



ENVIRONMENTAL ENGINEERING, INC.
6620 Owens Drive, Suite A • Pleasanton, CA 94588
TEL (925)734-6400 • FAX (925)734-6401
www.somaenv.com

January 6, 2014

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By Alameda County Environmental Health at 2:24 pm, Jan 07, 2014

Ms. Karel Detterman
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Site Location: 6501 Shattuck Avenue, Oakland, CA
Fuel Leak Case No. RO0003066

Dear Ms. Detterman:

SOMA's "Soil and Groundwater Investigation Report" for the subject site has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 734-6400, if you have questions or comments.

Sincerely,

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

cc: Mr. Athan Magganas w/report enclosure



Soil and Groundwater Investigation Report

**6501 Shattuck Avenue,
Oakland, California**

January 6, 2014

Project 5032

Prepared for:

**Bruder LLC
2550 Appian Way, Suite 201
Pinole, California**



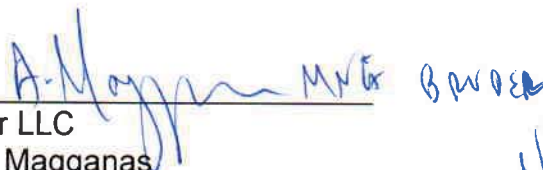
ENVIRONMENTAL ENGINEERING, INC.

6620 Owens Drive Suite A Pleasanton CA 94588 Ph: 925.734.6400 F: 925.734-6401 www.somaenv.com

PERJURY STATEMENT

Site Location: 6501 Shattuck Avenue, Oakland, California
Soil and Groundwater Investigation Report

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

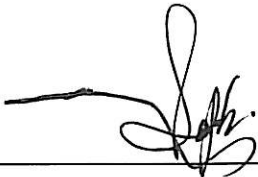


Bruder LLC
Athan Magganas
2550 Appian Way, Suite 201
Pinole, California 94564

1/6/14
Σ

CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this document for Bruder LLC, at the request of Bruder LLC manager Mr. Athan Magganas, for the property located at 6501 Shattuck Avenue, Oakland, California. This report was prepared in response to Alameda County Health Care Services correspondence dated November 1, 2013.



Mansour Sepehr, PhD, PE
Principal Hydrogeologist



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1. INTRODUCTION

SOMA Environmental Engineering, Inc. (SOMA) conducted an additional soil and groundwater assessment and prepared this report at the request of Bruder LLC manager Mr. Athan Magganas, for the property located 6501 Shattuck Avenue, Oakland, California. This report was prepared in response to Alameda County Health Care Services (ACHCS) approval correspondence dated November 1, 2013. This correspondence pertains to SOMA's workplan entitled "Data Gap Investigation Workplan" dated October 24, 2013. The site vicinity map is shown in Figure 1.

1.1 Site History and Use

According to the Phase I Environmental Site Assessment Report dated January 26, 2007, prepared for the site by RGA Environmental, the site was redeveloped from a single-family residential property to a service station in 1933. The total period of operation of the service station could not be precisely determined from available historical sources, but based on the City Directory Abstract, the service station appears to have been converted to a repair shop and used car sales facility during the mid-1980s. The facility has operated as East Bay Smog Center and Auto Repair since 2000.

The subject property is located at the northwest quadrant of the intersection of Shattuck Avenue and 65th Street near the common municipal limits of Oakland and Berkeley, approximately 3.25 miles north-northeast of the downtown Oakland commercial district. According to the Alameda County Assessor Office, the parcel is rectangular and covers an area of 0.19 acres (8,333 square feet). Prior to recent underground storage tank (UST) removal and soil excavation activities, the property was improved with an automotive tune-up and repair facility that included the former service station office and canopy structure and a detached two-bay service building. The two site structures were single-story buildings constructed on concrete slabs at grade. Portions of the parcel not occupied by the structures were asphalt or concrete paved. The site vicinity is a mix of service commercial properties along Shattuck Avenue, with older residential development farther to the east and west. Based on assessments of other properties in the area, there are no manufacturing or heavy industrial facilities in the vicinity.

In September 2009, Controlled Environmental Services (CES) obtained permits for removal of six steel USTs located at the subject site. According to the report prepared by CES, dated October 23, 2009, two 1,000-gallon gasoline USTs, three 2,000-gallon gasoline USTs, and one 500-gallon waste oil UST were removed.

