	86	88	51-115	2.36	20
Chloroethane	0.0413	0.0419	0.050	ND	83	84	16-138	1.57	20
Chloroform	0.0421	0.0427	0.050	ND	84	85	54-117	1.45	20
Chloromethane	0.0365	0.0364	0.050	ND	73	73	14-128	0	20
2-Chlorotoluene	0.0497	0.0506	0.050	ND	99	101	54-141	1.66	20
4-Chlorotoluene	0.0476	0.0484	0.050	ND	95	97	52-134	1.81	20
Dibromochloromethane	0.0359	0.0360	0.050	ND	72	72	46-102	0	20
1,2-Dibromo-3-chloropropane	0.0136	0.0134	0.020	ND	68	67	16-120	1.47	20
1,2-Dibromoethane (EDB)	0.0420	0.0435	0.050	ND	84	87	48-113	3.51	20
Dibromomethane	0.0403	0.0404	0.050	ND	81	81	44-110	0	20
1,2-Dichlorobenzene	0.0415	0.0421	0.050	ND	83	84	43-106	1.40	20
1,3-Dichlorobenzene	0.0478	0.0486	0.050	ND	96	97	49-128	1.58	20
1,4-Dichlorobenzene	0.0432	0.0443	0.050	ND	86	89	48-120	2.59	20
Dichlorodifluoromethane	0.0173	0.0171	0.050	ND	35	34	8-63	0.719	20
1,1-Dichloroethane	0.0425	0.0430	0.050	ND	85	86	50-122	1.03	20
1,2-Dichloroethane (1,2-DCA)	0.0403	0.0409	0.050	ND	81	82	46-116	1.61	20
1,1-Dichloroethene	0.0414	0.0418	0.050	ND	83	84	37-124	1.08	20
cis-1,2-Dichloroethene	0.0413	0.0417	0.050	ND	83	83	47-123	0	20
trans-1,2-Dichloroethene	0.0426	0.0428	0.050	ND	85	86	31-131	0.347	20
1,2-Dichloropropane	0.0422	0.0427	0.050	ND	84	85	50-116	1.33	20
1,3-Dichloropropane	0.0420	0.0430	0.050	ND	84	86	52-115	2.33	20
2,2-Dichloropropane	0.0429	0.0438	0.050	ND	86	88	43-137	2.08	20

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Quality Control Report

Client: AEI Consultants
Date Prepared: 11/9/17
Date Analyzed: 11/11/17 - 11/12/17
Instrument: GC28, GC38
Matrix: Soil
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
BatchID: 148450
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-148450
 1711383-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,1-Dichloropropene	0.0411	0.0412	0.050	ND	82	82	43-126	0	20
cis-1,3-Dichloropropene	0.0434	0.0445	0.050	ND	87	89	35-134	2.46	20
trans-1,3-Dichloropropene	0.0388	0.0398	0.050	ND	78	80	35-124	2.45	20
Diisopropyl ether (DIPE)	0.0367	0.0333	0.050	ND	73	67	49-116	9.63	20
Ethylbenzene	0.0457	0.0466	0.050	ND	91	93	49-137	2.01	20
Ethyl tert-butyl ether (ETBE)	0.0392	0.0393	0.050	ND	78	79	50-113	0.223	20
Freon 113	0.0352	0.0348	0.050	ND	70	70	28-114	0	20
Hexachlorobutadiene	0.0556	0.0572	0.050	ND	111	114	22-180	2.72	20
Hexachloroethane	0.0461	0.0478	0.050	ND	92	96	28-158	3.50	20
2-Hexanone	0.0329	0.0347	0.050	ND	66	69	31-102	5.38	20
Isopropylbenzene	0.0516	0.0526	0.050	ND	103	105	50-153	2.02	20
4-Isopropyl toluene	0.0527	0.0537	0.050	ND	105	107	41-171	1.88	20
Methyl-t-butyl ether (MTBE)	0.0396	0.0396	0.050	ND	79	79	48-110	0	20
Methylene chloride	0.0444	0.0438	0.050	ND	89	88	42-127	1.36	20
4-Methyl-2-pentanone (MIBK)	0.0325	0.0339	0.050	ND	65	68	24-114	4.16	20
Naphthalene	0.0252	0.0253	0.050	ND	50	51	19-69	0.530	20
n-Propyl benzene	0.0523	0.0538	0.050	ND	105	108	46-168	2.80	20
Styrene	0.0438	0.0442	0.050	ND	87	88	42-122	1.01	20
1,1,1,2-Tetrachloroethane	0.0444	0.0454	0.050	ND	89	91	52-121	2.24	20
1,1,2,2-Tetrachloroethane	0.0352	0.0359	0.050	ND	70	72	27-116	2.16	20
Tetrachloroethene	0.0427	0.0441	0.050	ND	85	88	37-149	3.19	20
Toluene	0.0435	0.0443	0.050	ND	87	89	52-124	1.95	20
1,2,3-Trichlorobenzene	0.0319	0.0321	0.050	ND	64	64	20-86	0	20
1,2,4-Trichlorobenzene	0.0388	0.0399	0.050	ND	78	80	24-107	2.98	20
1,1,1-Trichloroethane	0.0404	0.0413	0.050	ND	81	83	48-128	2.28	20
1,1,2-Trichloroethane	0.0410	0.0416	0.050	ND	82	83	51-110	1.25	20
Trichloroethene	0.0428	0.0438	0.050	ND	86	88	42-128	2.16	20
Trichlorofluoromethane	0.0380	0.0382	0.050	ND	76	76	31-121	0	20
1,2,3-Trichloropropane	0.0402	0.0406	0.050	ND	80	81	50-115	0.928	20
1,2,4-Trimethylbenzene	0.0504	0.0510	0.050	ND	101	102	48-151	1.19	20
1,3,5-Trimethylbenzene	0.0509	0.0522	0.050	ND	102	104	51-159	2.44	20
Vinyl Chloride	0.0358	0.0356	0.050	ND	71	71	11-136	0	20
Xylenes, Total	0.134	0.137	0.15	ND	89	91	38-141	1.96	20

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Quality Control Report

Client: AEI Consultants
Date Prepared: 11/9/17
Date Analyzed: 11/11/17 - 11/12/17
Instrument: GC28, GC38
Matrix: Soil
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
BatchID: 148450
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-148450
 1711383-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Surrogate Recovery									
Dibromofluoromethane	0.141	0.142	0.12		113	113	82-136	0	20
Toluene-d8	0.146	0.147	0.12		117	118	92-139	0.484	20
4-BFB	0.0142	0.0139	0.012		113	111	82-135	2.01	20
Benzene-d6	0.0951	0.0962	0.10		95	96	55-122	1.20	20
Ethylbenzene-d10	0.0910	0.0930	0.10		91	93	58-141	2.20	20
1,2-DCB-d4	0.0855	0.0876	0.10		86	88	51-107	2.36	20



