

**ED HEMMAT**  
2420 SAN PABLO AVENUE  
OAKLAND, CA 94612

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By Alameda County Environmental Health 3:07 pm, Sep 06, 2016

August 16, 2016

**Mr. Keith Nowell, PG, CHG**  
Hazardous Materials Specialist  
ACHCSA  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**SUBJECT: REVISED WELL INSTALLATION AND INTERIM  
REMEDIAL CORRECTIVE ACTION REPORT**  
1501 Martin Luther King Junior Way, Oakland, CA

Dear Mr. Nowell:

Enclosed is the July 27, 2016, subject Revised Well Installation and Interim Remedial Corrective Action report prepared by my consultant, Enviro Soil Tech Consultants.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

Sincerely,

A handwritten signature in black ink, appearing to read 'ED HEMMAT', with a long horizontal flourish extending to the right.

ED HEMMAT

**REVISED WELL INSTALLATION AND INTERIM  
REMEDIAL CORRECTIVE ACTION  
FOR THE PROPERTY  
LOCATED AT 1501 MARTIN LUTHER KING JR WAY  
OAKLAND, CALIFORNIA  
JULY 27, 2016**

**PREPARED FOR:  
MR. ED HEMMAT  
2420 SAN PABLO AVENUE  
OAKLAND, CALIFORNIA 94612**

**BY:  
ENVIRO SOIL TECH CONSULTANTS  
131 TULLY ROAD  
SAN JOSE, CALIFORNIA 95111**

**ENVIRO SOIL TECH CONSULTANTS**

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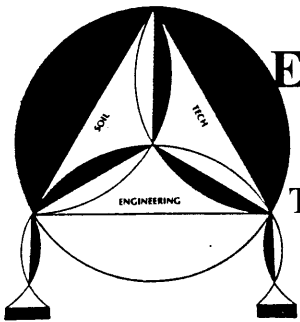
Curtis & Tompkins' Lab Reports 257056, 260991, 265336, 266902 & 267871  
(Water Sampling from Extraction Wells)

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Extraction Wells Measurements Field Notes

**ENVIRO SOIL TECH CONSULTANTS**



# ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Email: [info@envirosoiltech.com](mailto:info@envirosoiltech.com)

July 27, 2016

File No. 6-13-858-SA

**Mr. Ed Hemmat**

2420 San Pablo Avenue  
Oakland, California 94612

**SUBJECT: REVISED WELL INSTALLATION AND INTERIM  
REMEDIAL CORRECTIVE ACTION ON THE PROPERTY**

Located at 1501 Martin Luther King Jr. Way, in  
Oakland, California

Dear Mr. Hemmat:

Enclosed is our report summarizing the activities and results of interim remedial corrective action on the property located at 1501 Martin Luther King Jr. Way, in Oakland, California. The work was performed in accordance with your acceptance of our *SOIL AND GROUNDWATER CLEANUP PROPOSAL* dated January 21, 2014.

The environmental work that was conducted included: underground tank removal; soil & groundwater sampling; installation of 6wells (3 extraction, 2 vapor and 1 air sparging); and installation and operation of a groundwater remediation system.

The remediation system was in operation from August 2, 2014 through April 30, 2015. During this period, approximately 1,198,380-gallons of groundwater were extracted and remediated. The results of laboratory testing indicated that the site has been remediated and is ready for site closure if Alameda County Health Care Services Agency (ACHCSA) has no objection.

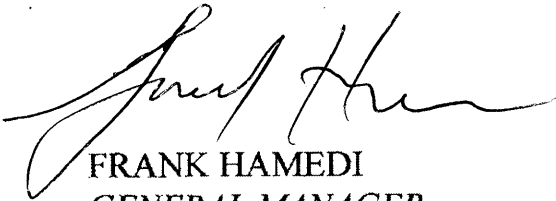


File No. 6-13-858-SA  
July 27, 2016


If you have any questions or require additional information, please feel free to contact our office at 408-297-1500 or via email at [info@envirosoiltech.com](mailto:info@envirosoiltech.com).

Sincerely,

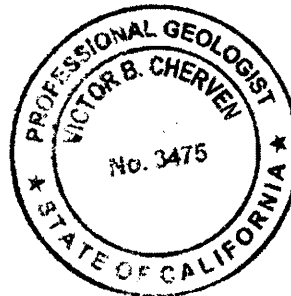
**ENVIRO SOIL TECH CONSULTANTS**



FRANK HAMEDI  
GENERAL MANAGER



VICTOR B. CHERVEN, Ph. D.  
R. G. #3475



**ENVIRO SOIL TECH CONSULTANTS**

## **GENERAL SITE DESCRIPTION**

The site is located on the northwest corner of Martin Luther King Junior Way and 15<sup>th</sup> Street. The site has two parcel numbers that are identified as 003-0073-004 and 003-0073-005. However according to the Alameda County Assessor Office (ACAO), the side of the building facing Martin Luther King Junior Way is 1501 with parcel number 3-73-4 is listed as a commercial repair garage. The side that is facing 15<sup>th</sup> Street is 660 15<sup>th</sup> Street (parcel number 3-73-5) is listed as vacant commercial building and land.

The property lot has an approximately 13,750 square feet one-story, free standing brick building/warehouse with 3 roll-up doors and a locked chain link fence around a 7,500 square feet parking lot for 22 vehicles. The building was erected in the 1930's.

## **INITIAL INVESTIGATION**

In June 2013, ESTC conducted a Level 1 environmental site assessment with limited soil and groundwater sampling. Four borings were drilled and soil and groundwater samples were collected during drilling for chemical analysis. The sample results are summarized in Tables 1 and 2. Low to elevated levels of petroleum-related hydrocarbons were detected. These contaminants were above levels that normally require remediation.

During the assessment investigation, ESTC's engineer noticed that there was a vent line pipe for an underground storage tank (UST) on the sidewalk at 15<sup>th</sup> Street. The pipe was attached to the southeast wall of the building. ESTC recommended removing the UST and conducting additional assessment.

## **TANK REMOVAL**

On December 3, 2013, after obtaining all necessary permits from the City of Oakland Fire Department-Fire Prevention Bureau (COFD), CEECON, Inc. excavated and removed one 1,000-gallon underground storage gasoline tank under the supervision of Mr. Cesar Avila with COFD. Ecology Control Industries (ECI) transported the removed UST under Uniform Hazardous Waste Manifest to their facility in Richmond for proper disposal. Details of the removal were reported in ESTC's report entitled *SOIL SAMPLING BENEATH REMOVED UST* dated December 26, 2013.

During tank removal activities, ESTC collected 2 soil samples at approximately 8 feet below surface from the excavation, 1 soil sample from the midpoint of the fuel line at approximately 2 feet below surface and 4 soil samples from the stockpile of excavated soil. The stockpile samples were composited into one sample at the laboratory for chemical analysis. Sampling was conducted under the supervision of Mr. Avila. Analytical results of the tank and stockpile 1 samples are summarized in Table 3.

Due to the evidence that both soil and groundwater were contaminated and the building was slated for redevelopment as soon as possible, the owner elected to authorize ESTC to proceed with expedited investigation and remediation rather than wait for a regulatory agency directive. After consultation with ESTC personnel, the owner decided that additional drilling, including the installation of extraction wells for removal of vapor and groundwater, would be the most cost-effective and feasible method of addressing the problem.

## **REMEDIATION SYSTEM INSTALLATION**

In order to comply with the client's request to expedite site cleanup, ESTC drilled six exploratory boreholes inside the building and converted the boreholes into 4-inch diameter groundwater-extraction and 2-inch diameter vapor extraction and air sparging wells. The vapor wells and sparging well were installed in case they were needed for remediation.

### *INSTALLATION AND CONSTRUCTION OF WELLS*

After obtaining the necessary drilling permits from Alameda County Public Works Agency (ACPWA) (see Appendix "D"), ESTC installed the wells in March 25, 26, and 27, 2014. Well drilling was conducted in accordance with ESTC's Standard Operation Procedures (SOP) (Appendix "C") [except these newly installed wells are not groundwater monitoring wells but they are groundwater and vapor extraction wells]. The detailed construction of these wells is shown in the boring logs (Appendix "E"). Table 6 summarizes the well construction details.

Three groundwater-extraction wells were drilled and installed by Vironex, Inc. Wells STEW-1, STEW-2 and STEW-3 were constructed of 4-inch diameter PVC Schedule 40, flush threaded casing with threaded bottom cap with screen of 15-feet from bottom of wells up.

Vironex, Inc. installed two vapor-extraction wells (STVW-1 and STVW-2). They were constructed of 2-inch diameter PVC Schedule 40, flush-threaded casing with threaded bottom cap with screen of 15-feet from bottom of wells.

The air-sparging well STASW-6 was installed on March 27, 2014, and was constructed of 2-inch PVC Schedule 40, flush threaded casing with threaded bottom cap with screen of 5-feet from bottom of well.

All the wells were installed inside the building within a radius of 5 to 50 feet from the former location of the UST.

### *WELL DEVELOPMENT*

The wells were developed using the surge-and-purge method on April 16, 2014. A bailer was lowered into each well and repeatedly raised and lowered to mobilize any sediment that may have collected within the casing. After the water had been surged for approximately 5-minutes, the bailer was used to purge approximately 50 gallons from each well. The purged water was collected in the bucket and stored in the large purge tank that was located on site.

### *WELL SURVEYING*

Muir Consulting was retained to survey the new wells. The survey was performed on April 23, 2015 and the surveyor's report is included as Appendix "B".

### *GROUNDWATER EXTRACTION TREATMENT SYSTEM CONSTRUCTION*

Downhole groundwater pumps were installed in the extraction wells and the wells were connected to a treatment unit for groundwater remediation. The treatment system consisted of PVC piping from the wells to 2000-gallon holding tanks for both treated and untreated water, two 1,000-pound canisters of granulated activated carbon (GAC) for filtering contaminants, transfer pumps from the untreated holding tank to the GAC vessel and from the GAC to the treated holding tank, and a flow meter to measure the rate of extraction and total volume removed.

### **REMEDIATION SYSTEM OPERATION**

Groundwater extraction began in early August 2014, and by August 4 approximately 15,000 gallons of groundwater had been extracted (Appendix "G"). When the holding tank for untreated water was approximately 80% full, the transfer pump was automatically set to pump

approximately 10 gallons per minute untreated water to the first GAC vessel. After flowing through the first GAC vessel, the partially treated water flowed to the second GAC vessel for final treatment. From there, the treated water flowed to the second holding tank. Samples of the effluent were collected from this holding tank on two occasions: July 7, 2014 and November 3, 2014 (Appendix "A", Table 5). When this tank was full, the water was released to the floor drain for disposal in the sanitary sewer line. A process flow diagram of the extraction and treatment system is in Appendix "B".

## **WELL SAMPLING DURING REMEDIATION SYSTEM OPERATION**

On May 20, 2014, ESTC conducted initial groundwater sampling of the extraction wells prior to startup of the remediation system. Elevated concentrations of Total Petroleum Hydrocarbon as gasoline were detected in wells STEW-1 at 11,000 microgram per liter ( $\mu\text{g/L}$ ) and STEW-3 at 7,200  $\mu\text{g/L}$ . Levels in STEW-2 were below detection limits. Samples from STEW-1 and STEW-3 detected Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) ranging from low to moderate levels. BTE were not detected in STEW-2, but a low Xylenes concentration was reported.

To check the efficiency of the remedial system, water samplings were conducted periodically. The second groundwater-sampling event was on September 18, 2014 after approximately 2 months of operation. Groundwater samples continued to detect elevated TPHg in wells STEW-1 (at 11,000  $\mu\text{g/L}$ ) and STEW-3 (at 7,000  $\mu\text{g/L}$ ) with BTEX ranging from low to moderate levels. No changes were detected in STEW-2.

The third groundwater-sampling event was on March 17, 2015. By this time, TPHg concentrations in STEW-1 and STEW-3 had declined to 410  $\mu\text{g/L}$  and 840  $\mu\text{g/L}$ . BTEX concentrations had also declined (Table 4). The sample from well STEW-2 was below laboratory detection limits for all analytes.

The fourth groundwater-sampling event was on May 18, 2015. Hydrocarbons were only detected in the sample from extraction well STEW-1.

A fifth groundwater-sampling event was on June 29, 2015. TPHg and BTEX were below laboratory detection limits in water samples from STEW-2 and STEW-3. Well STEW-1 detected very low levels of Ethylbenzene and Total Xylenes while TPHg, Benzene and Toluene were below the laboratory detection limit.

Methyl Tertiary Butyl Ether (MTBE) was below the laboratory detection limit in all extraction well samples during all sampling events.

Chemical analytical tests results of groundwater samples from extraction wells are tabulated in Table 4 (Appendix "A").

Based on the improvement of water quality, it was deemed unnecessary to use the vapor extraction wells for soil vapor extraction.

## **DISPOSAL OF TREATED GROUNDWATER**

A special discharge permit was approved by EBMUD on May 1, 2014. Disposal began at the beginning of August, and between August 2, 2014 and April 30, 2015, ESTC had pumped and treated approximately 1,198,380 gallons. The water was piped to the floor drain that was connected to the sanitary sewer line at a rate that varied from 2 to 7 gallons per minute (see Appendix "G"). The groundwater extraction remediation system was shut down on April 30, 2015.

## **WELL ABANDONMENT**

In preparation for new construction at the site, some of the wells were abandoned under permit from Alameda County Public Works Agency (ACPWA), ESTC abandoned two of the groundwater extraction wells (STEW-1 and STEW-3), one of the vapor extraction wells (STVW-5), and the sparging well (STASW-6) on November 12, 2015.

Also, all the remediation system such as downhole pumps, holding tanks, GAC vessel and all plumbing and electrical had been removed due to the new construction of the building.

## **RECOMMENDATION**

It was not necessary to abandon extraction well STEW-2 or vapor well STVW-4 in order to begin the new construction in the building. However, because no hydrocarbons have been detected in STEW-2 and vapor extraction well STVW-4 was never used, there is no need to keep them in place. We recommend abandoning these wells as soon as it becomes feasible.

## **LIMITATION**

This report and the associated work have been provided in accordance with the general principles and practices currently employed in the environmental consulting profession. The contents of this report reflect the conditions of the site at this particular time. The findings of this report are based on:

1. The observations of field personnel.
2. The results of laboratory analyses performed by a state-certified laboratory.



File No. 6-13-858-SA  
July 27, 2016

This report is issued with the understanding that it is the responsibility of the owner or his/her representative to ensure that the information contained herein are called to the attention of the Local Environmental Agency.

Services performed by ESTC have been in accordance with generally accepted of environmental professional practices for the nature and conditions of the work completed in the same or similar localities at the time the work was performed. This report is not meant to represent a legal opinion. No other warranty, express or implied is made.

File No. 6-13-858-SA  
July 27, 2016

# **A P P E N D I X "A"**

## **TABLES**

**ENVIRO SOIL TECH CONSULTANTS**

**TABLE 1  
 SUMMARY OF SOIL SAMPLES ANALYTICAL RESULTS  
 FROM LEVEL 1 ESA INVESTIGATION**

Date	Sample ID	Depth (feet)	TPHd mg/Kg	TPHg µg/Kg	TOG mg/Kg	B µg/Kg	T µg/Kg	E µg/Kg	X µg/Kg	MTBE µg/Kg	Other VOCs (µg/Kg)
6/11/13	B-1-10	10	6.87a	<99	13.9a	<5.0	<5.0	<5.0	<9.9	<5.0	Naphthalene 0.99a 1,2,4-Trimethylbenzene 1.6a
	B-1-20	20	<10	54.4a	<20	3.1a	<4.9	1.0a	3.4a	<4.9	1,2,4-Trimethylbenzene 1.4a
6/11/13	B-2-10	10	17.7	<99	27.5	<4.9	<4.9	<4.9	<9.9	<20	<4.9
	B-2-20	20	<9.8	<98	<20	<4.9	<4.9	<4.9	<9.8	<4.9	<4.9
6/11/13	B-3-10	10	<10	<99	<20	<4.9	<4.9	<4.9	<9.9	<4.9	<4.9
	B-3-20	20	<9.8	<100	<20	<5.0	<5.0	<5.0	<10	<5.0	<5.0
6/11/13	B-4-10	10	<10	<97	<20	<4.8	<4.8	<4.8	<9.7	<4.8	<4.8
	B-4-20	20	<9.9	<99	<20	<4.9	<4.9	<4.9	<9.9	<4.9	<4.9

**TPHd** – Total Petroleum Hydrocarbons as Diesel  
**TOG** – Total Oil & Grease  
**MTBE** – Methyl Tertiary Butyl Ether  
**mg/Kg** – Milligrams per Kilogram  
**<99** – Below Laboratory Detection Limit

**TPHg** – Total Petroleum Hydrocarbon as Gasoline  
**BTEX** – Benzene, Toluene, Ethylbenzene, Total Xylenes  
**VOCs** – Volatile Organic Compounds  
**µg/Kg** – Micrograms per Kilogram

**TABLE 2**  
**SUMMARY OF GRAB WATER SAMPLES ANALYTICAL RESULTS**  
**FROM LEVEL 1 ESA INVESTIGATION**

Date	Sample ID	TPHd mg/L	TPHg µg/L	TOG mg/L	B µg/L	T µg/L	E µg/L	X µg/L	MTBE µg/L	Other VOCs (µg/L)
6/11/13	B-1-W	22.3	66900	<4.9	28.1a	254	1450	7360	<100	n-Butylbenzene 52.1a sec-Butylbenzene 40.0a Isopropylbenzene 118 p-Isopropyltoluene 49.5a Naphthalene 256a n-Propylbenzene 214 1,2,4-Trimethylbenzene 1100 1,3,5-Trimethylbenzene 300
	B-2-W	0.351	4720	<0.38	2.7a	46.4	222	1230	<10	Isopropylbenzene 13.0 Naphthalene 31.2a n-Propylbenzene 9.5a 1,2,4-Trimethylbenzene 72.3 1,3,5-Trimethylbenzene 18.2a
	B-3-W	0.0503	335	<0.21	1.9	0.64a	23.4	43.9	<1.0	Acetone 12.4a sec-Butylbenzene 0.39a 1,2-Dichloroethane 0.95a Isopropylbenzene 3.4 Methyl Ethyl Ketone 2.4a Naphthalene 0.78a n-Propylbenzene 1.2a Tert-Butyl Alcohol 28.1 1,2,4-Trimethylbenzene 0.34a

**TPHd** – Total Petroleum Hydrocarbons as Diesel  
**TOG** – Total Oil & Grease  
**MTBE** – Methyl Tertiary Butyl Ether  
**mg/L** – Milligrams per Liter  
**<4.9** – Below Laboratory Detection Limit

**TPHg** – Total Petroleum Hydrocarbon as Gasoline  
**BTEX** – Benzene, Toluene, Ethylbenzene, Total Xylenes  
**VOCs** – Volatile Organic Compounds  
**µg/L** – Micrograms per Liter

**TABLE 3  
 SUMMARY OF SOIL SAMPLES ANALYTICAL RESULTS  
 FROM REMOVED UST & ASSOCIATED PIPING**

Date	Sample ID	Depth (feet)	TPHg mg/Kg	Total Lead mg/Kg	B µg/Kg	T µg/Kg	E µg/Kg	X µg/Kg	MTBE µg/Kg	Other VOCs (µg/Kg)
12/03/13	1-8-W	8	<0.199	2.4	<5.0	<5.0	<5.0	<9.9	<5.0	<5.0
	1-8-E	8	906	8.8	<21000	15100a	27200	222000	<21000	n-Butylbenzene 19300a tert-Butyllbenzene 3020a Isopropylbenzene 4740a p-Isopropyltoluene 2390a Naphthalene 20100a n-Propylbenzene 21000 1,2,4-Trimethylbenzene 174000 1,3,5-Trimethylbenzene 43600a
12/03/13	SP-(1-4)	--	<4.8	5.7	<250	<250	<250	<500	<250	Methyl Ethyl Ketone 560a
12/03/13	1-2-P	2	<0.093	9.0	<4.9	<4.9	<4.9	<9.8	<4.9	<4.9

**TPHg** – Total Petroleum Hydrocarbon as Gasoline  
**MTBE** – Methyl Tertiary Butyl Ether  
**mg/Kg** – Milligrams per Kilogram  
**<0.199** – Below Laboratory Detection Limit  
**a** – Indicates an estimated value

**BTEX** – Benzene, Toluene, Ethylbenzene, Total Xylenes  
**VOCs** – Volatile Organic Compounds  
**µg/Kg** – Micrograms per Kilogram

**TABLE 4**  
**SUMMARY OF WATER SAMPLES DURING**  
**INTERIM REMEDIAL CORRECTIVE ACTION**  
**FROM EXTRACTION WELLS TESTS RESULTS**  
**IN MICROGRAM PER LITER (µg/L)**

Date	Well No./ Elevation	Depth of Well	Depth to Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	B	T	E	X	MTBE
5/20/14	STEW-1 (37.23)	33	18-33	No well observation or measurement			11,000	110a	31a	160	730	<33
9/18/14				No well observation or measurement			11,000	58a	34	140	1360a	<2.0
3/17/15				No well observation or measurement			410	2.4a	1.8	10	40.8	<2.0
5/18/15				No well observation or measurement			840	<0.50	0.87a	14	38.4	<2.0
6/29/15				27.61	9.62	No well observation	<50	<0.50	<0.50	0.88	3.16	<2.0
5/20/14	STEW-2 (37.34)	34	19-34	No well observation or measurement			<50	<0.5	<0.5	<0.5	1.62a	<2.0
9/18/14				No well observation or measurement			<50	<0.5	<0.5	<0.5	1.2a	<2.0
3/17/15				No well observation or measurement			<50	<0.5	<0.5	<0.5	<0.5	<2.0
5/18/15				No well observation or measurement			<50	<0.50	<0.50	<0.50	<0.50	<2.0
6/29/15				27.78	9.56	No well observation	<50	<0.50	<0.50	<0.50	<0.50	<2.0
5/20/14	STEW-3 (38.21)	30	15-30	No well observation or measurement			7,200	41a	200	300	1650	<50
9/18/14				No well observation or measurement			7,000	28a	56	300	1560	<2.0
3/17/15				No well observation or measurement			840	3.5a	2.4a	13	56.1	<2.0
5/18/15				No well observation or measurement			<50	<0.50	<0.50	<0.50	<0.50	<2.0
6/29/15				29.07	9.14	No well observation	<50	<0.50	<0.50	<0.50	<0.50	<2.0

**TPHg** – Total Petroleum Hydrocarbons as gasoline  
**BTEX** – Benzene, Toluene, Ethylbenzene, Total Xylenes  
**MTBE** – Methyl Tertiary Butyl Ether  
**<50** – Below Laboratory Detection Limit  
**a** – Presence confirmed, but RPD between columns exceeds 40%

**TABLE 5**  
**SUMMARY OF EFFLUENT RESULTS**  
**IN MICROGRAM PER LITER (µg/L)**

<b>Date</b>	<b>Sample ID</b>	<b>Total Metals (EPA 200.7)</b>	<b>R.L.</b>	<b>B (200.7)</b>	<b>T (200.7)</b>	<b>E (200.7)</b>	<b>X (200.7)</b>	<b>Other VOCs (EPA 624)</b>
7/07/14	Effluent	Arsenic = 5.6 Cadmium = <5.0 Chromium = <5.0 Copper = <5.0 Cyanide = <0.01 Iron = <100 Lead = <5.0 Mercury = <0.20 Nickel = <5.0 Silver = <5.0 Zinc = 1,300	5.0 5.0 5.0 5.0 0.01 100 5.0 0.20 5.0 5.0 20	<0.5	<0.5	<0.5	<0.5	<0.5
11/03/14	Effluent	Arsenic = 10 Cadmium = <5.0 Chromium = <5.0 Copper = <5.0 Cyanide = 0.01 Iron = 380 Lead = <5.0 Mercury = <0.20 Nickel = 16 Silver = <5.0 Zinc = 29	5.0 5.0 5.0 5.0 0.01 100 5.0 0.20 5.0 5.0 20	<0.5	<0.5	<0.5	<0.5	<0.5

R.L. – Reporting Limit

<0.5 – Below Laboratory Detection Limit

**ENVIRO SOIL TECH CONSULTANTS**

**TABLE 6**  
**SUMMARY OF WELLS CONSTRUCTION DATA**  
**IN FEET**

<b>Well No.</b>	<b>Well Diameter (inch)</b>	<b>Depth of Well</b>	<b>Depth of Perforation</b>	<b>Depth of Blank</b>	<b>Depth of Cement</b>	<b>Depth of Bentonite</b>	<b>Depth of Sand</b>
STEW-1	4	33	18-33	0-18	0-16	16-17	17-33
STEW-2	4	34	19-34	0-19	0-17	17-18	18-34
STEW-3	4	30	15-30	0-15	0-13	13-14	14-30
STVW-4	2	30	10-30	0-10	0-8	8-9	9-30
STVW-5	2	30	10-30	0-10	0-8	8-9	9-30
STASW-6	2	30	25-30	0-25	0-23	23-24	24-30



File No. 6-13-858-SA  
July 27, 2016

## **A P P E N D I X "B"**

### **FIGURES**

**ENVIRO SOIL TECH CONSULTANTS**



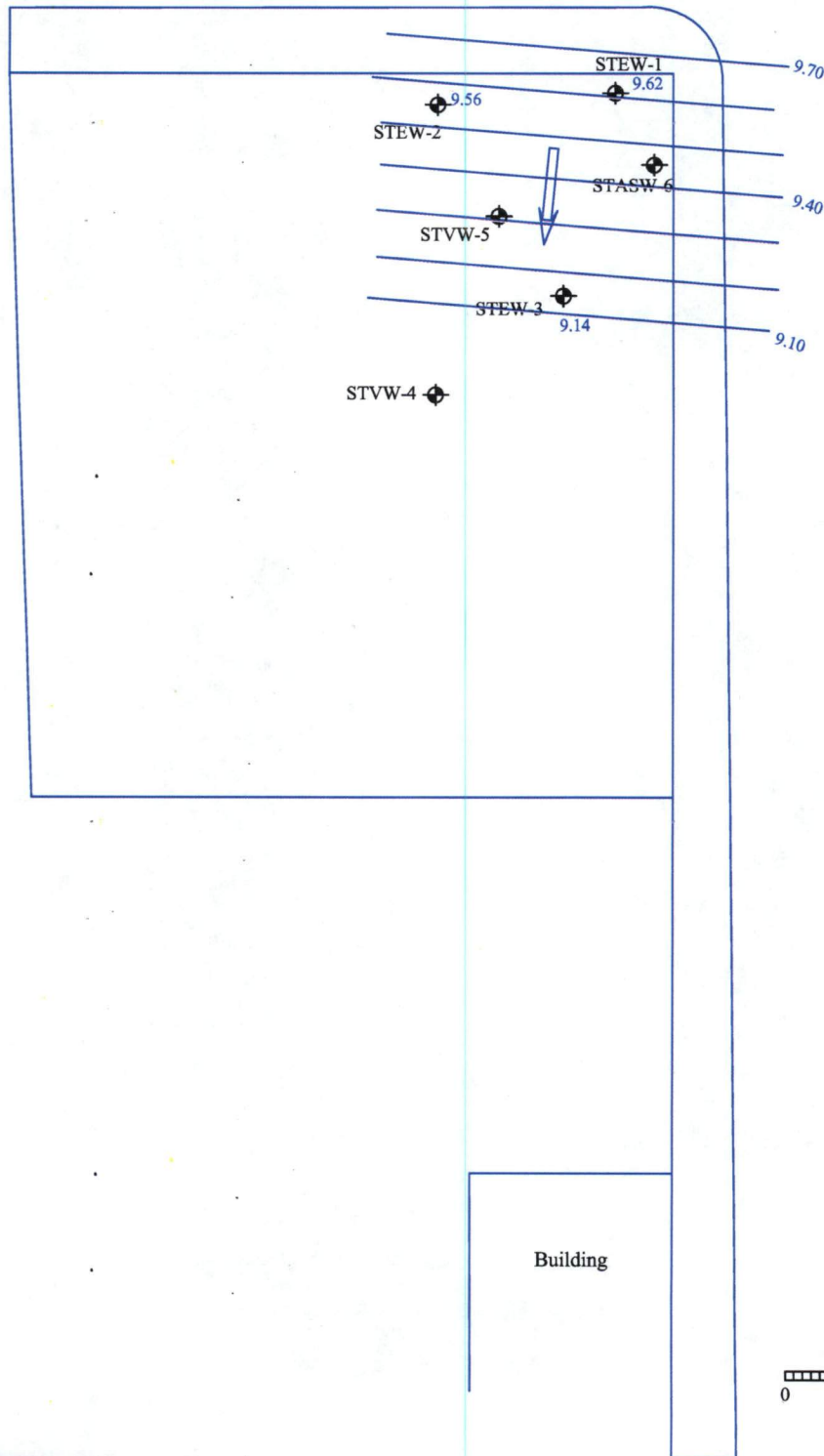
Map data ©2015 Google 50 ft

**1501 MARTIN LUTHER KING JUNIOR WAY,  
OAKLAND, CA**

**ENVIRO SOIL TECH CONSULTANTS**

Figure 1

Martin Luther King Jr Way

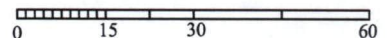


15th Street

Legend

◆ = Monitor Well

Scale: Feet



Contour Intervals = 0.10 feet

Enviro Soil Tech  
Consultants

131 Tully Road  
San Jose, CA 95111

PROJECT

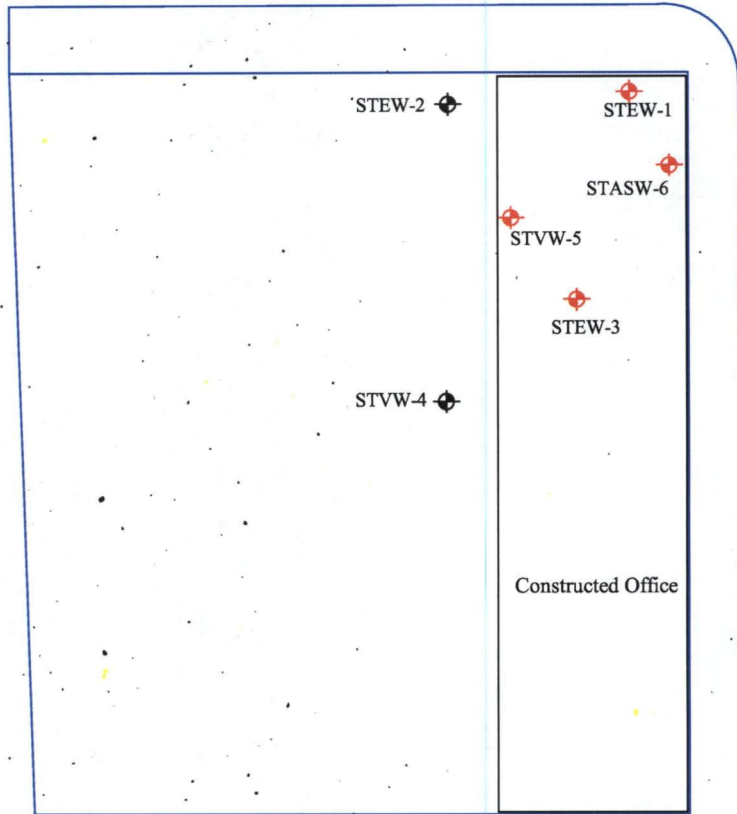
1501 Martin Luther King Jr Way  
Oakland, California

PROJECT # 6-13-858-SA  
DATE: 1/20/2016

Figure 3

Recent Site after Well  
Abandonment & Construction  
of New Offices

Martin Luther King Jr Way

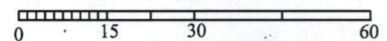


15th Street

Legend

- ◆ = Monitor Well.
- ◆ = Destroyed Monitor Well

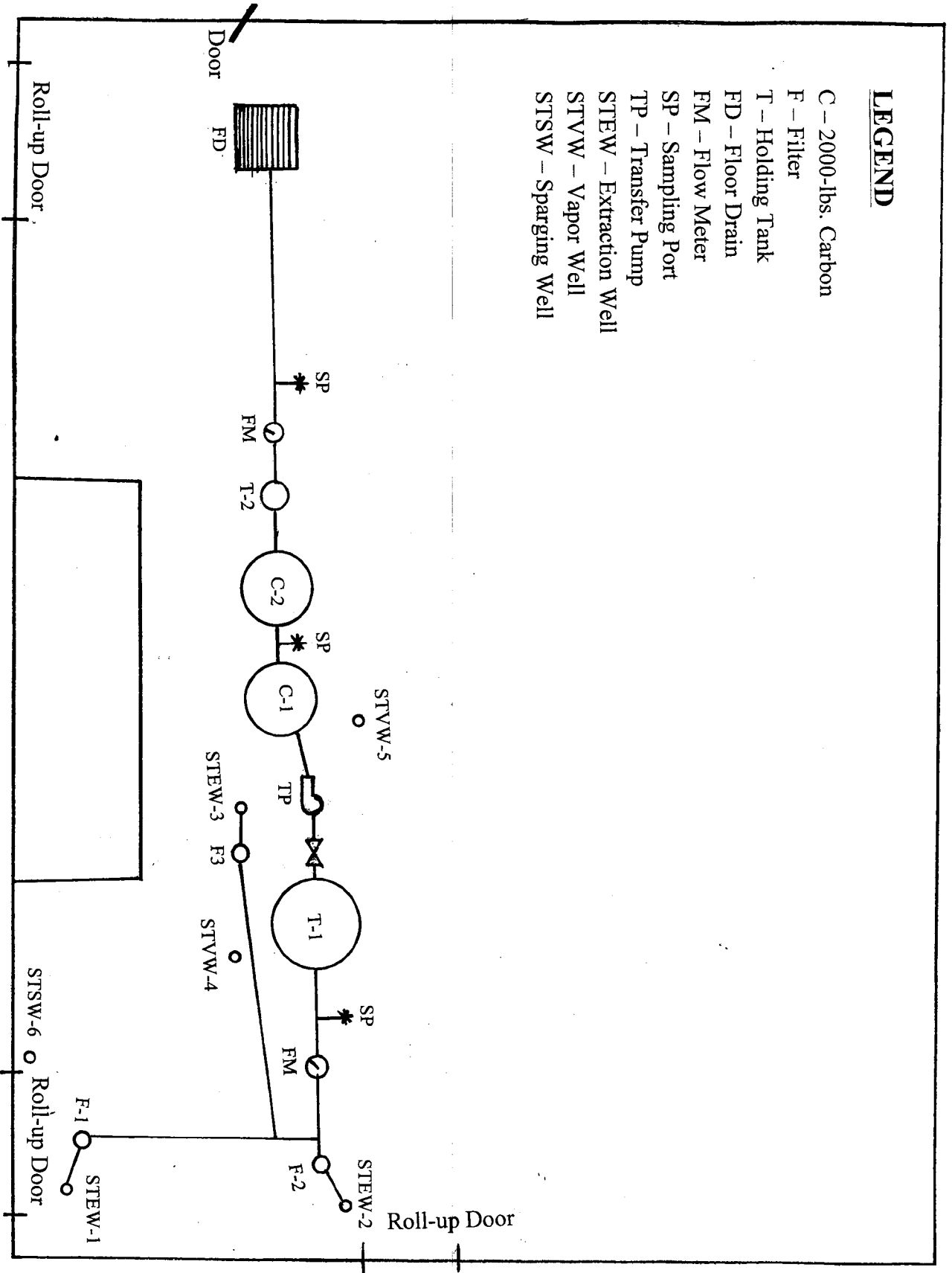
Scale: Feet



Contour Intervals = 0.10 feet

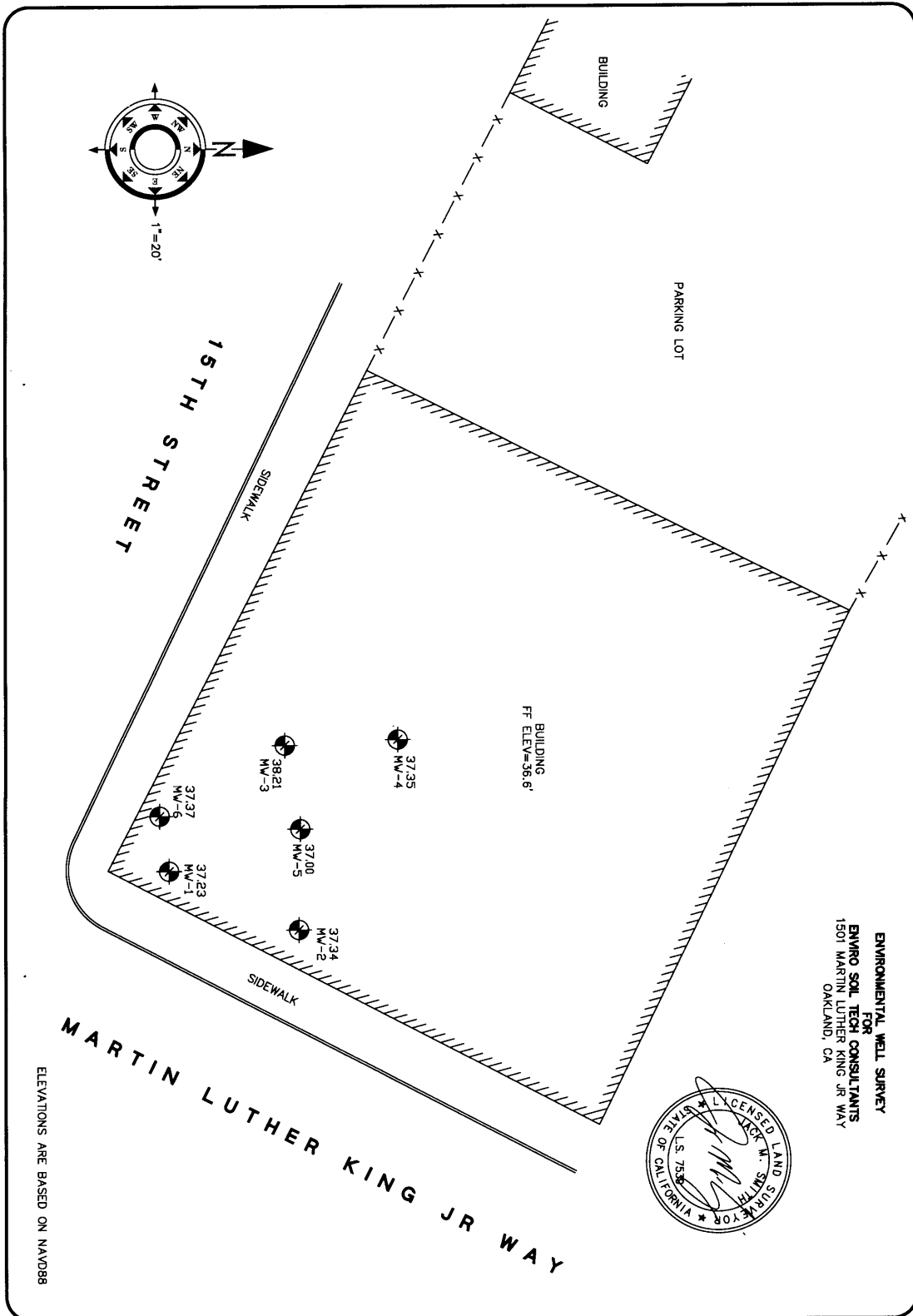
# LEGEND

- C - 2000-lbs. Carbon
- F - Filter
- T - Holding Tank
- FD - Floor Drain
- FM - Flow Meter
- SP - Sampling Port
- TP - Transfer Pump
- STEW - Extraction Well
- STVW - Vapor Well
- STSW - Sparging Well



MARTIN LUTHER KING JR. WAY

15<sup>TH</sup> STREET



**MUIR CONSULTING, INC.**

139 CHURCH AVENUE  
 OAKDALE, CA 95361  
 (209) 845-8630 FAX (209) 845-8639

LAND SURVEYING - GPS - PLANNING  
 www.muirconsulting.com

**ENVIRONMENTAL WELL SURVEY**

**1501 MARTIN LUTHER KING JR WAY**

**OAKLAND CALIFORNIA**

JOB NO. 4619-01	DATE 04/23/15	SCALE 1"=20'
DRAWN BY JMS	CHECKED	1 OF 1

File No. 6-13-858-SA  
July 27, 2016

## **A P P E N D I X "C"**

### **STANDARD OPERATION PROCEDURES**

**ENVIRO SOIL TECH CONSULTANTS**

## **MONITORING WELL INSTALLATION**

A direct push technology (Geoprobe) tool with hollow-stem auger was used in drilling the soil borings to the desired depths.

Prior to drilling, all drilling equipment was thoroughly steam-cleaned to minimize the possibility of cross-contamination and/or vertical migration of possible contaminants.

The boreholes for the monitoring wells were hand augered to the depth of 5-feet in order to detect any buried underground lines with a diameter of at least two inches larger than the casing outside diameter (O.D.).

The monitoring wells were cased with threaded, factory-perforated and blank, schedule 40 PVC. The perforated interval consisted of slotted casing, generally 0.010 to 0.040 inch wide by 1.5-inch long slot size, with 42 slots per foot (slots which match formation grain size as determined by field grain-size distribution analysis). A PVC cap was fastened to the bottom of the casing (no solvents, adhesive, or cements were used), the well casing was thoroughly washed and steam-cleaned.

After setting the casing inside the borehole, kiln-dried sand or gravel-filter material was poured into the annular space to fill from the bottom of the boring to two feet above the perforated interval. A half-a-foot to two feet thick bentonite plug was placed above this filter material to prevent grout from infiltrating down into the filter material. Approximately one to two gallons of distilled water was added to hydrate the bentonite pellets. Then the well was sealed from the top of the bentonite seal to the surface with concrete or neat cement containing about 5% bentonite (see Well Construction Detail).



To protect the well from vandalism and surface water contamination, Christy box with a special type of Allen screw was installed around the wellhead, (for wells in parking lots, driveways and building areas). Steel stove pipes with padlocks were usually set over wellheads in landscaped areas.

In general, groundwater-monitoring wells extend to the base of the upper aquifer, as defined by the consistent (less than 5 feet thick) clay layer below the upper aquifer, or at least 10 to 15 feet below the top of the upper aquifer, whichever is shallower. The wells do not extend through the laterally extensive clay layer below the upper aquifer. The wells are terminated one to two feet into such a clay layer.

## **WELL DEVELOPMENT**

For all newly installed groundwater-monitoring wells, the well casing, filter pack and adjacent formations were cleared of disturbed sediment and water.

Well development techniques including pumping, bailing, surging, swabbing, jetting, flushing or air lifting by using a stainless steel or Teflon bailer, a submersible stainless steel pump, or air lift pump. The well development was continued until the discharged water appeared to be relatively free of all turbidity.

All water and sediment generated by well development was collected in 55-gallon steel drums (Department of Transportation approved), closed head (17-H) for temporarily storage, and then was disposed of properly, depending on analytical results.

To assure that cross-contamination did not occur between wells, all well development tools were steam-cleaned or thoroughly washed in a Trisodium Phosphate (TSP) solution followed by a rinse in distilled water before each well development.

## **GROUNDWATER SAMPLING**

Prior to collection of groundwater samples, all of the sampling equipment (i.e. bailer, cables, bladder pump, discharge lines and etc...) was cleaned by pumping TSP water solution followed by distilled water.

Prior to purging, the well "Water Sampling Field Survey Forms" was filled out (depth to water and total depth of water column will be measured and recorded). The well then was bailed or pumped to remove four to ten well volumes or until the discharged water temperature, conductivity and pH stabilized. "Stabilized" is defined as three consecutive readings within 15% of one another.

The groundwater sample was collected when the water level in the well recovered to 80% of its static level.

Forty-milliliter (ml.) glass volatile organic analysis (VOA) vials with Teflon septa were used as sample containers. The groundwater sample was decanted into each VOA vial in such a manner that there was a meniscus at the top. The cap quickly was placed over the top of the vial and securely tightened. The VOA vial was then be inverted and tapped to see if air bubbles are present. If none is present, then the sample was labeled and refrigerated for delivery under chain-of-custody to the laboratory. The label information has included a sample identification number, job identification number, date, time, type of analysis requested and the sampler's name.

File No. 6-13-858-SA  
July 27, 2016

## **A P P E N D I X "D"**

### **PERMITS**

**ENVIRO SOIL TECH CONSULTANTS**

# Alameda County Public Works Agency - Water Resources Well Permit



**Public Works Agency**  
Alameda County

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

**Application Approved on: 03/19/2014 By jamesy**

**Permit Numbers: W2014-0262 to W2014-0263**  
**Permits Valid from 03/25/2014 to 03/27/2014**

**Application Id:** 1394559438885  
**Site Location:** 1501 Martin Luther King Junior Way  
**Project Start Date:** 03/25/2014  
**Assigned Inspector:** Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

**City of Project Site:**Oakland  
**Completion Date:**03/27/2014

**Applicant:** Enviro Soil Tech Consultants - Frank Hamedi  
131 Tully Road, San Jose, CA 95111  
**Property Owner:** Ed Hemmat  
2420 San Pablo Avenue, Oakland, CA 94612  
**Client:** Ed Hemmat  
2420 San Pablo Avenue, Oakland, CA 94612  
**Contact:** Frank Hamedi

**Phone:** 408-297-1500  
**Phone:** 510-773-7100  
**Phone:** 510-773-7100  
**Phone:** 408-297-1500  
**Cell:** 408-314-1843

**Receipt Number: WR2014-0097** **Total Due:** \$530.00  
**Payer Name : Farhang Hamedi-Fard** **Total Amount Paid:** \$530.00  
Paid By: MC **PAID IN FULL**

**Works Requesting Permits:**

Remediation Well Construction-Extraction - 3 Wells  
Driller: Vironex, Inc. - Lic #: 705927 - Method: DP

**Work Total: \$265.00**

**Specifications**

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2014-0262	03/19/2014	06/23/2014	STEW-1	10.00 in.	4.00 in.	5.00 ft	30.00 ft
W2014-0262	03/19/2014	06/23/2014	STEW-2	10.00 in.	4.00 in.	5.00 ft	30.00 ft
W2014-0262	03/19/2014	06/23/2014	STEW-3	10.00 in.	4.00 in.	5.00 ft	30.00 ft

**Specific Work Permit Conditions**

1. 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.
2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

## Alameda County Public Works Agency - Water Resources Well Permit

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.
5. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to [stevem@acpwa.org](mailto:stevem@acpwa.org) at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
7. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).
8. Minimum surface seal thickness is two inches of cement grout placed by tremie.
9. 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.
10. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

---

Well Construction-Vapor monitoring well-Vapor monitoring well - 3 Wells

Driller: Vironex, Inc. - Lic #: 705927 - Method: DP

**Work Total: \$265.00**

### Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2014-0263	03/19/2014	06/23/2014	STVW-1	8.00 in.	2.00 in.	5.00 ft	20.00 ft
W2014-0263	03/19/2014	06/23/2014	STVW-2	8.00 in.	2.00 in.	5.00 ft	20.00 ft
W2014-0263	03/19/2014	06/23/2014	STVW-3	8.00 in.	2.00 in.	5.00 ft	20.00 ft

### Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.
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.