1.2 Geologic and Hydrogeologic Conditions

The property is situated near the east-center of the San Francisco Bay physiographic sub-region, characterized as a partially submerged structural basin situated between sub-parallel, northwest trending faults. Tectonic subsidence of the basin during the past two million years has resulted in a thick layer of Quaternary alluvium up to 2,000 feet in depth, underlain by interbedded marine sandstone and shale of the Franciscan Assemblage, which was deposited in an off-shore environment during the Late Jurassic/Early Cretaceous Period (125-150 million years before present). Surficial soils are medium- to coarse-grained alluvium deposited by periodic debris flow and sheet erosion processes at the lower slopes of the adjacent Oakland Hills in alluvial fan structures. The soils are characterized as weakly consolidated, slightly weathered, poorly sorted, irregular interbedded clay, silt, sand and gravel, with the coarser component typically situated at the heads of old alluvial fans (Helley, et al, 1979). Deposition of the upper soil zone has occurred during the Late Pleistocene Epoch (11,000 to 50,000 years before present), resulting in a typical soil profile ranging from 20 to 30 feet in depth. The surficial soils have moderate permeability and, based on the nearly flat topography, relatively low transmissivity values. Based on local surface topography, the near surface groundwater aquifer in the area of the site is inferred to be less than 25 feet in depth, and regional groundwater flow is generally westerly, toward San Francisco Bay.

2. SCOPE OF WORK

To further characterize the vertical extent of potential impact of volatile organic compounds (VOCs), poly-aromatic hydrocarbons (PAHs) and CA LUFT-5 metals (cadmium, chromium, zinc, nickel, lead) to the west of the former waste oil underground storage tank (UST), SOMA proposed advancing one soil borehole (B-10) at the site, adjacent to the former waste oil UST location.

Based on ACHCS directive dated November 1, 2013, SOMA advanced one additional soil borehole (B-10) in order to determine the extent of soil and groundwater contamination adjacent to the former waste oil UST.

Details of the tasks listed below are discussed in the following sections of this report.

- Task 1: Permit acquisition, Health and Safety Plan preparation, and subsurface utility clearance
- Task 2: Advancement of one soil boring
- Task 3: Laboratory analysis of soil and groundwater samples
- Task 4: Preparation of site investigation report and recommendations for future actions at the site

2.1 Permit Acquisition, Health and Safety Plan Preparation, and Subsurface Utility Clearance

Prior to initiating field activities, SOMA obtained a drilling permit from Alameda County Public Works Agency (ACPWA) (Appendix A). ACHCS was given the required minimum 72-hour notice in advance of drilling on November 21, 2013 and grouting inspection was scheduled on November 26, 2013 with ACPWA/Balance Hydrologics (Gustavo Porras).

During field implementation activities, SOMA followed standard Health and Safety Plan (HASP) procedures. The HASP is a requirement of the Occupational Safety and Health Administration (OSHA), "Hazardous Waste Operation and Emergency Response" guidelines (29 CFR 1910.120) and the California Occupational Safety and Health Administration (Cal/OSHA) "Hazardous Waste Operation and Emergency Response" guidelines (CCR Title 8, section 5192). The HASP is designed to address safety provisions during field activities and protect the field crew from physical and chemical hazards resulting from drilling and sampling. It establishes personnel responsibilities, general safe work practices, field procedures, personal protective equipment standards, decontamination procedures, and emergency action plans. Field staff and contractors reviewed and signed the HASP prior to beginning field operations.

On November 22, 2013, prior to boring advancement activities, SOMA's field crew visited the site and marked proposed well locations using chalk-based white paint. Underground Service Alert (USA) clearance verifying that drilling areas were clear of underground utilities was obtained November 21, 2013 (Ticket 463549). A private utility locator (OHJ Subsurface Utility) surveyed proposed drilling areas on November 22, 2013 to locate any additional subsurface conduits.

2.2 Advancement of Soil Borings

On December 20, 2013, a C-57 licensed driller Gregg Drilling & Testing (under SOMA's oversight) advanced one soil borings (B-10) for collection of soil and groundwater samples. The boring was located adjacent to the former waste oil UST location. The boring location is shown in Figure 2. Boring B-10 was advanced to approximately 21 feet below ground surface (bgs).

Direct Push Technology (DPT) was utilized for the boring. DPT is an efficient method of collecting continuous soil cores while preventing cross-contamination. It involves hydraulically hammering a set of steel rods into the subsurface with the lead section consisting of a polyethylene-lined sampler. After drilling rods are pushed to the desired depth, the soil-filled liner is retrieved. SOMA's field geologist logged continuous soil cores from advanced borings, characterizing the content of each soil-filled tube using the Unified Soil Classification System (USCS) Visual-Manual method. Encountered subsurface lithologies were

recorded on geologic borehole logs. Contents of each sediment-filled tube were screened with a photoionization detector (PID) at each screened depth and results noted on respective boring logs (Appendix B).

Soil samples were collected at one foot intervals beginning at 7 feet bgs (previous excavation extended to 7 feet under the tank). A minimum of three soil samples were analyzed between 7 and 15 feet bgs (7 feet, 9 feet 10 feet, & 15 feet). A sample from the bottom of the boring (21 feet) was also analyzed. The depths for sample analysis were selected on the basis of locations of elevated PID (greater than 25 ppmv) or where visual or olfactory observations indicate the presence of significant soil contamination. The final depth of boring was determined based on the presence of groundwater.