Quality Control Report

Client:	AEI Consultants	WorkOrder:	1711448
Date Prepared:	11/16/17	BatchID:	148891
Date Analyzed:	11/16/17	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Water	Unit:	µg/L
Project:	372927; 401 Jackson Street, Oakland	Sample ID:	MB/LCS/LCSD-148891

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	10	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.50	-	-	-
Benzene	ND	0.50	-	-	-
Bromobenzene	ND	0.50	-	-	-
Bromochloromethane	ND	0.50	-	-	-
Bromodichloromethane	ND	0.50	-	-	-
Bromoform	ND	0.50	-	-	-
Bromomethane	ND	0.50	-	-	-
2-Butanone (MEK)	ND	2.0	-	-	-
t-Butyl alcohol (TBA)	ND	2.0	-	-	-
n-Butyl benzene	ND	0.50	-	-	-
sec-Butyl benzene	ND	0.50	-	-	-
tert-Butyl benzene	ND	0.50	-	-	-
Carbon Disulfide	ND	0.50	-	-	-
Carbon Tetrachloride	ND	0.50	-	-	-
Chlorobenzene	ND	0.50	-	-	-
Chloroethane	ND	0.50	-	-	-
Chloroform	ND	0.50	-	-	-
Chloromethane	ND	0.50	-	-	-
2-Chlorotoluene	ND	0.50	-	-	-
4-Chlorotoluene	ND	0.50	-	-	-
Dibromochloromethane	ND	0.50	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.20	-	-	-
1,2-Dibromoethane (EDB)	ND	0.50	-	-	-
Dibromomethane	ND	0.50	-	-	-
1,2-Dichlorobenzene	ND	0.50	-	-	-
1,3-Dichlorobenzene	ND	0.50	-	-	-
1,4-Dichlorobenzene	ND	0.50	-	-	-
Dichlorodifluoromethane	ND	0.50	-	-	-
1,1-Dichloroethane	ND	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.50	-	-	-
1,1-Dichloroethene	ND	0.50	-	-	-
cis-1,2-Dichloroethene	ND	0.50	-	-	-
trans-1,2-Dichloroethene	ND	0.50	-	-	-
1,2-Dichloropropane	ND	0.50	-	-	-
1,3-Dichloropropane	ND	0.50	-	-	-
2,2-Dichloropropane	ND	0.50	-	-	-
1,1-Dichloropropene	ND	0.50	-	-	-
cis-1,3-Dichloropropene	ND	0.50	-	-	-

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Quality Control Report

Client:	AEI Consultants	WorkOrder:	1711448
Date Prepared:	11/16/17	BatchID:	148891
Date Analyzed:	11/16/17	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Water	Unit:	µg/L
Project:	372927; 401 Jackson Street, Oakland	Sample ID:	MB/LCS/LCSD-148891

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
trans-1,3-Dichloropropene	ND	0.50	-	-	-
Diisopropyl ether (DIPE)	ND	0.50	-	-	-
Ethylbenzene	ND	0.50	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.50	-	-	-
Freon 113	ND	0.50	-	-	-
Hexachlorobutadiene	ND	0.50	-	-	-
Hexachloroethane	ND	0.50	-	-	-
2-Hexanone	ND	0.50	-	-	-
Isopropylbenzene	ND	0.50	-	-	-
4-Isopropyl toluene	ND	0.50	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.50	-	-	-
Methylene chloride	ND	0.50	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.50	-	-	-
Naphthalene	ND	0.50	-	-	-
n-Propyl benzene	ND	0.50	-	-	-
Styrene	ND	0.50	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.50	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.50	-	-	-
Tetrachloroethene	ND	0.50	-	-	-
Toluene	ND	0.50	-	-	-
1,2,3-Trichlorobenzene	ND	0.50	-	-	-
1,2,4-Trichlorobenzene	ND	0.50	-	-	-
1,1,1-Trichloroethane	ND	0.50	-	-	-
1,1,2-Trichloroethane	ND	0.50	-	-	-
Trichloroethene	ND	0.50	-	-	-
Trichlorofluoromethane	ND	0.50	-	-	-
1,2,3-Trichloropropane	ND	0.50	-	-	-
1,2,4-Trimethylbenzene	ND	0.50	-	-	-
1,3,5-Trimethylbenzene	ND	0.50	-	-	-
Vinyl Chloride	ND	0.50	-	-	-
Xylenes, Total	ND	0.50	-	-	-

Surrogate Recovery

Dibromofluoromethane	29.41		25	118	91-133
Toluene-d8	27.94		25	112	87-127
4-BFB	2.218		2.5	89	66-140

(Cont.)



Quality Control Report

Client: AEI Consultants
Date Prepared: 11/16/17
Date Analyzed: 11/16/17
Instrument: GC16
Matrix: Water
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
BatchID: 148891
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS/LCSD-148891

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	170	157	200	85	79	47-122	7.62	20
tert-Amyl methyl ether (TAME)	10.0	9.34	10	100	93	62-121	6.97	20
Benzene	10.3	9.79	10	103	98	74-121	4.91	20
Bromobenzene	10.1	9.51	10	101	95	63-127	6.45	20
Bromochloromethane	10.5	9.80	10	105	98	70-126	7.22	20
Bromodichloromethane	10.2	9.62	10	102	96	66-127	6.18	20
Bromoform	8.71	8.09	10	87	81	60-119	7.33	20
Bromomethane	10.8	9.84	10	108	98	32-155	9.62	20
2-Butanone (MEK)	38.0	35.2	40	95	88	51-117	7.66	20
t-Butyl alcohol (TBA)	37.7	33.7	40	94	84	41-122	11.3	20
n-Butyl benzene	9.73	9.00	10	97	90	73-137	7.81	20
sec-Butyl benzene	11.3	10.6	10	113	106	71-137	6.06	20
tert-Butyl benzene	11.2	10.5	10	112	105	61-136	6.77	20
Carbon Disulfide	9.65	9.21	10	97	92	61-139	4.67	20
Carbon Tetrachloride	9.88	9.38	10	99	94	69-137	5.14	20
Chlorobenzene	9.98	9.53	10	100	95	71-122	4.55	20
Chloroethane	10.8	9.53	10	108	95	54-132	12.3	20
Chloroform	10.4	9.82	10	104	98	73-122	5.84	20
Chloromethane	8.24	7.63	10	82	76	48-136	7.59	20
2-Chlorotoluene	11.4	10.7	10	114	107	65-134	6.32	20
4-Chlorotoluene	10.2	9.68	10	102	97	65-130	5.69	20
Dibromochloromethane	9.65	9.22	10	96	92	65-121	4.58	20
1,2-Dibromo-3-chloropropane	2.89	2.96	4	72	74	41-132	2.29	20
1,2-Dibromoethane (EDB)	9.39	8.92	10	94	89	67-125	5.14	20
Dibromomethane	10.0	9.32	10	100	93	68-121	7.28	20
1,2-Dichlorobenzene	9.50	9.13	10	95	91	69-128	4.06	20
1,3-Dichlorobenzene	11.3	10.5	10	113	105	71-131	7.52	20
1,4-Dichlorobenzene	10.0	9.63	10	100	96	70-128	4.11	20
Dichlorodifluoromethane	7.95	7.50	10	79	75	21-158	5.84	20
1,1-Dichloroethane	10.2	9.72	10	102	97	73-123	4.61	20
1,2-Dichloroethane (1,2-DCA)	9.92	9.30	10	99	93	61-127	6.37	20
1,1-Dichloroethene	9.90	9.42	10	99	94	68-130	4.92	20
cis-1,2-Dichloroethene	10.5	9.73	10	105	97	72-123	7.66	20
trans-1,2-Dichloroethene	10.4	9.83	10	104	98	64-138	5.85	20
1,2-Dichloropropane	10.4	9.86	10	104	99	71-121	5.36	20
1,3-Dichloropropane	9.62	9.17	10	96	92	69-120	4.77	20
2,2-Dichloropropane	10.1	9.46	10	101	95	64-142	6.76	20
1,1-Dichloropropene	10.3	9.73	10	103	97	70-130	5.43	20
cis-1,3-Dichloropropene	9.87	9.44	10	99	94	58-136	4.46	20