## Alameda County Public Works Agency - Water Resources Well Permit

4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
  5. 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. No work shall begin until all the permits and requirements have been approved or obtained.
  6. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.
  7. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.
  8. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to [stevem@acpwa.org](mailto:stevem@acpwa.org) at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
  9. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.
  10. 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.
  11. Vapor monitoring wells above water level constructed with tubing maybe be backfilled with pancake-batter consistency bentonite. Minimum surface seal thickness is two inches of cement grout around well box.
- Vapor monitoring wells above water level constructed with pvc pipe shall have a minimum seal depth (Neat Cement Seal) of 2 feet below ground surface (BGS). Minimum surface seal thickness is two inches of cement grout around well box. All other conditions for monitoring well construction shall apply.
-

May 1, 2014

**CERTIFIED MAIL**  
**(Return Receipt Requested)**  
**Certified Mail No. 7004 1160 0007 3431 4445**

Mr. Frank Hamed  
Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111

Dear Mr. Hamed:

Re: Wastewater Discharge Permit No. 83389682

Enclosed is the Enviro Soil Tech Consultants Special Discharge Permit (Permit) for your information and records. Please read the Permit terms and conditions and the enclosed *EBMUD Special Discharge Permit Standard Terms and Conditions*, March 2014 Edition. A copy of *EBMUD Wastewater Control Ordinance* is available at [www.ebmud.com](http://www.ebmud.com). As a Permit Holder, you are legally responsible for complying with all Permit conditions and requirements.

Enviro Soil Tech Consultants shall report to the Environmental Services Division any changes to the site operations that affect the quality or volume of the permitted discharge or deviate from the terms and conditions under which the Permit was granted.

If you have any questions regarding this Permit, please contact Deirdre Mena of the Environmental Services Division at (510) 287-1559.

Sincerely,



JACQUELINE KEPKE  
Manager of Environmental Services

W:\NAB\IDS\Permits\Special Discharge\Permits\Enviro Soil Tech Consultants\Permit Cover Letter.docx

JK:DMM:dmm

Enclosures





# SPECIAL DISCHARGE PERMIT Terms and Conditions

Permit Number: 83389682

## SELF-MONITORING REPORTING REQUIREMENTS

Enviro Soil Tech Consultants shall:

- Obtain representative samples of the pretreated/managed Special Discharge Wastewater from the source described under *General Conditions* Paragraph III. Parameters to be monitored, sample types, and analytical test methods shall be in accordance with the following table:

Parameter	Sample Type	Method
Volatile Organic Compounds	Grab	EPA 624
Total Metals	Grab	EPA 200.7

- Submit a self-monitoring report within 30 days of sample collection. The self-monitoring report shall include:
  - A signed analytical report
  - The chain of custody documentation
  - The authorized signature and certification statement

Discharge of Special Discharge Wastewater to the community sewer is prohibited until the District reviews the self-monitoring report and approves start-up of the discharge. The District reserves the right to require additional self-monitoring if deemed necessary.

## INSPECTIONS

The District may conduct random, unannounced inspections to verify compliance with the terms and conditions of this Special Discharge Permit. Enviro Soil Tech Consultants shall grant District personnel site access to conduct inspections and collect Special Discharge Wastewater samples.

## ENFORCEMENT AND PENALTIES

Failure to comply with the terms and conditions of this Special Discharge Permit may result in enforcement actions, including violation follow-up fees, civil enforcement penalties, and administrative fines of up to \$5,000 per day.

## RATES AND CHARGES

This Special Discharge Permit may be amended to include changes to rates and charges that may be established by the District during the term of this Special Discharge Permit. The current treatment charge is \$0.02 per gallon of Special Discharge Wastewater discharged to the community sewer. The Special Discharge Permit fee is \$995 per year.

## AUTHORIZATION

Enviro Soil Tech Consultants is hereby authorized to discharge Special Discharge Wastewater to the community sewer, subject to compliance with the *Wastewater Control Ordinance, Special Discharge Permit Standard Terms and Conditions*, and established billing conditions.

Effective:

May 1, 2014

Expiration:

April 30, 2015

Director, Wastewater Department

5/1/14

Date



# SPECIAL DISCHARGE PERMIT Terms and Conditions

PERMIT NUMBER: 83389682

## GENERAL CONDITIONS

- I. Enviro Soil Tech Consultants shall comply with the provisions of the following two documents:
  - East Bay Municipal Utility District Wastewater Control Ordinance (Wastewater Control Ordinance)
  - EBMUD Special Discharge Permit Standard Terms and Conditions, most recent edition
- II. This Special Discharge Permit is a waiver of Wastewater Control Ordinance, Title I, Section 5, which prohibits the discharge of stormwater, drainage water, and groundwater to the community sewer.
- III. Enviro Soil Tech Consultants shall discharge Special Discharge Wastewater only from the site described in the *Special Discharge Permit Applicant Form* –1501 Martin Luther King Junior Way, Oakland, CA 94612 as depicted on the site map titled *Figure 4, Floor Plan for Location of Treatment System & Discharge Point*.
- IV. Enviro Soil Tech Consultants shall immediately cease discharge of treated or managed Special Discharge Wastewater if not in compliance with any of the terms and conditions of this Special Discharge Permit.
- V. Enviro Soil Tech Consultants shall not discharge Special Discharge Wastewater authorized by this Special Discharge Permit after the expiration date.

## COMPLIANCE REQUIREMENTS

- I. Enviro Soil Tech Consultants shall pretreat/manage, including sediment control, all Special Discharge Wastewater prior to discharge to the community sewer. Pretreatment or management shall be sufficient to achieve compliance with the benchmark values and discharge limits established in this Special Discharge Permit.
- II. Enviro Soil Tech Consultants shall post a sign in the work area stating "All Wastewater Discharge must comply with the Special Discharge Permit."
- III. Enviro Soil Tech Consultants shall not discharge Special Discharge Wastewater to the community sewer during a rain event or within 24 hours after a rain event, which is defined as any precipitation greater than a drizzle.
- IV. Enviro Soil Tech Consultants shall not discharge Special Discharge Wastewater to the community sewer at a flow rate greater than 100 gallons per minute.
- V. Enviro Soil Tech Consultants shall obtain permission from the applicable city agency to discharge Special Discharge Wastewater to the community sewer.
- VI. Enviro Soil Tech Consultants shall discharge all Special Discharge Wastewater to the community sewer through a totalizing flow meter.
- VII. Enviro Soil Tech Consultants shall maintain a discharge logbook for the Special Discharge Wastewater described under *General Conditions* Paragraph III. Each entry shall include the date, time, source, and total volume of all Special Discharge Wastewater discharged to the community sewer.

## REPORTING REQUIREMENTS

Enviro Soil Tech Consultants shall submit a discharge log report, including:

- A copy of all entries recorded in the discharge logbook described under *Compliance Requirements*, Paragraph VII up to 30 days prior to the report due date.
- The authorized signature and certification statement.

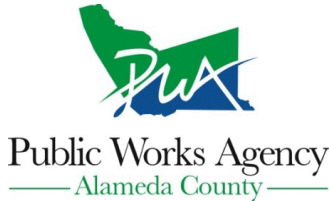
The discharge log report is due quarterly with the initial report due by August 31, 2014. The final discharge log report is due within ten days of the final discharge to the community sewer. Submit all reports, including self-monitoring, through U.S. Postal Service to East Bay Municipal Utility District, c/o Deirdre Mena, Environmental Services Division MS 702, P.O. Box 24055, Oakland, CA 94623, or electronic mail to [dmena@ebmud.com](mailto:dmena@ebmud.com).

## WASTEWATER DISCHARGE LIMITS

Enviro Soil Tech Consultants shall not discharge Special Discharge Wastewater to the community sewer if the strength of the wastewater exceeds:

- Wastewater Control Ordinance Discharge Limits
- BTEX benchmark value of 5 ug/L for each component - benzene, toluene, ethylbenzene, and total xylenes

# 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: 11/04/2015 By jamesy**

**Permit Numbers: W2015-1007**  
**Permits Valid from 11/06/2015 to 11/06/2015**

**Application Id:** 1446146392729  
**Site Location:** 1501 Martin Luther King Junior Way, Oakland, CA  
Wells are inside the building, and located at the corner of north 15th Street and west of Martin Luther King Junior Way

**City of Project Site:** Oakland

**Project Start Date:** 11/06/2015  
**Assigned Inspector:** Contact Balance Hydrologics, Inc at (510) 473-5663 or acwells@balancehydro.com  
**Completion Date:** 11/06/2015

**Applicant:** Enviro Soil Tech Consultants - Frank Hamed  
131 Tully Road, San Jose, CA 95111  
**Phone:** 408-297-1500

**Property Owner:** Ed Hemmat  
2420 San Pablo Avenue, Oakland, CA 94612  
**Phone:** 510-773-7100

**Client:** Ed Hemmat  
2420 San Pablo Avenue, Oakland, CA 94612  
**Phone:** 510-773-7100

**Contact:** Frank Hamed  
**Phone:** 408-297-1500  
**Cell:** 408-314-1843

**Total Due:** \$265.00  
**Receipt Number: WR2015-0547 Total Amount Paid:** \$265.00  
**Payer Name : Enviro Soil Tech Consultants & Paid By: CHECK** **PAID IN FULL**

**Geo Environmental**

**Works Requesting Permits:**

Remediation Well Destruction-Extraction - 4 Wells  
Driller: Vironex, Inc. - Lic #: 1006597 - Method: other

**Work Total: \$265.00**

**Specifications**

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2015-1007	11/04/2015	02/04/2016	STASW-6	10.00 in.	2.00 in.	23.00 ft	30.00 ft		W2014-0263	e0275752
W2015-1007	11/04/2015	02/04/2016	STEW-1	10.00 in.	4.00 in.	16.00 ft	33.00 ft		W2014-0262	e0275755
W2015-1007	11/04/2015	02/04/2016	STEW-3	10.00 in.	4.00 in.	13.00 ft	30.00 ft		W2014-0262	e0275757
W2015-1007	11/04/2015	02/04/2016	STVW-5	10.00 in.	2.00 in.	8.00 ft	30.00 ft		W2014-0263	e0275749

**Specific Work Permit Conditions**

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Sound the well to measure depth and to ensure no obstructions exist.

Excavate and remove existing casing 3 to 5 foot below ground surface (bgs), including vent cap and well or vault cover.

Grout neat cement with a tremie to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade.

## Alameda County Public Works Agency - Water Resources Well Permit

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.
  4. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.
  5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
  6. Remove the Christy box or similar structure. Destroy well(s) by overdrilling the upper 5ft. below ground surface (bgs) and then tremie grouting with neat cement. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil. After the seal has set, backfill the remaining hole by approved encroachment permit concrete material and asphalt material by Caltrans Spec or County/City Codes.
  7. Remove the Christy box or similar structure. Pressure Grout with Cement (Less than 30 ft in depth). After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
  8. 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.
  9. Remove well by excavation. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
  10. 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.
  11. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
  12. Remove the Christy box or similar structure. Tremie Grout with Cement (More than 30 ft in depth). After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
-

File No. 6-13-858-SA  
July 27, 2016

# **A P P E N D I X "E"**

## **BORING LOGS**

**ENVIRO SOIL TECH CONSULTANTS**

# MONITORING WELL LOG

WELL NO. STEW-1

PROJECT: 1501 MLK Jr. Way, Oakland PROJECT NO.: 6-13-858-SA

LOCATION: Inside the building in the corner of right-hand side facing MLK Way ELEVATION: 37.23-feet

DRILLER: J. McAssey DATE DRILLED: 3/25/14 DATE COMPLETED: 3/25/14

WATER DEPTH: 23½-feet COMPLETION DEPTH: 33 feet

DEPTH (ft.)	Well Construction Diagram	Sampler	Soil Graphic	DESCRIPTION	
0				4-inch concrete. GP: 2-inch sandy Gravel. ML: Dark brown sandy Silt, damp, dense.	
5				ML: Light brown sandy Silt, damp, moist.	
10					
15				ML: Yellowish-brown sandy Silt, wet, dense.	
20					
25				ML: Yellowish-brown sandy Silt, wet, dense.	
30					
35					
					Borehole/well completion at 33-feet.

**PROTECTIVE**

**COVER TYPE: Christy Box**

**GROUT:**

Type: Bentonite \_\_\_\_\_  
 Quantity: 1-foot \_\_\_\_\_  
 Total Depth: 16' to 17' \_\_\_\_\_

**BACKFILL:**

Type: Washed Kiln Dried Sand \_\_\_\_\_  
 Top Depth: 17' \_\_\_\_\_  
 Bottom Depth: 33' \_\_\_\_\_

**CASING:**

Diameter: 4-inch \_\_\_\_\_  
 Length: 33' \_\_\_\_\_  
 Stick Up: \_\_\_\_\_

**SEAL**

Type: Cement \_\_\_\_\_  
 Quantity: 16-feet \_\_\_\_\_  
 Top Depth: 0' \_\_\_\_\_  
 Bottom Depth: 16' \_\_\_\_\_

**SCREEN**

Type: Schedule 40 PVC Slotted  
 Diameter: 4" \_\_\_\_\_  
 Slot Size: 0.020" \_\_\_\_\_  
 Top Depth: \_\_\_\_\_ 18-feet  
 Bottom Depth: \_\_\_\_\_ 33-feet

**COMMENTS**

# MONITORING WELL LOG

## WELL NO. STEW-2

PROJECT: 1501 MLK Jr. Way, Oakland  
 LOCATION: Inside the building close to right-hand side wall facing MLK Way  
 DRILLER: J. McAssey DATE DRILLED: 3/25/14  
 WATER DEPTH: 24-feet

PROJECT NO.: 6-13-858-SA  
 ELEVATION: 37.34-feet  
 DATE COMPLETED: 3/25/14  
 COMPLETION DEPTH: 34 feet

DEPTH (ft.)	Well Construction Diagram	Sampler	Soil Graphic	DESCRIPTION	
0				4-inch asphalt. GP: 2-inch sandy Gravel. ML: Dark brown sandy Silt, damp, dense.	
5				ML: Light brown sandy Silt damp, moist.	
10					
15				ML: Yellowish-brown sandy Silt, moist, dense.	
20					
25				ML: Yellowish-brown sandy Silt, wet, dense.	
30					
35					Borehole/well completion at 34-feet.

**PROTECTIVE COVER TYPE: Christy Box**

**GROUT:**

Type: Bentonite \_\_\_\_\_  
 Quantity: 1-foot \_\_\_\_\_  
 Total Depth: 17' to 18' \_\_\_\_\_

**BACKFILL:**

Type: Washed Kiln Dried Sand \_\_\_\_\_  
 Top Depth: 18' \_\_\_\_\_  
 Bottom Depth: 34' \_\_\_\_\_

**CASING:**

Diameter: 4-inch \_\_\_\_\_  
 Length: 34' \_\_\_\_\_  
 Stick Up: \_\_\_\_\_

**SEAL**

Type: Cement \_\_\_\_\_  
 Quantity: 17-feet \_\_\_\_\_  
 Top Depth: 0' \_\_\_\_\_  
 Bottom Depth: 17' \_\_\_\_\_

**SCREEN**

Type: Schedule 40 PVC Slotted  
 Diameter: 4" \_\_\_\_\_  
 Slot Size: 0.020" \_\_\_\_\_  
 Top Depth: \_\_\_\_\_ 19-feet  
 Bottom Depth: \_\_\_\_\_ 34-feet

**COMMENTS**

# MONITORING WELL LOG

WELL NO. STEW-3

PROJECT: 1501 MLK Jr. Way, Oakland  
 LOCATION: Inside the building to left-hand close to the entrance door  
 DRILLER: J. McAssey DATE DRILLED: 3/26/14  
 WATER DEPTH: 24-feet

PROJECT NO.: 6-13-858-SA  
 ELEVATION: 38.21-feet  
 DATE COMPLETED: 3/26/14  
 COMPLETION DEPTH: 30 feet

DEPTH (ft.)	Well Construction Diagram	Sampler	Soil Graphic	DESCRIPTION	
0				4-inch Concrete. GP: 2-inch sandy Gravel. ML: Reddish-brown sandy Silt, damp, dense.	
5					
10					ML: Brown clayey sandy Silt, moist, dense.
15					ML: Brown sandy Silt, moist, dense.
20					SM/ML: Light brown silty Sand to sandy Silt, moist, dense.
25					
30					Borehole/well completion at 30-feet.
35					

**PROTECTIVE COVER TYPE: Christy Box**

**GROUT:**

Type: Bentonite \_\_\_\_\_  
 Quantity: 1-foot \_\_\_\_\_  
 Total Depth: 13' to 14' \_\_\_\_\_

**BACKFILL:**

Type: Washed Kiln Dried Sand \_\_\_\_\_  
 Top Depth: 14' \_\_\_\_\_  
 Bottom Depth: 30' \_\_\_\_\_

**CASING:**

Diameter: 4-inch \_\_\_\_\_  
 Length: 30' \_\_\_\_\_  
 Stick Up: \_\_\_\_\_

**SEAL**

Type: Cement \_\_\_\_\_  
 Quantity: 13-feet \_\_\_\_\_  
 Top Depth: 0' \_\_\_\_\_  
 Bottom Depth: 13' \_\_\_\_\_

**SCREEN**

Type: Schedule 40 PVC Slotted \_\_\_\_\_  
 Diameter: 4" \_\_\_\_\_  
 Slot Size: 0.020" \_\_\_\_\_  
 Top Depth: 15-feet \_\_\_\_\_  
 Bottom Depth: 30-feet \_\_\_\_\_

**COMMENTS**



# MONITORING WELL LOG

## WELL NO. STVW-4

PROJECT: 1501 MLK Jr. Way, Oakland PROJECT NO.: 6-13-858-SA  
 LOCATION: Inside the building close the middle of the building ELEVATION: 37.35-feet  
 DRILLER: J. McAssey DATE DRILLED: 3/26/14 DATE COMPLETED: 3/26/14  
 WATER DEPTH: 24-feet COMPLETION DEPTH: 30 feet

DEPTH (ft.)	Well Construction Diagram	Sampler	Soil Graphic	DESCRIPTION
0				4-inch Concrete GP: 2-inch gray sandy Gravel. ML: Reddish-brown sandy Silt, damp, dense.
5				ML: Light brown sandy Silt, moist, dense.
10				ML: Dark brown sandy Silt, moist, dense.
15				ML: Yellowish-brown sandy Silt, dense, moist.
20				ML: Light brown sandy Silt, wet, dense.
30				Borehole/well completion at 30-feet.
35				

**PROTECTIVE COVER TYPE: Christy Box**

**GROUT:**

Type: Bentonite \_\_\_\_\_  
 Quantity: 1-foot \_\_\_\_\_  
 Total Depth: 8' to 9' \_\_\_\_\_

**BACKFILL:**

Type: Washed Kiln Dried Sand \_\_\_\_\_  
 Top Depth: 9' \_\_\_\_\_  
 Bottom Depth: 30' \_\_\_\_\_

**CASING:**

Diameter: 2-inch \_\_\_\_\_  
 Length: 30' \_\_\_\_\_  
 Stick Up: \_\_\_\_\_

**SEAL**

Type: Cement \_\_\_\_\_  
 Quantity: 8-feet \_\_\_\_\_  
 Top Depth: 0' \_\_\_\_\_  
 Bottom Depth: 8' \_\_\_\_\_

**SCREEN**

Type: Schedule 40 PVC Slotted  
 Diameter: 2" \_\_\_\_\_  
 Slot Size: 0.020" \_\_\_\_\_  
 Top Depth: 10-feet  
 Bottom Depth: 30-feet

**COMMENTS**

# MONITORING WELL LOG

WELL NO. STVW-5

PROJECT: 1501 MLK Jr. Way, Oakland  
 LOCATION: Inside the building close the middle of the building  
 DRILLER: J. McAssey DATE DRILLED: 3/27/14  
 WATER DEPTH: 24-feet

PROJECT NO.: 6-13-858-SA  
 ELEVATION: 37.00-feet  
 DATE COMPLETED: 3/27/14  
 COMPLETION DEPTH: 30 feet

DEPTH (ft.)	Well Construction Diagram	Sampler	Soil Graphic	DESCRIPTION
0				4-inch Concrete GP: 2-inch gray sandy Gravel. ML: Reddish-brown sandy Silt, damp, dense.
5				ML: Light brown sandy Silt, moist, dense.
10				ML: Dark brown sandy Silt, dense, moist.
15				ML: Yellowish-brown sandy Silt, wet, dense.
20				ML: Light brown sandy Silt, wet, dense.
25				
30				Borehole/well completion at 30-feet.
35				

**PROTECTIVE COVER TYPE: Christy Box**

**GROUT:**

Type: Bentonite \_\_\_\_\_  
 Quantity: 1-foot \_\_\_\_\_  
 Total Depth: 8' to 9' \_\_\_\_\_

**BACKFILL:**

Type: Washed Kiln Dried Sand \_\_\_\_\_  
 Top Depth: 9' \_\_\_\_\_  
 Bottom Depth: 30' \_\_\_\_\_

**CASING:**

Diameter: 2-inch \_\_\_\_\_  
 Length: 30' \_\_\_\_\_  
 Stick Up: \_\_\_\_\_

**SEAL**

Type: Cement \_\_\_\_\_  
 Quantity: 8-feet \_\_\_\_\_  
 Top Depth: 0' \_\_\_\_\_  
 Bottom Depth: 8' \_\_\_\_\_

**SCREEN**

Type: Schedule 40 PVC Slotted  
 Diameter: 2" \_\_\_\_\_  
 Slot Size: 0.020" \_\_\_\_\_  
 Top Depth: 10-feet  
 Bottom Depth: 30-feet

**COMMENTS**

# MONITORING WELL LOG

## WELL NO. STASW-6

PROJECT: 1501 MLK Jr. Way, Oakland PROJECT NO.: 6-13-858-SA  
 LOCATION: Inside the building in the corner of right-hand side facing MLK Way ELEVATION: 37.37-feet  
 DRILLER: J. McAssey DATE DRILLED: 3/27/14 DATE COMPLETED: 3/27/14  
 WATER DEPTH: 23½-feet COMPLETION DEPTH: 30 feet

DEPTH (ft.)	Well Construction Diagram	Sampler	Soil Graphic	DESCRIPTION
0				4-inch concrete. GP: 2-inch sandy Gravel. ML: Dark brown sandy Silt, damp, dense.
5				ML: Light brown sandy Silt, damp, moist.
10				
15				ML: Yellowish-brown sandy Silt, moist, dense.
20				
25				ML: Yellowish-brown sandy Silt, wet, dense.
30				Borehole/well completion at 30-feet.
35				

**PROTECTIVE COVER TYPE: Christy Box**

**GROUT:**

Type: Bentonite \_\_\_\_\_  
 Quantity: 1-foot \_\_\_\_\_  
 Total Depth: 23' to 24' \_\_\_\_\_

**BACKFILL:**

Type: Washed Kiln Dried Sand \_\_\_\_\_  
 Top Depth: 24' \_\_\_\_\_  
 Bottom Depth: 30' \_\_\_\_\_

**CASING:**

Diameter: 2-inch \_\_\_\_\_  
 Length: 30' \_\_\_\_\_  
 Stick Up: \_\_\_\_\_

**SEAL**

Type: Cement \_\_\_\_\_  
 Quantity: 23-feet \_\_\_\_\_  
 Top Depth: 0' \_\_\_\_\_  
 Bottom Depth: 23' \_\_\_\_\_

**SCREEN**

Type: Schedule 40 PVC Slotted  
 Diameter: 2" \_\_\_\_\_  
 Slot Size: 0.020" \_\_\_\_\_  
 Top Depth: 25-feet  
 Bottom Depth: 30-feet

**COMMENTS**

File No. 6-13-858-SA  
July 27, 2016

**A P P E N D I X "F"**

**WELL COMPLETION REPORTS**

**ENVIRO SOIL TECH CONSULTANTS**

File Original with DWR

State of California  
**Well Completion Report**

Refer to Instruction Pamphlet  
No. e0275755

Page 1 of 1

Owner's Well Number **STEW-1**

Date Work Began **03/25/2014** Date Work Ended **3/25/2014**

Local Permit Agency **Alameda County Public Works Agency**

Permit Number **W2014-0262** Permit Date **3/19/14**

**DWR Use Only - Do Not Fill In**

State Well Number/Site Number			
Latitude		Longitude	
APN/TRS/Other			

Geologic Log		
Orientation <input checked="" type="radio"/> Vertical <input type="radio"/> Horizontal <input type="radio"/> Angle Specify _____		
Drilling Method <b>Direct Push</b> Drilling Fluid <b>Fresh Water</b>		
Depth from Surface	Depth	Description
Feet	to Feet	Describe material, grain size, color, etc.
0	0.3	4-inch concrete.
0.3	0.5	2-inch sandy gravel.
0.5	5	Dark brown sandy silt, damp, dense.
5	15	Light brown sandy silt, damp, moist
15	33	Yellowish-brown sandy silt, wet, dense.
33		Borehole/well termination.
Total Depth of Boring <b>33</b> Feet		
Total Depth of Completed Well <b>33</b> Feet		

**Well Owner**

Name **Ed Hemmat**

Mailing Address **2420 San Pablo Avenue**

City **Oakland** State **CA** Zip **94612**

**Well Location**

Address **1501 Martin Luther King Jr. Way**

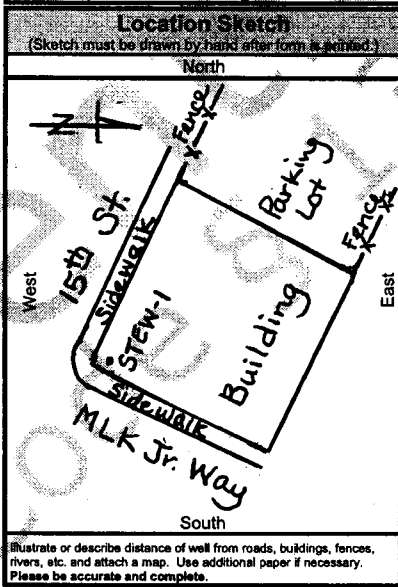
City **Oakland** County **Alameda**

Latitude **37** **48** **25** N Longitude **-122** **16** **32** W  
Dec. Min. Sec. Dec. Min. Sec.

Datum **NAD83** Dec. Lat. **37.8070464** Dec. Long. **-122.2756144**

APN Book **003** Page **0073** Parcel **005**

Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_



**Activity**

New Well  
 Modification/Repair  
 Deepen  
 Other \_\_\_\_\_  
 Destroy  
Describe procedures and materials under "GEOLOGIC LOG"

**Planned Uses**

Water Supply  
 Domestic  Public  
 Irrigation  Industrial  
 Cathodic Protection  
 Dewatering  
 Heat Exchange  
 Injection  
 Monitoring  
 Remediation  
 Sparging  
 Test Well  
 Vapor Extraction  
 Other \_\_\_\_\_

**Water Level and Yield of Completed Well**

Depth to first water **23 1/2** (Feet below surface)

Depth to Static \_\_\_\_\_

Water Level \_\_\_\_\_ (Feet) Date Measured \_\_\_\_\_

Estimated Yield \* \_\_\_\_\_ (GPM) Test Type \_\_\_\_\_

Test Length \_\_\_\_\_ (Hours) Total Drawdown \_\_\_\_\_ (Feet)

\*May not be representative of a well's long term yield.

Casings								Annular Material			
Depth from Surface	Borehole Diameter	Type	Material	Wall Thickness	Outside Diameter	Screen Type	Slot Size	Depth from Surface	Fill	Description	
Feet to Feet	(Inches)			(Inches)	(Inches)		If Any (Inches)	Feet to Feet			
0	33	10	PVC Sch. 40	4"	4"			0	16	Cement	
0	18	10	Blank	PVC Sch. 40	4"	4"		16	17	Bentonite	
18	33	10	Screen	PVC Sch. 40	4"	4"	Milled Slots	0.020	17	33	Filter Pack #2/12 Sand

**Attachments**

Geologic Log  
 Well Construction Diagram  
 Geophysical Log(s)  
 Soil/Water Chemical Analyses  
 Other \_\_\_\_\_

Attach additional information, if it exists.

**Certification Statement**

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name **Vironex, Inc.**  
Person, Firm or Corporation

**1641 Challenge Drive** **Concord** **CA** **94520**  
Address City State Zip

Signed **6/26/14** **705927**  
C-57 License Water Well Contractor Date Signed C-57 License Number





\*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

# Well Completion Report

Refer to Instruction Pamphlet

No. e0275746

DWR Use Only - Do Not Fill In

State Well Number/Site Number

Latitude

Longitude

APN/TRS/Other

Page 1 of 1

Owner's Well Number STVW-4

Date Work Began 03/26/2014 Date Work Ended 3/26/2014

Local Permit Agency Alameda County Public Works Agency

Permit Number W2014-0263 Permit Date 3/19/14

## Geologic Log

Orientation		
<input checked="" type="radio"/> Vertical	<input type="radio"/> Horizontal	<input type="radio"/> Angle Specify _____
Drilling Method <u>Direct Push</u>		Drilling Fluid <u>Fresh Water</u>
Depth from Surface		Description
Feet	to Feet	Describe material, grain size, color, etc.
0	0.3	4-inch concrete.
0.3	0.5	2-inch gray sandy gravel.
0.5	5	Reddish-brown sandy silt, damp, dense.
5	10	Light brown sandy silt, moist, dense.
10	15	Dark brown sandy silt, moist, dense.
15	20	Yellowish-brown sandy silt, dense, moist.
20	30	Light brown sandy silt, wet, dense.
30		Borehole/well termination.
Total Depth of Boring <u>30</u> Feet		
Total Depth of Completed Well <u>30</u> Feet		

## Well Owner

Name Ed Hemmat

Mailing Address 2420 San Pablo Avenue

City Oakland State CA Zip 94612

## Well Location

Address 1501 Martin Luther King Jr. Way

City Oakland County Alameda

Latitude 37 48 25 N Longitude -122 16 32 W  
Dec. Min. Sec. Dec. Min. Sec.

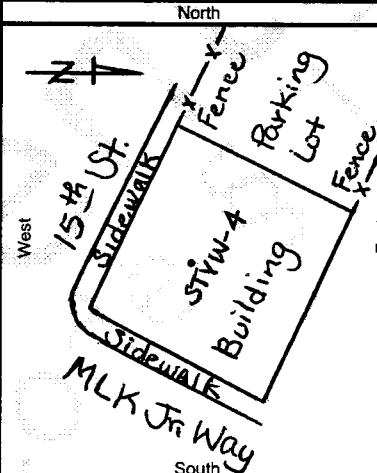
Datum NAD83 Dec. Lat. 37.8071763 Dec. Long. -122.2757124

APN Book 003 Page 0073 Parcel 005

Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_

## Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

## Activity

- New Well
- Modification/Repair
  - Deepen
  - Other \_\_\_\_\_
- Destroy
  - Describe procedures and materials under "GEOLOGIC LOG"

## Planned Uses

- Water Supply
  - Domestic  Public
  - Irrigation  Industrial
- Cathodic Protection
- Dewatering
- Heat Exchange
- Injection
- Monitoring
- Remediation
- Sparging
- Test Well
- Vapor Extraction
- Other \_\_\_\_\_

## Water Level and Yield of Completed Well

Depth to first water 24 (Feet below surface)

Depth to Static \_\_\_\_\_

Water Level \_\_\_\_\_ (Feet) Date Measured \_\_\_\_\_

Estimated Yield \* \_\_\_\_\_ (GPM) Test Type \_\_\_\_\_

Test Length \_\_\_\_\_ (Hours) Total Drawdown \_\_\_\_\_ (Feet)

\*May not be representative of a well's long term yield.

## Casings

Depth from Surface Feet to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	30		PVC Sch. 40	2"	2"		
0	10	Blank	PVC Sch. 40	2"	2"		
10	30	Screen	PVC Sch. 40	2"	2"	Milled Slots	0.020

## Annular Material

Depth from Surface Feet to Feet	Fill	Description
0	8	Cement
8	9	Bentonite
9	30	Filter Pack #2/12 Sand

## Attachments

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analyses
- Other \_\_\_\_\_

Attach additional information, if it exists.

## Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief  
 Name Vironex, Inc.

Person, Firm or Corporation

1641 Challenge Drive Address

Concord City

CA State 94520 Zip

Signed \_\_\_\_\_

6/26/14 Date Signed

705927 C-57 License Number

C-57 Licensed Water Well Contractor

C-57 License Number



\*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California  
**Well Completion Report**

Refer to Instruction Pamphlet  
No. **e0275749**

DWR Use Only - Do Not Fill In

State Well Number/Site Number			
Latitude		Longitude	
APN/TRS/Other			

Page 1 of 1

Owner's Well Number STVW-5

Date Work Began 03/27/2014 Date Work Ended 3/27/2014

Local Permit Agency Alameda County Public Works Agency

Permit Number W2014-0263 Permit Date 3/19/14

Geologic Log		
Orientation <input checked="" type="radio"/> Vertical <input type="radio"/> Horizontal <input type="radio"/> Angle Specify _____		
Drilling Method <u>Direct Push</u> Drilling Fluid <u>Fresh Water</u>		
Depth from Surface		Description
Feet	to Feet	Describe material, grain size, color, etc
0	0.3	4-inch concrete.
0.3	0.5	2-inch gray sandy gravel.
0.5	5	Reddish-brown sandy silt, damp, dense.
5	10	Light brown sandy silt, moist, dense.
10	15	Dark brown sandy silt, dense, moist.
15	20	Yellowish-brown sandy silt, wet, dense.
20	30	Light brown sandy silt, wet, dense.
30		Borehole/well termination.
Total Depth of Boring <u>30</u> Feet		
Total Depth of Completed Well <u>30</u> Feet		

**Well Owner**

Name Ed Hemmat

Mailing Address 2420 San Pablo Avenue

City Oakland State CA Zip 94612

**Well Location**

Address 1501 Martin Luther King Jr. Way

City Oakland County Alameda

Latitude 37 48 25 N Longitude -122 16 32 W  
Dec. Min. Sec. Dec. Min. Sec.

Datum NAD83 Dec. Lat. 37.8071213 Dec. Long. -122.2756466

APN Book 003 Page 0073 Parcel 005

Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_

**Location Sketch**  
(Sketch must be drawn by hand after form is printed.)

**Activity**

New Well  
 Modification/Repair  
 Deepen  
 Other \_\_\_\_\_  
 Destroy  
Describe procedures and materials under "GEOLOGIC LOG"

**Planned Uses**

Water Supply  
 Domestic  Public  
 Irrigation  Industrial  
 Cathodic Protection  
 Dewatering  
 Heat Exchange  
 Injection  
 Monitoring  
 Remediation  
 Sparging  
 Test Well  
 Vapor Extraction  
 Other \_\_\_\_\_

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

**Water Level and Yield of Completed Well**

Depth to first water 24 (Feet below surface)

Depth to Static \_\_\_\_\_

Water Level \_\_\_\_\_ (Feet) Date Measured \_\_\_\_\_

Estimated Yield \* \_\_\_\_\_ (GPM) Test Type \_\_\_\_\_

Test Length \_\_\_\_\_ (Hours) Total Drawdown \_\_\_\_\_ (Feet)

\*May not be representative of a well's long term yield.

Casings								Annular Material			
Depth from Surface Feet to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)	Depth from Surface Feet to Feet	Fill	Description	
0	30		PVC Sch. 40	2"	2"			0	8	Cement	
0	10	Blank	PVC Sch. 40	2"	2"			8	9	Bentonite	
10	30	Screen	PVC Sch. 40	2"	2"	Milled Slots	0.020	9	30	Filter Pack #2/12 Sand	

**Attachments**

Geologic Log  
 Well Construction Diagram  
 Geophysical Log(s)  
 Soil/Water Chemical Analyses  
 Other \_\_\_\_\_

Attach additional information, if it exists.

**Certification Statement**

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Vironex, Inc.  
Person, Firm or Corporation

1641 Challenge Drive Concord CA 94520  
Address City State Zip

Signed [Signature] 6/26/14  
C-57 Licensed Water Well Contractor Date Signed

705927  
C-57 License Number



File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet No. e0290625

Page 1 of 1

Owner's Well Number STEW-1

Date Work Began 11/12/2015 Date Work Ended 11/12/2015

Local Permit Agency Alameda County Public Works Agency

Permit Number W2015-1007 Permit Date 11/4/15

DWR Use Only - Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Table with columns: Orientation (Vertical checked, Horizontal, Angle), Drilling Method (Direct Push), Depth from Surface (Feet), Description (Well was abandoned in place by pressure grout to the surface and sealed with neat cement.)

Total Depth of Boring 33 Feet
Total Depth of Completed Well 33 Feet

Well Owner

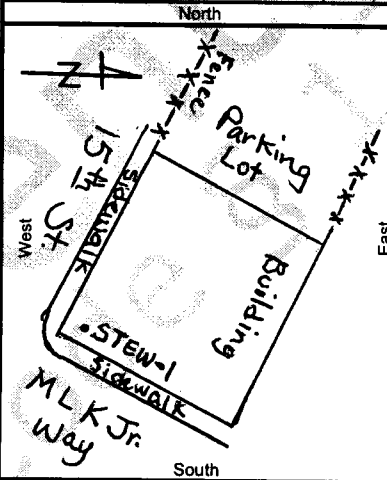
Name Ed Hemmat
Mailing Address 2420 San Pablo Avenue
City Oakland State CA Zip 94612

Well Location

Address 1501 Martin Luther King Junior Way
City Oakland County Alameda
Latitude 37 48 2536 N Longitude 122 16 3221 W
Datum NAD83 Dec. Lat. 37.8070464 Dec. Long. -122.2756144
APN Book 3 Page 73 Parcel 4
Township Range Section

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Activity

- Activity options: New Well, Modification/Repair, Deepen, Other, Destroy (selected).

Planned Uses

- Planned Uses options: Water Supply (Domestic, Public), Irrigation (Industrial), Cathodic Protection, Dewatering, Heat Exchange, Injection, Monitoring, Remediation (selected), Sparging, Test Well, Vapor Extraction, Other.

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)
Depth to Static
Water Level (Feet) Date Measured
Estimated Yield\* (GPM) Test Type
Test Length (Hours) Total Drawdown (Feet)
\*May not be representative of a well's long term yield.

Casings

Table with columns: Depth from Surface, Borehole Diameter, Type, Material, Wall Thickness, Outside Diameter, Screen Type, Slot Size.

Annular Material

Table with columns: Depth from Surface, Fill, Description.

Attachments

- Attachments checkboxes: Geologic Log, Well Construction Diagram, Geophysical Log(s), Soil/Water Chemical Analyses, Other.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief
Name Vironex, Inc.
Person, Firm or Corporation
1641 Challenge Drive Concord CA 94520
Address City State Zip
Signed [Signature] Date Signed 11/13/15 C-57 License Number 1006597



File Original with DWR

State of California

**Well Completion Report**

Refer to Instruction Pamphlet  
No. e0290656

DWR Use Only - Do Not Fill In

State Well Number/Site Number					
			N		
Latitude			Longitude		
APN/TRS/Other					

Page 1 of 1

Owner's Well Number STVW-5

Date Work Began 11/12/2015 Date Work Ended 11/12/2015

Local Permit Agency Alameda County Public Works Agency

Permit Number W2015-1007 Permit Date 11/4/15

Depth from Surface		Description
Feet	to Feet	
0	30	Well was abandoned in place by pressure grout to the surface and sealed with neat cement.
Total Depth of Boring		30 Feet
Total Depth of Completed Well		30 Feet

**Well Owner**

Name Ed Hemmat

Mailing Address 2420 San Pablo Avenue

City Oakland State CA Zip 94612

**Well Location**

Address 1501 Martin Luther King Junior Way

City Oakland County Alameda

Latitude 37 48 2563 N Longitude 122 16 3232 W  
Dec. Min. Sec. Dec. Min. Sec.

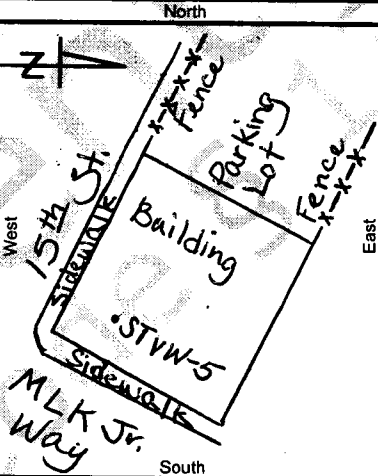
Datum NAD83 Dec. Lat. 37.8071213 Dec. Long. -122.2756466

APN Book 3 Page 73 Parcel 4

Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_

**Location Sketch**

(Sketch must be drawn by hand after form is printed.)



**Activity**

- New Well
  - Modification/Repair
    - Deepen
    - Other
  - Destroy
- Describe procedures and materials under "GEOLOGIC LOG"

**Planned Uses**

- Water Supply
  - Domestic  Public
  - Irrigation  Industrial
- Cathodic Protection
- Dewatering
- Heat Exchange
- Injection
- Monitoring
- Remediation
- Sparging
- Test Well
- Vapor Extraction
- Other

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

**Water Level and Yield of Completed Well**

Depth to first water \_\_\_\_\_ (Feet below surface)

Depth to Static \_\_\_\_\_

Water Level \_\_\_\_\_ (Feet) Date Measured \_\_\_\_\_

Estimated Yield \* \_\_\_\_\_ (GPM) Test Type \_\_\_\_\_

Test Length \_\_\_\_\_ (Hours) Total Drawdown \_\_\_\_\_ (Feet)

\*May not be representative of a well's long term yield.

**Casings**

Depth from Surface	Borehole Diameter	Type	Material	Wall Thickness	Outside Diameter	Screen Type	Slot Size if Any
Feet to Feet	(Inches)			(Inches)	(Inches)		(Inches)
0	30		PVC Sch. 40		2		
0	10	Blank	PVC Sch. 40		2		
10	30	Screen	PVC Sch. 40		2	Milled Slots	0.020

**Annular Material**

Depth from Surface	Fill	Description
Feet to Feet		
0	8	Cement
8	9	Bentonite
9	30	Filter Pack Sand #2/12

**Attachments**

- Geologic Log
  - Well Construction Diagram
  - Geophysical Log(s)
  - Soil/Water Chemical Analyses
  - Other
- Attach additional information, if it exists.

**Certification Statement**

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief  
Name Vironex, Inc.

Person, Firm or Corporation  
1641 Challenge Drive Concord CA 94520  
Address City State Zip

Signed [Signature] 11/13/15  
Date Signed  
C-57 Licensed Water Well Contractor License Number



File No. 6-13-858-SA  
July 27, 2016

**A P P E N D I X "G"**

**GROUNDWATER TREATMENT SYSTEM  
OPERATION LOGS**

**ENVIRO SOIL TECH CONSULTANTS**

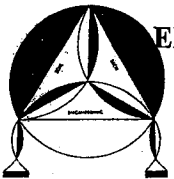
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
8/2/14		235							
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled ? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
8/4/14		14780					5.05	14545	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled ? Y/N		
FHF									

Personnel Frank H.



**ENVIRO SOIL TECH CONSULTANTS**

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116



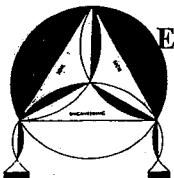
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
8/6/14		29111					4.98	14331	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
F#F									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
8/9/14		50779					5.02	7223	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
F#F									

Personnel Frank H.



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 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
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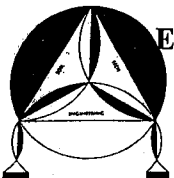
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
8/12/14		72403					5.00	7208	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
8/15/14		93910					4.98	7169	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									

Personnel Frank H.



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131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

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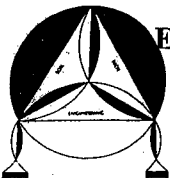
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
8/19/14		122617					4.98	7177	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FL									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
8/22/14		144173					4.99	7185	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FL									

Personnel Frank M.



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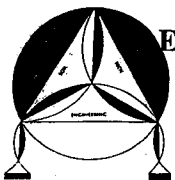
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
8/26/14		172876					4.98	7176	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FL									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
8/29/14		194532	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FT									

Personnel Frank H.



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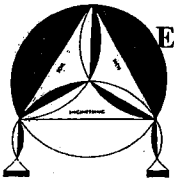
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
9/1/14		208920					3.33	4796	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
9/5/14		237575					4.98	7164	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									

Personnel Frank H.



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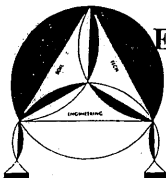
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
9/8/14		259067					4.98	7164	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
9/11/14		280578					4.98	7170	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
EH									

Personnel Frank H.



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131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

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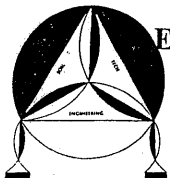
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-JA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
9/15/14		309267					4.98	7172	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
PH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
9/18/14		330791					4.98	7175	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									

Personnel Frank H2



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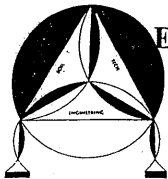
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
9/23/14		366619					4.98	7166	Rain in Forecast. Stop
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
9/27/14		366619					4.98	7166	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									

Personnel Frank H.



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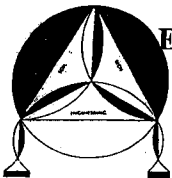
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT # 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
9/30/14		389119					5.21	7500	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
10/3/14		410949					5.05	7277	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									

Personnel Frank H.



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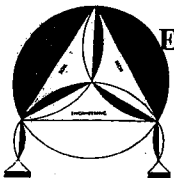
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
10/7/14		440061					5.05	7278	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
10/11/14		469039					5.03	7245	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									

Personnel Frank H.



**ENVIRO SOIL TECH CONSULTANTS**

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

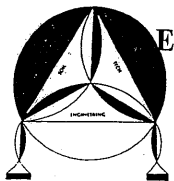
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858 SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
10/15/14		491033					3.82	5499	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
10/20/14		527830					5.14	7359	Stop. Rain in Forecast
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									

Personnel Frank H.