(Cont.)



Quality Control Report

Client:	AEI Consultants	WorkOrder:	1711448
Date Prepared:	11/16/17	BatchID:	148891
Date Analyzed:	11/16/17	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Water	Unit:	µg/L
Project:	372927; 401 Jackson Street, Oakland	Sample ID:	MB/LCS/LCSD-148891

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	10.7	10.1	10	107	101	66-119	5.56	20
Diisopropyl ether (DIPE)	10.4	9.88	10	104	99	66-123	5.35	20
Ethylbenzene	10.0	9.54	10	100	95	71-125	5.11	20
Ethyl tert-butyl ether (ETBE)	10.6	9.99	10	106	100	67-122	5.54	20
Freon 113	10.1	9.60	10	101	96	68-132	4.84	20
Hexachlorobutadiene	8.99	8.90	10	90	89	56-155	1.02	20
Hexachloroethane	10.5	9.70	10	105	97	61-129	8.21	20
2-Hexanone	8.91	8.34	10	89	83	51-115	6.53	20
Isopropylbenzene	10.9	10.2	10	109	102	66-134	7.24	20
4-Isopropyl toluene	10.7	9.93	10	107	99	70-136	7.50	20
Methyl-t-butyl ether (MTBE)	10.0	9.40	10	100	94	64-118	6.57	20
Methylene chloride	9.08	8.61	10	91	86	62-121	5.34	20
4-Methyl-2-pentanone (MIBK)	8.74	8.30	10	87	83	51-115	5.27	20
Naphthalene	9.33	9.39	10	93	94	55-137	0.681	20
n-Propyl benzene	11.2	10.6	10	112	106	63-140	6.11	20
Styrene	10.6	9.80	10	106	98	62-133	7.56	20
1,1,1,2-Tetrachloroethane	10.0	9.57	10	100	96	69-128	4.31	20
1,1,2,2-Tetrachloroethane	10.1	9.43	10	101	94	60-118	6.64	20
Tetrachloroethene	9.52	9.14	10	95	91	63-136	4.09	20
Toluene	9.79	9.44	10	98	94	67-124	3.59	20
1,2,3-Trichlorobenzene	9.07	9.18	10	91	92	57-145	1.25	20
1,2,4-Trichlorobenzene	9.30	9.18	10	93	92	60-144	1.31	20
1,1,1-Trichloroethane	10.1	9.64	10	101	96	70-133	4.34	20
1,1,2-Trichloroethane	9.54	9.03	10	95	90	65-125	5.45	20
Trichloroethene	9.91	9.44	10	99	94	67-133	4.84	20
Trichlorofluoromethane	9.87	9.46	10	99	95	59-145	4.28	20
1,2,3-Trichloropropane	10.3	9.68	10	103	97	65-115	5.85	20
1,2,4-Trimethylbenzene	11.2	10.4	10	112	104	67-136	7.43	20
1,3,5-Trimethylbenzene	11.1	10.6	10	111	106	68-135	5.09	20
Vinyl Chloride	9.16	8.73	10	92	87	53-146	4.75	20
Xylenes, Total	31.3	29.3	30	104	98	68-128	6.56	20
Surrogate Recovery								
Dibromofluoromethane	29.4	29.4	25	118	117	91-133	0.232	20
Toluene-d8	27.5	28.0	25	110	112	87-127	1.88	20
4-BFB	2.62	2.61	2.5	105	104	66-140	0.286	20



Quality Control Report

Client: AEI Consultants	WorkOrder: 1711448
Date Prepared: 11/9/17	BatchID: 148439
Date Analyzed: 11/10/17 - 11/14/17	Extraction Method: SW5030B
Instrument: GC19	Analytical Method: SW8021B/8015Bm
Matrix: Soil	Unit: mg/Kg
Project: 372927; 401 Jackson Street, Oakland	Sample ID: MB/LCS-148439 1711381-003AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	1.0	-	-	-
MTBE	ND	0.050	-	-	-
Benzene	ND	0.0050	-	-	-
Toluene	ND	0.0050	-	-	-
Ethylbenzene	ND	0.0050	-	-	-
Xylenes	ND	0.015	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.09064		0.10	91	75-134
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.584	-	0.60	97	-	82-118	-	-
MTBE	0.108	-	0.10	108	-	61-119	-	-
Benzene	0.112	-	0.10	112	-	77-128	-	-
Toluene	0.116	-	0.10	116	-	74-132	-	-
Ethylbenzene	0.115	-	0.10	115	-	84-127	-	-
Xylenes	0.329	-	0.30	110	-	86-129	-	-

Surrogate Recovery

2-Fluorotoluene	0.0926	-	0.10	93	-	75-134	-	-
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.546	0.552	0.60	ND	91	92	58-129	1.12	20
MTBE	0.102	0.106	0.10	ND	102	106	47-118	3.99	20
Benzene	0.110	0.109	0.10	ND	110	109	55-129	1.02	20
Toluene	0.114	0.113	0.10	ND	114	113	56-130	0.713	20
Ethylbenzene	0.112	0.112	0.10	ND	112	112	63-129	0	20
Xylenes	0.317	0.317	0.30	ND	106	106	64-131	0	20

Surrogate Recovery

2-Fluorotoluene	0.0910	0.0892	0.10		91	89	62-126	1.96	20
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Quality Control Report

Client: AEI Consultants	WorkOrder: 1711448
Date Prepared: 11/14/17	BatchID: 148643
Date Analyzed: 11/14/17	Extraction Method: SW5030B
Instrument: GC12	Analytical Method: SW8021B/8015Bm
Matrix: Water	Unit: µg/L
Project: 372927; 401 Jackson Street, Oakland	Sample ID: MB/LCS-148643 1711533-001BMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	50	-	-	-
MTBE	ND	5.0	-	-	-
Benzene	ND	0.50	-	-	-
Toluene	ND	0.50	-	-	-
Ethylbenzene	ND	0.50	-	-	-
Xylenes	ND	1.5	-	-	-
Surrogate Recovery					
aaa-TFT	11.33		10	113	89-116

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	60.4	-	60	101	-	78-116	-	-
MTBE	11.7	-	10	117	-	72-122	-	-
Benzene	11.4	-	10	114	-	81-123	-	-
Toluene	11.4	-	10	114	-	83-129	-	-
Ethylbenzene	10.5	-	10	105	-	88-126	-	-
Xylenes	28.9	-	30	96	-	87-131	-	-
Surrogate Recovery								
aaa-TFT	11.2	-	10	112	-	89-116	-	-

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	57.4	47.7	60	ND	96	80	63-133	18.4	20
MTBE	11.9	11.9	10	ND	119	119	69-122	0	20
Benzene	11.4	11.3	10	ND	114	113	84-125	0.949	20
Toluene	11.4	11.3	10	ND	114	113	87-131	0.544	20
Ethylbenzene	10.3	10.2	10	ND	103	102	92-126	0.629	20
Xylenes	27.9	27.7	30	ND	93	92	88-132	0.770	20
Surrogate Recovery									
aaa-TFT	11.4	11.5	10		114	115	90-117	1.06	20



Quality Control Report

Client: AEI Consultants
Date Prepared: 11/9/17
Date Analyzed: 11/10/17
Instrument: GC9b
Matrix: Soil
Project: 372927; 401 Jackson Street, Oakland

WorkOrder: 1711448
BatchID: 148461
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-148461
 1711409-012AMS/MSD

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	39.8	1.0	40	-	99	75-128
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	25.12	24.8		25	100	99	72-122

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	37.0	38.6	40	ND	92	97	71-134	4.36	30
Surrogate Recovery									
C9	24.8	24.9	25		99	100	78-126	0.326	30



Quality Control Report

Client: AEI Consultants	WorkOrder: 1711448
Date Prepared: 11/9/17	BatchID: 148466
Date Analyzed: 11/10/17	Extraction Method: SW3510C
Instrument: GC9b	Analytical Method: SW8015B
Matrix: Water	Unit: µg/L
Project: 372927; 401 Jackson Street, Oakland	Sample ID: MB/LCS/LCSD-148466

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-
Surrogate Recovery					
C9	613.5		625	98	68-127

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1170	1140	1000	117	114	86-142	1.88	30
Surrogate Recovery								
C9	624	626	625	100	100	68-127	0	30



Quality Control Report

Client: AEI Consultants	WorkOrder: 1711448
Date Prepared: 11/14/17	BatchID: 148652
Date Analyzed: 11/14/17	Extraction Method: SW3510C
Instrument: GC39B	Analytical Method: SW8015B
Matrix: Water	Unit: µg/L
Project: 372927; 401 Jackson Street, Oakland	Sample ID: MB/LCS/LCSD-148652

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-
Surrogate Recovery					
C9	609		625	97	68-127

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1070	1030	1000	107	103	86-142	3.69	30
Surrogate Recovery								
C9	632	597	625	101	95	68-127	5.75	30



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1711448

ClientCode: AEL

- WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

William Hicks
AEI Consultants
2500 Camino Diablo, Ste.#200
Walnut Creek, CA 94597
(925) 478-9698 FAX: (925) 944-2895

Email: whix@aeiconsultants.com
cc/3rd Party:
PO: 145501
ProjectNo: 372927; 401 Jackson Street, Oakland

Bill to:

Accounts Payable
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
AccountsPayable@AEIConsultants.com

Requested TAT: 5 days;

Date Received: 11/10/2017

Date Logged: 11/10/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1711448-002	SB-9-3.5	Soil	11/9/2017 10:48	<input type="checkbox"/>	A		A		A							
1711448-008	SB-10-2.5	Soil	11/9/2017 11:27	<input type="checkbox"/>	A		A		A							
1711448-014	SB-11-5.5	Soil	11/9/2017 09:35	<input type="checkbox"/>	A		A		A							
1711448-020	SB-12-5.5	Soil	11/9/2017 08:58	<input type="checkbox"/>	A		A		A							
1711448-025	SB-9	Water	11/9/2017 11:50	<input type="checkbox"/>		B		A		A						
1711448-026	SB-10	Water	11/9/2017 12:10	<input type="checkbox"/>		B		A		A						
1711448-027	SB-11	Water	11/9/2017 12:00	<input type="checkbox"/>		B		A		A						
1711448-028	SB-12	Water	11/9/2017 11:40	<input type="checkbox"/>		B		A		A						

Test Legend:

1	8260B_S	2	8260B_W	3	G-MBTEX_S	4	G-MBTEX_W
5	TPH(DMO)_S	6	TPH(DMO)_W	7		8	
9		10		11		12	

Prepared by: Kena Ponce

The following SampIDs: 002A, 008A, 014A, 020A contain testgroup Multi Range_S.; The following SampIDs: 025A, 026A, 027A, 028A contain testgroup Multi Range_W.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS
Client Contact: William Hicks
Contact's Email: whix@aeiconsultants.com

Project: 372927; 401 Jackson Street, Oakland

Work Order: 1711448
QC Level: LEVEL 2
Date Logged: 11/10/2017

Comments:

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1711448-001A	SB-9-1.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 10:51			<input checked="" type="checkbox"/>	
1711448-002A	SB-9-3.5	Soil	Multi-Range TPH(g,d,mo) by EPA 8015Bm SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	11/9/2017 10:48	5 days		<input type="checkbox"/>	
1711448-003A	SB-9-5.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 10:56			<input checked="" type="checkbox"/>	
1711448-004A	SB-9-7.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 10:53			<input checked="" type="checkbox"/>	
1711448-005A	SB-9-10.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 10:59			<input checked="" type="checkbox"/>	
1711448-006A	SB-9-12.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 11:08			<input checked="" type="checkbox"/>	
1711448-007A	SB-9-14.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 11:05			<input checked="" type="checkbox"/>	
1711448-008A	SB-10-2.5	Soil	Multi-Range TPH(g,d,mo) by EPA 8015Bm SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	11/9/2017 11:27	5 days		<input type="checkbox"/>	
1711448-009A	SB-10-5.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 11:25			<input checked="" type="checkbox"/>	
1711448-010A	SB-10-7.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 11:32			<input checked="" type="checkbox"/>	
1711448-011A	SB-10-9.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 11:30			<input checked="" type="checkbox"/>	
1711448-012A	SB-10-11.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 11:37			<input checked="" type="checkbox"/>	
1711448-013A	SB-11-2.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:37			<input checked="" type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS
Client Contact: William Hicks
Contact's Email: whix@aeiconsultants.com