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Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

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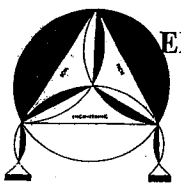
Fax: (408) 292-2116

# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA      SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
10/22/14		527830					5.14	7359	Restart
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
10/23/14		535354					5.23	7524	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									stop. Rain in forecast

Personnel Frank H.



**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500      Fax: (408) 292-2116

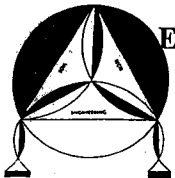
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
10/27/14		535354					5.23	7524	Restart
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
10/30/14		557585					5.15	7410	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									Stop. RAIN IN FORECAST

Personnel Frank H.



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Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

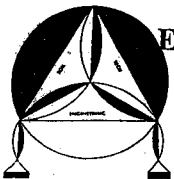
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
11/1/14		557585					5.15	7410	RESTART
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
11/3/14		583200					8.89	12808	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FH									

Personnel Frank H.



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Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

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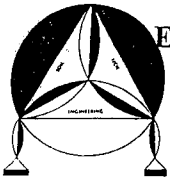
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
11/07/14		603475					3.52	20275	Stop - Rain
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
11/15/14		603475							
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									Restart

Personnel Frank H.



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 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

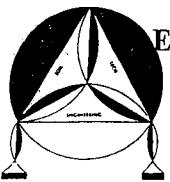
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
11/19/14		624614					3.67	21139	Rain. Stop
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
11/24/14		624614							Restart
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									

Personnel Frank H.



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 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116



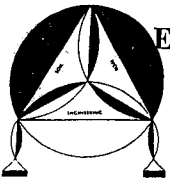
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
12/31/14		708422					6.79	42898	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
1/05/15		744494					5.01	36072	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									

Personnel: Frank H.



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 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

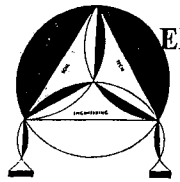
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-258-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
1/09/15		767419					3.98	22925	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
1/14/15		789235					3.03	21816	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									

Personnel: Frank T.



**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

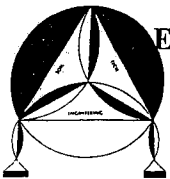
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
1/19/15		810043					2.89	20808	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
PMF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
1/23/15		825710					2.72	15667	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FLM									

Personnel Frank T.



**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

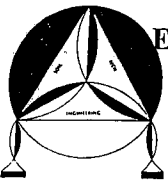
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-S\*

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
1/27/15		840283					2.53	14573	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
F+P									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
1/21/15		853934					2.37	13651	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
RHF									

Personnel Frank A



**ENVIRO SOIL TECH CONSULTANTS**

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

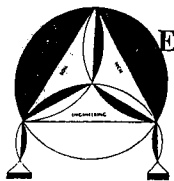
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
2/03/15		863481					2.21	9547	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
2/06/15		872035					1.98	8554	Rain. Stop
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									

Personnel Frank H



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Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

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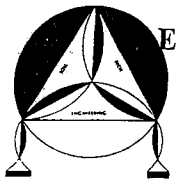
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
2/10/15		872035							12E start
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
EHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
2/14/15		909360					6.48	37325	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
EHF									

Personnel Frank H



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 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

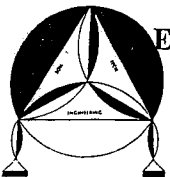
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS. Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
2/17/15		929189					4.59	19829	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS. Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
2/20/15		944395					3.52	15206	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									

Personnel Frank H



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 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

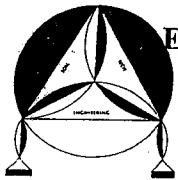
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT # 6-13-858-SA

SITE: 1501 M L L C Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
2/24/15		962193					3.09	17798	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
2/28/15		978436					2.82	16243	Rain stop
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		

Personnel FV [Signature]



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 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116



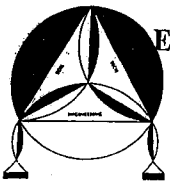
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-\*

SITE: 1501 MLIC Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
3/02/15		978436							REstart
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
3/06/15		997444					3.30	19008	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									

Personnel Frank



**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

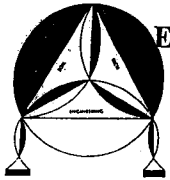
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
3/11/15		1017172					2.74	19728	Rain stop
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
3/13/15		1017172							
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									Restart

Personnel FHF



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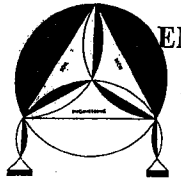
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
3/18/15		1039276					3.07	22104	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
F+F									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
3/22/15		1056038					2.91	16762	Stop. Rain
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
F+F									

Personnel Frank H



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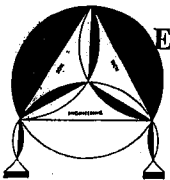
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
3/24/15		1056038							12 Restart
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
3/27/15		1070769					3.41	14731	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									

Personnel Frank H



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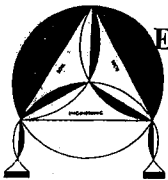
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
3/31/15		1089431					3.24	18662	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
4/02/15		1098186					3.04	8755	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									

Personnel Ryan H



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 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
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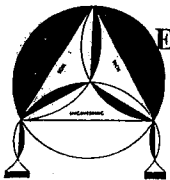
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
4/05/15		111189					3.01	13003	Stop. Rain
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
PHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
4/09/15		111189	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
PHF									Restart

Personnel Frank It



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 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

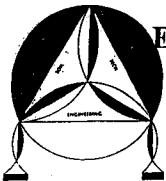
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1201 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
4/14/15		1136893					3.57	25704	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FFF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
4/18/15		1156995	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FFF									

Personnel Frank H



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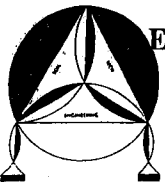
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
4/24/15		1184297					3.16	27302	rain - stop
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
4/27/15		1184297	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									RE Start

Personnel Frank H



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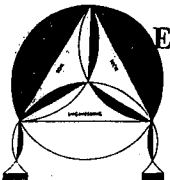
# GROUNDWATER TREATMENT SYSTEM OPERATION LOG

PROJECT #: 6-13-858-SA

SITE: 1501 MLK Jr. Way, Oakland

Date	GTS. Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Comments / Observations
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
4/30/15		1198380					3.26	14083	Shut down system
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		
FHF									
Date	GTS Operating Y/N	Totalizer Reading (gallons)	Extraction Well		Extraction Well		Extraction Well		Work Performed
			Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	Rate (gpm)	Total (gal)	
Initials	Ground-Water Vapor Rate (cfm)	S.Filt. 1 Pressure (psi)	S.Filt. 2 Pressure (psi)	Carbon 1 Pressure (psi)	Carbon 2 Pressure (psi)	Combined Discharge Rate (gpm)	Sampled? Y/N		

Personnel Franck H



**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

File No. 6-13-858-SA  
July 27, 2016

**A P P E N D I X "H"**

**LABORATORY REPORTS**

**ENVIRO SOIL TECH CONSULTANTS**

**Technical Report for**

**Enviro Soil Tech Consultants**

1501 Martin Luther King Jr. Way, Oakland, CA

6-13-858-5A

Accutest Job Number: C28241

Sampling Date: 06/11/13

**Report to:**

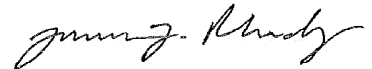
**Enviro Soil Tech Consultants**  
131 Tully Road  
San Jose, CA 95111  
info@envirosoiltech.com

**ATTN: Frank Hamedi**

**Total number of pages in report: 36**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.



**James J. Rhudy**  
**Lab Director**

**Client Service contact: Teresa Morrison 408-588-0200**

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

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Test results relate only to samples analyzed.

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1

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## Sample Summary

Enviro Soil Tech Consultants

**Job No:** C28241

1501 Martin Luther King Jr. Way, Oakland, CA  
 Project No: 6-13-858-5A

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C28241-1	06/11/13	00:00 FH	06/13/13	AQ	Ground Water	B-1-W
C28241-2	06/11/13	00:00 FH	06/13/13	AQ	Ground Water	B-2-W
C28241-3	06/11/13	00:00 FH	06/13/13	AQ	Ground Water	B-3-W

## Summary of Hits

**Job Number:** C28241  
**Account:** Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA  
**Collected:** 06/11/13

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
---------------	------------------	--------------------	----	-----	-------	--------

### C28241-1 B-1-W

Benzene	28.1 J	100	20	ug/l	SW846 8260B
n-Butylbenzene	52.1 J	200	20	ug/l	SW846 8260B
sec-Butylbenzene	40.0 J	200	20	ug/l	SW846 8260B
Ethylbenzene	1450	100	20	ug/l	SW846 8260B
Isopropylbenzene	184	100	20	ug/l	SW846 8260B
p-Isopropyltoluene	49.5 J	200	20	ug/l	SW846 8260B
Naphthalene	256 J	500	50	ug/l	SW846 8260B
n-Propylbenzene	214	200	20	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	1100	200	20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	300	200	20	ug/l	SW846 8260B
Toluene	254	100	20	ug/l	SW846 8260B
Xylene (total)	7360	200	46	ug/l	SW846 8260B
TPH-GRO (C6-C10)	66900	5000	2500	ug/l	SW846 8260B
TPH (C10-C28)	22.3	2.5	0.62	mg/l	SW846 8015B M

### C28241-2 B-2-W

Benzene	2.7 J	10	2.0	ug/l	SW846 8260B
Ethylbenzene	222	10	2.0	ug/l	SW846 8260B
Isopropylbenzene	13.0	10	2.0	ug/l	SW846 8260B
Naphthalene	31.2 J	50	5.0	ug/l	SW846 8260B
n-Propylbenzene	9.5 J	20	2.0	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	72.3	20	2.0	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	18.2 J	20	2.0	ug/l	SW846 8260B
Toluene	46.4	10	2.0	ug/l	SW846 8260B
Xylene (total)	1230	20	4.6	ug/l	SW846 8260B
TPH-GRO (C6-C10)	4720	500	250	ug/l	SW846 8260B
TPH (C10-C28) <sup>a</sup>	0.351	0.19	0.048	mg/l	SW846 8015B M

### C28241-3 B-3-W

Acetone	12.4 J	20	4.0	ug/l	SW846 8260B
Benzene	1.9	1.0	0.20	ug/l	SW846 8260B
sec-Butylbenzene	0.39 J	2.0	0.20	ug/l	SW846 8260B
1,2-Dichloroethane	0.95 J	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene	23.4	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene	3.4	1.0	0.20	ug/l	SW846 8260B
Methyl ethyl ketone	2.4 J	10	2.0	ug/l	SW846 8260B
Naphthalene	0.78 J	5.0	0.50	ug/l	SW846 8260B
n-Propylbenzene	1.2 J	2.0	0.20	ug/l	SW846 8260B
Tert-Butyl Alcohol	28.1	10	2.4	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	0.34 J	2.0	0.20	ug/l	SW846 8260B
Toluene	0.64 J	1.0	0.20	ug/l	SW846 8260B

## Summary of Hits

**Job Number:** C28241  
**Account:** Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA  
**Collected:** 06/11/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Xylene (total)		43.9	2.0	0.46	ug/l	SW846 8260B
TPH-GRO (C6-C10)		335	50	25	ug/l	SW846 8260B
TPH (C10-C28)		0.0503 J	0.10	0.026	mg/l	SW846 8015B M

(a) Reporting Limits raised due to insufficient sample volume (high level of sediment).

Sample Results

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Report of Analysis

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# Report of Analysis

<b>Client Sample ID:</b> B-1-W		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28241-1		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U11904.D	100	06/21/13	TN	n/a	n/a	VU457
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

### VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2000	400	ug/l	
71-43-2	Benzene	28.1	100	20	ug/l	J
108-86-1	Bromobenzene	ND	100	20	ug/l	
74-97-5	Bromochloromethane	ND	100	20	ug/l	
75-27-4	Bromodichloromethane	ND	100	20	ug/l	
75-25-2	Bromoform	ND	100	22	ug/l	
104-51-8	n-Butylbenzene	52.1	200	20	ug/l	J
135-98-8	sec-Butylbenzene	40.0	200	20	ug/l	J
98-06-6	tert-Butylbenzene	ND	200	28	ug/l	
108-90-7	Chlorobenzene	ND	100	20	ug/l	
75-00-3	Chloroethane	ND	100	20	ug/l	
67-66-3	Chloroform	ND	100	20	ug/l	
95-49-8	o-Chlorotoluene	ND	200	20	ug/l	
106-43-4	p-Chlorotoluene	ND	200	26	ug/l	
56-23-5	Carbon tetrachloride	ND	100	20	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	20	ug/l	
563-58-6	1,1-Dichloropropene	ND	100	20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	200	40	ug/l	
106-93-4	1,2-Dibromoethane	ND	100	20	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	20	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	20	ug/l	
142-28-9	1,3-Dichloropropane	ND	100	20	ug/l	
108-20-3	Di-Isopropyl ether	ND	200	22	ug/l	
594-20-7	2,2-Dichloropropane	ND	100	20	ug/l	
124-48-1	Dibromochloromethane	ND	100	20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	100	20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	20	ug/l	
541-73-1	m-Dichlorobenzene	ND	100	20	ug/l	
95-50-1	o-Dichlorobenzene	ND	100	20	ug/l	
106-46-7	p-Dichlorobenzene	ND	100	20	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> B-1-W		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28241-1		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	100	20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	30	ug/l	
100-41-4	Ethylbenzene	1450	100	20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	200	22	ug/l	
591-78-6	2-Hexanone	ND	1000	200	ug/l	
87-68-3	Hexachlorobutadiene	ND	200	20	ug/l	
98-82-8	Isopropylbenzene	184	100	20	ug/l	
99-87-6	p-Isopropyltoluene	49.5	200	20	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	1000	100	ug/l	
74-83-9	Methyl bromide	ND	200	20	ug/l	
74-87-3	Methyl chloride	ND	100	30	ug/l	
74-95-3	Methylene bromide	ND	100	20	ug/l	
75-09-2	Methylene chloride	ND	1000	200	ug/l	
78-93-3	Methyl ethyl ketone	ND	1000	200	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	100	20	ug/l	
91-20-3	Naphthalene	256	500	50	ug/l	J
103-65-1	n-Propylbenzene	214	200	20	ug/l	
100-42-5	Styrene	ND	100	20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	200	40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	1000	240	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	200	20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	200	20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	200	20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1100	200	20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	300	200	20	ug/l	
127-18-4	Tetrachloroethylene	ND	100	30	ug/l	
108-88-3	Toluene	254	100	20	ug/l	
79-01-6	Trichloroethylene	ND	100	20	ug/l	
75-69-4	Trichlorofluoromethane	ND	100	20	ug/l	
75-01-4	Vinyl chloride	ND	100	20	ug/l	
1330-20-7	Xylene (total)	7360	200	46	ug/l	
	TPH-GRO (C6-C10)	66900	5000	2500	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-1-W	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28241-1	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	102%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-1-W	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28241-1	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH304594.D	20	06/14/13	AG	06/14/13	OP8141	GHH1007
Run #2							

Run #	Initial Volume	Final Volume
Run #1	810 ml	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	22.3	2.5	0.62	mg/l	
	TPH (> C28-C40)	ND	4.9	1.2	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	64%		32-124%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> B-2-W		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28241-2		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U11905.D	10	06/21/13	TN	n/a	n/a	VU457
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

### VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	40	ug/l	
71-43-2	Benzene	2.7	10	2.0	ug/l	J
108-86-1	Bromobenzene	ND	10	2.0	ug/l	
74-97-5	Bromochloromethane	ND	10	2.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.0	ug/l	
75-25-2	Bromoform	ND	10	2.2	ug/l	
104-51-8	n-Butylbenzene	ND	20	2.0	ug/l	
135-98-8	sec-Butylbenzene	ND	20	2.0	ug/l	
98-06-6	tert-Butylbenzene	ND	20	2.8	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
75-00-3	Chloroethane	ND	10	2.0	ug/l	
67-66-3	Chloroform	ND	10	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	20	2.0	ug/l	
106-43-4	p-Chlorotoluene	ND	20	2.6	ug/l	
56-23-5	Carbon tetrachloride	ND	10	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	2.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	2.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	4.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	2.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	10	2.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	20	2.2	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	10	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.0	ug/l	
541-73-1	m-Dichlorobenzene	ND	10	2.0	ug/l	
95-50-1	o-Dichlorobenzene	ND	10	2.0	ug/l	
106-46-7	p-Dichlorobenzene	ND	10	2.0	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	B-2-W	<b>Date Sampled:</b>	06/11/13
<b>Lab Sample ID:</b>	C28241-2	<b>Date Received:</b>	06/13/13
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	1501 Martin Luther King Jr. Way, Oakland, CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	3.0	ug/l	
100-41-4	Ethylbenzene	222	10	2.0	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	20	2.2	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
87-68-3	Hexachlorobutadiene	ND	20	2.0	ug/l	
98-82-8	Isopropylbenzene	13.0	10	2.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	100	10	ug/l	
74-83-9	Methyl bromide	ND	20	2.0	ug/l	
74-87-3	Methyl chloride	ND	10	3.0	ug/l	
74-95-3	Methylene bromide	ND	10	2.0	ug/l	
75-09-2	Methylene chloride	ND	100	20	ug/l	
78-93-3	Methyl ethyl ketone	ND	100	20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.0	ug/l	
91-20-3	Naphthalene	31.2	50	5.0	ug/l	J
103-65-1	n-Propylbenzene	9.5	20	2.0	ug/l	J
100-42-5	Styrene	ND	10	2.0	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	20	4.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	100	24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.2	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	20	2.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	20	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	72.3	20	2.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	18.2	20	2.0	ug/l	J
127-18-4	Tetrachloroethylene	ND	10	3.0	ug/l	
108-88-3	Toluene	46.4	10	2.0	ug/l	
79-01-6	Trichloroethylene	ND	10	2.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.0	ug/l	
75-01-4	Vinyl chloride	ND	10	2.0	ug/l	
1330-20-7	Xylene (total)	1230	20	4.6	ug/l	
	TPH-GRO (C6-C10)	4720	500	250	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		70-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-2-W	
<b>Lab Sample ID:</b> C28241-2	<b>Date Sampled:</b> 06/11/13
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/13/13
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b> B-2-W	
<b>Lab Sample ID:</b> C28241-2	<b>Date Sampled:</b> 06/11/13
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 06/13/13
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	HH304595.D	1	06/14/13	AG	06/14/13	OP8141	GHH1007
Run #2							

Run #	Initial Volume	Final Volume
Run #1	525 ml	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.351	0.19	0.048	mg/l	
	TPH (> C28-C40)	ND	0.38	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	72%		32-124%

(a) Reporting Limits raised due to insufficient sample volume (high level of sediment).

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ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> B-3-W		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28241-3		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U11906.D	1	06/21/13	TN	n/a	n/a	VU457
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

### VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	12.4	20	4.0	ug/l	J
71-43-2	Benzene	1.9	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	0.39	2.0	0.20	ug/l	J
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	0.95	1.0	0.20	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> B-3-W		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28241-3		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	23.4	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	3.4	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	2.4	10	2.0	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	0.78	5.0	0.50	ug/l	J
103-65-1	n-Propylbenzene	1.2	2.0	0.20	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	28.1	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.34	2.0	0.20	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	0.64	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	43.9	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	335	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-3-W		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28241-3		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-3-W		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28241-3		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH304596.D	1	06/14/13	AG	06/14/13	OP8141	GHH1007
Run #2							

Run #	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0503	0.10	0.026	mg/l	J
	TPH (> C28-C40)	ND	0.21	0.052	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	69%		32-124%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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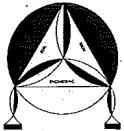
Includes the following where applicable:

- Chain of Custody

ESTCASTE302 CHAIN OF CUSTODY RECORD

C28241

PROJ. NO.		NAME					CON-TAINER	ANALYSES REQUESTED				REMARKS	
6-13-858-SA		1501 Martin Luther King Jr. Way, Oakland						TPHd (8015) GC	TPHg (8260)	TOG (8015) GC	EPA 8260B*		
SAMPLERS: (Signature)													
<i>[Signature]</i>													
NO.	DATE	TIME	SOIL	WATER	AIR	SAMPLE ID							
1	6/14/13			✓		B-1-W	6	✓	✓	✓	✓		
2	↓			✓		B-2-W	6	✓	✓	✓	✓		
3	↓			✓		B-3-W	6	✓	✓	✓	✓		
*Full lists													
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
<i>[Signature]</i>		6/13/13 9:16		<i>[Signature]</i>		6/13/13 11:00		<i>[Signature]</i>		6/13/13 12:10		<i>[Signature]</i>	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Remarks:					
								Please send lab report to Frank Hamed					



**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 694-3347

TEMP = 4.6 °C

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## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** C28241      **Client:** ENVIRO SOIL      **Project:** 1501 MLK JR WAY, OAKLAND, CA  
**Date / Time Received:** 6/13/2013      **Delivery Method:** Accutest Courier      **Airbill #s:**

**Cooler Temps (Initial/Adjusted):** #1: (4.6/4.6): 0

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

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## GC/MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



## Method Blank Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU457-MB	U11896.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

## Method Blank Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU457-MB	U11896.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

## Method Blank Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU457-MB	U11896.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	105% 70-130%
2037-26-5	Toluene-D8	106% 70-130%
460-00-4	4-Bromofluorobenzene	99% 70-130%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU457-BS	U11893.D	1	06/21/13	TN	n/a	n/a	VU457
VU457-BSD	U11894.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	90.0	113	88.4	111	2	38-159/24
71-43-2	Benzene	20	19.8	99	19.9	100	1	77-122/25
108-86-1	Bromobenzene	20	19.4	97	19.5	98	1	76-126/17
74-97-5	Bromochloromethane	20	20.2	101	20.2	101	0	77-130/17
75-27-4	Bromodichloromethane	20	20.0	100	19.8	99	1	75-127/16
75-25-2	Bromoform	20	20.1	101	19.7	99	2	69-141/17
104-51-8	n-Butylbenzene	20	19.4	97	20.3	102	5	72-129/18
135-98-8	sec-Butylbenzene	20	18.0	90	18.8	94	4	74-128/18
98-06-6	tert-Butylbenzene	20	18.4	92	19.1	96	4	73-127/18
108-90-7	Chlorobenzene	20	18.2	91	18.2	91	0	77-122/16
75-00-3	Chloroethane	20	19.4	97	19.4	97	0	69-133/18
67-66-3	Chloroform	20	20.9	105	20.9	105	0	74-126/17
95-49-8	o-Chlorotoluene	20	19.7	99	19.8	99	1	72-127/20
106-43-4	p-Chlorotoluene	20	18.2	91	18.3	92	1	68-127/18
56-23-5	Carbon tetrachloride	20	18.6	93	18.7	94	1	71-133/19
75-34-3	1,1-Dichloroethane	20	20.4	102	20.5	103	0	71-125/17
75-35-4	1,1-Dichloroethylene	20	18.5	93	19.1	96	3	66-125/20
563-58-6	1,1-Dichloropropene	20	19.7	99	19.9	100	1	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	20	22.7	114	21.7	109	5	65-131/20
106-93-4	1,2-Dibromoethane	20	20.0	100	19.8	99	1	75-135/17
107-06-2	1,2-Dichloroethane	20	21.4	107	20.9	105	2	71-131/17
78-87-5	1,2-Dichloropropane	20	20.5	103	20.4	102	0	78-124/16
142-28-9	1,3-Dichloropropane	20	20.5	103	20.1	101	2	78-123/16
108-20-3	Di-Isopropyl ether	20	21.5	108	21.5	108	0	68-129/17
594-20-7	2,2-Dichloropropane	20	19.9	100	20.0	100	1	70-131/19
124-48-1	Dibromochloromethane	20	19.4	97	19.1	96	2	76-132/16
75-71-8	Dichlorodifluoromethane	20	22.0	110	20.7	104	6	32-168/28
156-59-2	cis-1,2-Dichloroethylene	20	20.8	104	21.0	105	1	73-126/17
10061-01-5	cis-1,3-Dichloropropene	20	21.8	109	21.5	108	1	72-130/16
541-73-1	m-Dichlorobenzene	20	18.0	90	18.2	91	1	75-124/16
95-50-1	o-Dichlorobenzene	20	18.6	93	18.7	94	1	76-124/16
106-46-7	p-Dichlorobenzene	20	19.3	97	19.4	97	1	75-124/16
156-60-5	trans-1,2-Dichloroethylene	20	20.4	102	20.8	104	2	71-126/18
10061-02-6	trans-1,3-Dichloropropene	20	19.8	99	19.4	97	2	71-126/16
100-41-4	Ethylbenzene	20	19.9	100	20.0	100	1	76-126/17
637-92-3	Ethyl Tert Butyl Ether	20	23.8	119	23.7	119	0	75-134/17

\* = Outside of Control Limits.

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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU457-BS	U11893.D	1	06/21/13	TN	n/a	n/a	VU457
VU457-BSD	U11894.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	96.3	120	92.8	116	4	67-150/22
87-68-3	Hexachlorobutadiene	20	19.0	95	19.7	99	4	69-135/20
98-82-8	Isopropylbenzene	20	18.6	93	19.0	95	2	61-125/17
99-87-6	p-Isopropyltoluene	20	18.3	92	19.0	95	4	68-127/18
108-10-1	4-Methyl-2-pentanone	80	94.4	118	90.8	114	4	71-142/21
74-83-9	Methyl bromide	20	19.9	100	20.0	100	1	68-132/18
74-87-3	Methyl chloride	20	19.3	97	19.3	97	0	39-150/28
74-95-3	Methylene bromide	20	20.4	102	20.1	101	1	77-127/16
75-09-2	Methylene chloride	20	20.0	100	20.2	101	1	67-128/18
78-93-3	Methyl ethyl ketone	80	90.3	113	87.9	110	3	56-155/23
1634-04-4	Methyl Tert Butyl Ether	20	22.3	112	22.1	111	1	73-132/17
91-20-3	Naphthalene	20	24.6	123	24.2	121	2	70-136/20
103-65-1	n-Propylbenzene	20	18.0	90	18.6	93	3	71-127/17
100-42-5	Styrene	20	19.5	98	19.4	97	1	72-134/16
994-05-8	Tert-Amyl Methyl Ether	20	22.6	113	22.6	113	0	73-133/17
75-65-0	Tert-Butyl Alcohol	100	111	111	106	106	5	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	20	20.2	101	20.1	101	0	77-130/16
71-55-6	1,1,1-Trichloroethane	20	19.6	98	19.8	99	1	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	20	20.8	104	20.5	103	1	77-129/17
79-00-5	1,1,2-Trichloroethane	20	20.1	101	19.9	100	1	77-125/16
87-61-6	1,2,3-Trichlorobenzene	20	20.7	104	21.0	105	1	70-133/18
96-18-4	1,2,3-Trichloropropane	20	20.9	105	20.7	104	1	69-126/18
120-82-1	1,2,4-Trichlorobenzene	20	21.8	109	22.5	113	3	68-129/17
95-63-6	1,2,4-Trimethylbenzene	20	20.7	104	21.1	106	2	74-129/17
108-67-8	1,3,5-Trimethylbenzene	20	21.2	106	21.8	109	3	77-129/17
127-18-4	Tetrachloroethylene	20	17.8	89	18.2	91	2	69-127/20
108-88-3	Toluene	20	19.6	98	19.7	99	1	75-122/17
79-01-6	Trichloroethylene	20	19.5	98	19.6	98	1	78-123/17
75-69-4	Trichlorofluoromethane	20	21.4	107	20.6	103	4	65-136/23
75-01-4	Vinyl chloride	20	22.9	115	22.1	111	4	57-146/22
1330-20-7	Xylene (total)	60	57.3	96	57.4	96	0	77-125/17

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	106%	107%	70-130%

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU457-BS	U11893.D	1	06/21/13	TN	n/a	n/a	VU457
VU457-BSD	U11894.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	101%	101%	70-130%
460-00-4	4-Bromofluorobenzene	104%	104%	70-130%

\* = Outside of Control Limits.

# Laboratory Control Sample Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU457-LCS	U11895.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	120	96	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	109%	70-130%
2037-26-5	Toluene-D8	106%	70-130%
460-00-4	4-Bromofluorobenzene	101%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28233-1MS	U11915.D	1	06/21/13	TN	n/a	n/a	VU457
C28233-1MSD	U11916.D	1	06/21/13	TN	n/a	n/a	VU457
C28233-1	U11913.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Compound	C28233-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		80	92.4	116	87.7	110	5	38-159/24
71-43-2	Benzene	ND		20	20.9	105	20.3	102	3	77-122/16
108-86-1	Bromobenzene	ND		20	19.6	98	19.2	96	2	76-126/17
74-97-5	Bromochloromethane	ND		20	20.0	100	19.2	96	4	77-130/17
75-27-4	Bromodichloromethane	ND		20	20.9	105	20.0	100	4	75-127/16
75-25-2	Bromoform	ND		20	19.0	95	18.3	92	4	69-141/17
104-51-8	n-Butylbenzene	ND		20	22.1	111	21.4	107	3	72-129/18
135-98-8	sec-Butylbenzene	ND		20	20.4	102	20.1	101	1	74-128/18
98-06-6	tert-Butylbenzene	ND		20	20.1	101	20.0	100	0	73-127/18
108-90-7	Chlorobenzene	ND		20	18.7	94	18.5	93	1	77-122/16
75-00-3	Chloroethane	ND		20	20.0	100	19.6	98	2	69-133/18
67-66-3	Chloroform	0.34	J	20	22.3	110	21.5	106	4	74-126/17
95-49-8	o-Chlorotoluene	ND		20	20.8	104	20.4	102	2	72-127/20
106-43-4	p-Chlorotoluene	ND		20	18.9	95	18.6	93	2	68-127/18
56-23-5	Carbon tetrachloride	ND		20	22.7	114	22.0	110	3	71-133/19
75-34-3	1,1-Dichloroethane	ND		20	21.2	106	20.6	103	3	71-125/17
75-35-4	1,1-Dichloroethylene	ND		20	20.6	103	20.2	101	2	66-125/20
563-58-6	1,1-Dichloropropene	ND		20	22.8	114	22.4	112	2	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	ND		20	22.1	111	21.4	107	3	65-131/20
106-93-4	1,2-Dibromoethane	ND		20	20.1	101	19.7	99	2	75-135/17
107-06-2	1,2-Dichloroethane	1.3		20	24.8	118	23.5	111	5	71-131/17
78-87-5	1,2-Dichloropropane	ND		20	21.0	105	20.5	103	2	78-124/16
142-28-9	1,3-Dichloropropane	ND		20	20.9	105	20.4	102	2	78-123/16
108-20-3	Di-Isopropyl ether	ND		20	21.1	106	20.6	103	2	68-129/17
594-20-7	2,2-Dichloropropane	ND		20	19.4	97	18.5	93	5	70-131/19
124-48-1	Dibromochloromethane	ND		20	19.3	97	18.7	94	3	76-132/16
75-71-8	Dichlorodifluoromethane	ND		20	25.6	128	24.2	121	6	32-168/28
156-59-2	cis-1,2-Dichloroethylene	ND		20	20.9	105	20.4	102	2	73-126/17
10061-01-5	cis-1,3-Dichloropropene	ND		20	20.7	104	20.2	101	2	72-130/16
541-73-1	m-Dichlorobenzene	ND		20	18.4	92	18.1	91	2	75-124/16
95-50-1	o-Dichlorobenzene	ND		20	18.9	95	18.6	93	2	76-124/16
106-46-7	p-Dichlorobenzene	ND		20	19.7	99	19.3	97	2	75-124/16
156-60-5	trans-1,2-Dichloroethylene	ND		20	21.1	106	20.8	104	1	71-126/18
10061-02-6	trans-1,3-Dichloropropene	ND		20	19.2	96	18.7	94	3	71-126/16
100-41-4	Ethylbenzene	ND		20	21.5	108	21.2	106	1	76-126/17
637-92-3	Ethyl Tert Butyl Ether	ND		20	23.5	118	22.7	114	3	75-134/17

\* = Outside of Control Limits.

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# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28233-1MS	U11915.D	1	06/21/13	TN	n/a	n/a	VU457
C28233-1MSD	U11916.D	1	06/21/13	TN	n/a	n/a	VU457
C28233-1	U11913.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Compound	C28233-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	80	104	130	98.1	123	6	67-150/22
87-68-3	Hexachlorobutadiene	ND	20	20.4	102	20.2	101	1	69-135/20
98-82-8	Isopropylbenzene	ND	20	20.7	104	20.4	102	1	61-125/17
99-87-6	p-Isopropyltoluene	ND	20	20.1	101	19.8	99	2	68-127/18
108-10-1	4-Methyl-2-pentanone	ND	80	100	125	93.7	117	7	71-142/21
74-83-9	Methyl bromide	ND	20	20.0	100	19.5	98	3	68-132/18
74-87-3	Methyl chloride	ND	20	21.6	108	20.4	102	6	39-150/28
74-95-3	Methylene bromide	ND	20	21.3	107	20.4	102	4	77-127/16
75-09-2	Methylene chloride	ND	20	19.5	98	19.0	95	3	67-128/18
78-93-3	Methyl ethyl ketone	ND	80	88.8	111	84.4	106	5	56-155/23
1634-04-4	Methyl Tert Butyl Ether	ND	20	21.8	109	21.2	106	3	73-132/17
91-20-3	Naphthalene	ND	20	21.2	106	22.9	115	8	70-136/20
103-65-1	n-Propylbenzene	ND	20	19.7	99	19.5	98	1	71-127/17
100-42-5	Styrene	ND	20	11.9	60* a	11.1	56* a	7	72-134/16
994-05-8	Tert-Amyl Methyl Ether	ND	20	21.8	109	21.3	107	2	73-133/17
75-65-0	Tert-Butyl Alcohol	ND	100	101	101	96.3	96	5	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	21.2	106	20.8	104	2	77-130/16
71-55-6	1,1,1-Trichloroethane	ND	20	22.4	112	21.5	108	4	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	20.6	103	20.1	101	2	77-129/17
79-00-5	1,1,2-Trichloroethane	ND	20	20.8	104	20.2	101	3	77-125/16
87-61-6	1,2,3-Trichlorobenzene	ND	20	18.6	93	19.7	99	6	70-133/18
96-18-4	1,2,3-Trichloropropane	ND	20	19.1	96	18.5	93	3	69-126/18
120-82-1	1,2,4-Trichlorobenzene	ND	20	21.3	107	21.4	107	0	68-129/17
95-63-6	1,2,4-Trimethylbenzene	ND	20	21.2	106	20.4	102	4	74-129/17
108-67-8	1,3,5-Trimethylbenzene	ND	20	22.3	112	21.9	110	2	77-129/17
127-18-4	Tetrachloroethylene	ND	20	20.1	101	20.0	100	0	69-127/20
108-88-3	Toluene	ND	20	20.6	103	20.5	103	0	75-122/17
79-01-6	Trichloroethylene	1.6	20	23.1	108	22.8	106	1	78-123/17
75-69-4	Trichlorofluoromethane	ND	20	23.8	119	23.1	116	3	65-136/23
75-01-4	Vinyl chloride	ND	20	26.1	131	24.8	124	5	57-146/22
1330-20-7	Xylene (total)	ND	60	60.5	101	59.2	99	2	77-125/17

CAS No.	Surrogate Recoveries	MS	MSD	C28233-1	Limits
1868-53-7	Dibromofluoromethane	109%	106%	117%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28233-1MS	U11915.D	1	06/21/13	TN	n/a	n/a	VU457
C28233-1MSD	U11916.D	1	06/21/13	TN	n/a	n/a	VU457
C28233-1	U11913.D	1	06/21/13	TN	n/a	n/a	VU457

The QC reported here applies to the following samples:

Method: SW846 8260B

C28241-1, C28241-2, C28241-3

CAS No.	Surrogate Recoveries	MS	MSD	C28233-1	Limits
2037-26-5	Toluene-D8	104%	104%	105%	70-130%
460-00-4	4-Bromofluorobenzene	106%	105%	97%	70-130%

(a) Outside control limits due to matrix interference. AZ:M2

\* = Outside of Control Limits.

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## GC Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8141-MB	HH304559.D1		06/13/13	AG	06/13/13	OP8141	GHH1006

The QC reported here applies to the following samples:

Method: SW846 8015B M

C28241-1, C28241-2, C28241-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	
	TPH (> C28-C40)	ND	0.20	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	76% 32-124%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8141-BS	HH304557.D1		06/13/13	AG	06/13/13	OP8141	GHH1006
OP8141-BSD	HH304558.D1		06/13/13	AG	06/13/13	OP8141	GHH1006

The QC reported here applies to the following samples:

Method: SW846 8015B M

C28241-1, C28241-2, C28241-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.940	94	0.859	86	9	38-115/22
	TPH (> C28-C40)	1	1.01	101	0.940	94	7	45-114/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	79%	71%	32-124%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28241  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8141-MS	HH304572.D1		06/14/13	AG	06/13/13	OP8141	GHH1006
OP8141-MSD	HH304573.D1		06/14/13	AG	06/13/13	OP8141	GHH1006
C28186-1	HH304560.D1		06/14/13	AG	06/13/13	OP8141	GHH1006

The QC reported here applies to the following samples:

Method: SW846 8015B M

C28241-1, C28241-2, C28241-3

CAS No.	Compound	C28186-1 mg/l	Spike Q mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	0.182	0.98	0.993	83	0.982	82	1	38-115/22
	TPH (> C28-C40)	ND	0.98	0.964	98	0.951	98	1	45-114/20

CAS No.	Surrogate Recoveries	MS	MSD	C28186-1	Limits
630-01-3	Hexacosane	72%	80%	77%	32-124%

\* = Outside of Control Limits.

Technical Report for

Enviro Soil Tech Consultants

1501 Martin Luther King Jr. Way, Oakland, CA

6-13-858-5A

Accutest Job Number: C28242

Sampling Date: 06/11/13

Report to:

Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111  
info@envirosoiltech.com

ATTN: Frank Hamedi

Total number of pages in report: **76**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.



James J. Rhudy  
Lab Director

Client Service contact: Teresa Morrison 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

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Test results relate only to samples analyzed.

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## Sample Summary

Enviro Soil Tech Consultants

**Job No:** C28242

1501 Martin Luther King Jr. Way, Oakland, CA  
 Project No: 6-13-858-5A

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C28242-2	06/11/13	00:00 HF	06/13/13	SO	Soil	B-1-10
C28242-4	06/11/13	00:00 HF	06/13/13	SO	Soil	B-1-20
C28242-7	06/11/13	00:00 HF	06/13/13	SO	Soil	B-2-10
C28242-9	06/11/13	00:00 HF	06/13/13	SO	Soil	B-2-20
C28242-13	06/11/13	00:00 HF	06/13/13	SO	Soil	B-3-10
C28242-15	06/11/13	00:00 HF	06/13/13	SO	Soil	B-3-20
C28242-19	06/11/13	00:00 HF	06/13/13	SO	Soil	B-4-10
C28242-21	06/11/13	00:00 HF	06/13/13	SO	Soil	B-4-20

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Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## Summary of Hits

**Job Number:** C28242  
**Account:** Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA  
**Collected:** 06/11/13

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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### C28242-2 B-1-10

Naphthalene	0.99 J	5.0	0.99	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	1.6 J	5.0	0.99	ug/kg	SW846 8260B
TPH (C10-C28)	6.87 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)	13.9 J	20	5.0	mg/kg	SW846 8015B M

### C28242-4 B-1-20

Benzene	3.1 J	4.9	0.49	ug/kg	SW846 8260B
Ethylbenzene	1.0 J	4.9	0.49	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	1.4 J	4.9	0.97	ug/kg	SW846 8260B
Xylene (total)	3.4 J	9.7	0.97	ug/kg	SW846 8260B
TPH-GRO (C6-C10)	54.5 J	97	49	ug/kg	SW846 8260B

### C28242-7 B-2-10

TPH (C10-C28)	17.7	9.8	2.4	mg/kg	SW846 8015B M
TPH (> C28-C40)	27.5	20	4.9	mg/kg	SW846 8015B M

### C28242-9 B-2-20

No hits reported in this sample.

### C28242-13 B-3-10

No hits reported in this sample.

### C28242-15 B-3-20

No hits reported in this sample.

### C28242-19 B-4-10

No hits reported in this sample.

### C28242-21 B-4-20

No hits reported in this sample.



Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> B-1-10		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-2		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L25406.D	1	06/14/13	XB	n/a	n/a	VL802
Run #2							

Run #1	Initial Weight
Run #1	5.05 g
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	9.9	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.99	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane <sup>b</sup>	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> B-1-10		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-2		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.99	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	0.99	ug/kg	
74-87-3	Methyl chloride	ND	5.0	0.99	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
91-20-3	Naphthalene	0.99	5.0	0.99	ug/kg	J
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	9.9	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane <sup>b</sup>	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.99	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	1.6	5.0	0.99	ug/kg	J
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.99	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.59	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.99	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
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<b>Client Sample ID:</b> B-1-10 <b>Lab Sample ID:</b> C28242-2 <b>Matrix:</b> SO - Soil <b>Method:</b> SW846 8260B <b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	<b>Date Sampled:</b> 06/11/13 <b>Date Received:</b> 06/13/13 <b>Percent Solids:</b> n/a <sup>a</sup>
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	96%		70-130%

- (a) All results reported on a wet weight basis.
- (b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-1-10	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-2	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG43582.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	6.87	10	2.5	mg/kg	J
	TPH (> C28-C40)	13.9	20	5.0	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	95%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-1-20		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-4		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L25407.D	1	06/14/13	XB	n/a	n/a	VL802
Run #2							

Run #	Initial Weight
Run #1	5.15 g
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.7	ug/kg	
71-43-2	Benzene	3.1	4.9	0.49	ug/kg	J
108-86-1	Bromobenzene	ND	4.9	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.49	ug/kg	
75-25-2	Bromoform	ND	4.9	0.49	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.49	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.97	ug/kg	
67-66-3	Chloroform	ND	4.9	0.49	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.49	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.49	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.49	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.9	0.49	ug/kg	
594-20-7	2,2-Dichloropropane <sup>b</sup>	ND	4.9	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.97	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.9	0.49	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.9	0.49	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.9	0.49	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	B-1-20	<b>Date Sampled:</b>	06/11/13
<b>Lab Sample ID:</b>	C28242-4	<b>Date Received:</b>	06/13/13
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	n/a <sup>a</sup>
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	1501 Martin Luther King Jr. Way, Oakland, CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
100-41-4	Ethylbenzene	1.0	4.9	0.49	ug/kg	J
637-92-3	Ethyl tert-Butyl Ether	ND	4.9	0.49	ug/kg	
591-78-6	2-Hexanone	ND	19	1.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.97	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.49	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	19	1.9	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.97	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.97	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	19	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	19	1.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.97	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.97	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	0.49	ug/kg	
100-42-5	Styrene	ND	4.9	0.49	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.7	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane <sup>b</sup>	ND	4.9	0.49	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	0.97	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	1.4	4.9	0.97	ug/kg	J
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.97	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.58	ug/kg	
108-88-3	Toluene	ND	4.9	0.49	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.97	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.97	ug/kg	
1330-20-7	Xylene (total)	3.4	9.7	0.97	ug/kg	J
	TPH-GRO (C6-C10)	54.5	97	49	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-1-20		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-4		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

- (a) All results reported on a wet weight basis.
- (b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

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<b>Client Sample ID:</b> B-1-20	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-4	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG43583.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	80%		37-122%

(a) All results reported on a wet weight basis.

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ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> B-2-10	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-7	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L25408.D	1	06/14/13	XB	n/a	n/a	VL802
Run #2							

Run #	Initial Weight
Run #1	5.07 g
Run #2	

### VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.9	ug/kg	
71-43-2	Benzene	ND	4.9	0.49	ug/kg	
108-86-1	Bromobenzene	ND	4.9	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.49	ug/kg	
75-25-2	Bromoform	ND	4.9	0.49	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.49	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.99	ug/kg	
67-66-3	Chloroform	ND	4.9	0.49	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.49	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.49	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.49	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.9	0.49	ug/kg	
594-20-7	2,2-Dichloropropane <sup>b</sup>	ND	4.9	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.9	0.49	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.9	0.49	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.9	0.49	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> B-2-10		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-7		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	0.49	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.9	0.49	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.99	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.49	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.99	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.99	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	20	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.99	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.99	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	0.49	ug/kg	
100-42-5	Styrene	ND	4.9	0.49	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.9	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane <sup>b</sup>	ND	4.9	0.49	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	0.99	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	0.99	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.99	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.59	ug/kg	
108-88-3	Toluene	ND	4.9	0.49	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.99	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-2-10		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-7		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	95%		70-130%
460-00-4	4-Bromofluorobenzene	98%		70-130%

- (a) All results reported on a wet weight basis.
- (b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-2-10	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-7	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG43584.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	17.7	9.8	2.4	mg/kg	
	TPH (> C28-C40)	27.5	20	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	88%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> B-2-20		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-9		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L25409.D	1	06/14/13	XB	n/a	n/a	VL802
Run #2							

Run #	Initial Weight
Run #1	5.09 g
Run #2	

### VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.8	ug/kg	
71-43-2	Benzene	ND	4.9	0.49	ug/kg	
108-86-1	Bromobenzene	ND	4.9	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.49	ug/kg	
75-25-2	Bromoform	ND	4.9	0.49	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.49	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.98	ug/kg	
67-66-3	Chloroform	ND	4.9	0.49	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.49	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.49	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.49	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.9	0.49	ug/kg	
594-20-7	2,2-Dichloropropane <sup>b</sup>	ND	4.9	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.98	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.9	0.49	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.9	0.49	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.9	0.49	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> B-2-20	
<b>Lab Sample ID:</b> C28242-9	<b>Date Sampled:</b> 06/11/13
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 06/13/13
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	0.49	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.9	0.49	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.98	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.49	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.98	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.98	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	20	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.98	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.98	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	0.49	ug/kg	
100-42-5	Styrene	ND	4.9	0.49	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.8	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane <sup>b</sup>	ND	4.9	0.49	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	0.98	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	0.98	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.98	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.59	ug/kg	
108-88-3	Toluene	ND	4.9	0.49	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.98	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.98	ug/kg	
1330-20-7	Xylene (total)	ND	9.8	0.98	ug/kg	
	TPH-GRO (C6-C10)	ND	98	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-2-20 <b>Lab Sample ID:</b> C28242-9 <b>Matrix:</b> SO - Soil <b>Method:</b> SW846 8260B <b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	<b>Date Sampled:</b> 06/11/13 <b>Date Received:</b> 06/13/13 <b>Percent Solids:</b> n/a <sup>a</sup>
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

- (a) All results reported on a wet weight basis.
- (b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-2-20	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-9	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG43585.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.8	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	103%		37-122%

(a) All results reported on a wet weight basis.