Project: 372927; 401 Jackson Street, Oakland

Work Order: 1711448
QC Level: LEVEL 2
Date Logged: 11/10/2017

Comments:

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1711448-014A	SB-11-5.5	Soil	Multi-Range TPH(g,d,mo) by EPA 8015Bm	1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:35	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days	<input type="checkbox"/>		
1711448-015A	SB-11-7.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:45			<input checked="" type="checkbox"/>	
1711448-016A	SB-11-9.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:42			<input checked="" type="checkbox"/>	
1711448-017A	SB-11-12.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 10:00			<input checked="" type="checkbox"/>	
1711448-018A	SB-11-14.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:58			<input checked="" type="checkbox"/>	
1711448-019A	SB-12-2.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:01			<input checked="" type="checkbox"/>	
1711448-020A	SB-12-5.5	Soil	Multi-Range TPH(g,d,mo) by EPA 8015Bm	1	Acetate Liner	<input type="checkbox"/>	11/9/2017 8:58	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days	<input type="checkbox"/>		
1711448-021A	SB-12-7.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:24			<input checked="" type="checkbox"/>	
1711448-022A	SB-12-9.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:04			<input checked="" type="checkbox"/>	
1711448-023A	SB-12-12.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:24			<input checked="" type="checkbox"/>	
1711448-024A	SB-12-14.5	Soil		1	Acetate Liner	<input type="checkbox"/>	11/9/2017 9:22			<input checked="" type="checkbox"/>	
1711448-025A	SB-9	Water	Multi-Range TPH(g,d,mo) by EPA 8015Bm	5	2 VOAs w/HCL + 3-aVOAs (multi-range)	<input type="checkbox"/>	11/9/2017 11:50	5 days	5%+	<input type="checkbox"/>	
1711448-025B	SB-9	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/9/2017 11:50	5 days	5%+	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: AEI CONSULTANTS
Client Contact: William Hicks
Contact's Email: whix@aeiconsultants.com

Project: 372927; 401 Jackson Street, Oakland

Work Order: 1711448
QC Level: LEVEL 2
Date Logged: 11/10/2017


Comments:

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1711448-026A	SB-10	Water	Multi-Range TPH(g,d,mo) by EPA 8015Bm	5	2 VOAs w/HCL + 3-aVOAs (multi-range)	<input type="checkbox"/>	11/9/2017 12:10	5 days	5%+	<input type="checkbox"/>	
1711448-026B	SB-10	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/9/2017 12:10	5 days	5%+	<input type="checkbox"/>	
1711448-027A	SB-11	Water	Multi-Range TPH(g,d,mo) by EPA 8015Bm	5	2 VOAs w/HCL + 3-aVOAs (multi-range)	<input type="checkbox"/>	11/9/2017 12:00	5 days	5%+	<input type="checkbox"/>	
1711448-027B	SB-11	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/9/2017 12:00	5 days	5%+	<input type="checkbox"/>	
1711448-028A	SB-12	Water	Multi-Range TPH(g,d,mo) by EPA 8015Bm	5	2 VOAs w/HCL + 3-aVOAs (multi-range)	<input type="checkbox"/>	11/9/2017 11:40	5 days	5%+	<input type="checkbox"/>	
1711448-028B	SB-12	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/9/2017 11:40	5 days	5%+	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

 <p>McCAMPBELL ANALYTICAL, INC. 1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701 Telephone: (877) 252-9262 / Fax: (925) 252-9269 www.mccampbell.com main@mccampbell.com</p>	CHAIN OF CUSTODY RECORD					
	Turn Around Time: 1 Day Rush	2 Day Rush	3 Day Rush	STD	<input checked="" type="radio"/>	Quote #
	J-Flag / MDL	ESL	Cleanup Approved	Bottle Order #		
	Delivery Format: GeoTracker EDF	PDF	<input checked="" type="radio"/>	EDD	Write On (DW)	EQuIS

Report To: AEI Consultants	Bill To: AEI Consultants
Company: AEI Consultants	
Email: whix@aeiconsultants.com	
Alt Email: vstatham@aeiconsultants.com	Tele: 925-746-6050
Project Name/ #: 372927	
Project Location: 401 Jackson Street, Oakland	PO #145501
Sampler Signature: <i>[Signature]</i>	

Analysis Requested

SAMPLE ID Location / Field Point	Sampling		#Containers	Matrix	Preservative	VOCs by 8260	TPH-multirange by 8015M	Hold	Analysis Requested															
	Date	Time							1	2	3	4	5	6	7	8	9	10	11	12				
SB-12-7.5	11/9/2017	0924	1	Soil	Ice			X																
SB-12-9.5	11/9/2017	0904	1	Soil	Ice			X																
SB-12-12.5	11/9/2017	0924	1	Soil	Ice			X																
SB-12-14.5	11/9/2017	0922	1	Soil	Ice			X																
SB-9	11/9/2017	1150	7	GW	HCl/Ice	X	X																	
SB-10	11/9/2017	1210	7	GW	HCl/Ice	X	X																	
SB-11	11/9/2017	1200	7	GW	HCl/Ice	X	X																	
SB-12	11/9/2017	1140	7	GW	HCl/Ice	X	X																	

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.						Comments / Instructions
Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.						
Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time	
<i>[Signature]</i>	11/10/17		<i>[Signature]</i>	11/10/17	1320	
OTS	11/10/17	1408	<i>[Signature]</i>	11/10/17	1408	

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other
 Preservative Code: 1=4°C 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=ZnOAc/NaOH 7=None

Temp _____ °C Initials _____



Sample Receipt Checklist

Client Name:	AEI Consultants	Date and Time Received	11/10/2017 14:08
Project Name:	372927; 401 Jackson Street, Oakland	Date Logged:	11/10/2017
WorkOrder No:	1711448	Received by:	Kena Ponce
Carrier:	<u>Patrick Johnson (MAI Courier)</u>	Matrix:	<u>Soil/Water</u>
		Logged by:	Kena Ponce

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample/Temp Blank temperature	Temp: 7.3°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:

November 19, 2017

AEI Consultants - CA

Sample Delivery Group: L950273

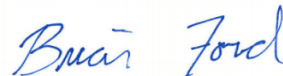
Samples Received: 11/11/2017

Project Number: 372927

Description:

Report To: V. Statham
2500 Camino Diablo
Walnut Creek, CA 94597

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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SAMPLE SUMMARY



SV-1 L950273-01 Air

Collected by
William B Hix
Collected date/time
11/09/17 16:15
Received date/time
11/11/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method ASTM 1946	WG1043913	1	11/17/17 06:53	11/17/17 06:53	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1041881	2	11/12/17 17:53	11/12/17 17:53	MBF