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ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-3-10	
<b>Lab Sample ID:</b> C28242-13	<b>Date Sampled:</b> 06/11/13
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 06/13/13
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L25410.D	1	06/14/13	XB	n/a	n/a	VL802
Run #2							

Run #1	Initial Weight
Run #1	5.07 g
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.9	ug/kg	
71-43-2	Benzene	ND	4.9	0.49	ug/kg	
108-86-1	Bromobenzene	ND	4.9	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.49	ug/kg	
75-25-2	Bromoform	ND	4.9	0.49	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.49	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.99	ug/kg	
67-66-3	Chloroform	ND	4.9	0.49	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.49	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.49	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.49	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.9	0.49	ug/kg	
594-20-7	2,2-Dichloropropane <sup>b</sup>	ND	4.9	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.9	0.49	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.9	0.49	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.9	0.49	ug/kg	

ND = Not detected      MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	B-3-10	<b>Date Sampled:</b>	06/11/13
<b>Lab Sample ID:</b>	C28242-13	<b>Date Received:</b>	06/13/13
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	n/a <sup>a</sup>
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	1501 Martin Luther King Jr. Way, Oakland, CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	0.49	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.9	0.49	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.99	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.49	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.99	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.99	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	20	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.99	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.99	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	0.49	ug/kg	
100-42-5	Styrene	ND	4.9	0.49	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.9	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane <sup>b</sup>	ND	4.9	0.49	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	0.99	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	0.99	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.99	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.59	ug/kg	
108-88-3	Toluene	ND	4.9	0.49	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.99	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-3-10		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-13		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	93%		70-130%
460-00-4	4-Bromofluorobenzene	95%		70-130%

- (a) All results reported on a wet weight basis.
- (b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-3-10	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-13	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG43586.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	96%		37-122%

(a) All results reported on a wet weight basis.

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ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> B-3-20		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-15		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L25501.D	1	06/19/13	XB	n/a	n/a	VL805
Run #2							

Run #	Initial Weight
Run #1	5.00 g
Run #2	

### VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> B-3-20		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-15		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

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3

<b>Client Sample ID:</b> B-3-20 <b>Lab Sample ID:</b> C28242-15 <b>Matrix:</b> SO - Soil <b>Method:</b> SW846 8260B <b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	<b>Date Sampled:</b> 06/11/13 <b>Date Received:</b> 06/13/13 <b>Percent Solids:</b> n/a <sup>a</sup>
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	95%		70-130%

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-3-20	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-15	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG43587.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.8	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	101%		37-122%

(a) All results reported on a wet weight basis.

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ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-4-10	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-19	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L25482.D	1	06/18/13	XB	n/a	n/a	VL804
Run #2							

Run #1	Initial Weight
Run #1	5.16 g
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.7	ug/kg	
71-43-2	Benzene	ND	4.8	0.48	ug/kg	
108-86-1	Bromobenzene	ND	4.8	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	4.8	0.48	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	0.48	ug/kg	
75-25-2	Bromoform	ND	4.8	0.48	ug/kg	
104-51-8	n-Butylbenzene	ND	4.8	0.48	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.8	0.48	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.8	0.48	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	0.48	ug/kg	
75-00-3	Chloroethane	ND	4.8	0.97	ug/kg	
67-66-3	Chloroform	ND	4.8	0.48	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.8	0.48	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.8	0.48	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.8	0.48	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	0.48	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.8	0.48	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.8	0.48	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.8	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.8	0.48	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.8	0.48	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.48	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.8	0.48	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.8	0.48	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.8	0.48	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.8	0.97	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.8	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.48	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.8	0.48	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.8	0.48	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.8	0.48	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	B-4-10	<b>Date Sampled:</b>	06/11/13
<b>Lab Sample ID:</b>	C28242-19	<b>Date Received:</b>	06/13/13
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	n/a <sup>a</sup>
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	1501 Martin Luther King Jr. Way, Oakland, CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.8	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	0.48	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.8	0.48	ug/kg	
591-78-6	2-Hexanone	ND	19	1.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.8	0.97	ug/kg	
98-82-8	Isopropylbenzene	ND	4.8	0.48	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.8	0.48	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	19	1.9	ug/kg	
74-83-9	Methyl bromide	ND	4.8	0.97	ug/kg	
74-87-3	Methyl chloride	ND	4.8	0.97	ug/kg	
74-95-3	Methylene bromide	ND	4.8	0.48	ug/kg	
75-09-2	Methylene chloride	ND	19	4.8	ug/kg	
78-93-3	Methyl ethyl ketone	ND	19	1.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.8	0.97	ug/kg	
91-20-3	Naphthalene	ND	4.8	0.97	ug/kg	
103-65-1	n-Propylbenzene	ND	4.8	0.48	ug/kg	
100-42-5	Styrene	ND	4.8	0.48	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.8	0.48	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.7	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.8	0.48	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.48	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.48	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.8	0.48	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.8	0.97	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.8	0.97	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.8	0.97	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.8	0.58	ug/kg	
108-88-3	Toluene	ND	4.8	0.48	ug/kg	
79-01-6	Trichloroethylene	ND	4.8	0.48	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	0.97	ug/kg	
75-01-4	Vinyl chloride	ND	4.8	0.97	ug/kg	
1330-20-7	Xylene (total)	ND	9.7	0.97	ug/kg	
	TPH-GRO (C6-C10)	ND	97	48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-4-10 <b>Lab Sample ID:</b> C28242-19 <b>Matrix:</b> SO - Soil <b>Method:</b> SW846 8260B <b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	<b>Date Sampled:</b> 06/11/13 <b>Date Received:</b> 06/13/13 <b>Percent Solids:</b> n/a <sup>a</sup>
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-4-10	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-19	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG43588.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	88%		37-122%

(a) All results reported on a wet weight basis.

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ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> B-4-20		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-21		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L25483.D	1	06/18/13	XB	n/a	n/a	VL804
Run #2							

Run #	Initial Weight
Run #1	5.07 g
Run #2	

### VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.9	ug/kg	
71-43-2	Benzene	ND	4.9	0.49	ug/kg	
108-86-1	Bromobenzene	ND	4.9	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.49	ug/kg	
75-25-2	Bromoform	ND	4.9	0.49	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.49	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.99	ug/kg	
67-66-3	Chloroform	ND	4.9	0.49	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.49	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.49	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.49	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.9	0.49	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.9	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.9	0.49	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.9	0.49	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.9	0.49	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> B-4-20		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-21		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	0.49	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.9	0.49	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.99	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.49	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.99	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.99	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	20	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.99	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.99	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	0.49	ug/kg	
100-42-5	Styrene	ND	4.9	0.49	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.9	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.9	0.49	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	0.99	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	0.99	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.99	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.59	ug/kg	
108-88-3	Toluene	ND	4.9	0.49	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.99	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-4-20		<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-21		<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	95%		70-130%

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> B-4-20	<b>Date Sampled:</b> 06/11/13
<b>Lab Sample ID:</b> C28242-21	<b>Date Received:</b> 06/13/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG43590.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.9	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	95%		37-122%

(a) All results reported on a wet weight basis.

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ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

PROJ. NO.		NAME					ANALYSES REQUESTED				REMARKS		
6-13-858-SA		1501 Martin Luther King Jr. Way, Oakland					TP-Hd(8015)GC	TP-Hg(8226)	TOG(8015)GC	EPA-8260B*			
SAMPLERS: (Signature)						CON-TAINER					* Fill lists		
NO.	DATE	TIME	SOIL	WATER	AIR		SAMPLE ID						
1	6/11/13		✓			B-1-5					Hold		
2			✓			B-1-10	✓	✓	✓	✓			
3			✓			B-1-15					Hold		
4			✓			B-1-20	✓	✓	✓	✓			
5			✓			B-1-25					Hold		
6			✓			B-2-5					Hold		
7			✓			B-2-10	✓	✓	✓	✓			
8			✓			B-2-15					Hold		
9			✓			B-2-20	✓	✓	✓	✓			
10			✓			B-2-25					Hold		
11			✓			B-2-30					Hold		
12			✓			B-3-5					Hold		
13			✓			B-3-10	✓	✓	✓	✓			
14			✓			B-3-15					Hold		
15			✓			B-3-20	✓	✓	✓	✓			
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
[Signature]		6/13/13 9:10		[Signature]		6/13/13 1100		[Signature]		6/13/13 1210		[Signature]	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Remarks:					
								Please send lab report to Frank Hamdi Please send soil samples back to us when job is completed.					

TEMP = 4.6 °C



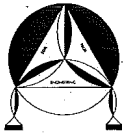
**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 694-3347

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CHAIN OF CUSTODY RECORD

C88242 2 of 2

PROJ. NO.		NAME					CON-TAINER	ANALYSES REQUESTED				REMARKS	
6-13-858-SA		1501 Martin Luther King Jr. Way, Oakland						TPHd (8015)GC	TPHq (8260)	TOG (8015)GC	EPA 8260IST		
SAMPLERS: (Signature)													
<i>Frank Hamed</i>													
NO.	DATE	TIME	SOIL	WATER	AIR	SAMPLE ID							
16	6/11/13		✓			B-3-25	1					Hold	
17			✓			B-3-30	1					Hold	
18			✓			B-4-5	1					Hold	
19			✓			B-4-10	1	✓	✓	✓	✓		
20			✓			B-4-15	1					Hold	
21			✓			B-4-20	1	✓	✓	✓	✓		
22			✓			B-4-25	1					Hold	
23	✓		✓			B-4-30	1					Hold	
* Full list													
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
<i>Frank Hamed</i>		6/13/13 5:12		<i>[Signature]</i>		6/13/13 11:00		<i>[Signature]</i>		6/13/13 12:10		<i>Lee [Signature]</i>	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Remarks:					
								Please send lab report to Frank Hamed. Please send soil samples back to us when job is completed.					



**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
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C28242: Chain of Custody

Page 2 of 3

## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** C28242      **Client:** ENVIRO SOIL      **Project:** 1501 MLK JR. WAY  
**Date / Time Received:** 6/13/2013      **Delivery Method:** Accutest Courier      **Airbill #s:**

**Cooler Temps (Initial/Adjusted):** #1: (4.6/4.6): 0

<u>Cooler Security</u>	<u>Y or N</u>				<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. Smp'l Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR Gun	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

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## GC/MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL802-MB	L25403.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL802-MB	L25403.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL802-MB	L25403.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 70-130%
2037-26-5	Toluene-D8	96% 70-130%
460-00-4	4-Bromofluorobenzene	97% 70-130%

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## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL804-MB	L25470.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL804-MB	L25470.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL804-MB	L25470.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 70-130%
2037-26-5	Toluene-D8	99% 70-130%
460-00-4	4-Bromofluorobenzene	96% 70-130%

## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL805-MB	L25498.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL805-MB	L25498.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	



## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL805-MB	L25498.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 70-130%
2037-26-5	Toluene-D8	100% 70-130%
460-00-4	4-Bromofluorobenzene	95% 70-130%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL802-BS	L25400.D	1	06/14/13	XB	n/a	n/a	VL802
VL802-BSD	L25401.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	161	101	180	113	11	62-130/24
71-43-2	Benzene	40	40.0	100	42.9	107	7	81-119/20
108-86-1	Bromobenzene	40	38.8	97	40.9	102	5	79-120/22
74-97-5	Bromochloromethane	40	42.5	106	45.7	114	7	81-120/19
75-27-4	Bromodichloromethane	40	39.0	98	41.6	104	6	79-124/20
75-25-2	Bromoform	40	38.9	97	42.3	106	8	76-128/21
104-51-8	n-Butylbenzene	40	38.0	95	39.9	100	5	79-123/26
135-98-8	sec-Butylbenzene	40	36.1	90	38.2	96	6	77-122/24
98-06-6	tert-Butylbenzene	40	36.7	92	38.7	97	5	77-121/23
108-90-7	Chlorobenzene	40	35.8	90	38.0	95	6	82-121/20
75-00-3	Chloroethane	40	36.8	92	40.8	102	10	80-126/21
67-66-3	Chloroform	40	41.4	104	44.7	112	8	82-123/20
95-49-8	o-Chlorotoluene	40	39.8	100	37.1	93	7	78-125/25
106-43-4	p-Chlorotoluene	40	34.7	87	36.5	91	5	75-125/26
56-23-5	Carbon tetrachloride	40	42.5	106	45.1	113	6	82-127/22
75-34-3	1,1-Dichloroethane	40	41.5	104	44.6	112	7	80-123/20
75-35-4	1,1-Dichloroethylene	40	41.2	103	44.4	111	7	76-123/19
563-58-6	1,1-Dichloropropene	40	42.7	107	45.5	114	6	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	36.2	91	40.7	102	12	64-133/23
106-93-4	1,2-Dibromoethane	40	38.4	96	42.1	105	9	80-120/20
107-06-2	1,2-Dichloroethane	40	38.3	96	41.8	105	9	76-132/21
78-87-5	1,2-Dichloropropane	40	40.0	100	42.6	107	6	80-121/20
142-28-9	1,3-Dichloropropane	40	37.7	94	41.4	104	9	78-120/20
108-20-3	Di-Isopropyl ether	40	39.4	99	42.2	106	7	78-126/19
594-20-7	2,2-Dichloropropane	40	43.7	109	46.4	116	6	77-132/22
124-48-1	Dibromochloromethane	40	36.9	92	40.0	100	8	76-121/21
75-71-8	Dichlorodifluoromethane	40	37.8	95	41.9	105	10	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	42.9	107	46.1	115	7	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	43.9	110	47.6	119	8	81-124/21
541-73-1	m-Dichlorobenzene	40	35.7	89	37.5	94	5	79-123/23
95-50-1	o-Dichlorobenzene	40	35.6	89	37.3	93	5	79-124/22
106-46-7	p-Dichlorobenzene	40	38.8	97	40.0	100	3	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	43.4	109	46.8	117	8	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	37.6	94	41.0	103	9	81-123/22
100-41-4	Ethylbenzene	40	38.5	96	41.0	103	6	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	44.7	112	48.1	120	7	75-132/21

\* = Outside of Control Limits.

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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL802-BS	L25400.D	1	06/14/13	XB	n/a	n/a	VL802
VL802-BSD	L25401.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	148	93	166	104	11	68-139/24
87-68-3	Hexachlorobutadiene	40	38.8	97	40.9	102	5	81-126/32
98-82-8	Isopropylbenzene	40	35.6	89	37.9	95	6	81-122/22
99-87-6	p-Isopropyltoluene	40	35.6	89	37.6	94	5	81-121/23
108-10-1	4-Methyl-2-pentanone	160	156	98	178	111	13	74-136/23
74-83-9	Methyl bromide	40	37.2	93	40.7	102	9	82-124/20
74-87-3	Methyl chloride	40	34.1	85	35.8	90	5	60-132/26
74-95-3	Methylene bromide	40	39.3	98	43.0	108	9	82-120/20
75-09-2	Methylene chloride	40	40.0	100	42.5	106	6	75-119/20
78-93-3	Methyl ethyl ketone	160	162	101	184	115	13	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	42.2	106	46.0	115	9	79-127/19
91-20-3	Naphthalene	40	37.1	93	41.0	103	10	78-125/23
103-65-1	n-Propylbenzene	40	35.2	88	36.8	92	4	79-124/22
100-42-5	Styrene	40	38.9	97	41.5	104	6	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	44.4	111	48.2	121	8	80-127/20
75-65-0	Tert Butyl Alcohol	200	199	100	245	123	21	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	40.2	101	42.6	107	6	82-123/21
71-55-6	1,1,1-Trichloroethane	40	43.8	110	46.5	116	6	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	38.1	95	41.6	104	9	77-126/20
79-00-5	1,1,2-Trichloroethane	40	37.7	94	40.6	102	7	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	37.6	94	39.4	99	5	81-122/26
96-18-4	1,2,3-Trichloropropane	40	37.9	95	41.8	105	10	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	37.6	94	39.5	99	5	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	38.8	97	40.7	102	5	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	39.9	100	41.9	105	5	81-123/23
127-18-4	Tetrachloroethylene	40	39.2	98	42.3	106	8	80-125/25
108-88-3	Toluene	40	38.5	96	41.0	103	6	80-117/21
79-01-6	Trichloroethylene	40	40.9	102	44.1	110	8	81-122/20
75-69-4	Trichlorofluoromethane	40	36.2	91	40.8	102	12	77-133/22
75-01-4	Vinyl chloride	40	37.1	93	41.6	104	11	71-133/23
1330-20-7	Xylene (total)	120	111	93	118	98	6	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	105%	105%	70-130%

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL802-BS	L25400.D	1	06/14/13	XB	n/a	n/a	VL802
VL802-BSD	L25401.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	95%	94%	70-130%
460-00-4	4-Bromofluorobenzene	99%	99%	70-130%

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL804-BS	L25467.D	1	06/18/13	XB	n/a	n/a	VL804
VL804-BSD	L25468.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	172	108	164	103	5	62-130/24
71-43-2	Benzene	40	41.6	104	41.1	103	1	81-119/20
108-86-1	Bromobenzene	40	42.1	105	41.5	104	1	79-120/22
74-97-5	Bromochloromethane	40	42.4	106	42.5	106	0	81-120/19
75-27-4	Bromodichloromethane	40	39.9	100	39.7	99	1	79-124/20
75-25-2	Bromoform	40	41.5	104	42.0	105	1	76-128/21
104-51-8	n-Butylbenzene	40	41.9	105	40.3	101	4	79-123/26
135-98-8	sec-Butylbenzene	40	40.1	100	38.5	96	4	77-122/24
98-06-6	tert-Butylbenzene	40	41.0	103	38.3	96	7	77-121/23
108-90-7	Chlorobenzene	40	38.4	96	38.1	95	1	82-121/20
75-00-3	Chloroethane	40	35.8	90	37.6	94	5	80-126/21
67-66-3	Chloroform	40	41.8	105	41.3	103	1	82-123/20
95-49-8	o-Chlorotoluene	40	39.9	100	37.9	95	5	78-125/25
106-43-4	p-Chlorotoluene	40	37.8	95	37.0	93	2	75-125/26
56-23-5	Carbon tetrachloride	40	43.8	110	42.7	107	3	82-127/22
75-34-3	1,1-Dichloroethane	40	42.0	105	41.5	104	1	80-123/20
75-35-4	1,1-Dichloroethylene	40	41.8	105	40.3	101	4	76-123/19
563-58-6	1,1-Dichloropropene	40	44.7	112	43.3	108	3	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	40.3	101	41.2	103	2	64-133/23
106-93-4	1,2-Dibromoethane	40	42.0	105	42.4	106	1	80-120/20
107-06-2	1,2-Dichloroethane	40	39.6	99	39.9	100	1	76-132/21
78-87-5	1,2-Dichloropropane	40	41.6	104	41.5	104	0	80-121/20
142-28-9	1,3-Dichloropropane	40	41.0	103	41.4	104	1	78-120/20
108-20-3	Di-Isopropyl ether	40	39.6	99	39.6	99	0	78-126/19
594-20-7	2,2-Dichloropropane	40	44.6	112	43.2	108	3	77-132/22
124-48-1	Dibromochloromethane	40	39.1	98	39.7	99	2	76-121/21
75-71-8	Dichlorodifluoromethane	40	33.7	84	35.1	88	4	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	42.9	107	42.8	107	0	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	45.6	114	46.0	115	1	81-124/21
541-73-1	m-Dichlorobenzene	40	39.1	98	38.3	96	2	79-123/23
95-50-1	o-Dichlorobenzene	40	38.9	97	38.3	96	2	79-124/22
106-46-7	p-Dichlorobenzene	40	41.8	105	41.3	103	1	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	43.8	110	43.2	108	1	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	41.2	103	41.5	104	1	81-123/22
100-41-4	Ethylbenzene	40	41.6	104	40.9	102	2	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	44.4	111	44.8	112	1	75-132/21

\* = Outside of Control Limits.

5.2.2  
 5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL804-BS	L25467.D	1	06/18/13	XB	n/a	n/a	VL804
VL804-BSD	L25468.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	157	98	164	103	4	68-139/24
87-68-3	Hexachlorobutadiene	40	41.9	105	41.1	103	2	81-126/32
98-82-8	Isopropylbenzene	40	38.7	97	37.6	94	3	81-122/22
99-87-6	p-Isopropyltoluene	40	39.4	99	37.8	95	4	81-121/23
108-10-1	4-Methyl-2-pentanone	160	157	98	165	103	5	74-136/23
74-83-9	Methyl bromide	40	36.4	91	38.1	95	5	82-124/20
74-87-3	Methyl chloride	40	31.0	78	32.3	81	4	60-132/26
74-95-3	Methylene bromide	40	40.9	102	41.3	103	1	82-120/20
75-09-2	Methylene chloride	40	38.8	97	38.8	97	0	75-119/20
78-93-3	Methyl ethyl ketone	160	166	104	168	105	1	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	42.0	105	43.1	108	3	79-127/19
91-20-3	Naphthalene	40	39.6	99	41.7	104	5	78-125/23
103-65-1	n-Propylbenzene	40	39.1	98	37.2	93	5	79-124/22
100-42-5	Styrene	40	41.5	104	41.3	103	0	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	44.0	110	44.8	112	2	80-127/20
75-65-0	Tert Butyl Alcohol	200	217	109	215	108	1	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	43.1	108	42.5	106	1	82-123/21
71-55-6	1,1,1-Trichloroethane	40	43.7	109	42.7	107	2	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	42.7	107	42.7	107	0	77-126/20
79-00-5	1,1,2-Trichloroethane	40	40.3	101	41.1	103	2	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	39.3	98	40.5	101	3	81-122/26
96-18-4	1,2,3-Trichloropropane	40	40.7	102	41.6	104	2	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	40.2	101	40.5	101	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	42.8	107	41.1	103	4	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	44.4	111	42.6	107	4	81-123/23
127-18-4	Tetrachloroethylene	40	42.9	107	41.5	104	3	80-125/25
108-88-3	Toluene	40	41.9	105	41.0	103	2	80-117/21
79-01-6	Trichloroethylene	40	43.0	108	41.7	104	3	81-122/20
75-69-4	Trichlorofluoromethane	40	38.9	97	41.4	104	6	77-133/22
75-01-4	Vinyl chloride	40	42.9	107	44.8	112	4	71-133/23
1330-20-7	Xylene (total)	120	119	99	117	98	2	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	103%	104%	70-130%

\* = Outside of Control Limits.

5.2.2  
 5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL804-BS	L25467.D	1	06/18/13	XB	n/a	n/a	VL804
VL804-BSD	L25468.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	98%	98%	70-130%
460-00-4	4-Bromofluorobenzene	98%	99%	70-130%

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL805-BS	L25495.D	1	06/19/13	XB	n/a	n/a	VL805
VL805-BSD	L25496.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	177	111	165	103	7	62-130/24
71-43-2	Benzene	40	42.1	105	40.0	100	5	81-119/20
108-86-1	Bromobenzene	40	42.7	107	40.8	102	5	79-120/22
74-97-5	Bromochloromethane	40	43.4	109	40.9	102	6	81-120/19
75-27-4	Bromodichloromethane	40	40.3	101	38.5	96	5	79-124/20
75-25-2	Bromoform	40	41.1	103	40.4	101	2	76-128/21
104-51-8	n-Butylbenzene	40	42.9	107	40.4	101	6	79-123/26
135-98-8	sec-Butylbenzene	40	40.6	102	38.1	95	6	77-122/24
98-06-6	tert-Butylbenzene	40	40.2	101	38.7	97	4	77-121/23
108-90-7	Chlorobenzene	40	38.9	97	37.2	93	4	82-121/20
75-00-3	Chloroethane	40	41.3	103	38.9	97	6	80-126/21
67-66-3	Chloroform	40	42.9	107	40.1	100	7	82-123/20
95-49-8	o-Chlorotoluene	40	40.3	101	37.1	93	8	78-125/25
106-43-4	p-Chlorotoluene	40	38.4	96	36.6	92	5	75-125/26
56-23-5	Carbon tetrachloride	40	44.5	111	42.3	106	5	82-127/22
75-34-3	1,1-Dichloroethane	40	43.1	108	40.7	102	6	80-123/20
75-35-4	1,1-Dichloroethylene	40	42.6	107	40.7	102	5	76-123/19
563-58-6	1,1-Dichloropropene	40	44.3	111	42.7	107	4	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	41.2	103	39.6	99	4	64-133/23
106-93-4	1,2-Dibromoethane	40	41.9	105	40.4	101	4	80-120/20
107-06-2	1,2-Dichloroethane	40	39.7	99	38.2	96	4	76-132/21
78-87-5	1,2-Dichloropropane	40	41.8	105	40.2	101	4	80-121/20
142-28-9	1,3-Dichloropropane	40	41.0	103	39.5	99	4	78-120/20
108-20-3	Di-Isopropyl ether	40	40.8	102	38.6	97	6	78-126/19
594-20-7	2,2-Dichloropropane	40	46.0	115	43.0	108	7	77-132/22
124-48-1	Dibromochloromethane	40	39.5	99	38.0	95	4	76-121/21
75-71-8	Dichlorodifluoromethane	40	43.9	110	39.0	98	12	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	44.1	110	42.1	105	5	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	46.0	115	44.0	110	4	81-124/21
541-73-1	m-Dichlorobenzene	40	39.5	99	37.9	95	4	79-123/23
95-50-1	o-Dichlorobenzene	40	39.3	98	37.2	93	5	79-124/22
106-46-7	p-Dichlorobenzene	40	42.9	107	40.5	101	6	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	45.3	113	42.4	106	7	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	41.2	103	39.5	99	4	81-123/22
100-41-4	Ethylbenzene	40	42.0	105	40.3	101	4	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	45.7	114	43.1	108	6	75-132/21

\* = Outside of Control Limits.

5.2.3  
 5



# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL805-BS	L25495.D	1	06/19/13	XB	n/a	n/a	VL805
VL805-BSD	L25496.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	165	103	159	99	4	68-139/24
87-68-3	Hexachlorobutadiene	40	44.0	110	40.5	101	8	81-126/32
98-82-8	Isopropylbenzene	40	39.0	98	37.1	93	5	81-122/22
99-87-6	p-Isopropyltoluene	40	39.8	100	37.5	94	6	81-121/23
108-10-1	4-Methyl-2-pentanone	160	164	103	159	99	3	74-136/23
74-83-9	Methyl bromide	40	40.7	102	38.0	95	7	82-124/20
74-87-3	Methyl chloride	40	41.4	104	35.1	88	16	60-132/26
74-95-3	Methylene bromide	40	40.8	102	39.3	98	4	82-120/20
75-09-2	Methylene chloride	40	40.2	101	38.0	95	6	75-119/20
78-93-3	Methyl ethyl ketone	160	173	108	162	101	7	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	43.0	108	40.9	102	5	79-127/19
91-20-3	Naphthalene	40	40.7	102	39.9	100	2	78-125/23
103-65-1	n-Propylbenzene	40	39.5	99	37.1	93	6	79-124/22
100-42-5	Styrene	40	42.1	105	40.1	100	5	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	45.0	113	42.9	107	5	80-127/20
75-65-0	Tert Butyl Alcohol	200	216	108	214	107	1	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	43.2	108	41.5	104	4	82-123/21
71-55-6	1,1,1-Trichloroethane	40	44.9	112	42.2	106	6	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	42.5	106	41.1	103	3	77-126/20
79-00-5	1,1,2-Trichloroethane	40	40.7	102	39.2	98	4	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	40.8	102	39.1	98	4	81-122/26
96-18-4	1,2,3-Trichloropropane	40	40.6	102	40.0	100	1	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	41.3	103	39.6	99	4	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	43.4	109	40.8	102	6	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	44.7	112	42.4	106	5	81-123/23
127-18-4	Tetrachloroethylene	40	42.7	107	40.5	101	5	80-125/25
108-88-3	Toluene	40	42.0	105	40.2	101	4	80-117/21
79-01-6	Trichloroethylene	40	43.0	108	40.7	102	5	81-122/20
75-69-4	Trichlorofluoromethane	40	41.1	103	37.5	94	9	77-133/22
75-01-4	Vinyl chloride	40	43.7	109	40.0	100	9	71-133/23
1330-20-7	Xylene (total)	120	120	100	116	97	3	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	106%	104%	70-130%

\* = Outside of Control Limits.

5.2.3  
 5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL805-BS	L25495.D	1	06/19/13	XB	n/a	n/a	VL805
VL805-BSD	L25496.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	99%	98%	70-130%
460-00-4	4-Bromofluorobenzene	98%	98%	70-130%

\* = Outside of Control Limits.

# Laboratory Control Sample Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL802-LCS	L25402.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	257	103	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	70-130%
2037-26-5	Toluene-D8	95%	70-130%
460-00-4	4-Bromofluorobenzene	96%	70-130%

\* = Outside of Control Limits.

# Laboratory Control Sample Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL804-LCS	L25469.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	278	111	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	70-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

\* = Outside of Control Limits.

5.3.2  
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# Laboratory Control Sample Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL805-LCS	L25497.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	297	119	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	70-130%
2037-26-5	Toluene-D8	98%	70-130%
460-00-4	4-Bromofluorobenzene	95%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28267-2MS	L25419.D	1	06/14/13	XB	n/a	n/a	VL802
C28267-2MSD	L25420.D	1	06/14/13	XB	n/a	n/a	VL802
C28267-2	L25412.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Compound	C28267-2 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		158	178	113	179	112	1	62-130/24
71-43-2	Benzene	ND		39.5	39.1	99	40.0	100	2	81-119/20
108-86-1	Bromobenzene	ND		39.5	37.1	94	38.4	96	3	79-120/22
74-97-5	Bromochloromethane	ND		39.5	42.1	107	43.5	109	3	81-120/19
75-27-4	Bromodichloromethane	ND		39.5	40.7	103	41.6	104	2	79-124/20
75-25-2	Bromoform	ND		39.5	38.8	98	40.1	100	3	76-128/21
104-51-8	n-Butylbenzene	ND		39.5	36.6	93	37.3	93	2	79-123/26
135-98-8	sec-Butylbenzene	ND		39.5	37.6	95	38.0	95	1	77-122/24
98-06-6	tert-Butylbenzene	ND		39.5	37.8	96	38.3	96	1	77-121/23
108-90-7	Chlorobenzene	ND		39.5	37.0	94	38.2	96	3	82-121/20
75-00-3	Chloroethane	ND		39.5	38.9	98	39.5	99	2	80-126/21
67-66-3	Chloroform	ND		39.5	41.2	104	42.5	106	3	82-123/20
95-49-8	o-Chlorotoluene	ND		39.5	36.3	92	40.3	101	10	78-125/25
106-43-4	p-Chlorotoluene	ND		39.5	35.8	91	36.8	92	3	75-125/26
56-23-5	Carbon tetrachloride	ND		39.5	41.9	106	42.6	107	2	82-127/22
75-34-3	1,1-Dichloroethane	ND		39.5	41.3	104	42.4	106	3	80-123/20
75-35-4	1,1-Dichloroethylene	ND		39.5	41.8	106	43.4	109	4	76-123/19
563-58-6	1,1-Dichloropropene	ND		39.5	40.2	102	41.0	103	2	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		39.5	38.2	97	40.0	100	5	64-133/23
106-93-4	1,2-Dibromoethane	ND		39.5	39.6	100	40.4	101	2	80-120/20
107-06-2	1,2-Dichloroethane	ND		39.5	38.7	98	39.5	99	2	76-132/21
78-87-5	1,2-Dichloropropane	ND		39.5	39.8	101	40.9	102	3	80-121/20
142-28-9	1,3-Dichloropropane	ND		39.5	37.9	96	39.1	98	3	78-120/20
108-20-3	Di-Isopropyl ether	ND		39.5	41.0	104	42.1	105	3	78-126/19
594-20-7	2,2-Dichloropropane	ND		39.5	39.8	101	40.3	101	1	77-132/22
124-48-1	Dibromochloromethane	ND		39.5	38.0	96	39.3	98	3	76-121/21
75-71-8	Dichlorodifluoromethane	ND		39.5	30.6	77	30.7	77	0	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		39.5	41.0	104	42.1	105	3	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		39.5	40.8	103	42.3	106	4	81-124/21
541-73-1	m-Dichlorobenzene	ND		39.5	36.5	92	37.6	94	3	79-123/23
95-50-1	o-Dichlorobenzene	ND		39.5	36.3	92	37.5	94	3	79-124/22
106-46-7	p-Dichlorobenzene	ND		39.5	36.3	92	36.9	92	2	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		39.5	41.5	105	42.6	107	3	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		39.5	39.1	99	40.5	101	4	81-123/22
100-41-4	Ethylbenzene	ND		39.5	37.4	95	38.3	96	2	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		39.5	41.8	106	43.3	108	4	75-132/21

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28267-2MS	L25419.D	1	06/14/13	XB	n/a	n/a	VL802
C28267-2MSD	L25420.D	1	06/14/13	XB	n/a	n/a	VL802
C28267-2	L25412.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Compound	C28267-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	158	159	101	163	102	2	68-139/24
87-68-3	Hexachlorobutadiene	ND	39.5	36.7	93	37.2	93	1	81-126/32
98-82-8	Isopropylbenzene	ND	39.5	37.8	96	38.7	97	2	81-122/22
99-87-6	p-Isopropyltoluene	ND	39.5	37.3	94	37.5	94	1	81-121/23
108-10-1	4-Methyl-2-pentanone	ND	158	170	108	175	109	3	74-136/23
74-83-9	Methyl bromide	ND	39.5	38.2	97	39.2	98	3	82-124/20
74-87-3	Methyl chloride	ND	39.5	34.6	88	35.5	89	3	60-132/26
74-95-3	Methylene bromide	ND	39.5	40.1	101	41.5	104	3	82-120/20
75-09-2	Methylene chloride	ND	39.5	40.9	103	42.2	106	3	75-119/20
78-93-3	Methyl ethyl ketone	ND	158	176	111	182	114	3	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND	39.5	42.1	107	43.5	109	3	79-127/19
91-20-3	Naphthalene	ND	39.5	36.8	93	38.5	96	5	78-125/23
103-65-1	n-Propylbenzene	ND	39.5	37.2	94	37.6	94	1	79-124/22
100-42-5	Styrene	ND	39.5	37.5	95	38.8	97	3	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND	39.5	43.1	109	45.1	113	5	80-127/20
75-65-0	Tert Butyl Alcohol	ND	198	240	121	239	120	0	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	39.5	38.7	98	40.5	101	5	82-123/21
71-55-6	1,1,1-Trichloroethane	ND	39.5	42.3	107	43.6	109	3	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND	39.5	38.1	96	38.6	97	1	77-126/20
79-00-5	1,1,2-Trichloroethane	ND	39.5	38.5	97	39.5	99	3	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND	39.5	35.0	89	36.7	92	5	81-122/26
96-18-4	1,2,3-Trichloropropane	ND	39.5	38.8	98	40.1	100	3	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND	39.5	34.2	87	35.8	90	5	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND	39.5	36.5	92	37.2	93	2	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND	39.5	37.1	94	37.8	95	2	81-123/23
127-18-4	Tetrachloroethylene	ND	39.5	53.5	135* a	54.1	135* a	1	80-125/25
108-88-3	Toluene	ND	39.5	36.9	93	38.2	96	3	80-117/21
79-01-6	Trichloroethylene	ND	39.5	40.8	103	41.9	105	3	81-122/20
75-69-4	Trichlorofluoromethane	ND	39.5	39.3	99	40.3	101	3	77-133/22
75-01-4	Vinyl chloride	ND	39.5	38.7	98	39.4	99	2	71-133/23
1330-20-7	Xylene (total)	ND	119	112	94	116	97	4	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C28267-2	Limits
1868-53-7	Dibromofluoromethane	108%	107%	106%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28267-2MS	L25419.D	1	06/14/13	XB	n/a	n/a	VL802
C28267-2MSD	L25420.D	1	06/14/13	XB	n/a	n/a	VL802
C28267-2	L25412.D	1	06/14/13	XB	n/a	n/a	VL802

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13

CAS No.	Surrogate Recoveries	MS	MSD	C28267-2	Limits
2037-26-5	Toluene-D8	94%	94%	94%	70-130%
460-00-4	4-Bromofluorobenzene	100%	99%	96%	70-130%

(a) Outside control limits due to matrix interference.

\* = Outside of Control Limits.



# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28321-2MS	L25478.D	1	06/18/13	XB	n/a	n/a	VL804
C28321-2MSD	L25479.D	1	06/18/13	XB	n/a	n/a	VL804
C28321-2	L25477.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Compound	C28321-2 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		157	177	113	184	118	4	62-130/24
71-43-2	Benzene	ND		39.2	37.1	95	37.5	96	1	81-119/20
108-86-1	Bromobenzene	ND		39.2	36.5	93	34.9	90	4	79-120/22
74-97-5	Bromochloromethane	ND		39.2	40.0	102	40.2	103	0	81-120/19
75-27-4	Bromodichloromethane	ND		39.2	38.5	98	38.5	99	0	79-124/20
75-25-2	Bromoform	ND		39.2	39.0	99	39.2	101	1	76-128/21
104-51-8	n-Butylbenzene	ND		39.2	29.5	75* a	27.1	70* a	8	79-123/26
135-98-8	sec-Butylbenzene	ND		39.2	32.1	82	29.8	76* a	7	77-122/24
98-06-6	tert-Butylbenzene	ND		39.2	33.5	85	31.6	81	6	77-121/23
108-90-7	Chlorobenzene	ND		39.2	35.6	91	35.4	91	1	82-121/20
75-00-3	Chloroethane	ND		39.2	35.8	91	35.9	92	0	80-126/21
67-66-3	Chloroform	ND		39.2	37.9	97	38.2	98	1	82-123/20
95-49-8	o-Chlorotoluene	ND		39.2	33.9	86	35.8	92	5	78-125/25
106-43-4	p-Chlorotoluene	ND		39.2	33.5	85	31.3	80	7	75-125/26
56-23-5	Carbon tetrachloride	ND		39.2	38.2	97	38.5	99	1	82-127/22
75-34-3	1,1-Dichloroethane	ND		39.2	38.5	98	38.5	99	0	80-123/20
75-35-4	1,1-Dichloroethylene	ND		39.2	38.2	97	39.0	100	2	76-123/19
563-58-6	1,1-Dichloropropene	ND		39.2	36.9	94	37.3	96	1	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		39.2	41.0	105	40.9	105	0	64-133/23
106-93-4	1,2-Dibromoethane	ND		39.2	40.9	104	41.0	105	0	80-120/20
107-06-2	1,2-Dichloroethane	ND		39.2	37.4	95	37.6	96	1	76-132/21
78-87-5	1,2-Dichloropropane	ND		39.2	38.2	97	38.6	99	1	80-121/20
142-28-9	1,3-Dichloropropane	ND		39.2	38.9	99	39.6	102	2	78-120/20
108-20-3	Di-Isopropyl ether	ND		39.2	38.4	98	38.4	98	0	78-126/19
594-20-7	2,2-Dichloropropane	ND		39.2	38.6	98	38.5	99	0	77-132/22
124-48-1	Dibromochloromethane	ND		39.2	38.4	98	38.3	98	0	76-121/21
75-71-8	Dichlorodifluoromethane	ND		39.2	26.5	68	26.1	67	2	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		39.2	38.4	98	38.3	98	0	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		39.2	39.6	101	39.8	102	1	81-124/21
541-73-1	m-Dichlorobenzene	ND		39.2	33.5	85	31.0	80	8	79-123/23
95-50-1	o-Dichlorobenzene	ND		39.2	33.7	86	31.7	81	6	79-124/22
106-46-7	p-Dichlorobenzene	ND		39.2	33.0	84	31.0	80	6	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		39.2	38.1	97	38.5	99	1	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		39.2	40.5	103	40.7	104	0	81-123/22
100-41-4	Ethylbenzene	ND		39.2	35.3	90	35.1	90	1	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		39.2	39.6	101	39.8	102	1	75-132/21

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28321-2MS	L25478.D	1	06/18/13	XB	n/a	n/a	VL804
C28321-2MSD	L25479.D	1	06/18/13	XB	n/a	n/a	VL804
C28321-2	L25477.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Compound	C28321-2 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND		157	168	107	177	114	5	68-139/24
87-68-3	Hexachlorobutadiene	ND		39.2	22.6	58* a	21.1	54* a	7	81-126/32
98-82-8	Isopropylbenzene	ND		39.2	33.8	86	33.2	85	2	81-122/22
99-87-6	p-Isopropyltoluene	ND		39.2	31.7	81	29.4	75* a	8	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		157	170	108	176	113	3	74-136/23
74-83-9	Methyl bromide	ND		39.2	34.9	89	34.8	89	0	82-124/20
74-87-3	Methyl chloride	ND		39.2	30.6	78	32.3	83	5	60-132/26
74-95-3	Methylene bromide	ND		39.2	39.6	101	39.6	102	0	82-120/20
75-09-2	Methylene chloride	ND		39.2	35.2	90	35.0	90	1	75-119/20
78-93-3	Methyl ethyl ketone	ND		157	170	108	177	114	4	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		39.2	40.3	103	40.7	104	1	79-127/19
91-20-3	Naphthalene	ND		39.2	33.0	84	31.9	82	3	78-125/23
103-65-1	n-Propylbenzene	ND		39.2	34.0	87	32.2	83	5	79-124/22
100-42-5	Styrene	ND		39.2	35.2	90	34.7	89	1	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		39.2	41.2	105	41.3	106	0	80-127/20
75-65-0	Tert Butyl Alcohol	ND		196	236	120	247	127	5	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		39.2	38.1	97	38.3	98	1	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		39.2	38.8	99	38.9	100	0	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		39.2	41.7	106	41.2	106	1	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		39.2	39.3	100	39.6	102	1	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		39.2	27.7	71* a	24.8	64* a	11	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		39.2	40.8	104	41.8	107	2	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		39.2	27.0	69* a	24.8	64* a	8	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		39.2	33.9	86	31.7	81* a	7	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		39.2	34.1	87	32.2	83	6	81-123/23
127-18-4	Tetrachloroethylene	ND		39.2	37.9	97	37.8	97	0	80-125/25
108-88-3	Toluene	ND		39.2	36.2	92	36.6	94	1	80-117/21
79-01-6	Trichloroethylene	ND		39.2	36.5	93	36.8	94	1	81-122/20
75-69-4	Trichlorofluoromethane	ND		39.2	35.0	89	35.5	91	1	77-133/22
75-01-4	Vinyl chloride	ND		39.2	35.3	90	35.9	92	2	71-133/23
1330-20-7	Xylene (total)	ND		118	106	90	105	90	1	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C28321-2	Limits
1868-53-7	Dibromofluoromethane	107%	106%	102%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28321-2MS	L25478.D	1	06/18/13	XB	n/a	n/a	VL804
C28321-2MSD	L25479.D	1	06/18/13	XB	n/a	n/a	VL804
C28321-2	L25477.D	1	06/18/13	XB	n/a	n/a	VL804

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-19, C28242-21

CAS No.	Surrogate Recoveries	MS	MSD	C28321-2	Limits
2037-26-5	Toluene-D8	100%	100%	100%	70-130%
460-00-4	4-Bromofluorobenzene	99%	100%	95%	70-130%

(a) Outside control limits due to matrix interference.