1
Cp

2
Tc

3
Ss

SV-2 L950273-02 Air

Collected by
William B Hix
Collected date/time
11/09/17 15:59
Received date/time
11/11/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method ASTM 1946	WG1043913	1	11/17/17 07:00	11/17/17 07:00	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1041881	2	11/12/17 18:39	11/12/17 18:39	MBF

4
Cn

5
Sr

6
Qc

SV-3 L950273-03 Air

Collected by
William B Hix
Collected date/time
11/09/17 15:44
Received date/time
11/11/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method ASTM 1946	WG1043913	1	11/17/17 07:03	11/17/17 07:03	AMC
Volatile Organic Compounds (MS) by Method TO-15	WG1041881	2	11/12/17 19:25	11/12/17 19:25	MBF

7
Gl

8
Al

9
Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Volatile Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL	Result	Qualifier	Dilution	Batch
			%	%			
Helium	7440-59-7		1.00	ND		1	WG1043913

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Acetone	67-64-1	58.10	2.50	5.94	43.6	104		2	WG1041881
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1041881
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG1041881
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1041881
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1041881
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1041881
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1041881
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1041881
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1041881
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1041881
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1041881
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1041881
Chloroform	67-66-3	119	0.400	1.95	1.50	7.30		2	WG1041881
Chloromethane	74-87-3	50.50	0.400	0.826	0.429	0.885		2	WG1041881
2-Chlorotoluene	95-49-8	126	0.400	2.06	1.10	5.65		2	WG1041881
Cyclohexane	110-82-7	84.20	0.400	1.38	1.47	5.05		2	WG1041881
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1041881
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1041881
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1041881
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1041881
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1041881
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1041881
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1041881
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1041881
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1041881
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1041881
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1041881
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1041881
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1041881
1,4-Dioxane	123-91-1	88.10	0.400	1.44	1.28	4.61		2	WG1041881
Ethanol	64-17-5	46.10	1.26	2.38	9.84	18.6		2	WG1041881
Ethylbenzene	100-41-4	106	0.400	1.73	0.409	1.77		2	WG1041881
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1041881
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	0.845	4.75		2	WG1041881
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.565	2.79		2	WG1041881
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1041881
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1041881
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1041881
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1041881
n-Hexane	110-54-3	86.20	0.400	1.41	0.535	1.89		2	WG1041881
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1041881
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.541	1.88		2	WG1041881
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1041881
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1041881
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1041881
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1041881
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1041881
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1041881
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1041881
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1041881

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/17 16:15

L950273

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1041881
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1041881
Tetrachloroethylene	127-18-4	166	0.400	2.72	2.93	19.9		2	WG1041881
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	0.637	1.88		2	WG1041881
Toluene	108-88-3	92.10	0.400	1.51	5.27	19.9		2	WG1041881
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1041881
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1041881
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1041881
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1041881
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1041881
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1041881
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	0.879	4.11		2	WG1041881
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1041881
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1041881
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1041881
m&p-Xylene	1330-20-7	106	0.800	3.47	1.78	7.71		2	WG1041881
o-Xylene	95-47-6	106	0.400	1.73	0.707	3.06		2	WG1041881
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	20.4	55.0		2	WG1041881
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	ND	ND		2	WG1041881
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		95.2				WG1041881

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/17 15:59

L950273

Volatile Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL	Result	Qualifier	Dilution	Batch
			%	%			
Helium	7440-59-7		1.00	ND		1	WG1043913

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Acetone	67-64-1	58.10	2.50	5.94	78.6	187		2	WG1041881
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1041881
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG1041881
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1041881
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1041881
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1041881
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1041881
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1041881
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1041881
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1041881
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1041881
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1041881
Chloroform	67-66-3	119	0.400	1.95	26.9	131		2	WG1041881
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1041881
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1041881
Cyclohexane	110-82-7	84.20	0.400	1.38	1.48	5.09		2	WG1041881
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1041881
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1041881
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1041881
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1041881
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1041881
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1041881
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1041881
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1041881
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1041881
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1041881
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1041881
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1041881
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1041881
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1041881
Ethanol	64-17-5	46.10	1.26	2.38	ND	ND		2	WG1041881
Ethylbenzene	100-41-4	106	0.400	1.73	0.505	2.19		2	WG1041881
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1041881
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	2.84	16.0		2	WG1041881
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.983	4.86		2	WG1041881
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1041881
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1041881
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1041881
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1041881
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1041881
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1041881
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1041881
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1041881
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	4.28	12.6		2	WG1041881
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1041881
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1041881
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1041881
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1041881
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1041881
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1041881

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 11/09/17 15:59

L950273

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1041881
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1041881
Tetrachloroethylene	127-18-4	166	0.400	2.72	0.971	6.59		2	WG1041881
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1041881
Toluene	108-88-3	92.10	0.400	1.51	0.680	2.56		2	WG1041881
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1041881
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1041881
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1041881
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1041881
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1041881
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1041881
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1041881
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1041881
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1041881
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1041881
m&p-Xylene	1330-20-7	106	0.800	3.47	0.869	3.77		2	WG1041881
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1041881
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	4.33	11.7		2	WG1041881
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	ND	ND		2	WG1041881
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		96.8				WG1041881

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/17 15:44

L950273

Volatile Organic Compounds (GC) by Method ASTM 1946

Analyte	CAS #	Mol. Wt.	RDL	Result	Qualifier	Dilution	Batch
			%	%			
Helium	7440-59-7		1.00	ND		1	WG1043913

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1	RDL2	Result	Result	Qualifier	Dilution	Batch
			ppbv	ug/m3	ppbv	ug/m3			
Acetone	67-64-1	58.10	2.50	5.94	143	341	E	2	WG1041881
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1041881
Benzene	71-43-2	78.10	0.400	1.28	0.668	2.13		2	WG1041881
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1041881
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1041881
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1041881
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1041881
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1041881
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1041881
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1041881
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1041881
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1041881
Chloroform	67-66-3	119	0.400	1.95	89.4	435		2	WG1041881
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1041881
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1041881
Cyclohexane	110-82-7	84.20	0.400	1.38	3.65	12.6		2	WG1041881
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1041881
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1041881
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1041881
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1041881
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1041881
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1041881
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1041881
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1041881
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1041881
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1041881
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1041881
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1041881
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1041881
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1041881
Ethanol	64-17-5	46.10	1.26	2.38	ND	ND		2	WG1041881
Ethylbenzene	100-41-4	106	0.400	1.73	0.562	2.44		2	WG1041881
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1041881
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	2.91	16.4		2	WG1041881
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	1.10	5.42		2	WG1041881
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1041881
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1041881
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1041881
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1041881
n-Hexane	110-54-3	86.20	0.400	1.41	ND	ND		2	WG1041881
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1041881
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1041881
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1041881
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	4.80	14.1		2	WG1041881
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1041881
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1041881
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG1041881
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1041881
2-Propanol	67-63-0	60.10	2.50	6.15	2.82	6.94		2	WG1041881
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG1041881

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 11/09/17 15:44

L950273

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Styrene	100-42-5	104	0.400	1.70	0.418	1.78		2	WG1041881
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1041881
Tetrachloroethylene	127-18-4	166	0.400	2.72	0.775	5.26		2	WG1041881
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1041881
Toluene	108-88-3	92.10	0.400	1.51	1.32	4.96		2	WG1041881
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1041881
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1041881
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1041881
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1041881
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG1041881
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG1041881
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1041881
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1041881
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1041881
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1041881
m&p-Xylene	1330-20-7	106	0.800	3.47	1.13	4.92		2	WG1041881
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG1041881
1,1-Difluoroethane	75-37-6	66.05	0.400	1.08	4.27	11.5		2	WG1041881
TPH (GC/MS) Low Fraction	8006-61-9	101	100	413	111	457		2	WG1041881
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		97.5				WG1041881

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3266395-3 11/17/17 06:44

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Helium	U		0.330	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3266395-1 11/17/17 06:36 • (LCSD) R3266395-2 11/17/17 06:40

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
	%	%	%	%	%	%			%	%
Helium	2.50	2.42	2.32	96.7	92.9	70.0-130			4.06	25



Method Blank (MB)

(MB) R3265082-3 11/12/17 10:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3265082-3 11/12/17 10:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
TPH (GC/MS) Low Fraction	U		6.91	50.0
1,1-Difluoroethane	U		0.0256	0.200
(S) 1,4-Bromofluorobenzene	95.5			60.0-140

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3265082-1 11/12/17 08:39 • (LCSD) R3265082-2 11/12/17 09:24

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	3.92	3.97	105	106	52.0-158			1.36	25
Propene	3.75	3.81	3.81	102	102	54.0-155			0.0732	25
Dichlorodifluoromethane	3.75	3.83	3.77	102	100	69.0-143			1.62	25



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3265082-1 11/12/17 08:39 • (LCSD) R3265082-2 11/12/17 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichlorotetrafluoroethane	3.75	3.94	3.92	105	104	70.0-130			0.575	25
Chloromethane	3.75	3.57	3.86	95.1	103	70.0-130			7.99	25
Vinyl chloride	3.75	3.81	3.77	102	101	70.0-130			1.02	25
1,3-Butadiene	3.75	3.68	3.50	98.2	93.4	70.0-130			5.04	25
Bromomethane	3.75	3.04	2.81	81.0	74.8	70.0-130			7.91	25
Chloroethane	3.75	3.86	3.86	103	103	70.0-130			0.0221	25
Trichlorofluoromethane	3.75	4.02	4.04	107	108	70.0-130			0.513	25
1,1,2-Trichlorotrifluoroethane	3.75	4.05	4.04	108	108	70.0-130			0.220	25
1,1-Dichloroethene	3.75	3.85	3.85	103	103	70.0-130			0.0464	25
1,1-Dichloroethane	3.75	3.80	3.81	101	101	70.0-130			0.108	25
Acetone	3.75	3.76	3.77	100	100	70.0-130			0.107	25
2-Propanol	3.75	3.79	3.81	101	102	66.0-150			0.546	25
Carbon disulfide	3.75	3.76	3.78	100	101	70.0-130			0.711	25
Methylene Chloride	3.75	3.65	3.65	97.5	97.4	70.0-130			0.113	25
MTBE	3.75	3.88	3.90	104	104	70.0-130			0.415	25
trans-1,2-Dichloroethene	3.75	3.79	3.80	101	101	70.0-130			0.104	25
n-Hexane	3.75	3.74	3.75	99.7	99.9	70.0-130			0.191	25
Vinyl acetate	3.75	4.02	4.01	107	107	70.0-130			0.272	25
Methyl Ethyl Ketone	3.75	3.89	3.88	104	103	70.0-130			0.257	25
cis-1,2-Dichloroethene	3.75	3.80	3.82	101	102	70.0-130			0.435	25
Chloroform	3.75	3.87	3.86	103	103	70.0-130			0.511	25
Cyclohexane	3.75	3.93	3.93	105	105	70.0-130			0.113	25
1,1,1-Trichloroethane	3.75	3.99	3.99	106	106	70.0-130			0.0371	25
Carbon tetrachloride	3.75	4.05	4.06	108	108	70.0-130			0.228	25
Benzene	3.75	3.86	3.84	103	102	70.0-130			0.501	25
1,2-Dichloroethane	3.75	3.95	3.93	105	105	70.0-130			0.444	25
Heptane	3.75	3.82	3.81	102	102	70.0-130			0.0747	25
Trichloroethylene	3.75	3.95	3.97	105	106	70.0-130			0.502	25
1,2-Dichloropropane	3.75	3.77	3.78	101	101	70.0-130			0.0415	25
1,4-Dioxane	3.75	4.04	4.02	108	107	70.0-152			0.524	25
Bromodichloromethane	3.75	3.97	3.98	106	106	70.0-130			0.286	25
cis-1,3-Dichloropropene	3.75	4.03	3.99	108	106	70.0-130			1.06	25
4-Methyl-2-pentanone (MIBK)	3.75	3.95	3.93	105	105	70.0-142			0.467	25
Toluene	3.75	4.03	4.01	107	107	70.0-130			0.608	25
trans-1,3-Dichloropropene	3.75	4.11	4.07	110	108	70.0-130			1.08	25
1,1,2-Trichloroethane	3.75	4.01	4.00	107	107	70.0-130			0.340	25
Tetrachloroethylene	3.75	4.22	4.20	112	112	70.0-130			0.364	25
Methyl Butyl Ketone	3.75	4.21	4.15	112	111	70.0-150			1.42	25
Dibromochloromethane	3.75	4.22	4.23	113	113	70.0-130			0.300	25
1,2-Dibromoethane	3.75	4.09	4.10	109	109	70.0-130			0.205	25

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3265082-1 11/12/17 08:39 • (LCSD) R3265082-2 11/12/17 09:24