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28242-15MS	L25515.D	1	06/19/13	XB	n/a	n/a	VL805
C28242-15MSD	L25516.D	1	06/19/13	XB	n/a	n/a	VL805
C28242-15	L25501.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Compound	C28242-15 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	160	188	118	177	112	6	62-130/24
71-43-2	Benzene	ND	40	38.4	96	36.5	93	5	81-119/20
108-86-1	Bromobenzene	ND	40	39.6	99	38.0	97	4	79-120/22
74-97-5	Bromochloromethane	ND	40	42.3	106	38.9	99	8	81-120/19
75-27-4	Bromodichloromethane	ND	40	40.6	102	38.5	98	5	79-124/20
75-25-2	Bromoform	ND	40	41.5	104	39.1	99	6	76-128/21
104-51-8	n-Butylbenzene	ND	40	36.7	92	35.4	90	4	79-123/26
135-98-8	sec-Butylbenzene	ND	40	38.0	95	36.6	93	4	77-122/24
98-06-6	tert-Butylbenzene	ND	40	38.2	96	36.8	93	4	77-121/23
108-90-7	Chlorobenzene	ND	40	37.8	95	35.9	91	5	82-121/20
75-00-3	Chloroethane	ND	40	37.8	95	36.9	94	2	80-126/21
67-66-3	Chloroform	ND	40	40.1	100	37.6	96	6	82-123/20
95-49-8	o-Chlorotoluene	ND	40	39.1	98	36.7	93	6	78-125/25
106-43-4	p-Chlorotoluene	ND	40	37.1	93	35.6	90	4	75-125/26
56-23-5	Carbon tetrachloride	ND	40	38.9	97	37.5	95	4	82-127/22
75-34-3	1,1-Dichloroethane	ND	40	40.6	102	37.9	96	7	80-123/20
75-35-4	1,1-Dichloroethylene	ND	40	39.6	99	37.5	95	5	76-123/19
563-58-6	1,1-Dichloropropene	ND	40	38.4	96	36.3	92	6	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND	40	44.1	110	41.8	106	5	64-133/23
106-93-4	1,2-Dibromoethane	ND	40	42.5	106	40.1	102	6	80-120/20
107-06-2	1,2-Dichloroethane	ND	40	38.9	97	36.8	93	6	76-132/21
78-87-5	1,2-Dichloropropane	ND	40	39.8	100	37.9	96	5	80-121/20
142-28-9	1,3-Dichloropropane	ND	40	40.8	102	38.3	97	6	78-120/20
108-20-3	Di-Isopropyl ether	ND	40	40.5	101	38.1	97	6	78-126/19
594-20-7	2,2-Dichloropropane	ND	40	39.3	98	37.1	94	6	77-132/22
124-48-1	Dibromochloromethane	ND	40	40.4	101	37.9	96	6	76-121/21
75-71-8	Dichlorodifluoromethane	ND	40	27.0	68	26.0	66	4	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND	40	40.8	102	37.7	96	8	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND	40	41.6	104	39.4	100	5	81-124/21
541-73-1	m-Dichlorobenzene	ND	40	37.9	95	36.6	93	3	79-123/23
95-50-1	o-Dichlorobenzene	ND	40	38.8	97	37.4	95	4	79-124/22
106-46-7	p-Dichlorobenzene	ND	40	38.1	95	36.4	92	5	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND	40	39.8	100	37.3	95	6	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND	40	42.3	106	39.7	101	6	81-123/22
100-41-4	Ethylbenzene	ND	40	37.7	94	35.8	91	5	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND	40	41.9	105	39.4	100	6	75-132/21

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28242-15MS	L25515.D	1	06/19/13	XB	n/a	n/a	VL805
C28242-15MSD	L25516.D	1	06/19/13	XB	n/a	n/a	VL805
C28242-15	L25501.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Compound	C28242-15 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	160	178	111	167	106	6	68-139/24
87-68-3	Hexachlorobutadiene	ND	40	36.2	91	35.2	89	3	81-126/32
98-82-8	Isopropylbenzene	ND	40	37.5	94	35.6	90	5	81-122/22
99-87-6	p-Isopropyltoluene	ND	40	37.3	93	36.1	92	3	81-121/23
108-10-1	4-Methyl-2-pentanone	ND	160	179	112	171	109	5	74-136/23
74-83-9	Methyl bromide	ND	40	36.8	92	36.1	92	2	82-124/20
74-87-3	Methyl chloride	ND	40	31.3	78	31.6	80	1	60-132/26
74-95-3	Methylene bromide	ND	40	41.2	103	39.2	100	5	82-120/20
75-09-2	Methylene chloride	ND	40	37.4	94	35.2	89	6	75-119/20
78-93-3	Methyl ethyl ketone	ND	160	188	118	170	108	10	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND	40	42.7	107	40.3	102	6	79-127/19
91-20-3	Naphthalene	ND	40	39.7	99	39.2	100	1	78-125/23
103-65-1	n-Propylbenzene	ND	40	38.1	95	36.5	93	4	79-124/22
100-42-5	Styrene	ND	40	38.5	96	36.6	93	5	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND	40	43.7	109	41.1	104	6	80-127/20
75-65-0	Tert Butyl Alcohol	ND	200	255	128	237	120	7	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	40	40.9	102	38.7	98	6	82-123/21
71-55-6	1,1,1-Trichloroethane	ND	40	40.2	101	37.9	96	6	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND	40	44.1	110	41.7	106	6	77-126/20
79-00-5	1,1,2-Trichloroethane	ND	40	41.1	103	38.4	98	7	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND	40	36.0	90	35.7	91	1	81-122/26
96-18-4	1,2,3-Trichloropropane	ND	40	43.3	108	40.5	103	7	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND	40	34.9	87	34.5	88	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND	40	37.8	95	36.5	93	3	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND	40	38.2	96	36.9	94	3	81-123/23
127-18-4	Tetrachloroethylene	ND	40	44.6	112	40.7	103	9	80-125/25
108-88-3	Toluene	ND	40	37.7	94	35.9	91	5	80-117/21
79-01-6	Trichloroethylene	ND	40	38.8	97	36.7	93	6	81-122/20
75-69-4	Trichlorofluoromethane	ND	40	37.3	93	36.1	92	3	77-133/22
75-01-4	Vinyl chloride	ND	40	37.4	94	36.2	92	3	71-133/23
1330-20-7	Xylene (total)	ND	120	113	94	108	91	5	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C28242-15	Limits
1868-53-7	Dibromofluoromethane	109%	106%	102%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C28242-15MS	L25515.D	1	06/19/13	XB	n/a	n/a	VL805
C28242-15MSD	L25516.D	1	06/19/13	XB	n/a	n/a	VL805
C28242-15	L25501.D	1	06/19/13	XB	n/a	n/a	VL805

The QC reported here applies to the following samples:

Method: SW846 8260B

C28242-15

CAS No.	Surrogate Recoveries	MS	MSD	C28242-15	Limits
2037-26-5	Toluene-D8	99%	98%	100%	70-130%
460-00-4	4-Bromofluorobenzene	99%	100%	95%	70-130%

\* = Outside of Control Limits.

## GC Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8149-MB	GG43571.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172

The QC reported here applies to the following samples:

Method: SW846 8015B M

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13, C28242-15, C28242-19, C28242-21

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	107% 37-122%



# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8149-BS	GG43620.D	1	06/17/13	NN	06/14/13	OP8149	GGG1173
OP8149-BSD	GG43621.D	1	06/17/13	NN	06/14/13	OP8149	GGG1173

The QC reported here applies to the following samples: Method: SW846 8015B M

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13, C28242-15, C28242-19, C28242-21

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	72.8	73	75.5	76	4	39-102/29
	TPH (> C28-C40)	100	111	111	108	108	3	42-111/26

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	97%	94%	37-122%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C28242  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8149-MS	GG43591.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
OP8149-MSD	GG43592.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172
C28242-13	GG43586.D	1	06/14/13	NN	06/14/13	OP8149	GGG1172

The QC reported here applies to the following samples:

Method: SW846 8015B M

C28242-2, C28242-4, C28242-7, C28242-9, C28242-13, C28242-15, C28242-19, C28242-21

CAS No.	Compound	C28242-13 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	98.9	72.1	70	72.5	70	1	39-102/29	
	TPH (> C28-C40)	ND	98.9	97.1	98	99.0	100	2	42-111/26	

CAS No.	Surrogate Recoveries	MS	MSD	C28242-13	Limits
630-01-3	Hexacosane	86%	86%	96%	37-122%

\* = Outside of Control Limits.

Technical Report for

Enviro Soil Tech Consultants

1501 Martin Luther King Jr. Way, Oakland, CA

6-13-858-5A

Accutest Job Number: C31221

Sampling Date: 12/03/13

Report to:

Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111  
info@envirosoiltech.com

ATTN: Frank Hamedi

Total number of pages in report: **44**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



James J. Rhudy  
Lab Director

Client Service contact: Renea Jackson 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD ELAP (L-A-B L2242)

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Test results relate only to samples analyzed.

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## Sample Summary

Enviro Soil Tech Consultants

**Job No:** C31221

1501 Martin Luther King Jr. Way, Oakland, CA  
 Project No: 6-13-858-5A

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C31221-1	12/03/13	10:20	12/04/13	SO	Soil	1-8-W
C31221-2	12/03/13	10:30	12/04/13	SO	Soil	1-8-E
C31221-3	12/03/13	10:45	12/04/13	SO	Soil	SP-1
C31221-4	12/03/13	10:50	12/04/13	SO	Soil	SP-2
C31221-5	12/03/13	10:55	12/04/13	SO	Soil	SP-3
C31221-6	12/03/13	11:00	12/04/13	SO	Soil	SP-4
C31221-7	12/03/13	00:00	12/04/13	SO	Soil	SP-(1-4)

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Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## Summary of Hits

**Job Number:** C31221  
**Account:** Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA  
**Collected:** 12/03/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
<b>C31221-1</b>	<b>1-8-W</b>					
Lead		2.4	1.8		mg/kg	SW846 6010B
<b>C31221-2</b>	<b>1-8-E</b>					
n-Butylbenzene		19300 J	21000	2100	ug/kg	SW846 8260B
sec-Butylbenzene		3020 J	21000	2100	ug/kg	SW846 8260B
Ethylbenzene		27200	21000	2100	ug/kg	SW846 8260B
Isopropylbenzene		4740 J	21000	2100	ug/kg	SW846 8260B
p-Isopropyltoluene		2390 J	21000	2100	ug/kg	SW846 8260B
Naphthalene		20100 J	21000	4100	ug/kg	SW846 8260B
n-Propylbenzene		21000	21000	2100	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene		174000	21000	4100	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene		43600	21000	4100	ug/kg	SW846 8260B
Toluene		15100 J	21000	2100	ug/kg	SW846 8260B
Xylene (total)		222000	41000	4100	ug/kg	SW846 8260B
TPH-GRO (C6-C10)		906	240	120	mg/kg	SW846 8015B
Lead		8.8	1.7		mg/kg	SW846 6010B
<b>C31221-7</b>	<b>SP-(1-4)</b>					
Methyl ethyl ketone <sup>a</sup>		560 J	1000	100	ug/kg	SW846 8260B
Lead		5.7	1.7		mg/kg	SW846 6010B

(a) 4:1 composite.

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> 1-8-W		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-1		<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L29170.D	1	12/04/13	XB	n/a	n/a	VL921
Run #2							

Run #1	Initial Weight
Run #1	5.03 g
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	9.9	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.99	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> 1-8-W		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-1		<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.99	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	0.99	ug/kg	
74-87-3	Methyl chloride	ND	5.0	0.99	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
91-20-3	Naphthalene	ND	5.0	0.99	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	9.9	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.99	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.99	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.99	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	0.99	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	0.99	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	102%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 1-8-W	
<b>Lab Sample ID:</b> C31221-1	<b>Date Sampled:</b> 12/03/13
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 12/04/13
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		70-130%

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> 1-8-W		
<b>Lab Sample ID:</b> C31221-1		<b>Date Sampled:</b> 12/03/13
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 12/04/13
<b>Method:</b> SW846 8015B		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JK40938.D	1	12/05/13	TT	n/a	n/a	GJK1653
Run #2							

	Initial Weight
Run #1	5.01 g
Run #2	

### TPH Volatiles

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	113%		60-115%		

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 1-8-W	
<b>Lab Sample ID:</b> C31221-1	<b>Date Sampled:</b> 12/03/13
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 12/04/13
	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	2.4	1.8	mg/kg	1	12/06/13	12/12/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA3635

(2) Prep QC Batch: MP7092

(a) All results reported on a wet weight basis.

---

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> 1-8-E		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-2		<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L29172.D	1	12/04/13	XB	n/a	n/a	VL921
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.09 g	5.0 ml	1.0 ul
Run #2			

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	160000	41000	ug/kg	
71-43-2	Benzene	ND	21000	2100	ug/kg	
108-86-1	Bromobenzene	ND	21000	2100	ug/kg	
74-97-5	Bromochloromethane	ND	21000	2100	ug/kg	
75-27-4	Bromodichloromethane	ND	21000	2100	ug/kg	
75-25-2	Bromoform	ND	21000	2100	ug/kg	
104-51-8	n-Butylbenzene	19300	21000	2100	ug/kg	J
135-98-8	sec-Butylbenzene	3020	21000	2100	ug/kg	J
98-06-6	tert-Butylbenzene	ND	21000	2100	ug/kg	
108-90-7	Chlorobenzene	ND	21000	2100	ug/kg	
75-00-3	Chloroethane	ND	21000	4100	ug/kg	
67-66-3	Chloroform	ND	21000	2100	ug/kg	
95-49-8	o-Chlorotoluene	ND	21000	2100	ug/kg	
106-43-4	p-Chlorotoluene	ND	21000	2100	ug/kg	
56-23-5	Carbon tetrachloride	ND	21000	2100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	21000	2100	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	21000	2100	ug/kg	
563-58-6	1,1-Dichloropropene	ND	21000	2100	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	21000	5700	ug/kg	
106-93-4	1,2-Dibromoethane	ND	21000	2100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	21000	2100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	21000	2100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	21000	2100	ug/kg	
108-20-3	Di-Isopropyl ether	ND	21000	2100	ug/kg	
594-20-7	2,2-Dichloropropane	ND	21000	2100	ug/kg	
124-48-1	Dibromochloromethane	ND	21000	2100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	21000	4100	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	21000	4500	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	21000	2100	ug/kg	
541-73-1	m-Dichlorobenzene	ND	21000	2100	ug/kg	
95-50-1	o-Dichlorobenzene	ND	21000	2100	ug/kg	
106-46-7	p-Dichlorobenzene	ND	21000	2100	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	1-8-E	<b>Date Sampled:</b>	12/03/13
<b>Lab Sample ID:</b>	C31221-2	<b>Date Received:</b>	12/04/13
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	n/a <sup>a</sup>
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	1501 Martin Luther King Jr. Way, Oakland, CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	21000	2100	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	21000	2100	ug/kg	
100-41-4	Ethylbenzene	27200	21000	2100	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	21000	2100	ug/kg	
591-78-6	2-Hexanone	ND	82000	8200	ug/kg	
87-68-3	Hexachlorobutadiene	ND	21000	4100	ug/kg	
98-82-8	Isopropylbenzene	4740	21000	2100	ug/kg	J
99-87-6	p-Isopropyltoluene	2390	21000	2100	ug/kg	J
108-10-1	4-Methyl-2-pentanone	ND	82000	8200	ug/kg	
74-83-9	Methyl bromide	ND	21000	4100	ug/kg	
74-87-3	Methyl chloride	ND	21000	4100	ug/kg	
74-95-3	Methylene bromide	ND	21000	2100	ug/kg	
75-09-2	Methylene chloride	ND	82000	21000	ug/kg	
78-93-3	Methyl ethyl ketone	ND	82000	8200	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	21000	4100	ug/kg	
91-20-3	Naphthalene	20100	21000	4100	ug/kg	J
103-65-1	n-Propylbenzene	21000	21000	2100	ug/kg	
100-42-5	Styrene	ND	21000	2100	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	21000	2100	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	160000	41000	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	21000	2100	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	21000	2100	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	21000	2100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	21000	2100	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	21000	2100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	21000	4100	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	21000	2100	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	174000	21000	4100	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	43600	21000	4100	ug/kg	
127-18-4	Tetrachloroethylene	ND	21000	2500	ug/kg	
108-88-3	Toluene	15100	21000	2100	ug/kg	J
79-01-6	Trichloroethylene	ND	21000	2100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	21000	4100	ug/kg	
75-01-4	Vinyl chloride	ND	21000	4100	ug/kg	
1330-20-7	Xylene (total)	222000	41000	4100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		70-130%
2037-26-5	Toluene-D8	102%		70-130%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> 1-8-E		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-2		<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		70-130%

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

<b>Client Sample ID:</b> 1-8-E	<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-2	<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JK40936.D	1	12/05/13	TT	n/a	n/a	GJK1653
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.13 g	5.0 ml	2.0 ul
Run #2			

**TPH Volatiles**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	906	240	120	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	114%		60-115%		

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> 1-8-E	<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-2	<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	8.8	1.7	mg/kg	1	12/06/13	12/12/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA3635

(2) Prep QC Batch: MP7092

(a) All results reported on a wet weight basis.

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RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> SP-(1-4)		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-7		<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>b</sup>	L29171.D	1	12/04/13	XB	n/a	n/a	VL921
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2000	500	ug/kg	
71-43-2	Benzene	ND	250	25	ug/kg	
108-86-1	Bromobenzene	ND	250	25	ug/kg	
74-97-5	Bromochloromethane	ND	250	25	ug/kg	
75-27-4	Bromodichloromethane	ND	250	25	ug/kg	
75-25-2	Bromoform	ND	250	25	ug/kg	
104-51-8	n-Butylbenzene	ND	250	25	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	25	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	25	ug/kg	
108-90-7	Chlorobenzene	ND	250	25	ug/kg	
75-00-3	Chloroethane	ND	250	50	ug/kg	
67-66-3	Chloroform	ND	250	25	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	25	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	25	ug/kg	
56-23-5	Carbon tetrachloride	ND	250	25	ug/kg	
75-34-3	1,1-Dichloroethane	ND	250	25	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	250	25	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	25	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	70	ug/kg	
106-93-4	1,2-Dibromoethane	ND	250	25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	250	25	ug/kg	
78-87-5	1,2-Dichloropropane	ND	250	25	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	25	ug/kg	
108-20-3	Di-Isopropyl ether	ND	250	25	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	25	ug/kg	
124-48-1	Dibromochloromethane	ND	250	25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	50	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	250	55	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	250	25	ug/kg	
541-73-1	m-Dichlorobenzene	ND	250	25	ug/kg	
95-50-1	o-Dichlorobenzene	ND	250	25	ug/kg	
106-46-7	p-Dichlorobenzene	ND	250	25	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SP-(1-4)		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-7		<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	250	25	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	250	25	ug/kg	
100-41-4	Ethylbenzene	ND	250	25	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	250	25	ug/kg	
591-78-6	2-Hexanone	ND	1000	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	50	ug/kg	
98-82-8	Isopropylbenzene	ND	250	25	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	25	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1000	100	ug/kg	
74-83-9	Methyl bromide	ND	250	50	ug/kg	
74-87-3	Methyl chloride	ND	250	50	ug/kg	
74-95-3	Methylene bromide	ND	250	25	ug/kg	
75-09-2	Methylene chloride	ND	1000	250	ug/kg	
78-93-3	Methyl ethyl ketone	560	1000	100	ug/kg	J
1634-04-4	Methyl Tert Butyl Ether	ND	250	50	ug/kg	
91-20-3	Naphthalene	ND	250	50	ug/kg	
103-65-1	n-Propylbenzene	ND	250	25	ug/kg	
100-42-5	Styrene	ND	250	25	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	250	25	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	2000	500	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	25	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	250	25	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	250	25	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	25	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	50	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	25	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	50	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	50	ug/kg	
127-18-4	Tetrachloroethylene	ND	250	30	ug/kg	
108-88-3	Toluene	ND	250	25	ug/kg	
79-01-6	Trichloroethylene	ND	250	25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	50	ug/kg	
75-01-4	Vinyl chloride	ND	250	50	ug/kg	
1330-20-7	Xylene (total)	ND	500	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-130%
2037-26-5	Toluene-D8	97%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SP-(1-4)		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-7		<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		70-130%

- (a) All results reported on a wet weight basis.
- (b) 4:1 composite.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SP-(1-4)		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-7		<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JK40937.D	1	12/05/13	TT	n/a	n/a	GJK1653
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.22 g	5.0 ml	100 ul
Run #2			

### TPH Volatiles

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	4.8	2.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
98-08-8	aaa-Trifluorotoluene	117% <sup>b</sup>		60-115%		

(a) All results reported on a wet weight basis.

(b) Outside of in-house control limits; but within method acceptance limits.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SP-(1-4)		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31221-7		<b>Date Received:</b> 12/04/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	5.7	1.7	mg/kg	1	12/06/13	12/12/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA3635

(2) Prep QC Batch: MP7092

(a) All results reported on a wet weight basis.

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RL = Reporting Limit

## Misc. Forms

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### Custody Documents and Other Forms

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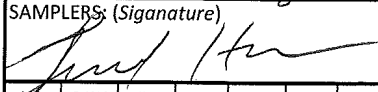
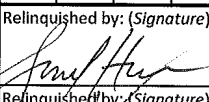
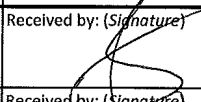
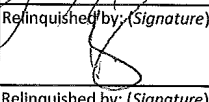
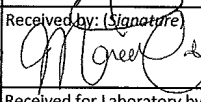
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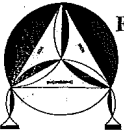
- Chain of Custody

ESTCASP5302

CHAIN OF CUSTODY RECORD

C31221

PROJ. NO.		NAME					CON-TAINER	ANALYSES REQUESTED					REMARKS
6-13-858-SA		1501 Martin Luther King Jr. Way, Oakland						TP-Hg (8015M)	EPA 8260B*	Total lead			
SAMPLERS: (Signature)													
													
NO.	DATE	TIME	SOIL	WATER	AIR	LOCATION							
1	12/03/13	10:20	✓			1-8-W	1	✓	✓	✓	1	* Full list	
2		10:30	✓			1-8-E	1	✓	✓	✓	2		
3		10:45	✓			SP-1	1				3	Please composite these 4 samples into 1 sample and label them as SP-1, 2, 3, 4	
4		10:50	✓			SP-2	1	✓	✓	✓	4		
5		10:55	✓			SP-3	1				5		
6	✓	11:02	✓			SP-4	1				6		
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
		12/03/13 1004				12/14/13 1004							
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time		Received by: (Signature)	
		12/4/13 1038				12/4/13 1041							
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Remarks: Please send lab report to Frank Hamedi. Note: Please send back the soil samples to our office when job is done.					



**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

Temp: 5.3 - 1.5 = 3.8 C

NE



## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** C31221      **Client:** ENVIRO SOIL TECH CONSULTANTS      **Project:** 1501 MARTIN LUTHER KING. JR. WAY, Oakland,  
**Date / Time Received:** 12/4/2013      **Delivery Method:** Accutest Courier      **Airbill #s:** \_\_\_\_\_  
**Cooler Temps (Initial/Adjusted):** #1: (5.3/3.8): 0

**Cooler Security**

	<u>Y</u> or <u>N</u>		<u>Y</u> or <u>N</u>
1. Custody Seals Present:	<input type="checkbox"/> <input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/> <input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

**Cooler Temperature**

	<u>Y</u> or <u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Cooler temp verification:	IR1 Plastic;
3. Cooler media:	Ice (Bag)
4. No. Coolers:	1

**Quality Control Preservation**

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Sample Integrity - Documentation**

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Sample Integrity - Condition**

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	Intact		

**Sample Integrity - Instructions**

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

4.1  
4

## GC/MS Volatiles

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5

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL921-MB	L29157.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

## Method Blank Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL921-MB	L29157.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	85% 70-130%

## Method Blank Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL921-MB	L29157.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	93% 70-130%
460-00-4	4-Bromofluorobenzene	88% 70-130%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL921-BS	L29154.D	1	12/04/13	XB	n/a	n/a	VL921
VL921-BSD	L29155.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	139	87	125	78	11	62-130/24
71-43-2	Benzene	40	40.6	102	39.1	98	4	81-119/20
108-86-1	Bromobenzene	40	43.0	108	45.5	114	6	79-120/22
74-97-5	Bromochloromethane	40	41.1	103	41.3	103	0	81-120/19
75-27-4	Bromodichloromethane	40	40.8	102	37.2	93	9	79-124/20
75-25-2	Bromoform	40	46.7	117	45.9	115	2	76-128/21
104-51-8	n-Butylbenzene	40	39.3	98	38.2	96	3	79-123/26
135-98-8	sec-Butylbenzene	40	38.6	97	38.7	97	0	77-122/24
98-06-6	tert-Butylbenzene	40	40.5	101	41.9	105	3	77-121/23
108-90-7	Chlorobenzene	40	40.0	100	38.8	97	3	82-121/20
75-00-3	Chloroethane	40	42.5	106	41.2	103	3	80-126/21
67-66-3	Chloroform	40	37.6	94	38.7	97	3	82-123/20
95-49-8	o-Chlorotoluene	40	40.4	101	45.2	113	11	78-125/25
106-43-4	p-Chlorotoluene	40	34.7	87	39.3	98	12	75-125/26
56-23-5	Carbon tetrachloride	40	41.3	103	39.7	99	4	82-127/22
75-34-3	1,1-Dichloroethane	40	42.1	105	38.7	97	8	80-123/20
75-35-4	1,1-Dichloroethylene	40	39.3	98	36.1	90	8	76-123/19
563-58-6	1,1-Dichloropropene	40	41.4	104	38.7	97	7	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	35.6	89	34.1	85	4	64-133/23
106-93-4	1,2-Dibromoethane	40	41.1	103	40.2	101	2	80-120/20
107-06-2	1,2-Dichloroethane	40	37.8	95	36.0	90	5	76-132/21
78-87-5	1,2-Dichloropropane	40	38.1	95	36.8	92	3	80-121/20
142-28-9	1,3-Dichloropropane	40	43.3	108	37.4	94	15	78-120/20
108-20-3	Di-Isopropyl ether	40	40.8	102	37.0	93	10	78-126/19
594-20-7	2,2-Dichloropropane	40	37.6	94	41.4	104	10	77-132/22
124-48-1	Dibromochloromethane	40	44.1	110	42.7	107	3	76-121/21
75-71-8	Dichlorodifluoromethane	40	53.9	135	47.6	119	12	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	40.1	100	43.3	108	8	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	49.9	125* a	40.5	101	21	81-124/21
541-73-1	m-Dichlorobenzene	40	40.3	101	39.2	98	3	79-123/23
95-50-1	o-Dichlorobenzene	40	39.8	100	38.8	97	3	79-124/22
106-46-7	p-Dichlorobenzene	40	43.5	109	42.3	106	3	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	41.6	104	38.2	96	9	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	46.4	116	37.8	95	20	81-123/22
100-41-4	Ethylbenzene	40	41.4	104	40.6	102	2	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	40.4	101	42.3	106	5	75-132/21

\* = Outside of Control Limits.

5.2.1  
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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL921-BS	L29154.D	1	12/04/13	XB	n/a	n/a	VL921
VL921-BSD	L29155.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	171	107	131	82	26* a	68-139/24
87-68-3	Hexachlorobutadiene	40	46.7	117	44.6	112	5	81-126/32
98-82-8	Isopropylbenzene	40	40.3	101	40.3	101	0	81-122/22
99-87-6	p-Isopropyltoluene	40	39.4	99	38.2	96	3	81-121/23
108-10-1	4-Methyl-2-pentanone	160	183	114	156	98	16	74-136/23
74-83-9	Methyl bromide	40	48.0	120	47.9	120	0	82-124/20
74-87-3	Methyl chloride	40	47.0	118	44.4	111	6	60-132/26
74-95-3	Methylene bromide	40	42.3	106	39.2	98	8	82-120/20
75-09-2	Methylene chloride	40	40.4	101	37.8	95	7	75-119/20
78-93-3	Methyl ethyl ketone	160	146	91	154	96	5	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	39.9	100	36.6	92	9	79-127/19
91-20-3	Naphthalene	40	42.5	106	41.6	104	2	78-125/23
103-65-1	n-Propylbenzene	40	36.2	91	41.1	103	13	79-124/22
100-42-5	Styrene	40	43.5	109	42.9	107	1	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	38.4	96	37.0	93	4	80-127/20
75-65-0	Tert Butyl Alcohol	200	193	97	171	86	12	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	43.3	108	42.9	107	1	82-123/21
71-55-6	1,1,1-Trichloroethane	40	38.9	97	36.8	92	6	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	38.2	96	40.6	102	6	77-126/20
79-00-5	1,1,2-Trichloroethane	40	46.1	115	38.2	96	19	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	45.0	113	44.2	111	2	81-122/26
96-18-4	1,2,3-Trichloropropane	40	38.2	96	43.3	108	13	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	44.3	111	43.6	109	2	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	41.1	103	44.6	112	8	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	41.9	105	46.8	117	11	81-123/23
127-18-4	Tetrachloroethylene	40	46.7	117	44.6	112	5	80-125/25
108-88-3	Toluene	40	48.7	122* a	40.8	102	18	80-117/21
79-01-6	Trichloroethylene	40	41.3	103	40.1	100	3	81-122/20
75-69-4	Trichlorofluoromethane	40	43.5	109	40.7	102	7	77-133/22
75-01-4	Vinyl chloride	40	42.1	105	41.9	105	0	71-133/23
1330-20-7	Xylene (total)	120	122	102	120	100	2	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	87%	86%	70-130%

\* = Outside of Control Limits.

5.2.1  
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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL921-BS	L29154.D	1	12/04/13	XB	n/a	n/a	VL921
VL921-BSD	L29155.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	109%	96%	70-130%
460-00-4	4-Bromofluorobenzene	91%	103%	70-130%

(a) Outside of in-house control limits; but within method acceptance limits.

\* = Outside of Control Limits.

5.2.1  
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# Laboratory Control Sample Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL921-LCS	L29156.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	82%	70-130%
2037-26-5	Toluene-D8	96%	70-130%
460-00-4	4-Bromofluorobenzene	106%	70-130%

\* = Outside of Control Limits.

5.3.1  
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# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C31221-7MS	L29173.D	1	12/04/13	XB	n/a	n/a	VL921
C31221-7MSD	L29174.D	1	12/04/13	XB	n/a	n/a	VL921
C31221-7 <sup>a</sup>	L29171.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	C31221-7 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		8000	7330	92	6450	81	13	62-130/24
71-43-2	Benzene	ND		2000	2100	105	2030	102	3	81-119/20
108-86-1	Bromobenzene	ND		2000	2300	115	2130	107	8	79-120/22
74-97-5	Bromochloromethane	ND		2000	2100	105	2130	107	1	81-120/19
75-27-4	Bromodichloromethane	ND		2000	2260	113	2010	101	12	79-124/20
75-25-2	Bromoform	ND		2000	2060	103	2040	102	1	76-128/21
104-51-8	n-Butylbenzene	ND		2000	1910	96	1880	94	2	79-123/26
135-98-8	sec-Butylbenzene	ND		2000	2050	103	2010	101	2	77-122/24
98-06-6	tert-Butylbenzene	ND		2000	2180	109	2040	102	7	77-121/23
108-90-7	Chlorobenzene	ND		2000	2160	108	2070	104	4	82-121/20
75-00-3	Chloroethane	ND		2000	2050	103	1920	96	7	80-126/21
67-66-3	Chloroform	ND		2000	2030	102	1830	92	10	82-123/20
95-49-8	o-Chlorotoluene	ND		2000	2280	114	2120	106	7	78-125/25
106-43-4	p-Chlorotoluene	ND		2000	2090	105	1930	97	8	75-125/26
56-23-5	Carbon tetrachloride	ND		2000	2040	102	1900	95	7	82-127/22
75-34-3	1,1-Dichloroethane	ND		2000	2000	100	1910	96	5	80-123/20
75-35-4	1,1-Dichloroethylene	ND		2000	2020	101	1800	90	12	76-123/19
563-58-6	1,1-Dichloropropene	ND		2000	2090	105	1920	96	8	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		2000	1550	78	1640	82	6	64-133/23
106-93-4	1,2-Dibromoethane	ND		2000	2070	104	2040	102	1	80-120/20
107-06-2	1,2-Dichloroethane	ND		2000	1950	98	1950	98	0	76-132/21
78-87-5	1,2-Dichloropropane	ND		2000	2230	112	2030	102	9	80-121/20
142-28-9	1,3-Dichloropropane	ND		2000	2050	103	2030	102	1	78-120/20
108-20-3	Di-Isopropyl ether	ND		2000	1970	99	1800	90	9	78-126/19
594-20-7	2,2-Dichloropropane	ND		2000	1840	92	1660	83	10	77-132/22
124-48-1	Dibromochloromethane	ND		2000	2120	106	2060	103	3	76-121/21
75-71-8	Dichlorodifluoromethane	ND		2000	2370	119	2270	114	4	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		2000	2100	105	1880	94	11	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		2000	2240	112	2040	102	9	81-124/21
541-73-1	m-Dichlorobenzene	ND		2000	2130	107	2070	104	3	79-123/23
95-50-1	o-Dichlorobenzene	ND		2000	2080	104	2070	104	0	79-124/22
106-46-7	p-Dichlorobenzene	ND		2000	2140	107	2060	103	4	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		2000	2080	104	1940	97	7	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		2000	2050	103	2020	101	1	81-123/22
100-41-4	Ethylbenzene	ND		2000	2140	107	2020	101	6	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		2000	2010	101	1960	98	3	75-132/21

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C31221-7MS	L29173.D	1	12/04/13	XB	n/a	n/a	VL921
C31221-7MSD	L29174.D	1	12/04/13	XB	n/a	n/a	VL921
C31221-7 <sup>a</sup>	L29171.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	C31221-7 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND		8000	7130	89	7230	90	1	68-139/24
87-68-3	Hexachlorobutadiene	ND		2000	2230	112	1920	96	15	81-126/32
98-82-8	Isopropylbenzene	ND		2000	2150	108	2060	103	4	81-122/22
99-87-6	p-Isopropyltoluene	ND		2000	2050	103	2000	100	2	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		8000	8310	104	7910	99	5	74-136/23
74-83-9	Methyl bromide	ND		2000	2380	119	2260	113	5	82-124/20
74-87-3	Methyl chloride	ND		2000	2320	116	2170	109	7	60-132/26
74-95-3	Methylene bromide	ND		2000	2220	111	2030	102	9	82-120/20
75-09-2	Methylene chloride	ND		2000	2010	101	1940	97	4	75-119/20
78-93-3	Methyl ethyl ketone	560	J	8000	7500	87	7650	89	2	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		2000	1990	100	1920	96	4	79-127/19
91-20-3	Naphthalene	ND		2000	2010	101	1820	91	10	78-125/23
103-65-1	n-Propylbenzene	ND		2000	2180	109	1970	99	10	79-124/22
100-42-5	Styrene	ND		2000	2210	111	2130	107	4	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		2000	1910	96	2030	102	6	80-127/20
75-65-0	Tert Butyl Alcohol	ND		10000	8640	86	8360	84	3	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		2000	2120	106	2090	105	1	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		2000	1890	95	1900	95	1	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		2000	2100	105	1950	98	7	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		2000	2090	105	2060	103	1	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		2000	2160	108	1920	96	12	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		2000	1840	92	1870	94	2	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		2000	2150	108	1930	97	11	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		2000	2150	108	2020	101	6	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		2000	2230	112	2020	101	10	81-123/23
127-18-4	Tetrachloroethylene	ND		2000	2140	107	2060	103	4	80-125/25
108-88-3	Toluene	ND		2000	2170	109	2080	104	4	80-117/21
79-01-6	Trichloroethylene	ND		2000	2070	104	2000	100	3	81-122/20
75-69-4	Trichlorofluoromethane	ND		2000	2120	106	1970	99	7	77-133/22
75-01-4	Vinyl chloride	ND		2000	1630	82	1460	73	11	71-133/23
1330-20-7	Xylene (total)	ND		6000	6570	110	6260	104	5	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C31221-7	Limits
1868-53-7	Dibromofluoromethane	91%	95%	90%	70-130%

\* = Outside of Control Limits.

5.4.1  
**5**

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C31221-7MS	L29173.D	1	12/04/13	XB	n/a	n/a	VL921
C31221-7MSD	L29174.D	1	12/04/13	XB	n/a	n/a	VL921
C31221-7 <sup>a</sup>	L29171.D	1	12/04/13	XB	n/a	n/a	VL921

The QC reported here applies to the following samples:

Method: SW846 8260B

C31221-1, C31221-2, C31221-7

CAS No.	Surrogate Recoveries	MS	MSD	C31221-7	Limits
2037-26-5	Toluene-D8	98%	98%	97%	70-130%
460-00-4	4-Bromofluorobenzene	94%	95%	97%	70-130%

(a) 4:1 composite.

\* = Outside of Control Limits.

## GC Volatiles

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## QC Data Summaries

---

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GJK1653-MB	JK40930.D	1	12/05/13	TT	n/a	n/a	GJK1653

The QC reported here applies to the following samples:

Method: SW846 8015B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/kg	

CAS No.	Surrogate Recoveries	Limits
98-08-8	aaa-Trifluorotoluene	117%* 60-115%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GJK1653-BS	JK40931.D	1	12/05/13	TT	n/a	n/a	GJK1653
GJK1653-BSD	JK40932.D	1	12/05/13	TT	n/a	n/a	GJK1653

The QC reported here applies to the following samples:

Method: SW846 8015B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.5	0.462	92	0.477	95	3	76-127/32

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
98-08-8	aaa-Trifluorotoluene	106%	108%	60-115%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C31221  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C31239-1MS	JK40942.D	1	12/05/13	TT	n/a	n/a	GJK1653
C31239-1MSD	JK40943.D	1	12/05/13	TT	n/a	n/a	GJK1653
C31239-1	JK40933.D	1	12/05/13	TT	n/a	n/a	GJK1653

The QC reported here applies to the following samples:

Method: SW846 8015B

C31221-1, C31221-2, C31221-7

CAS No.	Compound	C31239-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	0.527	0.293	56* a	0.301	58* a	3	76-127/32

CAS No.	Surrogate Recoveries	MS	MSD	C31239-1	Limits
98-08-8	aaa-Trifluorotoluene	94%	79%	80%	60-115%

(a) Outside control limits due to matrix interference.

\* = Outside of Control Limits.



## Metals Analysis

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## QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: C31221  
Account: ESTCASJ - Enviro Soil Tech Consultants  
Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7092  
Matrix Type: SOLID

Methods: SW846 6010B  
Units: mg/kg

Prep Date: 12/05/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087		
Arsenic	2.0	.07	.07		
Barium	20	.04	.035		
Beryllium	1.0	.02	.012		
Boron	10	.09	.2		
Cadmium	1.0	.02	.015		
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054		
Cobalt	1.0	.02	.022		
Copper	2.5	.12	.19		
Iron	20	.64	1.6		
Lead	2.0	.07	.054	0.14	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024		
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23		
Silicon		.12			
Silver	1.0	.03	.044		
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073		
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025		
Zinc	2.0	.03	.098		

Associated samples MP7092: C31221-1, C31221-2, C31221-7

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C31221  
 Account: ESTCASJ - Enviro Soil Tech Consultants  
 Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7092  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 12/05/13

Metal	C31253-1 Original MS	Spike/lot MP/IR4A		% Rec	QC Limits
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron					
Lead	7.4	51.2	48.6	90.2	75-125
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	anr				
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	anr				

Associated samples MP7092: C31221-1, C31221-2, C31221-7

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

7.1.2  
7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C31221  
 Account: ESTCASJ - Enviro Soil Tech Consultants  
 Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7092  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 12/05/13

Metal	C31253-1 Original MSD	SpikeLot MPIR4A	% Rec	MSD RPD	QC Limit
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron					
Lead	7.4	50.8	47.7	90.9	0.8 20
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	anr				
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	anr				

Associated samples MP7092: C31221-1, C31221-2, C31221-7

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

7.1.2  
7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C31221  
 Account: ESTCASJ - Enviro Soil Tech Consultants  
 Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7092  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 12/05/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	45.4	50	90.8	80-120
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP7092: C31221-1, C31221-2, C31221-7

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.3  
7

SERIAL DILUTION RESULTS SUMMARY

Login Number: C31221  
 Account: ESTCASJ - Enviro Soil Tech Consultants  
 Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7092  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 12/05/13

Metal	C31253-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	73.9	105	41.5*(a)	0-10
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP7092: C31221-1, C31221-2, C31221-7

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested  
 (a) Serial dilution indicates possible matrix interference.

7.1.4  
7

Technical Report for

Enviro Soil Tech Consultants

1501 Martin Luther King Jr. Way, Oakland, CA

6-13-858-5A

Accutest Job Number: C31255

Sampling Date: 12/03/13

Report to:

Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111  
info@envirosoiltech.com

ATTN: Frank Hamedi

Total number of pages in report: **34**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



James J. Rhudy  
Lab Director

Client Service contact: Renea Jackson 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD ELAP (L-A-B L2242)

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Test results relate only to samples analyzed.

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## Sample Summary

Enviro Soil Tech Consultants

Job No: C31255

1501 Martin Luther King Jr. Way, Oakland, CA  
Project No: 6-13-858-5A

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
C31255-1	12/03/13	14:35 FH	12/05/13	SO	Soil	1-2-P

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Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## Summary of Hits

**Job Number:** C31255  
**Account:** Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA  
**Collected:** 12/03/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C31255-1	1-2-P					
Lead		9.0	1.8		mg/kg	SW846 6010B

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> 1-2-P		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31255-1		<b>Date Received:</b> 12/05/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L29198.D	1	12/05/13	XB	n/a	n/a	VL922
Run #2							

Run #1	Initial Weight
Run #1	5.09 g
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.8	ug/kg	
71-43-2	Benzene	ND	4.9	0.49	ug/kg	
108-86-1	Bromobenzene	ND	4.9	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.49	ug/kg	
75-25-2	Bromoform	ND	4.9	0.49	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.49	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.98	ug/kg	
67-66-3	Chloroform	ND	4.9	0.49	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.49	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.49	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.49	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.9	0.49	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.9	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.98	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.9	0.49	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.9	0.49	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.9	0.49	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> 1-2-P		<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31255-1		<b>Date Received:</b> 12/05/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	0.49	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.9	0.49	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.98	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.49	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.98	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.98	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	20	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.98	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.98	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	0.49	ug/kg	
100-42-5	Styrene	ND	4.9	0.49	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.8	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.9	0.49	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	0.98	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	0.98	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.98	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.59	ug/kg	
108-88-3	Toluene	ND	4.9	0.49	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.98	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.98	ug/kg	
1330-20-7	Xylene (total)	ND	9.8	0.98	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		70-130%
2037-26-5	Toluene-D8	94%		70-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 1-2-P	
<b>Lab Sample ID:</b> C31255-1	<b>Date Sampled:</b> 12/03/13
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 12/05/13
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		70-130%

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 1-2-P	<b>Date Sampled:</b> 12/03/13
<b>Lab Sample ID:</b> C31255-1	<b>Date Received:</b> 12/05/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B	
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JK40951.D	1	12/06/13	TT	n/a	n/a	GJK1653
Run #2							

Run #	Initial Weight
Run #1	5.38 g
Run #2	

**TPH Volatiles**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.093	0.046	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
98-08-8	aaa-Trifluorotoluene	113%		60-115%

(a) All results reported on a wet weight basis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 1-2-P	
<b>Lab Sample ID:</b> C31255-1	<b>Date Sampled:</b> 12/03/13
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 12/05/13
	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> 1501 Martin Luther King Jr. Way, Oakland, CA	

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	9.0	1.8	mg/kg	1	12/10/13	12/14/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA3638

(2) Prep QC Batch: MP7101

(a) All results reported on a wet weight basis.

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RL = Reporting Limit



## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

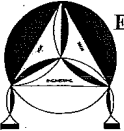
- Chain of Custody

CHAIN OF CUSTODY RECORD

C31255

PROJ. NO. 6-13-858-SA		NAME 1501 Martin Luther King Jr. Way, Oakland				CON-TAINER	ANYALYSES REQUESTED				REMARKS
SAMPLERS: (Signature) <i>[Signature]</i>							TPHg (801570)	EPA 82608*	Total Lead		
NO.	DATE	TIME	SOIL	WATER	LOCATION						
1	12/03/13	14:35	✓		1-2-P	✓	✓	✓			
										* Full list	
										Note: Please send <del>to</del> back soil sample to our office when jobs done.	
										TEMP = 9.7 - 1.5 = 8.2 °C	
Relinquished by: (Signature) <i>[Signature]</i>		Date/Time 12/5/13 1600		Received by: (Signature) <i>[Signature]</i>		Date/Time 12/5/13 1600		Relinquished by: (Signature)		Date/Time	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Relinquished by: (Signature)		Date/Time	
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Remarks: Please send lab report to Frank Hamedí			

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**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116

## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** C31255      **Client:** ENVIRO SOIL TECH CONSULTANTS      **Project:** 1501 MARTIN LUTHER KING JR WAY, Oakland, C  
**Date / Time Received:** 12/5/2013      **Delivery Method:** Client      **Airbill #'s:**  
**Cooler Temps (Initial/Adjusted):** #1: (9.7/8.2): 0

**Cooler Security**

	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Cooler Temperature**

	<u>Y or N</u>	
1. Temp criteria achieved:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Cooler temp verification:	IR1 Plastic;	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

**Quality Control Preservation**

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input type="checkbox"/>	<input type="checkbox"/>		
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Sample Integrity - Documentation**

	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Sample Integrity - Condition**

	<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	Intact	

**Sample Integrity - Instructions**

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>

Comments

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## GC/MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL922-MB	L29185.D	1	12/05/13	XB	n/a	n/a	VL922

The QC reported here applies to the following samples:

Method: SW846 8260B

C31255-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

## Method Blank Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL922-MB	L29185.D	1	12/05/13	XB	n/a	n/a	VL922

The QC reported here applies to the following samples:

Method: SW846 8260B

C31255-1

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	90% 70-130%

## Method Blank Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL922-MB	L29185.D	1	12/05/13	XB	n/a	n/a	VL922

The QC reported here applies to the following samples:

Method: SW846 8260B

C31255-1

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	99% 70-130%
460-00-4	4-Bromofluorobenzene	81% 70-130%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL922-BS	L29182.D	1	12/05/13	XB	n/a	n/a	VL922
VL922-BSD	L29183.D	1	12/05/13	XB	n/a	n/a	VL922

The QC reported here applies to the following samples:

Method: SW846 8260B

C31255-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	134	84	151	94	12	62-130/24
71-43-2	Benzene	40	43.6	109	39.6	99	10	81-119/20
108-86-1	Bromobenzene	40	43.7	109	40.4	101	8	79-120/22
74-97-5	Bromochloromethane	40	44.6	112	41.2	103	8	81-120/19
75-27-4	Bromodichloromethane	40	40.5	101	38.5	96	5	79-124/20
75-25-2	Bromoform	40	41.3	103	41.9	105	1	76-128/21
104-51-8	n-Butylbenzene	40	40.2	101	40.2	101	0	79-123/26
135-98-8	sec-Butylbenzene	40	40.0	100	37.7	94	6	77-122/24
98-06-6	tert-Butylbenzene	40	41.4	104	36.6	92	12	77-121/23
108-90-7	Chlorobenzene	40	40.7	102	38.8	97	5	82-121/20
75-00-3	Chloroethane	40	38.4	96	38.3	96	0	80-126/21
67-66-3	Chloroform	40	41.8	105	38.4	96	8	82-123/20
95-49-8	o-Chlorotoluene	40	40.1	100	35.4	89	12	78-125/25
106-43-4	p-Chlorotoluene	40	35.1	88	31.4	79	11	75-125/26
56-23-5	Carbon tetrachloride	40	42.2	106	37.2	93	13	82-127/22
75-34-3	1,1-Dichloroethane	40	38.3	96	35.2	88	8	80-123/20
75-35-4	1,1-Dichloroethylene	40	40.8	102	40.9	102	0	76-123/19
563-58-6	1,1-Dichloropropene	40	43.4	109	38.3	96	12	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	31.7	79	33.3	83	5	64-133/23
106-93-4	1,2-Dibromoethane	40	40.9	102	40.6	102	1	80-120/20
107-06-2	1,2-Dichloroethane	40	39.9	100	35.1	88	13	76-132/21
78-87-5	1,2-Dichloropropane	40	42.0	105	39.9	100	5	80-121/20
142-28-9	1,3-Dichloropropane	40	39.5	99	38.9	97	2	78-120/20
108-20-3	Di-Isopropyl ether	40	37.6	94	34.0	85	10	78-126/19
594-20-7	2,2-Dichloropropane	40	39.5	99	37.5	94	5	77-132/22
124-48-1	Dibromochloromethane	40	42.9	107	42.2	106	2	76-121/21
75-71-8	Dichlorodifluoromethane	40	50.7	127	47.8	120	6	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	41.8	105	40.8	102	2	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	44.2	111	41.5	104	6	81-124/21
541-73-1	m-Dichlorobenzene	40	41.1	103	40.1	100	2	79-123/23
95-50-1	o-Dichlorobenzene	40	42.4	106	39.2	98	8	79-124/22
106-46-7	p-Dichlorobenzene	40	44.8	112	42.8	107	5	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	43.3	108	43.3	108	0	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	40.2	101	40.9	102	2	81-123/22
100-41-4	Ethylbenzene	40	42.7	107	39.0	98	9	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	41.6	104	39.2	98	6	75-132/21

\* = Outside of Control Limits.