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Chlorobenzene	3.75	4.03	4.02	108	107	70.0-130			0.269	25
Ethylbenzene	3.75	4.13	4.15	110	111	70.0-130			0.659	25
m&p-Xylene	7.50	8.19	8.23	109	110	70.0-130			0.483	25
o-Xylene	3.75	4.18	4.18	111	111	70.0-130			0.0479	25
Styrene	3.75	4.34	4.36	116	116	70.0-130			0.320	25
Bromoform	3.75	4.43	4.45	118	119	70.0-130			0.540	25
1,1,2,2-Tetrachloroethane	3.75	4.05	4.05	108	108	70.0-130			0.0683	25
4-Ethyltoluene	3.75	4.33	4.34	115	116	70.0-130			0.407	25
1,3,5-Trimethylbenzene	3.75	4.31	4.32	115	115	70.0-130			0.168	25
1,2,4-Trimethylbenzene	3.75	4.30	4.29	115	114	70.0-130			0.244	25
1,3-Dichlorobenzene	3.75	4.41	4.38	118	117	70.0-130			0.542	25
1,4-Dichlorobenzene	3.75	4.39	4.39	117	117	70.0-130			0.0146	25
Benzyl Chloride	3.75	4.49	4.46	120	119	70.0-144			0.705	25
1,2-Dichlorobenzene	3.75	4.37	4.35	116	116	70.0-130			0.452	25
1,2,4-Trichlorobenzene	3.75	4.79	4.66	128	124	70.0-155			2.82	25
Hexachloro-1,3-butadiene	3.75	4.70	4.73	125	126	70.0-145			0.641	25
Naphthalene	3.75	4.59	4.45	122	119	70.0-155			3.09	25
TPH (GC/MS) Low Fraction	176	197	196	111	111	70.0-130			0.0330	25
Allyl Chloride	3.75	3.73	3.73	99.4	99.4	70.0-130			0.00632	25
2-Chlorotoluene	3.75	4.18	4.16	111	111	70.0-130			0.412	25
Methyl Methacrylate	3.75	3.90	3.90	104	104	70.0-130			0.217	25
Tetrahydrofuran	3.75	3.69	3.68	98.4	98.2	70.0-140			0.187	25
2,2,4-Trimethylpentane	3.75	3.83	3.82	102	102	70.0-130			0.213	25
Vinyl Bromide	3.75	3.96	3.95	106	105	70.0-130			0.138	25
Isopropylbenzene	3.75	4.20	4.19	112	112	70.0-130			0.275	25
1,1-Difluoroethane	3.75	3.94	3.87	105	103	70.0-130			1.78	25
(S) 1,4-Bromofluorobenzene				96.9	96.8	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

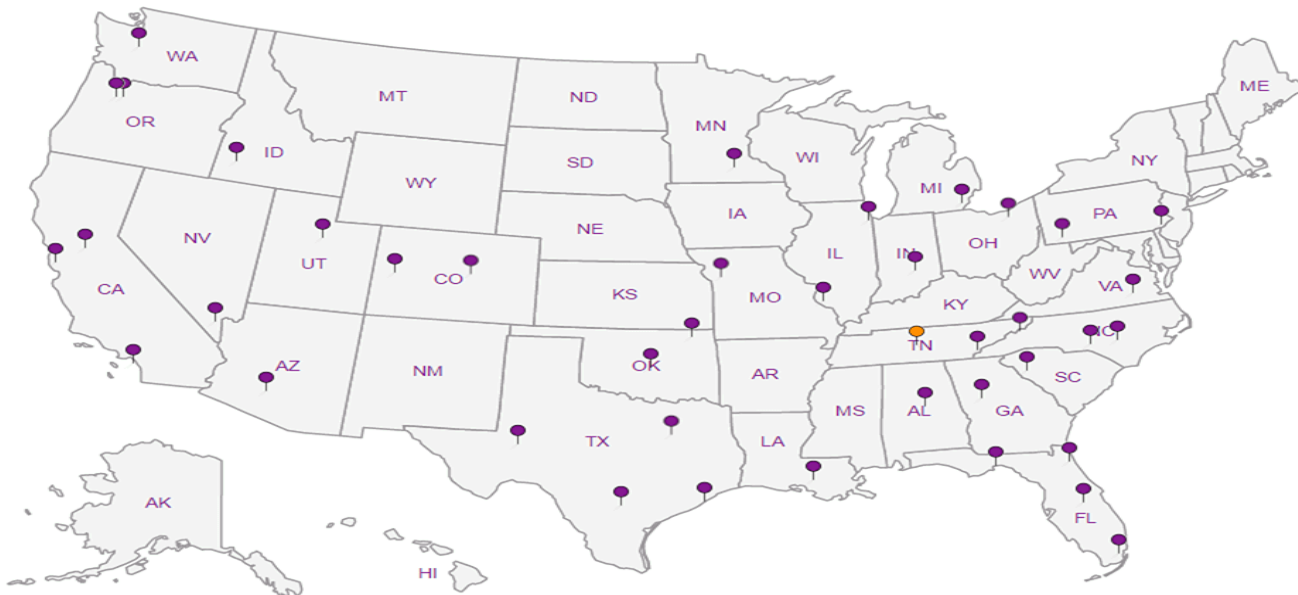
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



¹ Cp

² Tc

³ Ss

⁴ Cn



⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Company Name/Address: AEI Consultants 2500 Camino Diablo, Walnut Creek, CA, 94597		Billing Information: Same as company name		Analysis		Chain of Custody Page ___ of ___			
Report to: vstatham@aelconsultants.com		Email To: whix@aelconsultants.com		VOCs and TPH-g by TO-15 Helium by ASTM D 1946		 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 			
Project Description:		City/State Collected: Oakland, California				L# 950273		M114	
Phone: 925-746-6050	Client Project # 372927	Lab Project #				Acctnum:		Template:	
Fax:	Site/Facility ID #	P.O. # 145498				Prelogin:		TSR:	
Collected by (print): <i>William B Hix</i>	Rush? (Lab MUST Be Notified)	Date Results Needed Five Days from recieved		Canister Pressure/Vacuum		PB:			
Collected by (signature): <i>William B Hix</i>	<input type="checkbox"/> Same Day200% <input type="checkbox"/> Next Day100% <input type="checkbox"/> Two Day50% <input type="checkbox"/> Three Day25%	Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes		FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes		Shipped Via:			
Sample ID	Sample Description	Can #	Date	Time	Initial	Final	Rem./Contaminant	Sample # (lab only)	
SV-1	Loading dock subslab	5591	11/9/2017	1615	-29	-5	X	X	01
SV-2	Main freezer subslab	6260	11/9/2017	1559	-30+	-5	X	X	02
SV-3	Office area subslab	5258	11/9/2017	1544	-28	-5	X	X	03

Remarks:				Hold #	
4094 8308 7567				Condition: (lab use only) 02	
Relinquished by: (Signature) <i>William B Hix</i>	Date: 11/10/17	Time: 1000	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	COC Seal Intact: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C AND Bottles Received: 3	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>William B Hix</i> 860	Date: 11/11/17 Time: 8:45	
				pH Checked:	NCF:

ESC LAB SCIENCES Cooler Receipt Form

Client: <i>AEI LONNWA</i>	SDG#	<i>950273</i>	
Cooler Received/Opened On: <i>11/11/17</i>	Temperature:	<i>AMB</i>	
Received by : Christian Kacar			
Signature: <i>[Signature]</i>			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	/		
COC Signed / Accurate?		/	
Bottles arrive intact?		/	
Correct bottles used?		/	
Sufficient volume sent?			
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			