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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL922-BS	L29182.D	1	12/05/13	XB	n/a	n/a	VL922
VL922-BSD	L29183.D	1	12/05/13	XB	n/a	n/a	VL922

The QC reported here applies to the following samples:

Method: SW846 8260B

C31255-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	135	84	147	92	9	68-139/24
87-68-3	Hexachlorobutadiene	40	45.5	114	43.4	109	5	81-126/32
98-82-8	Isopropylbenzene	40	38.5	96	36.8	92	5	81-122/22
99-87-6	p-Isopropyltoluene	40	40.5	101	39.2	98	3	81-121/23
108-10-1	4-Methyl-2-pentanone	160	155	97	161	101	4	74-136/23
74-83-9	Methyl bromide	40	47.9	120	45.6	114	5	82-124/20
74-87-3	Methyl chloride	40	48.2	121	42.8	107	12	60-132/26
74-95-3	Methylene bromide	40	41.8	105	40.3	101	4	82-120/20
75-09-2	Methylene chloride	40	41.6	104	43.2	108	4	75-119/20
78-93-3	Methyl ethyl ketone	160	139	87	140	88	1	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	40.9	102	41.5	104	1	79-127/19
91-20-3	Naphthalene	40	39.2	98	39.7	99	1	78-125/23
103-65-1	n-Propylbenzene	40	39.3	98	33.6	84	16	79-124/22
100-42-5	Styrene	40	43.8	110	39.9	100	9	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	42.8	107	39.1	98	9	80-127/20
75-65-0	Tert Butyl Alcohol	200	172	86	196	98	13	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	44.0	110	42.1	105	4	82-123/21
71-55-6	1,1,1-Trichloroethane	40	42.5	106	38.5	96	10	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	38.1	95	34.3	86	10	77-126/20
79-00-5	1,1,2-Trichloroethane	40	40.8	102	41.2	103	1	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	43.3	108	42.7	107	1	81-122/26
96-18-4	1,2,3-Trichloropropane	40	34.4	86	33.4	84	3	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	43.3	108	41.7	104	4	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	42.3	106	38.1	95	10	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	43.7	109	38.9	97	12	81-123/23
127-18-4	Tetrachloroethylene	40	43.9	110	44.1	110	0	80-125/25
108-88-3	Toluene	40	43.8	110	43.6	109	0	80-117/21
79-01-6	Trichloroethylene	40	42.8	107	40.4	101	6	81-122/20
75-69-4	Trichlorofluoromethane	40	43.1	108	41.0	103	5	77-133/22
75-01-4	Vinyl chloride	40	46.2	116	42.2	106	9	71-133/23
1330-20-7	Xylene (total)	120	125	104	116	97	7	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	96%	90%	70-130%

\* = Outside of Control Limits.

5.2.1  
 5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL922-BS	L29182.D	1	12/05/13	XB	n/a	n/a	VL922
VL922-BSD	L29183.D	1	12/05/13	XB	n/a	n/a	VL922

The QC reported here applies to the following samples:

Method: SW846 8260B

C31255-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	95%	102%	70-130%
460-00-4	4-Bromofluorobenzene	87%	85%	70-130%

\* = Outside of Control Limits.

# Laboratory Control Sample Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL922-LCS	L29184.D	1	12/05/13	XB	n/a	n/a	VL922

The QC reported here applies to the following samples:

Method: SW846 8260B

C31255-1

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	91%	70-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	99%	70-130%

\* = Outside of Control Limits.



# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C31255-1MS	L29202.D	1	12/05/13	XB	n/a	n/a	VL922
C31255-1MSD	L29203.D	1	12/05/13	XB	n/a	n/a	VL922
C31255-1	L29198.D	1	12/05/13	XB	n/a	n/a	VL922

**The QC reported here applies to the following samples:**

**Method:** SW846 8260B

C31255-1

CAS No.	Compound	C31255-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	159	120	75	133	83	10	68-139/24	
87-68-3	Hexachlorobutadiene	ND	39.8	29.5	74* a	28.6	72* a	3	81-126/32	
98-82-8	Isopropylbenzene	ND	39.8	35.0	88	37.1	93	6	81-122/22	
99-87-6	p-Isopropyltoluene	ND	39.8	32.3	81	34.0	85	5	81-121/23	
108-10-1	4-Methyl-2-pentanone	ND	159	158	99	176	110	11	74-136/23	
74-83-9	Methyl bromide	ND	39.8	38.9	98	41.3	103	6	82-124/20	
74-87-3	Methyl chloride	ND	39.8	32.6	82	33.9	85	4	60-132/26	
74-95-3	Methylene bromide	ND	39.8	35.2	89	38.6	97	9	82-120/20	
75-09-2	Methylene chloride	ND	39.8	32.6	82	34.7	87	6	75-119/20	
78-93-3	Methyl ethyl ketone	ND	159	132	83	145	91	9	71-130/22	
1634-04-4	Methyl Tert Butyl Ether	ND	39.8	32.9	83	35.0	88	6	79-127/19	
91-20-3	Naphthalene	ND	39.8	34.8	88	37.1	93	6	78-125/23	
103-65-1	n-Propylbenzene	ND	39.8	30.7	77* a	32.4	81	5	79-124/22	
100-42-5	Styrene	ND	39.8	35.3	89	38.3	96	8	83-122/21	
994-05-8	Tert-Amyl Methyl Ether	ND	39.8	32.7	82	34.9	87	7	80-127/20	
75-65-0	Tert Butyl Alcohol	ND	199	177	89	180	90	2	65-144/23	
630-20-6	1,1,1,2-Tetrachloroethane	ND	39.8	36.3	91	39.7	99	9	82-123/21	
71-55-6	1,1,1-Trichloroethane	ND	39.8	32.0	80	33.9	85	6	79-129/21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	39.8	33.0	83	36.0	90	9	77-126/20	
79-00-5	1,1,2-Trichloroethane	ND	39.8	34.5	87	37.8	95	9	79-123/20	
87-61-6	1,2,3-Trichlorobenzene	ND	39.8	34.1	86	34.1	85	0	81-122/26	
96-18-4	1,2,3-Trichloropropane	ND	39.8	33.1	83	36.3	91	9	79-122/24	
120-82-1	1,2,4-Trichlorobenzene	ND	39.8	33.1	83	33.4	84	1	81-121/26	
95-63-6	1,2,4-Trimethylbenzene	ND	39.8	31.8	80* a	33.4	84	5	82-121/24	
108-67-8	1,3,5-Trimethylbenzene	ND	39.8	31.8	80* a	34.0	85	7	81-123/23	
127-18-4	Tetrachloroethylene	ND	39.8	37.9	95	41.3	103	9	80-125/25	
108-88-3	Toluene	ND	39.8	34.4	87	37.2	93	8	80-117/21	
79-01-6	Trichloroethylene	ND	39.8	34.0	86	37.9	95	11	81-122/20	
75-69-4	Trichlorofluoromethane	ND	39.8	33.9	85	35.9	90	6	77-133/22	
75-01-4	Vinyl chloride	ND	39.8	34.7	87	36.9	92	6	71-133/23	
1330-20-7	Xylene (total)	ND	119	105	88	114	95	8	81-122/22	

CAS No.	Surrogate Recoveries	MS	MSD	C31255-1	Limits
1868-53-7	Dibromofluoromethane	88%	89%	89%	70-130%

\* = Outside of Control Limits.

5.4.1  
5

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C31255-1MS	L29202.D	1	12/05/13	XB	n/a	n/a	VL922
C31255-1MSD	L29203.D	1	12/05/13	XB	n/a	n/a	VL922
C31255-1	L29198.D	1	12/05/13	XB	n/a	n/a	VL922

The QC reported here applies to the following samples:

Method: SW846 8260B

C31255-1

CAS No.	Surrogate Recoveries	MS	MSD	C31255-1	Limits
2037-26-5	Toluene-D8	93%	93%	94%	70-130%
460-00-4	4-Bromofluorobenzene	92%	92%	93%	70-130%

(a) Outside laboratory control limits. AZ:M2

\* = Outside of Control Limits.

## GC Volatiles

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## QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GJK1653-MB	JK40930.D	1	12/05/13	TT	n/a	n/a	GJK1653

The QC reported here applies to the following samples:

Method: SW846 8015B

C31255-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/kg	

CAS No.	Surrogate Recoveries	Limits
98-08-8	aaa-Trifluorotoluene	117%* 60-115%



# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GJK1653-BS	JK40931.D	1	12/05/13	TT	n/a	n/a	GJK1653
GJK1653-BSD	JK40932.D	1	12/05/13	TT	n/a	n/a	GJK1653

The QC reported here applies to the following samples:

Method: SW846 8015B

C31255-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.5	0.462	92	0.477	95	3	76-127/32

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
98-08-8	aaa-Trifluorotoluene	106%	108%	60-115%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C31255  
**Account:** ESTCASJ Enviro Soil Tech Consultants  
**Project:** 1501 Martin Luther King Jr. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C31239-1MS	JK40942.D	1	12/05/13	TT	n/a	n/a	GJK1653
C31239-1MSD	JK40943.D	1	12/05/13	TT	n/a	n/a	GJK1653
C31239-1	JK40933.D	1	12/05/13	TT	n/a	n/a	GJK1653

The QC reported here applies to the following samples:

Method: SW846 8015B

C31255-1

CAS No.	Compound	C31239-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	0.527	0.293	56* a	0.301	58* a	3	76-127/32

CAS No.	Surrogate Recoveries	MS	MSD	C31239-1	Limits
98-08-8	aaa-Trifluorotoluene	94%	79%	80%	60-115%

(a) Outside control limits due to matrix interference.

\* = Outside of Control Limits.

## Metals Analysis

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## QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: C31255  
Account: ESTCASJ - Enviro Soil Tech Consultants  
Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7101  
Matrix Type: SOLID

Methods: SW846 6010B  
Units: mg/kg

Prep Date: 12/10/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087		
Arsenic	2.0	.07	.07		
Barium	20	.04	.035		
Beryllium	1.0	.02	.012		
Boron	10	.09	.2		
Cadmium	1.0	.02	.015		
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054		
Cobalt	1.0	.02	.022		
Copper	2.5	.12	.19		
Iron	20	.64	1.6		
Lead	2.0	.07	.054	0.090	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024		
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23		
Silicon		.12			
Silver	1.0	.03	.044		
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073		
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025		
Zinc	2.0	.03	.098		

Associated samples MP7101: C31255-1

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C31255  
 Account: ESTCASJ - Enviro Soil Tech Consultants  
 Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7101  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 12/10/13

Metal	C31240-1 Original MS	Spike MPIRSN4	lot % Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	389	382	50	-14.0(a) 75-125
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium	anr			
Thallium	anr			
Tin	anr			
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP7101: C31255-1

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C31255  
 Account: ESTCASJ - Enviro Soil Tech Consultants  
 Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7101  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 12/10/13

Metal	C31240-1 Original MSD	Spikelot MPIRSN4	% Rec	MSD RPD	QC Limit	
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	389	410	50.4	41.6 (a)	7.1	20
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silicon						
Silver	anr					
Sodium	anr					
Strontium	anr					
Thallium	anr					
Tin	anr					
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP7101: C31255-1

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C31255  
 Account: ESTCASJ - Enviro Soil Tech Consultants  
 Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7101  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 12/10/13

Metal	BSP Result	Spikelot MPIRSN4	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	46.8	50	93.6	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium	anr			
Thallium	anr			
Tin	anr			
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP7101: C31255-1

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.3  
7

SERIAL DILUTION RESULTS SUMMARY

Login Number: C31255  
 Account: ESTCASJ - Enviro Soil Tech Consultants  
 Project: 1501 Martin Luther King Jr. Way, Oakland, CA

QC Batch ID: MP7101  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 12/10/13

Metal	C31240-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	3800	3990	5.1	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium	anr			
Thallium	anr			
Tin	anr			
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP7101: C31255-1

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

7.1.4  
7





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Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 257056  
ANALYTICAL REPORT

Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111

Project : 6-13-858-SA  
Location : 1501 Martin Luther King Jr. Way, Oakl  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
STEW-1	257056-001
STEW-2	257056-002
STEW-3	257056-003
STVW-4	257056-004
STVW-5	257056-005
STVW-6	257056-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Will S Rice  
Project Manager  
will.rice@ctberk.com

Date: 05/28/2014

CA ELAP# 2896, NELAP# 4044-001

### CASE NARRATIVE

Laboratory number: 257056  
Client: Enviro Soil Tech Consultants  
Project: 6-13-858-SA  
Location: 1501 Martin Luther King Jr. Way, Oakl  
Request Date: 05/20/14  
Samples Received: 05/20/14

This data package contains sample and QC results for six water samples, requested for the above referenced project on 05/20/14. The samples were received cold and intact.

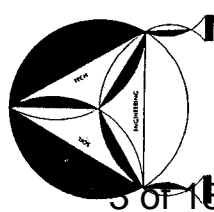
**TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):**

High surrogate recoveries were observed for bromofluorobenzene (FID) in STVW-4 (lab # 257056-004) and the MS/MSD for batch 211480. No other analytical problems were encountered.

257056

CHAIN OF CUSTODY RECORD

PROJ. NO. 6-13-858-SA		NAME 1501 Martin Luther King Jr. Way Oakland				ANALYSES REQUESTED		REMARKS
SAMPLERS: (Signature)		CON-TAINER Vials		MIBT THg + PCB + TCX				
NO.	DATE	TIME	SOIL	WATER	AIR	SAMPLE ID		
1	5/29/92	12:45		✓		STEW-1	✓	
2				✓		STEW-2	✓	
3				✓		STEW-3	✓	
4				✓		STVW-4	✓	
5				✓		STVW-5	✓	
6				✓		STSW-6	✓	
Relinquished by: (Signature)		Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
		5/29/92 3:37	<i>[Signature]</i>	5/20/94 15:37				
Relinquished by: (Signature)		Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	
Relinquished by: (Signature)		Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks: Please send lab report to Frank Hameddi.			



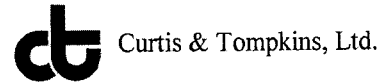
ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500 Fax: (408) 694-3347

COOLER RECEIPT CHECKLIST



Login # 257056 Date Received 5/20/14 Number of coolers 0
Client ENVIRO SOIL TECH CON. Project 6-13-858-SA

Date Opened 5/20/14 By (print) MT (sign) [Signature]
Date Logged in 5/20/14 By (print) ME (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)
Bubble Wrap Foam blocks Bags None
Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C
Type of ice used: Wet Blue/Gel None Temp(°C)

Samples received on ice & cold without a temperature blank; temp taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

- 002 : 1 of 2 VOAs w/ bubble

- 003 1 of 1 VOAs w/ bubble

Detections Summary for 257056

Client : Enviro Soil Tech Consultants  
 Project : 6-13-858-SA  
 Location : 1501 Martin Luther King Jr. Way, Oakl

Client Sample ID : STEW-1

Laboratory Sample ID :

257056-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	11,000		830	210	ug/L	As Recd	16.67	EPA 8015B	EPA 5030B
Benzene	110	C	8.3	0.61	ug/L	As Recd	16.67	EPA 8021B	EPA 5030B
Toluene	31	C	8.3	1.7	ug/L	As Recd	16.67	EPA 8021B	EPA 5030B
Ethylbenzene	160		8.3	1.9	ug/L	As Recd	16.67	EPA 8021B	EPA 5030B
m,p-Xylenes	600		8.3	0.78	ug/L	As Recd	16.67	EPA 8021B	EPA 5030B
o-Xylene	130		8.3	0.45	ug/L	As Recd	16.67	EPA 8021B	EPA 5030B

Client Sample ID : STEW-2

Laboratory Sample ID :

257056-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
m,p-Xylenes	1.1		0.50	0.047	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
o-Xylene	0.52	C	0.50	0.027	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B

Client Sample ID : STEW-3

Laboratory Sample ID :

257056-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	7,200		1,300	320	ug/L	As Recd	25.00	EPA 8015B	EPA 5030B
Benzene	41	C	13	0.91	ug/L	As Recd	25.00	EPA 8021B	EPA 5030B
Toluene	200		13	2.6	ug/L	As Recd	25.00	EPA 8021B	EPA 5030B
Ethylbenzene	300		13	2.9	ug/L	As Recd	25.00	EPA 8021B	EPA 5030B
m,p-Xylenes	1,100		13	1.2	ug/L	As Recd	25.00	EPA 8021B	EPA 5030B
o-Xylene	540		13	0.67	ug/L	As Recd	25.00	EPA 8021B	EPA 5030B

Client Sample ID : STVW-4

Laboratory Sample ID :

257056-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	4,000		50	13	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Benzene	34	C	0.50	0.036	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Ethylbenzene	22		0.50	0.12	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
m,p-Xylenes	37		0.50	0.047	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
o-Xylene	62		0.50	0.027	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B

Client Sample ID : STVW-5

Laboratory Sample ID :

257056-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	27,000		1,000	250	ug/L	As Recd	20.00	EPA 8015B	EPA 5030B
Benzene	83	C	10	0.73	ug/L	As Recd	20.00	EPA 8021B	EPA 5030B
Ethylbenzene	870		10	2.3	ug/L	As Recd	20.00	EPA 8021B	EPA 5030B
m,p-Xylenes	3,000		10	0.94	ug/L	As Recd	20.00	EPA 8021B	EPA 5030B
o-Xylene	1,000		10	0.54	ug/L	As Recd	20.00	EPA 8021B	EPA 5030B

Client Sample ID : STVW-6

Laboratory Sample ID :

257056-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	14,000		710	180	ug/L	As Recd	14.29	EPA 8015B	EPA 5030B
Benzene	140	C	7.1	0.52	ug/L	As Recd	14.29	EPA 8021B	EPA 5030B
Ethylbenzene	120		7.1	0.28	ug/L	As Recd	14.29	EPA 8021B	EPA 5030B
m,p-Xylenes	140		7.1	0.67	ug/L	As Recd	14.29	EPA 8021B	EPA 5030B
o-Xylene	93	C	7.1	0.38	ug/L	As Recd	14.29	EPA 8021B	EPA 5030B

C = Presence confirmed, but RPD between columns exceeds 40%

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	257056	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA		
Matrix:	Water	Sampled:	05/20/14
Units:	ug/L	Received:	05/20/14
Batch#:	211480	Analyzed:	05/26/14

Field ID: STEW-1                                  Lab ID: 257056-001  
Type: SAMPLE                                          Diln Fac: 16.67

Analyte	Result	RL	Analysis
Gasoline C7-C12	11,000	830	EPA 8015B
MTBE	ND	33	EPA 8021B
Benzene	110 C	8.3	EPA 8021B
Toluene	31 C	8.3	EPA 8021B
Ethylbenzene	160	8.3	EPA 8021B
m,p-Xylenes	600	8.3	EPA 8021B
o-Xylene	130	8.3	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	113	77-128	EPA 8015B
Bromofluorobenzene (PID)	115	75-132	EPA 8021B

Field ID: STEW-2                                  Lab ID: 257056-002  
Type: SAMPLE                                          Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	1.1	0.50	EPA 8021B
o-Xylene	0.52 C	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	111	77-128	EPA 8015B
Bromofluorobenzene (PID)	111	75-132	EPA 8021B

Field ID: STEW-3                                  Lab ID: 257056-003  
Type: SAMPLE                                          Diln Fac: 25.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	7,200	1,300	EPA 8015B
MTBE	ND	50	EPA 8021B
Benzene	41 C	13	EPA 8021B
Toluene	200	13	EPA 8021B
Ethylbenzene	300	13	EPA 8021B
m,p-Xylenes	1,100	13	EPA 8021B
o-Xylene	540	13	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	114	77-128	EPA 8015B
Bromofluorobenzene (PID)	116	75-132	EPA 8021B

\*= Value outside of QC limits; see narrative  
C= Presence confirmed, but RPD between columns exceeds 40%  
ND= Not Detected  
RL= Reporting Limit



### Curtis & Tompkins Laboratories Analytical Report

Lab #:	257056	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA		
Matrix:	Water	Sampled:	05/20/14
Units:	ug/L	Received:	05/20/14
Batch#:	211480	Analyzed:	05/26/14

Field ID: STVW-4	Lab ID: 257056-004
Type: SAMPLE	Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	4,000	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	34 C	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	22	0.50	EPA 8021B
m,p-Xylenes	37	0.50	EPA 8021B
o-Xylene	62	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	131 *	77-128	EPA 8015B
Bromofluorobenzene (PID)	124	75-132	EPA 8021B

Field ID: STVW-5	Lab ID: 257056-005
Type: SAMPLE	Diln Fac: 20.00

Analyte	Result	RL	Analysis
Gasoline C7-C12	27,000	1,000	EPA 8015B
MTBE	ND	40	EPA 8021B
Benzene	83 C	10	EPA 8021B
Toluene	ND	10	EPA 8021B
Ethylbenzene	870	10	EPA 8021B
m,p-Xylenes	3,000	10	EPA 8021B
o-Xylene	1,000	10	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	122	77-128	EPA 8015B
Bromofluorobenzene (PID)	119	75-132	EPA 8021B

Field ID: STVW-6	Lab ID: 257056-006
Type: SAMPLE	Diln Fac: 14.29

Analyte	Result	RL	Analysis
Gasoline C7-C12	14,000	710	EPA 8015B
MTBE	ND	29	EPA 8021B
Benzene	140 C	7.1	EPA 8021B
Toluene	ND	7.1	EPA 8021B
Ethylbenzene	120	7.1	EPA 8021B
m,p-Xylenes	140	7.1	EPA 8021B
o-Xylene	93 C	7.1	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	124	77-128	EPA 8015B
Bromofluorobenzene (PID)	118	75-132	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	257056	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA		
Matrix:	Water	Sampled:	05/20/14
Units:	ug/L	Received:	05/20/14
Batch#:	211480	Analyzed:	05/26/14

Type: BLANK Diln Fac: 1.000  
 Lab ID: QC741890

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	107	77-128	EPA 8015B
Bromofluorobenzene (PID)	109	75-132	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	257056	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	211480
Units:	ug/L	Analyzed:	05/26/14
Diln Fac:	1.000		

Type: BS Lab ID: QC741887

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	10.52	105	74-132
Benzene	10.00	10.18	102	80-120
Toluene	10.00	11.02	110	80-120
Ethylbenzene	10.00	11.03	110	80-120
m,p-Xylenes	10.00	11.16	112	80-120
o-Xylene	10.00	11.24	112	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	108	75-132

Type: BSD Lab ID: QC741888

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.54	98	74-132	7	36
Benzene	20.00	19.83	99	80-120	3	20
Toluene	20.00	21.10	106	80-120	4	20
Ethylbenzene	20.00	21.62	108	80-120	2	20
m,p-Xylenes	20.00	21.43	107	80-120	4	20
o-Xylene	20.00	22.19	111	80-120	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	110	75-132

RPD= Relative Percent Difference

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	257056	Location:	1501 Martin Luther King Jr. Way, Oakl	
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B	
Project#:	6-13-858-SA	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC741889	Batch#:	211480	
Matrix:	Water	Analyzed:	05/26/14	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,060	106	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	77-128

Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	257056	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	211480
MSS Lab ID:	257198-001	Sampled:	05/23/14
Matrix:	Water	Received:	05/23/14
Units:	ug/L	Analyzed:	05/27/14
Diln Fac:	1.000		

Type: MS Lab ID: QC741891

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	5,065	2,000	6,864	90	74-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	142 *	77-128

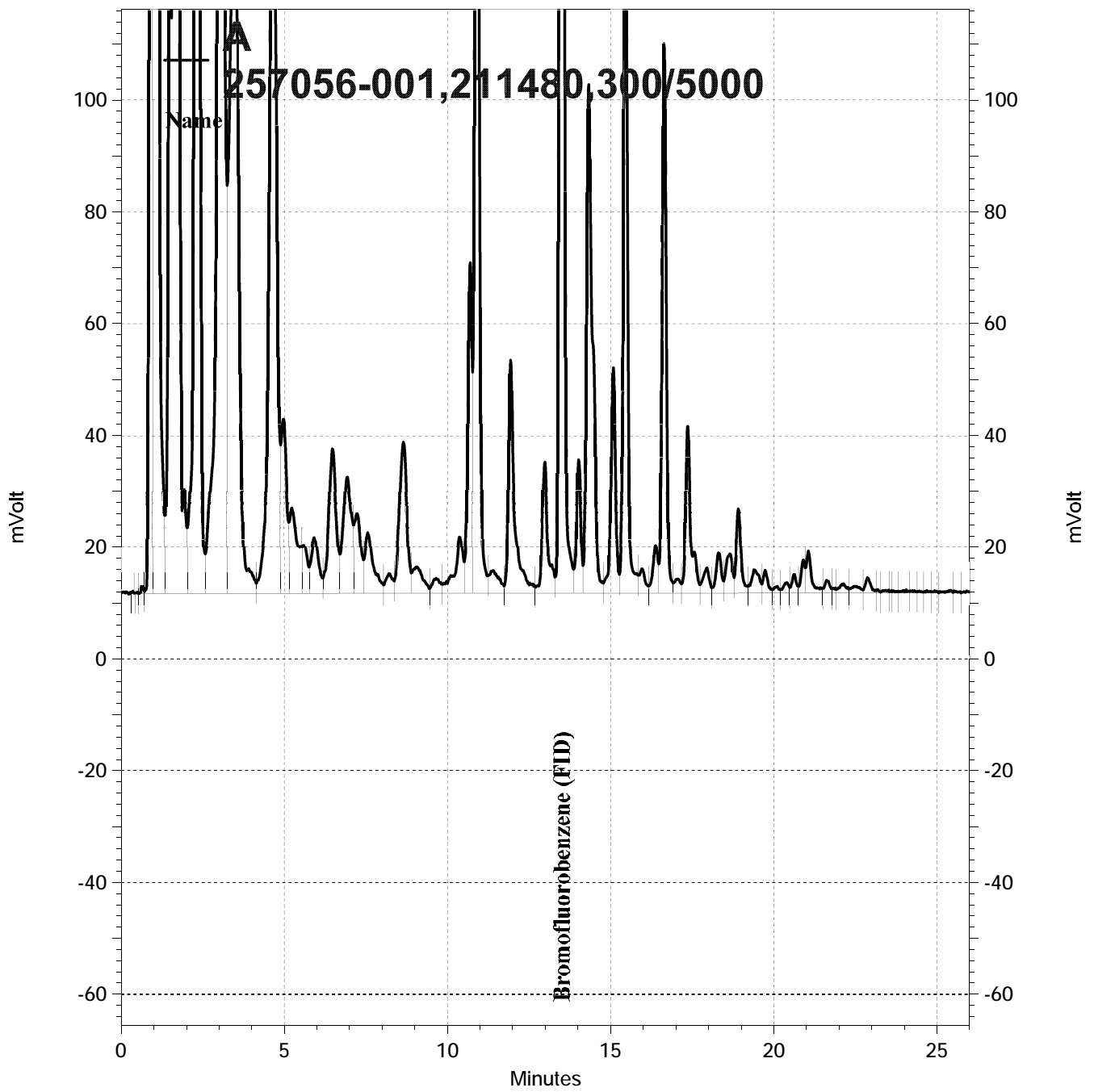
Type: MSD Lab ID: QC741892

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	6,784	86	74-120	1	27

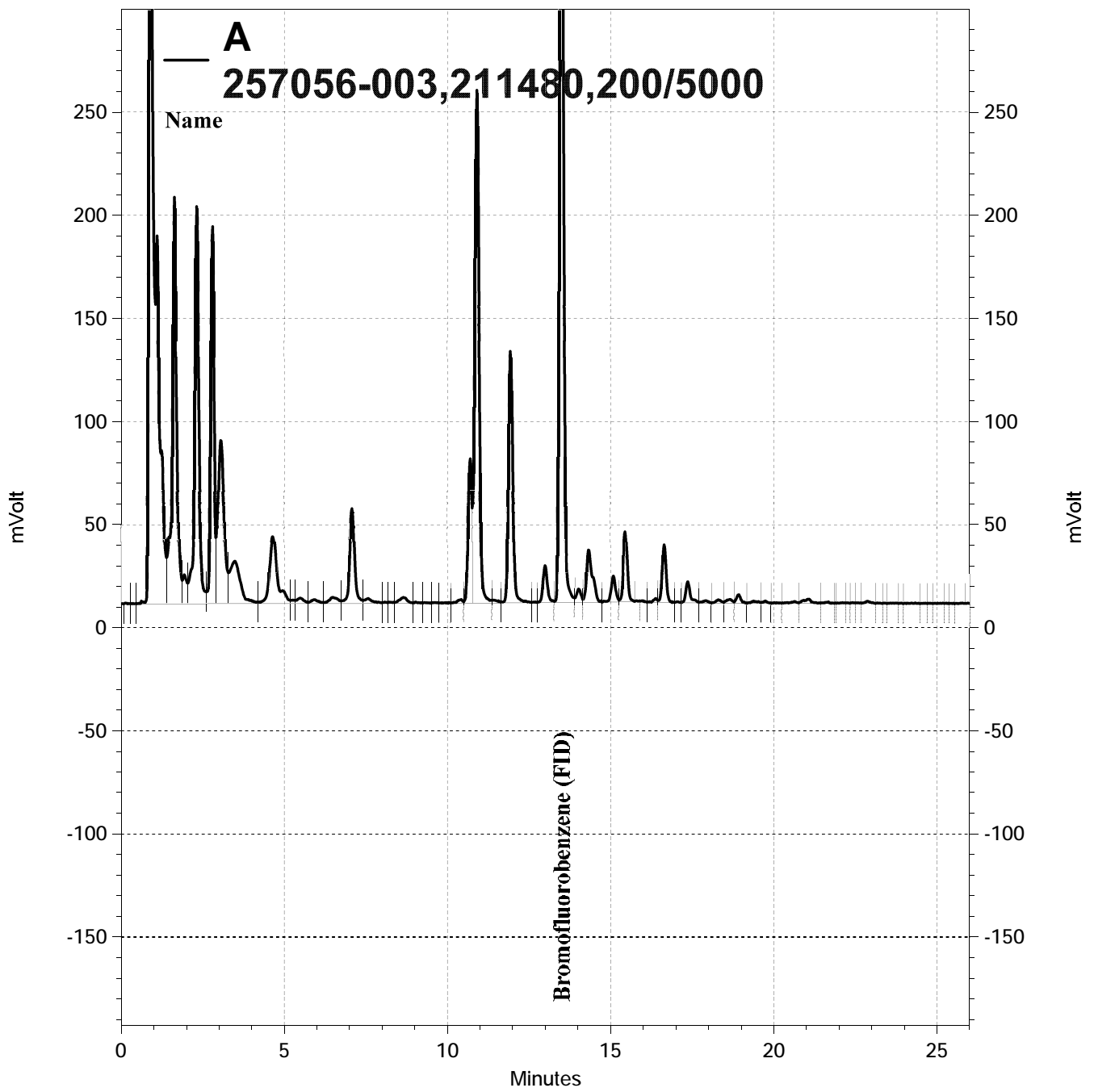
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	141 *	77-128

\*= Value outside of QC limits; see narrative

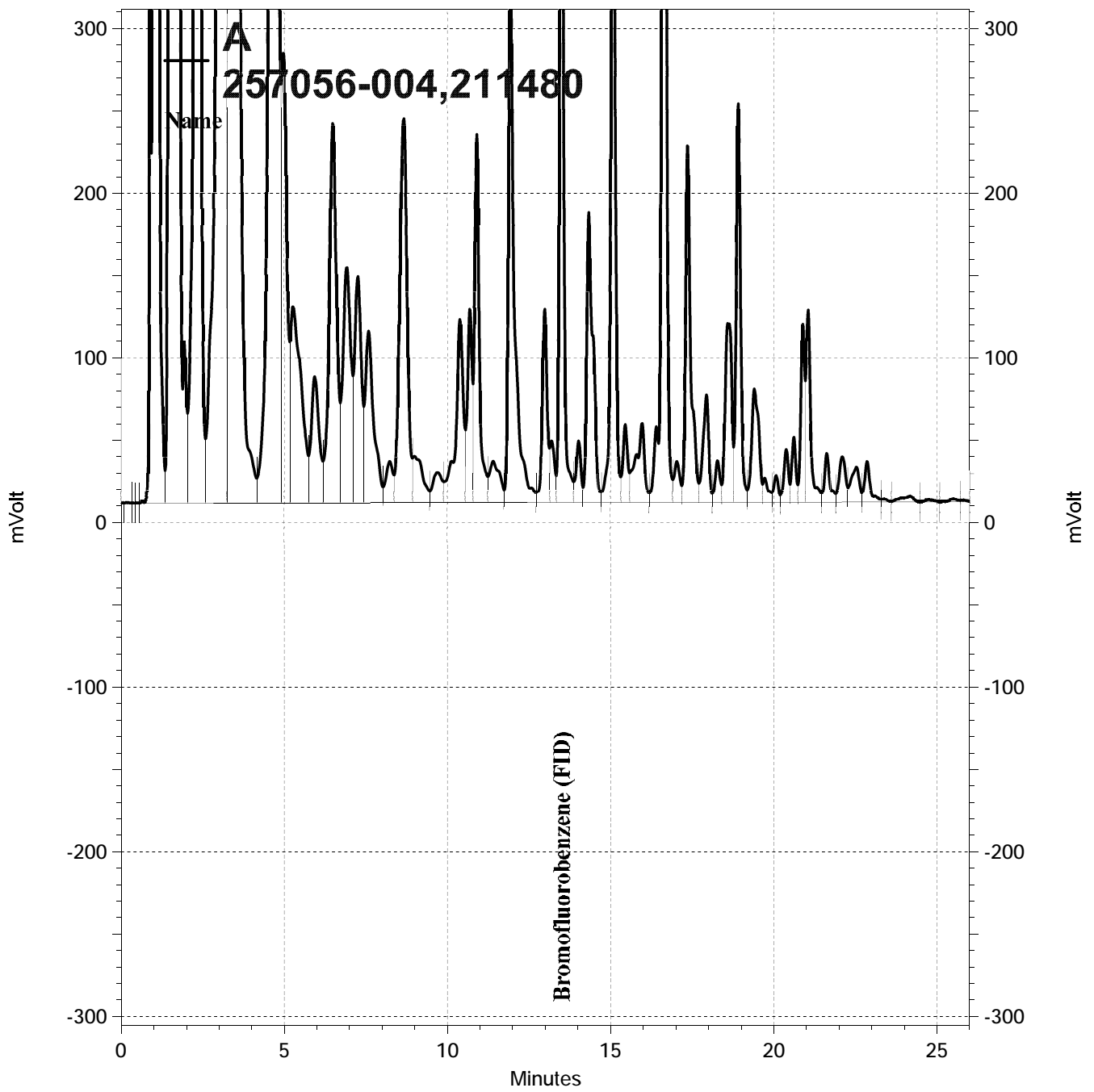
RPD= Relative Percent Difference



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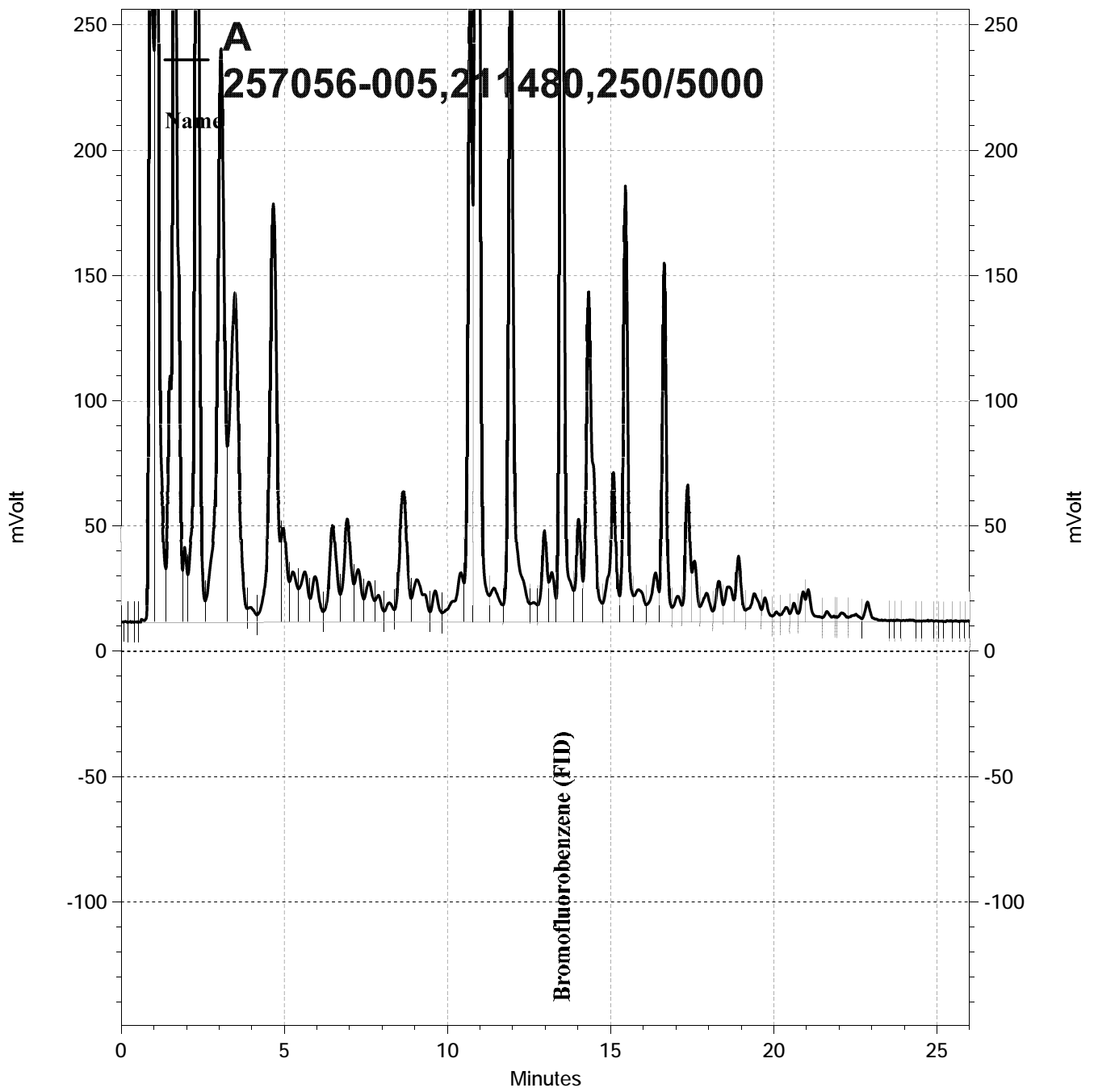


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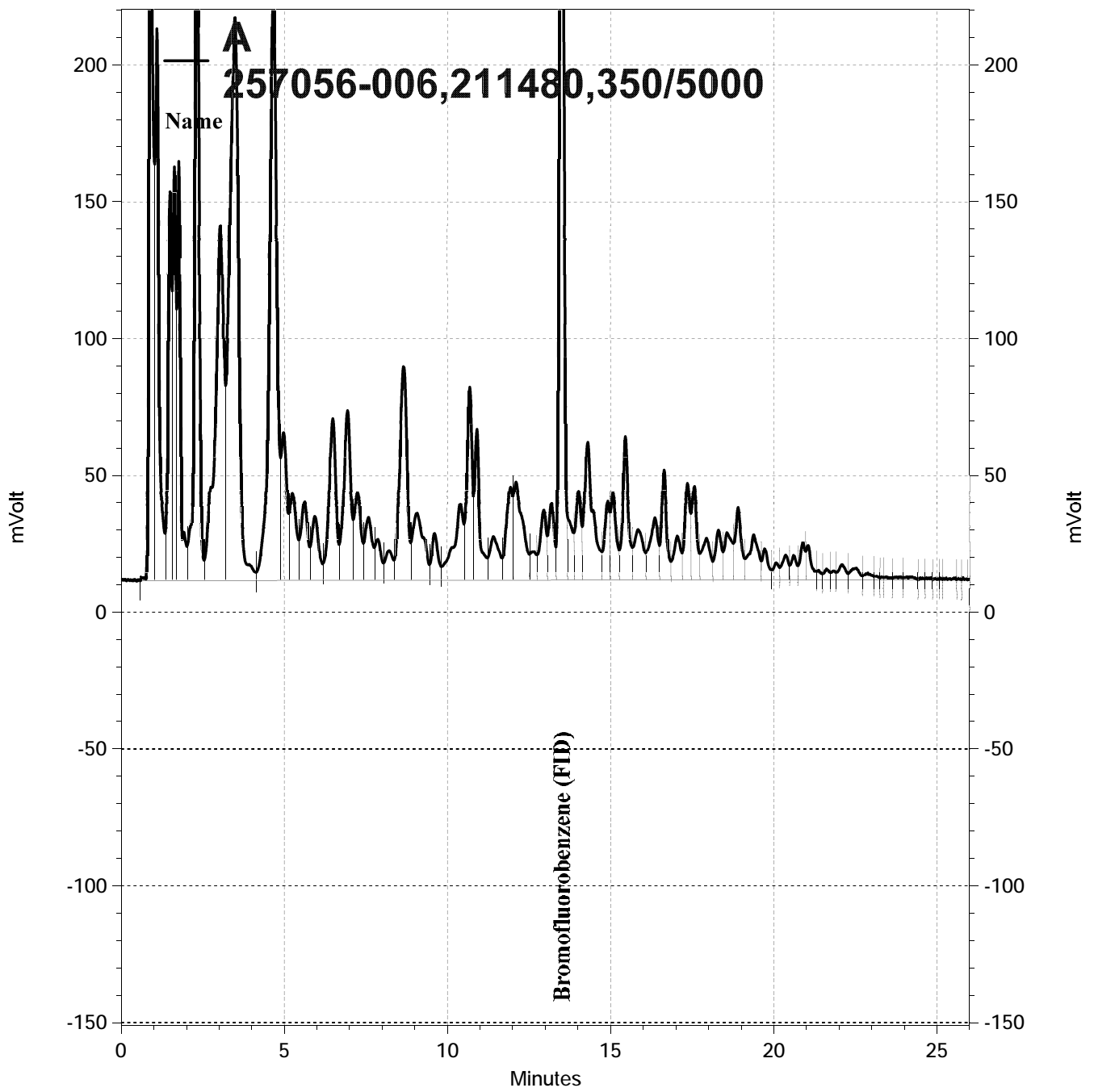


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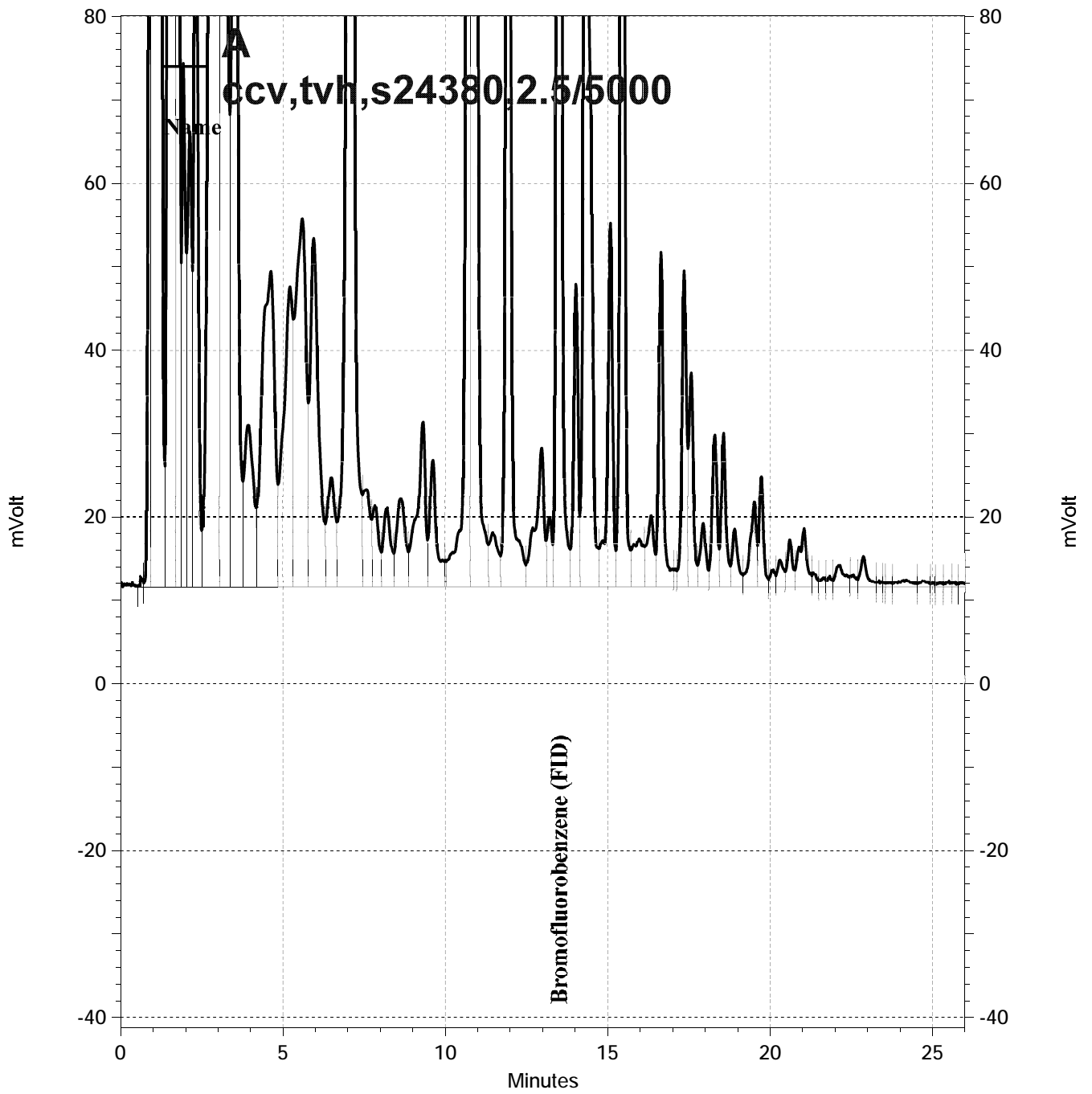




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Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 260991  
ANALYTICAL REPORT**

Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111

Project : 6-13-858-SA  
Location : 1501 Martin Luther King Jr. Way, Oakl  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
STEW-1	260991-001
STEW-2	260991-002
STEW-3	260991-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Will S Rice  
Project Manager  
will.rice@ctberk.com

Date: 09/25/2014

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE**

Laboratory number: 260991  
Client: Enviro Soil Tech Consultants  
Project: 6-13-858-SA  
Location: 1501 Martin Luther King Jr. Way, Oakl  
Request Date: 09/18/14  
Samples Received: 09/18/14

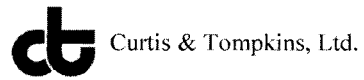
This data package contains sample and QC results for three water samples, requested for the above referenced project on 09/18/14. The samples were received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):**

No analytical problems were encountered.



COOLER RECEIPT CHECKLIST



Login # 260991 Date Received 9/18/14 Number of coolers 0  
Client Ennio Sorl TCU Project 6-13-858-SA

Date Opened 9/18 By (print) [Signature] (sign) [Signature]  
Date Logged in " " By (print) " " (sign) " "

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES ~~NO~~  
Shipping info \_\_\_\_\_

2A. Were custody seals present? ....  YES (circle) on cooler on samples  ~~NO~~  
How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? \_\_\_\_\_ ~~YES~~ NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ ~~YES~~ NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ ~~YES~~ NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

- Bubble Wrap  Foam blocks  Bags  None
- Cloth material  Cardboard  Styrofoam  Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used:  Wet  Blue/Gel  None Temp(°C) \_\_\_\_\_

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES ~~NO~~  
If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ ~~YES~~ NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES ~~NO~~

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ ~~YES~~ NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ ~~YES~~ NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ ~~YES~~ NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ ~~YES~~ NO N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO ~~N/A~~

17. Did you document your preservative check? \_\_\_\_\_ YES NO ~~N/A~~

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO ~~N/A~~

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO ~~N/A~~

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES ~~NO~~ ~~N/A~~

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES ~~NO~~

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

COMMENTS  
20) 2/3 VOAs for -002 have bubbles > 6mm  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Detections Summary for 260991

Results for any subcontracted analyses are not included in this summary.

Client : Enviro Soil Tech Consultants  
 Project : 6-13-858-SA  
 Location : 1501 Martin Luther King Jr. Way, Oakl

Client Sample ID : STEW-1 Laboratory Sample ID : 260991-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	11,000		1,700	190	ug/L	As Recd	33.33	EPA 8015B	EPA 5030B
Benzene	58	C	0.50	0.095	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Toluene	34		0.50	0.15	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Ethylbenzene	140		0.50	0.034	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
m,p-Xylenes	1,200		17	2.4	ug/L	As Recd	33.33	EPA 8021B	EPA 5030B
o-Xylene	160	C	17	3.4	ug/L	As Recd	33.33	EPA 8021B	EPA 5030B

Client Sample ID : STEW-2 Laboratory Sample ID : 260991-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
m,p-Xylenes	1.2	C	0.50	0.10	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B

Client Sample ID : STEW-3 Laboratory Sample ID : 260991-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	7,000		1,700	190	ug/L	As Recd	33.33	EPA 8015B	EPA 5030B
Benzene	28	C	0.50	0.095	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Toluene	56		0.50	0.15	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Ethylbenzene	300		0.50	0.077	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
m,p-Xylenes	1,000		17	3.4	ug/L	As Recd	33.33	EPA 8021B	EPA 5030B
o-Xylene	560		17	3.4	ug/L	As Recd	33.33	EPA 8021B	EPA 5030B

C = Presence confirmed, but RPD between columns exceeds 40%



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260991	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA		
Matrix:	Water	Sampled:	09/18/14
Units:	ug/L	Received:	09/18/14

Type:	BLANK	Batch#:	215576
Lab ID:	QC758313	Analyzed:	09/19/14
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	96	77-128	EPA 8015B
Bromofluorobenzene (PID)	103	75-132	EPA 8021B

Type:	BLANK	Batch#:	215608
Lab ID:	QC758444	Analyzed:	09/21/14
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	87	77-128	EPA 8015B
Bromofluorobenzene (PID)	95	75-132	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260991	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	215576
Units:	ug/L	Analyzed:	09/19/14
Diln Fac:	1.000		

Type: BS Lab ID: QC758311

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	8.877	89	74-132
Benzene	10.00	9.698	97	80-120
Toluene	10.00	9.829	98	80-120
Ethylbenzene	10.00	9.792	98	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	100	75-132

Type: BSD Lab ID: QC758312

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	10.00	9.778	98	74-132	10	36
Benzene	10.00	10.17	102	80-120	5	20
Toluene	10.00	10.22	102	80-120	4	20
Ethylbenzene	10.00	10.27	103	80-120	5	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	102	75-132

RPD= Relative Percent Difference

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260991	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	215608
Units:	ug/L	Analyzed:	09/21/14
Diln Fac:	1.000		

Type: BS Lab ID: QC758441

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	10.73	107	74-132
Benzene	10.00	10.12	101	80-120
Toluene	10.00	10.27	103	80-120
Ethylbenzene	10.00	10.46	105	80-120
m,p-Xylenes	10.00	10.11	101	80-120
o-Xylene	10.00	10.24	102	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	102	75-132

Type: BSD Lab ID: QC758442

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	10.00	11.24	112	74-132	5	36
Benzene	10.00	10.07	101	80-120	1	20
Toluene	10.00	10.13	101	80-120	1	20
Ethylbenzene	10.00	9.967	100	80-120	5	20
m,p-Xylenes	10.00	10.39	104	80-120	3	20
o-Xylene	10.00	10.11	101	80-120	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	100	75-132

RPD= Relative Percent Difference

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260991	Location:	1501 Martin Luther King Jr. Way, Oakl	
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B	
Project#:	6-13-858-SA	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC758443	Batch#:	215608	
Matrix:	Water	Analyzed:	09/21/14	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	969.5	97	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	77-128

Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260991	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	215608
MSS Lab ID:	261045-001	Sampled:	09/18/14
Matrix:	Water	Received:	09/19/14
Units:	ug/L	Analyzed:	09/22/14
Diln Fac:	1.000		

Type: MS Lab ID: QC758445

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	91.88	2,000	1,945	93	74-120

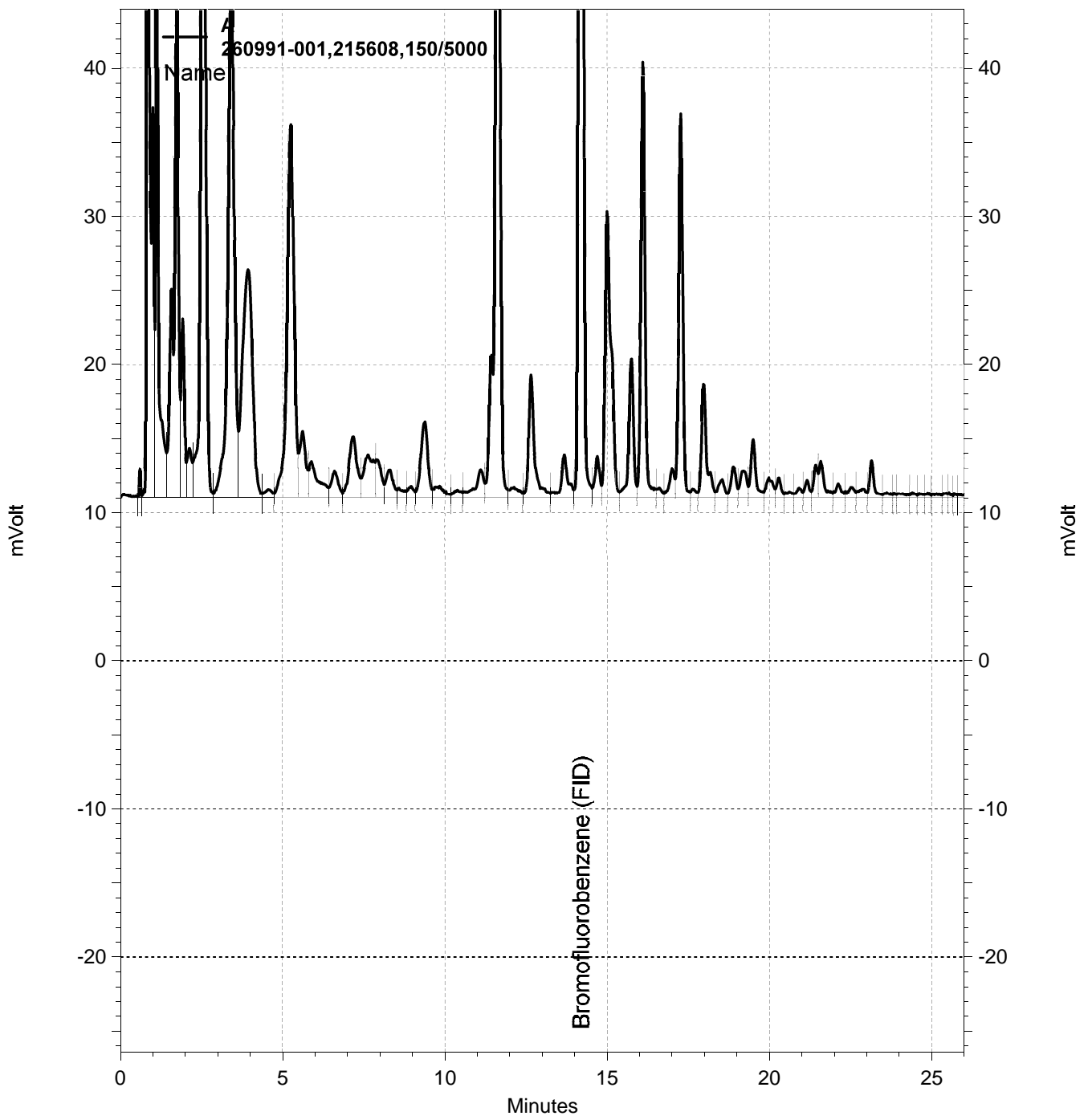
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	118	77-128

Type: MSD Lab ID: QC758446

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,948	93	74-120	0	27

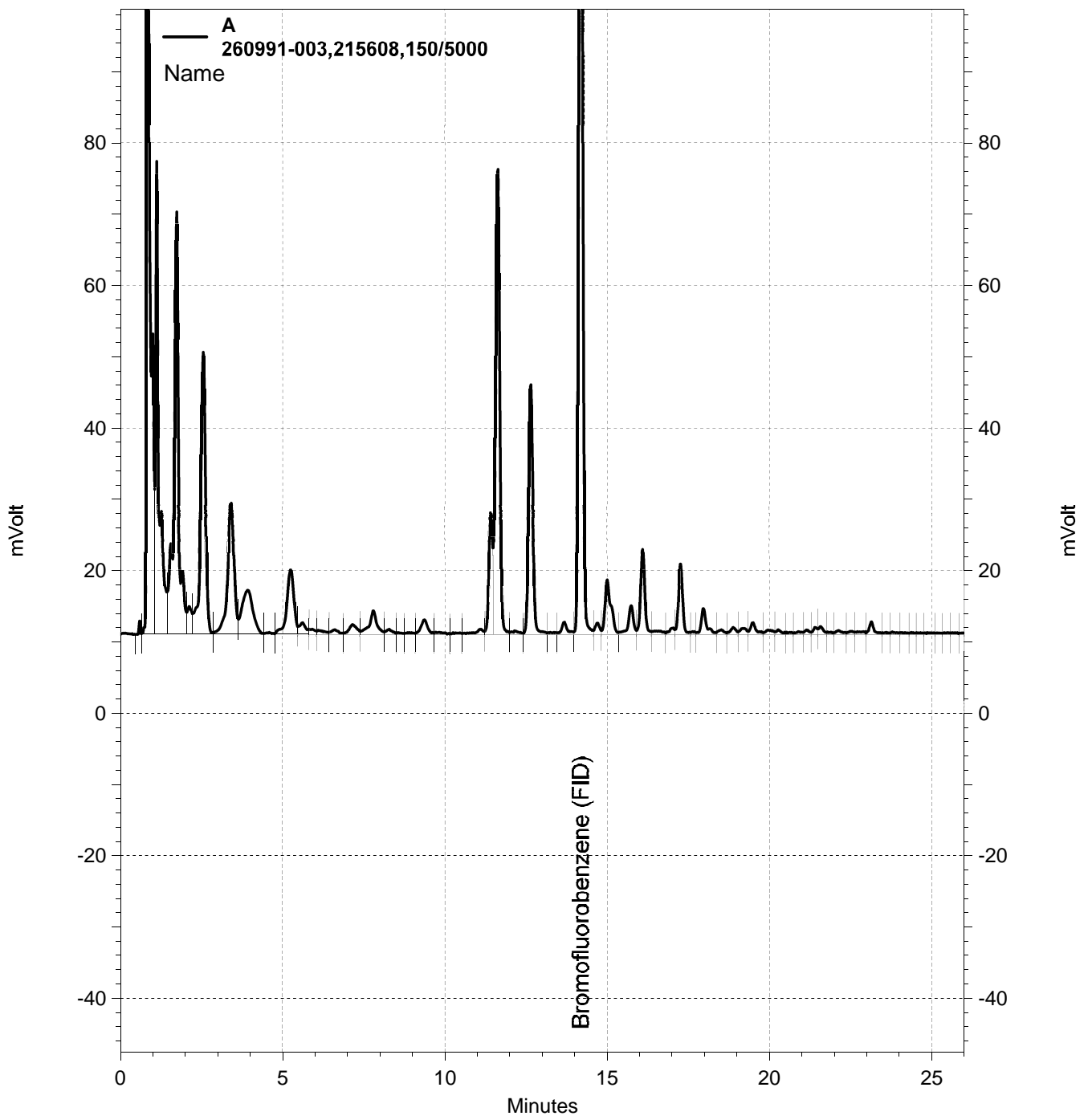
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	77-128

RPD= Relative Percent Difference

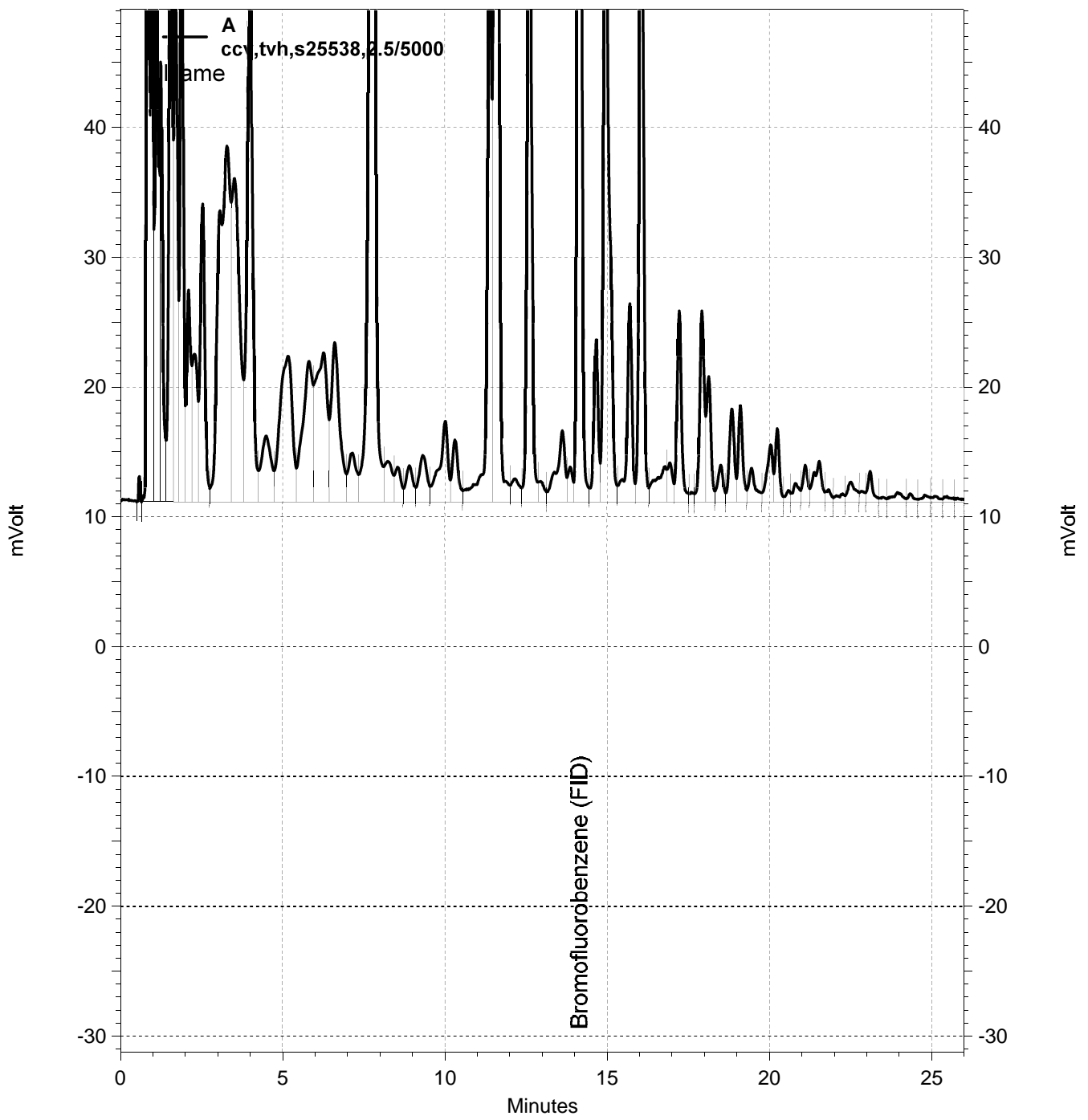


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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 265336  
ANALYTICAL REPORT**

Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111

Project : 6-13-858-SA  
Location : 1501 Martin Luther King Jr. Way, Oakl  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
STEW-1	265336-001
STEW-2	265336-002
STEW-3	265336-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Will S Rice  
Project Manager  
will.rice@ctberk.com

Date: 03/25/2015

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE**

Laboratory number: 265336  
Client: Enviro Soil Tech Consultants  
Project: 6-13-858-SA  
Location: 1501 Martin Luther King Jr. Way, Oakl  
Request Date: 03/17/15  
Samples Received: 03/17/15

This data package contains sample and QC results for three water samples, requested for the above referenced project on 03/17/15. The samples were received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):**

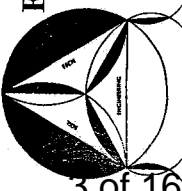
No analytical problems were encountered.

CHAIN OF CUSTODY RECORD

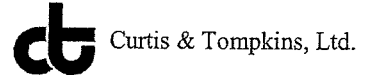
205336

PROJ. NO.	NAME	ANALYSES REQUESTED				REMARKS
		SOIL	WATER	AIR	LOCATION	
6-13-858-SA	1501 MLK Jr. Way, Oakland					
SAMPLERS: (Signature)						
NO.	DATE	TIME	SOIL	WATER	AIR	LOCATION
1				✓		STEW-1
2				✓		STEW-2
3				✓		STEW-3
CON-TAINER						
Vials						
1019/BICX + MTR						
RELINQUISHED						
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
<i>Pat Longley</i>	3/17 10:56 am	<i>Pat Longley</i>	3/17/15			
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Received by: (Signature)
<b>Remarks:</b> Please send lab report to Frank Hameddi						

**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 292-2116



**COOLER RECEIPT CHECKLIST**



Login # 205334 Date Received 3/17/15 Number of coolers 1  
 Client ESTC Project 6-13-858-SA

Date Opened 3/17 By (print) [Signature] (sign) [Signature]  
 Date Logged in 3/17 By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES  NO   
 Shipping info \_\_\_\_\_
- 2A. Were custody seals present? ....  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_
- 2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO ~~N/A~~
3. Were custody papers dry and intact when received? \_\_\_\_\_  YES NO
4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_  YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_  YES NO
6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_  
 Bubble Wrap  Foam blocks  Bags  None  
 Cloth material  Cardboard  Styrofoam  Paper towels
7. Temperature documentation: \* Notify PM if temperature exceeds 6°C  
 Type of ice used:  Wet  Blue/Gel  None Temp(°C) \_\_\_\_\_  
 Samples Received on ice & cold without a temperature blank; temp. taken with IR gun 3-17-15  
 Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES  NO   
 If YES, what time were they transferred to freezer? \_\_\_\_\_
9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_  YES NO
10. Are there any missing / extra samples? \_\_\_\_\_ YES  NO
11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_  YES NO
12. Are sample labels present, in good condition and complete? \_\_\_\_\_  YES NO
13. Do the sample labels agree with custody papers? \_\_\_\_\_  YES NO
14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_  YES NO
15. Are the samples appropriately preserved? \_\_\_\_\_  YES NO N/A
16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO  N/A
17. Did you document your preservative check? \_\_\_\_\_ YES NO  N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO  N/A
19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO  N/A
20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_  YES NO N/A
21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO   
 If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS**

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## Detections Summary for 265336

Results for any subcontracted analyses are not included in this summary.

Client : Enviro Soil Tech Consultants  
Project : 6-13-858-SA  
Location : 1501 Martin Luther King Jr. Way, Oakl

Client Sample ID : STEW-1                      Laboratory Sample ID :                      265336-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	410		50	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Benzene	2.4	C	0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Toluene	1.8		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Ethylbenzene	10		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
m,p-Xylenes	36		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
o-Xylene	4.8		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B

Client Sample ID : STEW-2                      Laboratory Sample ID :                      265336-002

No Detections

Client Sample ID : STEW-3                      Laboratory Sample ID :                      265336-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	840		50	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Benzene	3.5	C	0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Toluene	2.4	C	0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Ethylbenzene	13		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
m,p-Xylenes	50		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
o-Xylene	6.1		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B

C = Presence confirmed, but RPD between columns exceeds 40%





**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	265336	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA		
Matrix:	Water	Sampled:	03/17/15
Units:	ug/L	Received:	03/17/15
Diln Fac:	1.000		

Type: BLANK Batch#: 221535  
 Lab ID: QC781505 Analyzed: 03/20/15

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	110	80-132	EPA 8015B
Bromofluorobenzene (PID)	96	71-141	EPA 8021B

Type: BLANK Analyzed: 03/24/15  
 Lab ID: QC781799 Analysis: EPA 8015B  
 Batch#: 221608

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	Result	%REC	Limits
Bromofluorobenzene (FID)		98	80-132
Bromofluorobenzene (PID)	NA		

Type: BLANK Analyzed: 03/24/15  
 Lab ID: QC781815 Analysis: EPA 8021B  
 Batch#: 221611

Analyte	Result	RL
MTBE	ND	2.0
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	Result	%REC	Limits
Bromofluorobenzene (FID)	NA		
Bromofluorobenzene (PID)		78	71-141

C= Presence confirmed, but RPD between columns exceeds 40%  
 NA= Not Analyzed  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	265336	Location:	1501 Martin Luther King Jr. Way, Oakl	
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B	
Project#:	6-13-858-SA	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC781502	Batch#:	221535	
Matrix:	Water	Analyzed:	03/20/15	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	3,000	2,566	86	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	80-132

Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	265336	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	221535
Units:	ug/L	Analyzed:	03/20/15
Diln Fac:	1.000		

Type: BS Lab ID: QC781503

Analyte	Spiked	Result	%REC	Limits
Benzene	30.00	30.04	100	80-120
Toluene	30.00	30.34	101	80-120
Ethylbenzene	30.00	31.24	104	80-120
m,p-Xylenes	30.00	31.69	106	80-120
o-Xylene	30.00	31.69	106	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	100	71-141

Type: BSD Lab ID: QC781504

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	30.00	29.94	100	80-120	0	20
Toluene	30.00	29.81	99	80-120	2	20
Ethylbenzene	30.00	31.32	104	80-120	0	20
m,p-Xylenes	30.00	30.94	103	80-120	2	20
o-Xylene	30.00	31.37	105	80-120	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	101	71-141

RPD= Relative Percent Difference

Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	265336	Location:	1501 Martin Luther King Jr. Way, Oakl		
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B		
Project#:	6-13-858-SA	Analysis:	EPA 8015B		
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000		
MSS Lab ID:	265397-001	Batch#:	221535		
Matrix:	Water	Sampled:	03/18/15		
Units:	ug/L	Received:	03/18/15		

Type: MS Analyzed: 03/20/15  
 Lab ID: QC781506

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	37.24	2,000	1,610	79	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	80-132

Type: MSD Analyzed: 03/21/15  
 Lab ID: QC781507

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,845	90	76-120	14	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	116	80-132

RPD= Relative Percent Difference

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	265336	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	221608
Units:	ug/L	Analyzed:	03/24/15
Diln Fac:	1.000		

Type: BS Lab ID: QC781800

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	944.5	94	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	80-132

Type: BSD Lab ID: QC781801

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,037	104	80-120	9	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	80-132

RPD= Relative Percent Difference

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	265336	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	221611
Units:	ug/L	Analyzed:	03/24/15
Diln Fac:	1.000		

Type: BS Lab ID: QC781813

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	9.052	91	74-137
Toluene	10.00	9.064	91	80-120
Ethylbenzene	10.00	9.597	96	80-120
m,p-Xylenes	10.00	9.437	94	80-120
o-Xylene	10.00	9.452	95	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	81	71-141

Type: BSD Lab ID: QC781814

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	10.00	10.08	101	74-137	11	37
Toluene	10.00	10.01	100	80-120	10	20
Ethylbenzene	10.00	9.687	97	80-120	1	20
m,p-Xylenes	10.00	9.211	92	80-120	2	20
o-Xylene	10.00	9.313	93	80-120	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	85	71-141

RPD= Relative Percent Difference

Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	265336	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	221608
MSS Lab ID:	265387-003	Sampled:	03/18/15
Matrix:	Water	Received:	03/18/15
Units:	ug/L	Analyzed:	03/24/15
Diln Fac:	1.000		

Type: MS Lab ID: QC781833

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	21.54	2,000	1,601	79	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	80-132

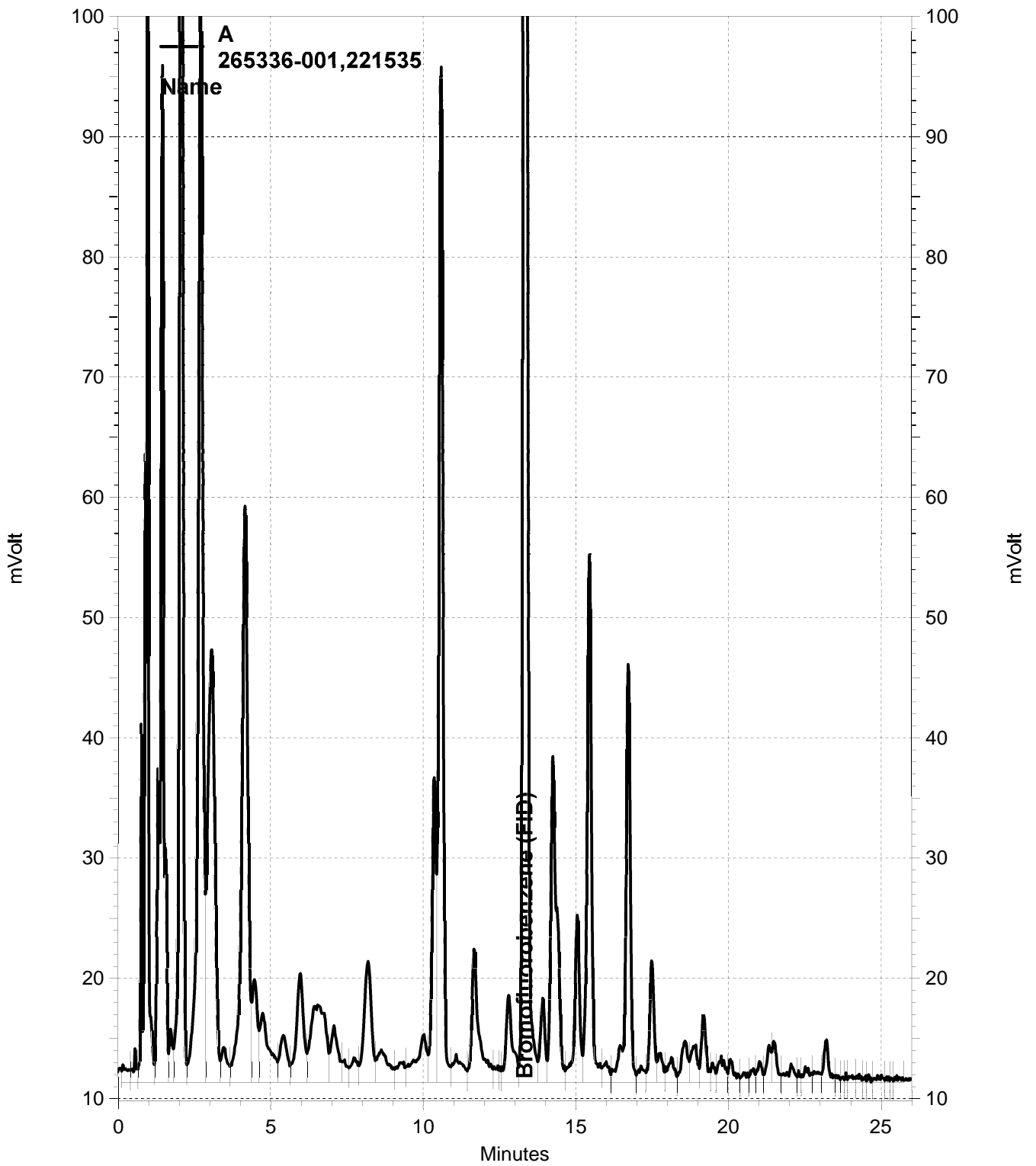
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Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,814	90	76-120	12	20

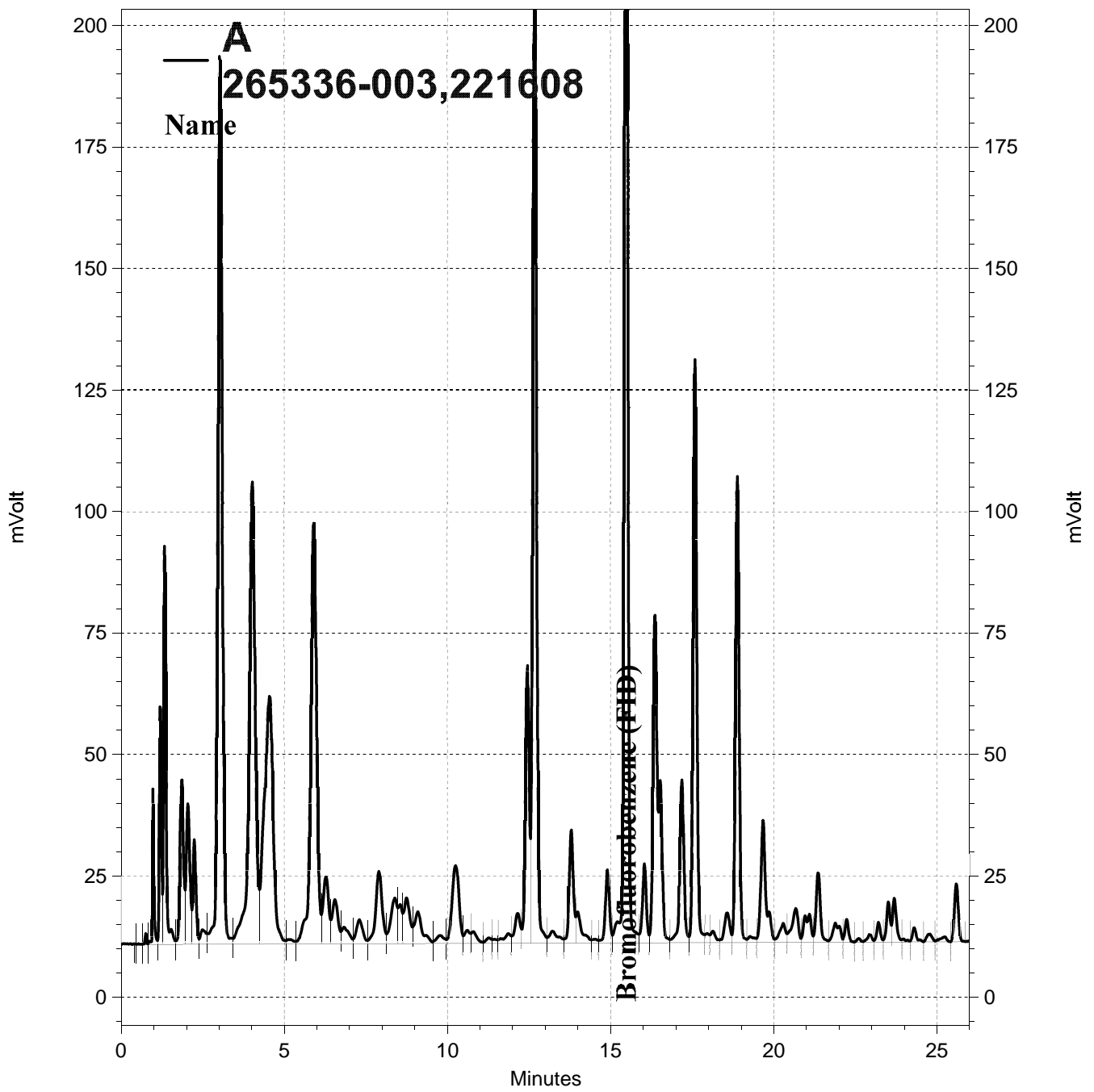
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	80-132

RPD= Relative Percent Difference

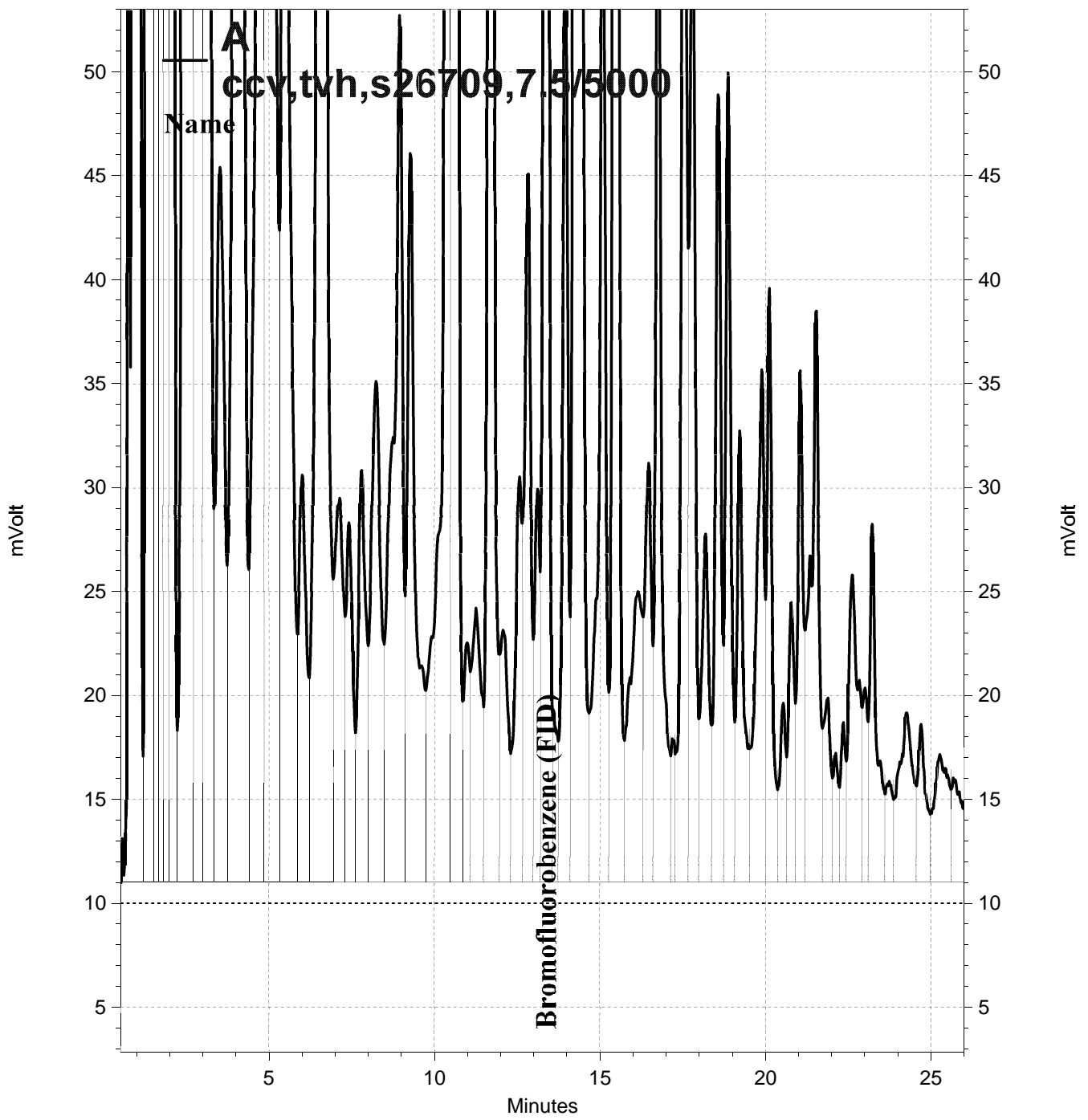




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Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 266902  
ANALYTICAL REPORT**

Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111

Project : 6-13-858-SA  
Location : 1501 Martin Luther King Jr. Way, Oakl  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
STEW-1	266902-001
STEW-2	266902-002
STEW-3	266902-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Mikelle Chong  
Project Manager  
mikelle.chong@ctberk.com

Date: 05/27/2015

CA ELAP# 2896, NELAP# 4044-001

### CASE NARRATIVE

Laboratory number: 266902  
Client: Enviro Soil Tech Consultants  
Project: 6-13-858-SA  
Location: 1501 Martin Luther King Jr. Way, Oakl  
Request Date: 05/19/15  
Samples Received: 05/19/15

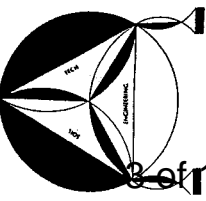
This data package contains sample and QC results for three water samples, requested for the above referenced project on 05/19/15. The samples were received on ice and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):**

No analytical problems were encountered.

266907  
CHAIN OF CUSTODY RECORD

PROJ. NO. 6-13-858-SA					NAME 1501 MLK Jr. Way, Oakland					ANALYSES REQUESTED	REMARKS
SAMPLERS: (Signature) <i>[Signature]</i>											
NO.	DATE	TIME	SOIL	WATER	AIR	SAMPLE ID	CON-TAINER				
1	5/18/15	16:01		<input checked="" type="checkbox"/>		STEW-1	Mials	TFHQ+BTEX	MTRB		EDF # T10000006271
2	16:33			<input checked="" type="checkbox"/>		STEW-2	b				
3	17:03			<input checked="" type="checkbox"/>		STEW-3	b				
Relinquished by: (Signature) <i>[Signature]</i>							Date/Time	Received by: (Signature) <i>[Signature]</i>	Date/Time	Received by: (Signature) <i>[Signature]</i>	
							5/19/15	11:18		5/19/15	17:00
Relinquished by: (Signature) <i>[Signature]</i>							Date/Time	Received by: (Signature) <i>[Signature]</i>	Date/Time	Received by: (Signature) <i>[Signature]</i>	
Relinquished by: (Signature) <i>[Signature]</i>							Date/Time	Remarks:			
								Please send lab report to Frank Hamedi			



**ENVIRO SOIL TECH CONSULTANTS**  
 Environmental & Geotechnical Consultants  
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
 Tel: (408) 297-1500 Fax: (408) 694-3347

MTRB - old R

**COOLER RECEIPT CHECKLIST**



Login # 266902 Date Received 5/19/15 Number of coolers 1  
 Client Enviro Soil Tech Consultants Project 1501 MLK Jr. Way Oakland.  
 Date Opened 5/19 By (print) SL (sign) [Signature]  
 Date Logged in 5/19 By (print) BL (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES  NO
- Shipping info \_\_\_\_\_
- 2A. Were custody seals present? ....  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_
- 2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO  N/A
3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ YES NO
6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_  
 Bubble Wrap  Foam blocks  Bags  None  
 Cloth material  Cardboard  Styrofoam  Paper towels
7. Temperature documentation: \* Notify PM if temperature exceeds 6°C  
 Type of ice used:  Wet  Blue/Gel  None Temp(°C) 0.8°  
 Samples Received on ice & cold without a temperature blank; temp. taken with IR gun  
 Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES  NO  
 If YES, what time were they transferred to freezer? \_\_\_\_\_
9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO
10. Are there any missing / extra samples? \_\_\_\_\_ YES  NO
11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO
12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES  NO
13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO
14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO
15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO N/A
16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO  N/A
17. Did you document your preservative check? \_\_\_\_\_ YES NO  N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO  N/A
19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO  N/A
20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO N/A
21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO  
 If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS**

12.) VOAs for Sample 1 are missing labels.  
-001: sampler has no labels, matched by process of elimination.



## Detections Summary for 266902

Results for any subcontracted analyses are not included in this summary.

Client : Enviro Soil Tech Consultants  
 Project : 6-13-858-SA  
 Location : 1501 Martin Luther King Jr. Way, Oakl

Client Sample ID : STEW-1                      Laboratory Sample ID :                      266902-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	840		50	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Toluene	0.87	C	0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Ethylbenzene	14		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
m,p-Xylenes	33		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
o-Xylene	5.4	C	0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B

Client Sample ID : STEW-2                      Laboratory Sample ID :                      266902-002

No Detections

Client Sample ID : STEW-3                      Laboratory Sample ID :                      266902-003

No Detections

C = Presence confirmed, but RPD between columns exceeds 40%

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	266902	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA		
Matrix:	Water	Sampled:	05/18/15
Units:	ug/L	Received:	05/19/15
Diln Fac:	1.000	Analyzed:	05/20/15
Batch#:	223374		

Field ID: STEW-1                      Lab ID: 266902-001  
 Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	840	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	0.87 C	0.50	EPA 8021B
Ethylbenzene	14	0.50	EPA 8021B
m,p-Xylenes	33	0.50	EPA 8021B
o-Xylene	5.4 C	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	118	80-132	EPA 8015B
Bromofluorobenzene (PID)	99	71-141	EPA 8021B

Field ID: STEW-2                      Lab ID: 266902-002  
 Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	114	80-132	EPA 8015B
Bromofluorobenzene (PID)	98	71-141	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	266902	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA		
Matrix:	Water	Sampled:	05/18/15
Units:	ug/L	Received:	05/19/15
Diln Fac:	1.000	Analyzed:	05/20/15
Batch#:	223374		

Field ID: STEW-3                                      Lab ID: 266902-003  
 Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	110	80-132	EPA 8015B
Bromofluorobenzene (PID)	95	71-141	EPA 8021B

Type: BLANK                                              Lab ID: QC788777

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	108	80-132	EPA 8015B
Bromofluorobenzene (PID)	93	71-141	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	266902	Location:	1501 Martin Luther King Jr. Way, Oakl	
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B	
Project#:	6-13-858-SA	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC788778	Batch#:	223374	
Matrix:	Water	Analyzed:	05/20/15	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,026	103	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	80-132

Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	266902	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8015B
Field ID:	STEW-1	Batch#:	223374
MSS Lab ID:	266902-001	Sampled:	05/18/15
Matrix:	Water	Received:	05/19/15
Units:	ug/L	Analyzed:	05/20/15
Diln Fac:	1.000		

Type: MS Lab ID: QC788779

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	844.3	2,000	2,684	92	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	120	80-132

Type: MSD Lab ID: QC788780

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,530	84	76-120	6	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	112	80-132

RPD= Relative Percent Difference

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	266902	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	223374
Units:	ug/L	Analyzed:	05/20/15
Diln Fac:	1.000		

Type: BS Lab ID: QC788781

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	10.06	101	74-137
Benzene	10.00	9.101	91	80-120
Toluene	10.00	8.577	86	80-120
Ethylbenzene	10.00	8.764	88	80-120
m,p-Xylenes	10.00	8.927	89	80-120
o-Xylene	10.00	8.808	88	80-120

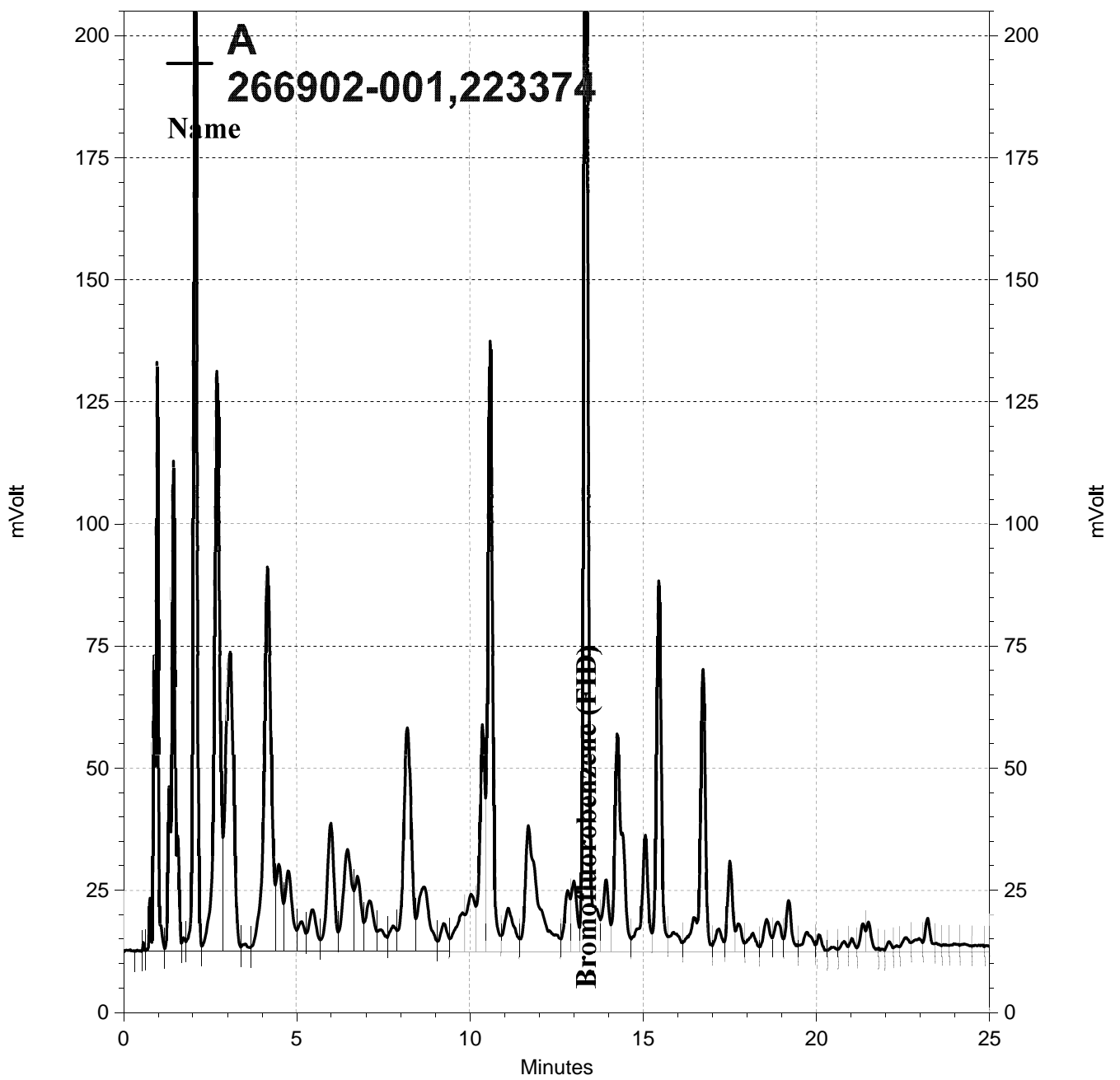
Surrogate	%REC	Limits
Bromofluorobenzene (PID)	88	71-141

Type: BSD Lab ID: QC788782

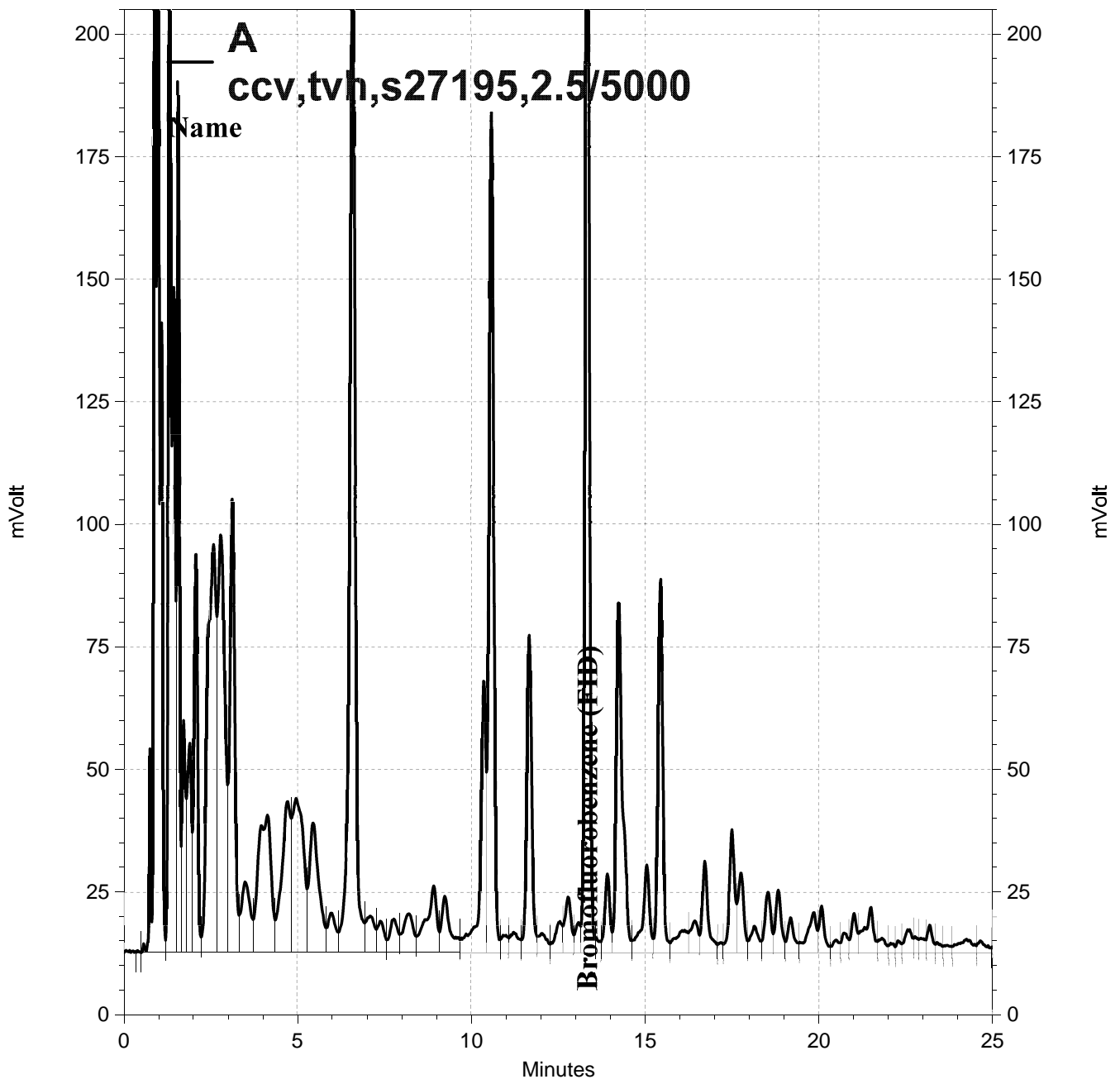
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	20.09	100	74-137	0	37
Benzene	20.00	19.82	99	80-120	9	20
Toluene	20.00	18.94	95	80-120	10	20
Ethylbenzene	20.00	19.34	97	80-120	10	20
m,p-Xylenes	20.00	19.42	97	80-120	8	20
o-Xylene	20.00	19.12	96	80-120	8	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	95	71-141

RPD= Relative Percent Difference



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\140-012, A



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\140002, A





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Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 267871  
ANALYTICAL REPORT**


Enviro Soil Tech Consultants  
131 Tully Road  
San Jose, CA 95111

Project : 6-13-858-SA  
Location : 1501 Martin Luther King Jr. Way, Oakl  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
STEW-1	267871-001
STEW-2	267871-002
STEW-3	267871-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

  
Mikelle Chong  
Project Manager  
mikelle.chong@ctberk.com

Date: 07/08/2015

CA ELAP# 2896, NELAP# 4044-001

### CASE NARRATIVE

Laboratory number: 267871  
Client: Enviro Soil Tech Consultants  
Project: 6-13-858-SA  
Location: 1501 Martin Luther King Jr. Way, Oakl  
Request Date: 06/30/15  
Samples Received: 06/30/15

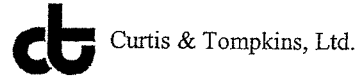
This data package contains sample and QC results for three water samples, requested for the above referenced project on 06/30/15. The samples were received on ice and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):**

No analytical problems were encountered.



**COOLER RECEIPT CHECKLIST**



Login # 267871 Date Received 6/30/15 Number of coolers \_\_\_\_\_  
 Client Enviro Soil Tech Consulting Project 1501 MLK Jr. Way, Oakland

Date Opened 6/30 By (print) SL (sign) [Signature]  
 Date Logged in 6/30 By (print) BL (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES  NO
- Shipping info \_\_\_\_\_
- 2A. Were custody seals present? ....  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_
- 2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO  N/A
3. Were custody papers dry and intact when received? \_\_\_\_\_  YES NO
4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_  YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_  YES NO
6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_  
 Bubble Wrap  Foam blocks  Bags  None  
 Cloth material  Cardboard  Styrofoam  Paper towels
7. Temperature documentation: \* Notify PM if temperature exceeds 6°C  
 Type of ice used:  Wet  Blue/Gel  None Temp(°C) 5.5°  
 Samples Received on ice & cold without a temperature blank; temp. taken with IR gun  
 Samples received on ice directly from the field. Cooling process had begun
8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES  NO  
 If YES, what time were they transferred to freezer? \_\_\_\_\_
9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_  YES NO
10. Are there any missing / extra samples? \_\_\_\_\_  YES NO
11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_  YES NO
12. Are sample labels present, in good condition and complete? \_\_\_\_\_  YES NO
13. Do the sample labels agree with custody papers? \_\_\_\_\_  YES NO
14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_  YES NO
15. Are the samples appropriately preserved? \_\_\_\_\_  YES NO N/A
16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO  N/A
17. Did you document your preservative check? \_\_\_\_\_ YES NO  N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO  N/A
19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO  N/A
20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES  NO N/A
21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO  
 If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS**

10.) 1 VOA missing from sample 1 set of 6.  
 20.) Bubbles > 6mm present in 1/5 VOA for Sample 1.  
 + 1/6 VOA for Sample 2. BL

## Detections Summary for 267871

Results for any subcontracted analyses are not included in this summary.

Client : Enviro Soil Tech Consultants  
 Project : 6-13-858-SA  
 Location : 1501 Martin Luther King Jr. Way, Oakl

Client Sample ID : STEW-1                      Laboratory Sample ID :                      267871-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Ethylbenzene	0.88		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
m,p-Xylenes	2.2		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
o-Xylene	0.96		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B

Client Sample ID : STEW-2                      Laboratory Sample ID :                      267871-002

No Detections

Client Sample ID : STEW-3                      Laboratory Sample ID :                      267871-003

No Detections

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	267871	Location:	1501 Martin Luther King Jr. Way, Oakl	
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B	
Project#:	6-13-858-SA			
Matrix:	Water	Sampled:	06/29/15	
Units:	ug/L	Received:	06/30/15	
Diln Fac:	1.000	Analyzed:	07/01/15	
Batch#:	224681			

Field ID:                STEW-1                                        Lab ID:                                        267871-001  
 Type:                      SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	0.88	0.50	EPA 8021B
m,p-Xylenes	2.2	0.50	EPA 8021B
o-Xylene	0.96	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	110	80-132	EPA 8015B
Bromofluorobenzene (PID)	104	71-141	EPA 8021B

Field ID:                STEW-2                                        Lab ID:                                        267871-002  
 Type:                      SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	121	80-132	EPA 8015B
Bromofluorobenzene (PID)	110	71-141	EPA 8021B

ND= Not Detected  
 RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	267871	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA		
Matrix:	Water	Sampled:	06/29/15
Units:	ug/L	Received:	06/30/15
Diln Fac:	1.000	Analyzed:	07/01/15
Batch#:	224681		

Field ID: STEW-3                                              Lab ID: 267871-003  
 Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	112	80-132	EPA 8015B
Bromofluorobenzene (PID)	105	71-141	EPA 8021B

Type: BLANK                                                              Lab ID: QC793984

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	114	80-132	EPA 8015B
Bromofluorobenzene (PID)	104	71-141	EPA 8021B

ND= Not Detected  
 RL= Reporting Limit



## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	267871	Location:	1501 Martin Luther King Jr. Way, Oakl	
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B	
Project#:	6-13-858-SA	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC793983	Batch#:	224681	
Matrix:	Water	Analyzed:	07/01/15	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	993.3	99	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	118	80-132

Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	267871	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8015B
Field ID:	STEW-2	Batch#:	224681
MSS Lab ID:	267871-002	Sampled:	06/29/15
Matrix:	Water	Received:	06/30/15
Units:	ug/L	Analyzed:	07/01/15
Diln Fac:	1.000		

Type: MS Lab ID: QC793985

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	26.38	2,000	1,834	90	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	116	80-132

Type: MSD Lab ID: QC793986

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,896	93	76-120	3	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	80-132

RPD= Relative Percent Difference

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	267871	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	6-13-858-SA	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	224681
Units:	ug/L	Analyzed:	07/01/15
Diln Fac:	1.000		

Type: BS Lab ID: QC793987

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	8.946	89	74-137
Benzene	10.00	9.810	98	80-120
Toluene	10.00	10.43	104	80-120
Ethylbenzene	10.00	11.06	111	80-120
m,p-Xylenes	10.00	11.37	114	80-120
o-Xylene	10.00	11.10	111	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	103	71-141

Type: BSD Lab ID: QC793988

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	10.00	9.213	92	74-137	3	37
Benzene	10.00	9.916	99	80-120	1	20
Toluene	10.00	10.49	105	80-120	1	20
Ethylbenzene	10.00	11.27	113	80-120	2	20
m,p-Xylenes	10.00	11.24	112	80-120	1	20
o-Xylene	10.00	11.10	111	80-120	0	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	103	71-141

RPD= Relative Percent Difference



**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 258774  
ANALYTICAL REPORT**

Enviro Soil Tech Consultants 131 Tully Road San Jose, CA 95111	Project : 6-13-858-SA Location : 1501 Martin Luther King Jr. Way, Oakl Level : II
----------------------------------------------------------------------	-----------------------------------------------------------------------------------------

Sample ID  
EFFLUENT

Lab ID  
258774-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Will S Rice  
Project Manager  
will.rice@ctberk.com

Date: 07/16/2014

CA ELAP# 2896, NELAP# 4044-001

## CASE NARRATIVE

Laboratory number: 258774  
Client: Enviro Soil Tech Consultants  
Project: 6-13-858-SA  
Location: 1501 Martin Luther King Jr. Way, Oakl  
Request Date: 07/08/14  
Samples Received: 07/08/14

This data package contains sample and QC results for one water sample, requested for the above referenced project on 07/08/14. The sample was received cold and intact.

### Volatile Organics by GC/MS (EPA 624):

High recoveries were observed for 1,1-dichloroethene in the MS/MSD for batch 213059; the parent sample was not a project sample, the BS/BSD were within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample. No other analytical problems were encountered.

### Metals (EPA 200.7 and EPA 245.1):

No analytical problems were encountered.

### Total Cyanide (SM4500CN-E):

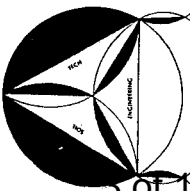
No analytical problems were encountered.

258774

CHAIN OF CUSTODY RECORD

PROJ. NO.	NAME		CON-TAINER	ANALYSES REQUESTED		REMARKS	
	6-13-858-SA	1501 Martin Luther King, Jr. Way, Oakland		VOCs (EPA 624)	Total Metals (EPA 300.7)		
SAMPLERS: (Signature)							
NO.	DATE	TIME	SOIL	WATER	AIR	SAMPLE ID	
	7/7/14	10:30		✓		Effluent	✓
							✓
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time	
<i>[Signature]</i>		7/8/14		<i>[Signature]</i>		7/8/14	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time	
<i>[Signature]</i>				<i>[Signature]</i>			
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time	
<i>[Signature]</i>				<i>[Signature]</i>			

Remarks: Per EBMUD permit, please analyze the sample by EPA method as stated. The metals are As, Cd, Cr, Cu, Cyanide, Fe, Pb, Hg, Ni, Ag, Zn. BTEX benchmark values of 5 ug/L for each component. Metals in STD. Please send lab report to Frank Hamel.



**ENVIRO SOIL TECH CONSULTANTS**  
Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111  
Tel: (408) 297-1500 Fax: (408) 694-3347

COOLER RECEIPT CHECKLIST



Login # 258774 Date Received 07/08/14 Number of coolers 1
Client ENVIRO Soil Tech Project 6-13-858-SA

Date Opened 07/08/14 By (print) MC (sign) [Signature]
Date Logged in [Arrow] By (print) [Arrow] (sign) [Arrow]

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? ... [ ] YES (circle) on cooler on samples [X] NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO (N/A)

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- [X] Bubble Wrap [ ] Foam blocks [ ] Bags [ ] None
[ ] Cloth material [ ] Cardboard [ ] Styrofoam [ ] Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: [X] Wet [X] Blue/Gel [ ] None Temp(°C) 5.7

[X] Samples received on ice & cold without a temperature blank; temp taken with IR gun

[ ] Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES (NO)

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)

19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)

20. Are bubbles > 6mm absent in VOA samples? YES (NO) N/A

21. Was the client contacted concerning this sample delivery? YES (NO)

If YES, Who was called? By Date:

COMMENTS
#20) -001: 1 of 4 VOAs w/ bubble > 6mm



Curtis & Tompkins Sample Preservation for 258774

Sample	pH: <2	>9	>12	Other
-001a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
d	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
e	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
f	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Analyst: ME  
Date: 07/08/14  
Page 1 of 1

## Detections Summary for 258774

Client : Enviro Soil Tech Consultants  
 Project : 6-13-858-SA  
 Location : 1501 Martin Luther King Jr. Way, Oakl

Client Sample ID : EFFLUENT

Laboratory Sample ID :

258774-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Arsenic	5.6		5.0	1.3	ug/L	TOTAL	1.000	EPA 200.7	EPA 200.7
Zinc	1,300		20	3.0	ug/L	TOTAL	1.000	EPA 200.7	EPA 200.7

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	258774	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 624
Project#:	6-13-858-SA	Analysis:	EPA 624
Field ID:	EFFLUENT	Batch#:	213059
Lab ID:	258774-001	Sampled:	07/07/14
Matrix:	Water	Received:	07/08/14
Units:	ug/L	Analyzed:	07/09/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	113	77-136
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	102	80-120

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	258774	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 624
Project#:	6-13-858-SA	Analysis:	EPA 624
Matrix:	Water	Batch#:	213059
Units:	ug/L	Analyzed:	07/09/14
Diln Fac:	1.000		

Type: BS Lab ID: QC748269

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	15.61	125	65-134
Benzene	12.50	13.64	109	80-124
Trichloroethene	12.50	12.95	104	80-120
Toluene	12.50	13.50	108	80-122
Chlorobenzene	12.50	13.53	108	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	109	77-136
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC748270

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	15.48	124	65-134	1	20
Benzene	12.50	13.30	106	80-124	3	20
Trichloroethene	12.50	12.76	102	80-120	1	20
Toluene	12.50	12.99	104	80-122	4	20
Chlorobenzene	12.50	13.32	107	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	109	77-136
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-120

RPD= Relative Percent Difference

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	258774	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 624
Project#:	6-13-858-SA	Analysis:	EPA 624
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC748271	Batch#:	213059
Matrix:	Water	Analyzed:	07/09/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	113	77-136
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	258774	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 624
Project#:	6-13-858-SA	Analysis:	EPA 624
Field ID:	ZZZZZZZZZZ	Batch#:	213059
MSS Lab ID:	258797-007	Sampled:	07/07/14
Matrix:	Water	Received:	07/08/14
Units:	ug/L	Analyzed:	07/09/14
Diln Fac:	1.000		

Type: MS Lab ID: QC748334

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1117	12.50	17.32	139 *	69-129
Benzene	<0.1000	12.50	13.79	110	80-127
Trichloroethene	10.93	12.50	21.79	87	70-127
Toluene	<0.1000	12.50	13.13	105	80-123
Chlorobenzene	<0.1000	12.50	13.53	108	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	113	77-136
1,2-Dichloroethane-d4	109	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-120

Type: MSD Lab ID: QC748335

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	17.01	136 *	69-129	2	26
Benzene	12.50	13.39	107	80-127	3	23
Trichloroethene	12.50	21.15	82	70-127	3	21
Toluene	12.50	12.99	104	80-123	1	22
Chlorobenzene	12.50	13.38	107	80-120	1	22

Surrogate	%REC	Limits
Dibromofluoromethane	114	77-136
1,2-Dichloroethane-d4	109	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-120

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

### Metals Analytical Report

Lab #:	258774	Project#:	6-13-858-SA
Client:	Enviro Soil Tech Consultants	Location:	1501 Martin Luther King Jr. Way, Oakl
Field ID:	EFFLUENT	Diln Fac:	1.000
Lab ID:	258774-001	Sampled:	07/07/14
Matrix:	Water	Received:	07/08/14
Units:	ug/L	Prepared:	07/11/14

Analyte	Result	RL	Batch#	Analyzed	Prep	Analysis
Arsenic	5.6	5.0	213147	07/15/14	EPA 200.7	EPA 200.7
Cadmium	ND	5.0	213147	07/15/14	EPA 200.7	EPA 200.7
Chromium	ND	5.0	213147	07/15/14	EPA 200.7	EPA 200.7
Copper	ND	5.0	213147	07/15/14	EPA 200.7	EPA 200.7
Iron	ND	100	213147	07/15/14	EPA 200.7	EPA 200.7
Lead	ND	5.0	213147	07/15/14	EPA 200.7	EPA 200.7
Mercury	ND	0.20	213176	07/11/14	METHOD	EPA 245.1
Nickel	ND	5.0	213147	07/15/14	EPA 200.7	EPA 200.7
Silver	ND	5.0	213147	07/15/14	EPA 200.7	EPA 200.7
Zinc	1,300	20	213147	07/15/14	EPA 200.7	EPA 200.7

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Metals Analytical Report		
Lab #:	258774	Location: 1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep: EPA 200.7
Project#:	6-13-858-SA	Analysis: EPA 200.7
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC748610	Batch#: 213147
Matrix:	Water	Prepared: 07/11/14
Units:	ug/L	Analyzed: 07/15/14

Analyte	Result	RL
Arsenic	ND	5.0
Cadmium	ND	5.0
Chromium	ND	5.0
Copper	ND	5.0
Iron	ND	100
Lead	ND	5.0
Nickel	ND	5.0
Silver	ND	5.0
Zinc	ND	20

ND= Not Detected

RL= Reporting Limit



**Batch QC Report**

<b>Metals Analytical Report</b>			
Lab #:	258774	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 200.7
Project#:	6-13-858-SA	Analysis:	EPA 200.7
Matrix:	Water	Batch#:	213147
Units:	ug/L	Prepared:	07/11/14
Diln Fac:	1.000	Analyzed:	07/15/14

Type: BS Lab ID: QC748611

Analyte	Spiked	Result	%REC	Limits
Arsenic	100.0	110.0	110	80-120
Cadmium	100.0	111.4	111	80-120
Chromium	100.0	105.2	105	80-120
Copper	100.0	102.2	102	79-120
Iron	10,000	10,010	100	79-120
Lead	100.0	103.4	103	80-120
Nickel	100.0	105.3	105	80-120
Silver	100.0	102.2	102	80-120
Zinc	100.0	113.3	113	80-120

Type: BSD Lab ID: QC748612

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	109.1	109	80-120	1	20
Cadmium	100.0	110.7	111	80-120	1	20
Chromium	100.0	104.3	104	80-120	1	20
Copper	100.0	103.0	103	79-120	1	20
Iron	10,000	9,718	97	79-120	3	21
Lead	100.0	103.0	103	80-120	0	20
Nickel	100.0	104.7	105	80-120	1	20
Silver	100.0	102.7	103	80-120	0	20
Zinc	100.0	112.9	113	80-120	0	20

RPD= Relative Percent Difference

**Batch QC Report**

<b>Metals Analytical Report</b>					
Lab #:	258774	Location:	1501 Martin Luther King Jr. Way, Oakl		
Client:	Enviro Soil Tech Consultants	Prep:	EPA 200.7		
Project#:	6-13-858-SA	Analysis:	EPA 200.7		
Field ID:	ZZZZZZZZZZ	Batch#:	213147		
MSS Lab ID:	258427-002	Sampled:	06/25/14		
Matrix:	Water	Received:	06/25/14		
Units:	ug/L	Prepared:	07/11/14		
Diln Fac:	1.000	Analyzed:	07/15/14		

Type: MS Lab ID: QC748613

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	<1.293	100.0	114.7	115	79-126
Cadmium	<0.5791	100.0	110.7	111	76-122
Chromium	5.425	100.0	109.8	104	76-120
Copper	77.26	100.0	181.1	104	74-122
Iron	7,552	10,000	17,950	104	66-127
Lead	6.552	100.0	111.7	105	71-120
Nickel	11.05	100.0	115.3	104	73-120
Silver	<0.6601	100.0	102.9	103	58-128
Zinc	337.8	100.0	444.9	107	74-123

Type: MSD Lab ID: QC748614

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	113.9	114	79-126	1	20
Cadmium	100.0	111.4	111	76-122	1	20
Chromium	100.0	110.1	105	76-120	0	20
Copper	100.0	180.1	103	74-122	1	21
Iron	10,000	16,780	92	66-127	7	21
Lead	100.0	112.3	106	71-120	1	20
Nickel	100.0	115.7	105	73-120	0	20
Silver	100.0	101.3	101	58-128	2	22
Zinc	100.0	447.2	109	74-123	1	20

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report		
Lab #:	258774	Location: 1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep: METHOD
Project#:	6-13-858-SA	Analysis: EPA 245.1
Analyte:	Mercury	Diln Fac: 1.000
Type:	BLANK	Batch#: 213176
Lab ID:	QC748727	Prepared: 07/11/14
Matrix:	Water	Analyzed: 07/11/14
Units:	ug/L	

Result	RL
ND	0.20

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Metals Analytical Report		
Lab #:	258774	Location: 1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep: METHOD
Project#:	6-13-858-SA	Analysis: EPA 245.1
Analyte:	Mercury	Batch#: 213176
Matrix:	Water	Prepared: 07/11/14
Units:	ug/L	Analyzed: 07/11/14
Diln Fac:	1.000	

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC748730	2.500	2.587	103	80-120		
BSD	QC748731	2.500	2.633	105	80-120	2	20

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	258774	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	METHOD
Project#:	6-13-858-SA	Analysis:	EPA 245.1
Analyte:	Mercury	Batch#:	213176
Field ID:	ZZZZZZZZZZ	Sampled:	07/08/14
MSS Lab ID:	258798-006	Received:	07/08/14
Matrix:	Water	Prepared:	07/11/14
Units:	ug/L	Analyzed:	07/11/14
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC748732	<0.02080	2.500	2.591	104	57-127		
MSD	QC748733		2.500	2.603	104	57-127	0	42

RPD= Relative Percent Difference

Total Cyanide			
Lab #:	258774	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	METHOD
Project#:	6-13-858-SA	Analysis:	SM4500CN-E
Analyte:	Cyanide	Batch#:	213164
Field ID:	EFFLUENT	Sampled:	07/07/14
Matrix:	Water	Received:	07/08/14
Units:	mg/L	Analyzed:	07/11/14
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	258774-001	ND	0.01
BLANK	QC748677	ND	0.01

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Total Cyanide</b>		
Lab #:	258774	Location: 1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep: METHOD
Project#:	6-13-858-SA	Analysis: SM4500CN-E
Analyte:	Cyanide	Diln Fac: 1.000
Field ID:	EFFLUENT	Batch#: 213164
MSS Lab ID:	258774-001	Sampled: 07/07/14
Matrix:	Water	Received: 07/08/14
Units:	mg/L	Analyzed: 07/11/14

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC748678	<0.01000	0.2000	0.1403	70	68-120		
MSD	QC748679		0.2000	0.2068	103	68-120	38	40
LCS	QC748680		0.2000	0.2122	103	75-120		

RPD= Relative Percent Difference



**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878







Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 262247  
ANALYTICAL REPORT**

Enviro Soil Tech Consultants 131 Tully Road San Jose, CA 95111	Project : 6-13-858-SA Location : 1501 Martin Luther King Jr. Way, Oakl Level : II
----------------------------------------------------------------------	-----------------------------------------------------------------------------------------

Sample ID  
EFFLUENT

Lab ID  
262247-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Will S Rice  
Project Manager  
will.rice@ctberk.com

Date: 11/12/2014

CA ELAP# 2896, NELAP# 4044-001

### CASE NARRATIVE

Laboratory number: 262247  
Client: Enviro Soil Tech Consultants  
Project: 6-13-858-SA  
Location: 1501 Martin Luther King Jr. Way, Oakl  
Request Date: 11/04/14  
Samples Received: 11/04/14

This data package contains sample and QC results for one water sample, requested for the above referenced project on 11/04/14. The sample was received cold and intact.

**Volatile Organics by GC/MS (EPA 624):**

No analytical problems were encountered.

**Metals (EPA 200.7 and EPA 245.1):**

No analytical problems were encountered.

**Total Cyanide (SM4500CN-E):**

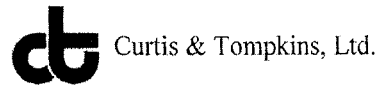
High recovery was observed for cyanide in the MSD for batch 217151; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

CHAIN OF CUSTODY RECORD

262247

PROJ. NO. 6-13-858-SA				NAME 1501 Martin Luther King Jr. Way, Oakland				ANALYSES REQUESTED VOCs (EPA 624) Total Metals (EPA 200.7)				REMARKS				
SAMPLERS: (Signature) 								CON-TAINER 17								
NO.	DATE	TIME	SOIL	WATER	AIR	LOCATION										
				✓		Effluent										
Relinquished by: (Signature) 				Date/Time 11/3/14 12:40		Received by: (Signature) 				Date/Time 11/3/14 12:40		Relinquished by: (Signature)		Received by: (Signature)		
Relinquished by: (Signature)				Date/Time		Received by: (Signature)				Date/Time		Relinquished by: (Signature)		Received by: (Signature)		
Relinquished by: (Signature)				Date/Time		Received for Laboratory by: (Signature)				Date/Time		Remarks: Per ERMUD permit, please analyze the sample by EPA method as stated. The metals are As, Cd, Cr, Cu, Cyanide, Fe, Pb, Hg, Ni, Ag, Zn. BTEX benchmark value of 5 ug/L for each component, Metals are STD. Please send lab report to Frank Hamede				

**COOLER RECEIPT CHECKLIST**



Login # 262247 Date Received 11/03/14 Number of coolers 1  
 Client EMM to Scott Reh Project C-13-858-8A

Date Opened 11/03 By (print) [Signature] (sign) [Signature]  
 Date Logged in 11/04 By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES  NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ....  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO  N/A

3. Were custody papers dry and intact when received?  YES NO

4. Were custody papers filled out properly (ink, signed, etc)?  YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form)  YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

- Bubble Wrap  Foam blocks  Bags  None
- Cloth material  Cardboard  Styrofoam  Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used:  Wet  Blue/Gel  None Temp(°C) \_\_\_\_\_

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES  NO  
 If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened?  YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES  NO

11. Are samples in the appropriate containers for indicated tests?  YES NO

12. Are sample labels present, in good condition and complete?  YES NO

13. Do the sample labels agree with custody papers?  YES NO

14. Was sufficient amount of sample sent for tests requested?  YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES  NO N/A

16. Did you check preservatives for all bottles for each sample?  YES NO N/A

17. Did you document your preservative check?  YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO  N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO  N/A

20. Are bubbles > 6mm absent in VOA samples?  YES NO N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO  
 If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

COMMENTS  
(5) Added HNO<sub>3</sub> (#106236) on 11/04/14 @ 1430 to -001  
Added NO<sub>2</sub> (#310917) " " to -001

Curtis & Tompkins Sample Preservation for 262247

Sample	pH: <2	>9	>12	Other
-001a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[ ]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[X]	[ ]	[X]	_____
i	[X]	[ ]	[ ]	_____
j	[ ]	[ ]	[ ]	_____
k	[ ]	[ ]	[ ]	_____
l	[X]	[ ]	[ ]	_____
m	[X]	[ ]	[ ]	_____
n	[X]	[ ]	[ ]	_____
o	[ ]	[ ]	[ ]	_____
p	[ ]	[ ]	[ ]	_____
q	[ ]	[ ]	[ ]	_____

Analyst: F. Hoyt  
Date: 11/04/11

## Detections Summary for 262247

Results for any subcontracted analyses are not included in this summary.

Client : Enviro Soil Tech Consultants  
 Project : 6-13-858-SA  
 Location : 1501 Martin Luther King Jr. Way, Oakl

Client Sample ID : EFFLUENT

Laboratory Sample ID :

262247-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Arsenic	10		5.0	ug/L	TOTAL	1.000	EPA 200.7	EPA 200.7
Iron	380		100	ug/L	TOTAL	1.000	EPA 200.7	EPA 200.7
Nickel	16		5.0	ug/L	TOTAL	1.000	EPA 200.7	EPA 200.7
Zinc	29		20	ug/L	TOTAL	1.000	EPA 200.7	EPA 200.7
Cyanide	0.01		0.01	mg/L	TOTAL	1.000	SM4500CN-E	METHOD

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	262247	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 624
Project#:	6-13-858-SA	Analysis:	EPA 624
Field ID:	EFFLUENT	Batch#:	217297
Lab ID:	262247-001	Sampled:	11/03/14
Matrix:	Water	Received:	11/04/14
Units:	ug/L	Analyzed:	11/10/14
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	77-136
1,2-Dichloroethane-d4	116	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-120

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	262247	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 624
Project#:	6-13-858-SA	Analysis:	EPA 624
Matrix:	Water	Batch#:	217297
Units:	ug/L	Analyzed:	11/10/14
Diln Fac:	1.000		

Type: BS Lab ID: QC765113

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	12.41	99	65-134
Benzene	12.50	12.49	100	80-124
Trichloroethene	12.50	12.09	97	80-120
Toluene	12.50	12.05	96	80-122
Chlorobenzene	12.50	13.46	108	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	77-136
1,2-Dichloroethane-d4	87	75-139
Toluene-d8	90	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC765114

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	12.51	100	65-134	1	20
Benzene	12.50	12.17	97	80-124	3	20
Trichloroethene	12.50	12.35	99	80-120	2	20
Toluene	12.50	11.94	95	80-122	1	20
Chlorobenzene	12.50	13.68	109	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	77-136
1,2-Dichloroethane-d4	91	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-120

RPD= Relative Percent Difference



**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	262247	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 624
Project#:	6-13-858-SA	Analysis:	EPA 624
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC765115	Batch#:	217297
Matrix:	Water	Analyzed:	11/10/14
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	262247	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	EPA 624
Project#:	6-13-858-SA	Analysis:	EPA 624
Field ID:	ZZZZZZZZZZ	Batch#:	217297
MSS Lab ID:	262170-005	Sampled:	10/29/14
Matrix:	Water	Received:	10/30/14
Units:	ug/L	Analyzed:	11/10/14
Diln Fac:	1.000		

Type: MS Lab ID: QC765170

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1259	12.50	12.03	96	69-129
Benzene	<0.1492	12.50	12.08	97	80-127
Trichloroethene	2.630	12.50	14.78	97	70-127
Toluene	<0.1147	12.50	12.62	101	80-123
Chlorobenzene	<0.1188	12.50	13.34	107	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	77-136
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	100	80-120

Type: MSD Lab ID: QC765171

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	11.37	91	69-129	6	26
Benzene	12.50	11.87	95	80-127	2	23
Trichloroethene	12.50	14.31	93	70-127	3	21
Toluene	12.50	12.25	98	80-123	3	22
Chlorobenzene	12.50	13.56	108	80-120	2	22

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference

**Metals Analytical Report**

Lab #:	262247	Project#:	6-13-858-SA
Client:	Enviro Soil Tech Consultants	Location:	1501 Martin Luther King Jr. Way, Oakl
Field ID:	EFFLUENT	Diln Fac:	1.000
Matrix:	Water	Sampled:	11/03/14
Units:	ug/L	Received:	11/04/14

Type: SAMPLE Lab ID: 262247-001

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Arsenic	10	5.0	217216	11/07/14	11/09/14	EPA 200.7	EPA 200.7
Cadmium	ND	5.0	217216	11/07/14	11/09/14	EPA 200.7	EPA 200.7
Chromium	ND	5.0	217216	11/07/14	11/09/14	EPA 200.7	EPA 200.7
Copper	ND	5.0	217216	11/07/14	11/09/14	EPA 200.7	EPA 200.7
Iron	380	100	217216	11/07/14	11/09/14	EPA 200.7	EPA 200.7
Lead	ND	5.0	217216	11/07/14	11/09/14	EPA 200.7	EPA 200.7
Mercury	ND	0.20	217154	11/05/14	11/06/14	METHOD	EPA 245.1
Nickel	16	5.0	217216	11/07/14	11/09/14	EPA 200.7	EPA 200.7
Silver	ND	5.0	217216	11/07/14	11/09/14	EPA 200.7	EPA 200.7
Zinc	29	20	217216	11/07/14	11/09/14	EPA 200.7	EPA 200.7

Type: BLANK Analyzed: 11/06/14  
 Lab ID: QC764532 Prep: METHOD  
 Batch#: 217154 Analysis: EPA 245.1  
 Prepared: 11/05/14

Analyte	Result	RL
Mercury	ND	0.20

Type: BLANK Analyzed: 11/09/14  
 Lab ID: QC764782 Prep: EPA 200.7  
 Batch#: 217216 Analysis: EPA 200.7  
 Prepared: 11/07/14

Analyte	Result	RL
Arsenic	ND	5.0
Cadmium	ND	5.0
Chromium	ND	5.0
Copper	ND	5.0
Iron	ND	100
Lead	ND	5.0
Nickel	ND	5.0
Silver	ND	5.0
Zinc	ND	20

## Batch QC Report

Metals Analytical Report			
Lab #:	262247	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	METHOD
Project#:	6-13-858-SA	Analysis:	EPA 245.1
Analyte:	Mercury	Diln Fac:	1.000
Type:	LCS	Batch#:	217154
Lab ID:	QC764534	Prepared:	11/05/14
Matrix:	Water	Analyzed:	11/06/14
Units:	ug/L		

Spiked	Result	%REC	Limits
2.500	2.939	118	80-120

## Batch QC Report

Metals Analytical Report		
Lab #:	262247	Location: 1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep: METHOD
Project#:	6-13-858-SA	Analysis: EPA 245.1
Analyte:	Mercury	Batch#: 217154
Field ID:	EFFLUENT	Sampled: 11/03/14
MSS Lab ID:	262247-001	Received: 11/04/14
Matrix:	Water	Prepared: 11/05/14
Units:	ug/L	Analyzed: 11/06/14
Diln Fac:	1.000	

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC764535	<0.02080	2.500	2.939	118	57-127		
MSD	QC764536		2.500	2.858	114	57-127	3	42

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report					
Lab #:	262247	Location:	1501 Martin Luther King Jr. Way, Oakl		
Client:	Enviro Soil Tech Consultants	Prep:	EPA 200.7		
Project#:	6-13-858-SA	Analysis:	EPA 200.7		
Matrix:	Water	Batch#:	217216		
Units:	ug/L	Prepared:	11/07/14		
Diln Fac:	1.000	Analyzed:	11/09/14		

Type: BS Lab ID: QC764783

Analyte	Spiked	Result	%REC	Limits
Arsenic	100.0	102.0	102	80-120
Cadmium	100.0	107.6	108	80-120
Chromium	100.0	103.4	103	80-120
Copper	100.0	91.35	91	79-120
Iron	10,000	10,810	108	79-120
Lead	100.0	99.63	100	80-120
Nickel	100.0	103.6	104	80-120
Silver	100.0	93.08	93	80-120
Zinc	100.0	108.9	109	80-120

Type: BSD Lab ID: QC764784

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	108.3	108	80-120	6	20
Cadmium	100.0	117.1	117	80-120	8	20
Chromium	100.0	109.7	110	80-120	6	20
Copper	100.0	98.42	98	79-120	7	20
Iron	10,000	11,920	119	79-120	10	21
Lead	100.0	106.5	106	80-120	7	20
Nickel	100.0	110.4	110	80-120	6	20
Silver	100.0	100.0	100	80-120	7	20
Zinc	100.0	118.0	118	80-120	8	20

RPD= Relative Percent Difference

**Batch QC Report**

<b>Metals Analytical Report</b>					
Lab #:	262247	Location:	1501 Martin Luther King Jr. Way, Oakl		
Client:	Enviro Soil Tech Consultants	Prep:	EPA 200.7		
Project#:	6-13-858-SA	Analysis:	EPA 200.7		
Field ID:	EFFLUENT	Batch#:	217216		
MSS Lab ID:	262247-001	Sampled:	11/03/14		
Matrix:	Water	Received:	11/04/14		
Units:	ug/L	Prepared:	11/07/14		
Diln Fac:	1.000	Analyzed:	11/09/14		

Type: MS Lab ID: QC764785

Analyte	MSS Result	Spiked	Result	%REC	Limits
Arsenic	10.47	100.0	110.0	99	79-126
Cadmium	<0.5791	100.0	89.81	90	76-122
Chromium	0.9302	100.0	99.37	98	76-120
Copper	<0.9890	100.0	85.77	86	74-122
Iron	378.9	10,000	10,760	104	66-127
Lead	<0.9081	100.0	91.94	92	71-120
Nickel	15.50	100.0	109.6	94	73-120
Silver	<0.6601	100.0	89.93	90	58-128
Zinc	28.84	100.0	127.4	99	74-123

Type: MSD Lab ID: QC764786

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Arsenic	100.0	113.7	103	79-126	3	20
Cadmium	100.0	92.54	93	76-122	3	20
Chromium	100.0	101.0	100	76-120	2	20
Copper	100.0	87.63	88	74-122	2	21
Iron	10,000	10,520	101	66-127	2	21
Lead	100.0	94.46	94	71-120	3	20
Nickel	100.0	110.7	95	73-120	1	20
Silver	100.0	91.60	92	58-128	2	22
Zinc	100.0	129.2	100	74-123	1	20

RPD= Relative Percent Difference

Total Cyanide		
Lab #:	262247	Location: 1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep: METHOD
Project#:	6-13-858-SA	Analysis: SM4500CN-E
Analyte:	Cyanide	Batch#: 217151
Field ID:	EFFLUENT	Sampled: 11/03/14
Matrix:	Water	Received: 11/04/14
Units:	mg/L	Analyzed: 11/06/14
Diln Fac:	1.000	

Type	Lab ID	Result	RL	Prepared
SAMPLE	262247-001	0.01	0.01	11/06/14
BLANK	QC764516	ND	0.01	11/05/14

ND= Not Detected  
 RL= Reporting Limit



**Batch QC Report**

<b>Total Cyanide</b>			
Lab #:	262247	Location:	1501 Martin Luther King Jr. Way, Oakl
Client:	Enviro Soil Tech Consultants	Prep:	METHOD
Project#:	6-13-858-SA	Analysis:	SM4500CN-E
Analyte:	Cyanide	Batch#:	217151
Field ID:	ZZZZZZZZZZ	Sampled:	11/03/14
MSS Lab ID:	262231-001	Received:	11/03/14
Matrix:	Water	Prepared:	11/05/14
Units:	mg/L	Analyzed:	11/06/14
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC764517		0.2000	0.2054	103	75-120		
MS	QC764518	0.008700	0.2000	0.2140	107	68-120		
MSD	QC764519		0.2000	0.2480	124 *	68-120	15	40

\*= Value outside of QC limits; see narrative

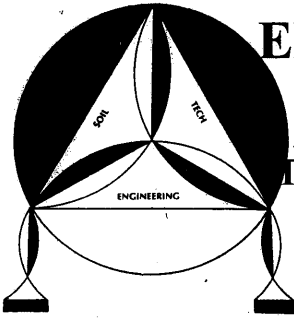
RPD= Relative Percent Difference

File No. 6-13-858-SA  
July 27, 2016

**A P P E N D I X "I"**

**EXTRACTION WELLS MEASUREMENTS  
FIELD NOTES**

**ENVIRO SOIL TECH CONSULTANTS**



# ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Email: [info@envirosoiltech.com](mailto:info@envirosoiltech.com)

FILE NO.: 6-13-858-SA

DATE: 6/29/15

DEPTH TO WELL: 33'

DEPTH TO WATER: 27'7" <sup>3</sup>/<sub>10</sub>

HEIGHT OF WATER COLUMN: \_\_\_\_\_

WELL NO.: STEW-1

SAMPLER: FRANK

1 WELL VOLUME: \_\_\_\_\_

5 WELL VOLUME: \_\_\_\_\_

ACTUAL PURGED VOLUME: \_\_\_\_\_

CASING DIAMETER: \_\_\_\_\_ 2"

\_\_\_\_\_ ✓ 4"

## CALCULATIONS:

2" - x 0.1632 \_\_\_\_\_

4" - x 0.653 \_\_\_\_\_

PURGED METHOD: \_\_\_\_\_ BAILER \_\_\_\_\_ DISPLACEMENT PUMP \_\_\_\_\_ OTHER

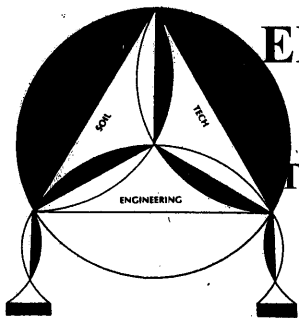
SAMPLE METHOD: \_\_\_\_\_ BAILER \_\_\_\_\_ OTHER

SHEEN: \_\_\_\_\_ NO \_\_\_\_\_ YES, DESCRIBE: \_\_\_\_\_

ODOR: \_\_\_\_\_ NO \_\_\_\_\_ YES, DESCRIBE: \_\_\_\_\_

## FIELD MEASUREMENTS

<u>TIME</u>	<u>VOLUME</u>	<u>pH</u>	<u>TEMP.</u>	<u>E.C.</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____



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FILE NO.: 6-13-858-SA

DATE: 6/29/10

DEPTH TO WELL: 34'

DEPTH TO WATER: 27' 9" <sup>3</sup>/<sub>10</sub>

HEIGHT OF WATER COLUMN: \_\_\_\_\_

WELL NO.: STEW-2

SAMPLER: FRANK

1 WELL VOLUME: \_\_\_\_\_

5 WELL VOLUME: \_\_\_\_\_

ACTUAL PURGED VOLUME: \_\_\_\_\_

CASING DIAMETER: \_\_\_\_\_ 2"

\_\_\_\_\_  4"

## CALCULATIONS:

2" - x 0.1632 \_\_\_\_\_

4" - x 0.653 \_\_\_\_\_

PURGED METHOD: \_\_\_\_\_ BAILER \_\_\_\_\_ DISPLACEMENT PUMP \_\_\_\_\_ OTHER

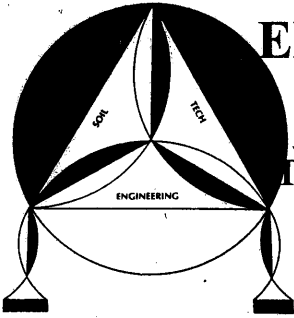
SAMPLE METHOD: \_\_\_\_\_ BAILER \_\_\_\_\_ OTHER

SHEEN: \_\_\_\_\_ NO \_\_\_\_\_ YES, DESCRIBE: \_\_\_\_\_

ODOR: \_\_\_\_\_ NO \_\_\_\_\_ YES, DESCRIBE: \_\_\_\_\_

## FIELD MEASUREMENTS

<u>TIME</u>	<u>VOLUME</u>	<u>pH</u>	<u>TEMP.</u>	<u>E.C.</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____



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FILE NO.: 6-13-858-SA

DATE: 6/29/15

DEPTH TO WELL: 30'

DEPTH TO WATER: 29' 0" 8/10

HEIGHT OF WATER COLUMN: \_\_\_\_\_

WELL NO.: STEW-3

SAMPLER: FRANK

1 WELL VOLUME: \_\_\_\_\_

5 WELL VOLUME: \_\_\_\_\_

ACTUAL PURGED VOLUME: \_\_\_\_\_

CASING DIAMETER: \_\_\_\_\_ 2"

4"

## CALCULATIONS:

2" - x 0.1632 \_\_\_\_\_

4" - x 0.653 \_\_\_\_\_

PURGED METHOD:  BAILER  DISPLACEMENT PUMP  OTHER

SAMPLE METHOD:  BAILER  OTHER

SHEEN:  NO  YES, DESCRIBE: \_\_\_\_\_

ODOR:  NO  YES, DESCRIBE: \_\_\_\_\_

## FIELD MEASUREMENTS

<u>TIME</u>	<u>VOLUME</u>	<u>pH</u>	<u>TEMP.</u>	<u>E.C.</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____