At each interval of depth-discrete soil sampling, the DPT drilling rig obtained a 4-foot soil sample core. For soil sample collection, SOMA's field geologist cut sections of the soil-filled tubes into 6-inch-long sections and capped each end with a Teflon liner and polyethylene end cap. Samples were labeled with unique identifiers and immediately placed in a chilled ice chest pending transportation to Curtis & Tompkins, Ltd. (C&T), a California state-certified environmental laboratory.

As stated above, laboratory analysis was performed on samples collected from 7 ft., 9 ft., 10 ft., 15 ft., and 21 ft (bottom of the boring). Elevated PID (<25 ppm) was observed only at 7ft. (51.9 ppm). Field notes summarizing observed PID readings are attached in Appendix B.

2.3 Site Geology

Similar to the previous investigations, observed subsurface soils consisted of sandy lean clay, clay and clayey sand. Encountered subsurface lithologies were recorded on geologic borehole logs (Appendix B). The contents of each sediment-filled tube were screened using a PID at each screened depth and results were noted on respective boring logs. PID responds to all molecules with ionization potential below 10.6eV, including aromatics and molecules with carbon double bonds. Detected PID readings, summarized on boring logs (Appendix B), ranged between 0.2 ppm and 51.9 ppm.

2.4 Groundwater Sample Collection Procedures

To collect grab groundwater samples, a new bailer was utilized to evacuate a sufficient amount of groundwater. Samples were decanted into 40-mL VOA vials, pre-preserved with hydrochloric acid, 500 mL unpreserved bottles, and 1-L ambers, then immediately stored in a cooler with ice, pending delivery to C&T under appropriate chain-of-custody protocol for analysis.

The boring was decommissioned on December 20, 2013, according to Cal/EPA guidelines with a neat-cement grout mixture.

2.5 Laboratory Analysis

Soil and groundwater samples were submitted to C&T for analysis of the following:

- Full List VOCs using method 8260
- CA LUFT-5 Metals
- PAHs using method EPA 8270 SIM

2.6 Results

2.6.1 Groundwater Analytical Results

TPH-g, BTEX, MtBE, and all other VOCs were below laboratory-reporting limits in the groundwater sample obtained from boring B-10. All PAHs were also below laboratory-reporting limits in this groundwater sample.

All CA LUFT-5 metals were detected at concentrations below the ESLs except Lead in the groundwater sample. Lead was detected at 6.1 µg/L (ESL-2.5 µg/L).

Current and historical groundwater analytical results with respective ESLs are summarized in Table 1. The laboratory analytical report is contained in Appendix C.

2.6.2 Soil Analytical Results

During this investigation, all analytes were detected below laboratory-reporting limits or below ESLs in analyzed soil samples. TPH-g was detected at low levels of 7.1 mg/kg and 3.5 mg/kg in soil samples obtained from B-10 at 7 ft and 9 ft., respectively. Laboratory noted that these samples exhibited chromatographic pattern that did not resemble a standard gasoline pattern. TPH-g and all other VOCs were below laboratory reporting limit at other sampling depths. Similarly, PAHs were either below laboratory-reporting limits or detected at low levels below ESLs at all sampling depths.

All CA LUFT-5 metals were detected at concentrations below the ESLs in analyzed soil samples. Cadmium was detected in concentrations ranging from 0.48 mg/kg at 21 ft. to 0.95 mg/kg at 10 ft. Chromium was detected in concentrations ranging from 30 mg/kg at 21 ft. to 44 mg/kg at 15 ft. Lead was detected in concentrations ranging from 5.6 mg/kg at 9 ft. to 10 mg/kg at 10 ft. Nickel was detected in concentrations ranging from 36 mg/kg at 7 and 8 ft. to 68

mg/kg at 15 ft. and Zinc was detected in concentrations ranging from 47 mg/kg at 21 ft. to 54 mg/kg at 7 ft.

Table 2 summarizes current and historical soil analytical results; the current analytical report is contained in Appendix C.

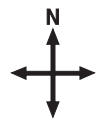
3. CONCLUSIONS AND RECOMMENDATIONS

- SOMA advanced one soil boring B-10, and collected soil and groundwater samples to further characterize the vertical extent of potential impact of volatile organic compounds (VOCs), poly-aromatic hydrocarbons (PAHs) and CA LUFT-5 metals (cadmium, chromium, zinc, nickel, lead) adjacent to the former waste oil underground storage tank (UST).
- TPH-g, BTEX, all other VOCs, and PAHs were below laboratory-reporting limits in the groundwater sample obtained from B-10. Cadmium, chromium, zinc, and nickel were either below laboratory-reporting limits or below their respective ESLs. Lead was detected at 6.1 µg/L which is above the ESL of 2.5 µg/L.
- TPH-g, BTEX, all other VOCs, PAHs, and CA LUFT-5 metals were either below laboratory-reporting limits or below their respective ESLs in soil samples collected from B-10.
- Based on results of this investigation, SOMA proposes adopting 'No Further Action' status for the site.

FIGURES



Imagery ©2011 GeoEye, I



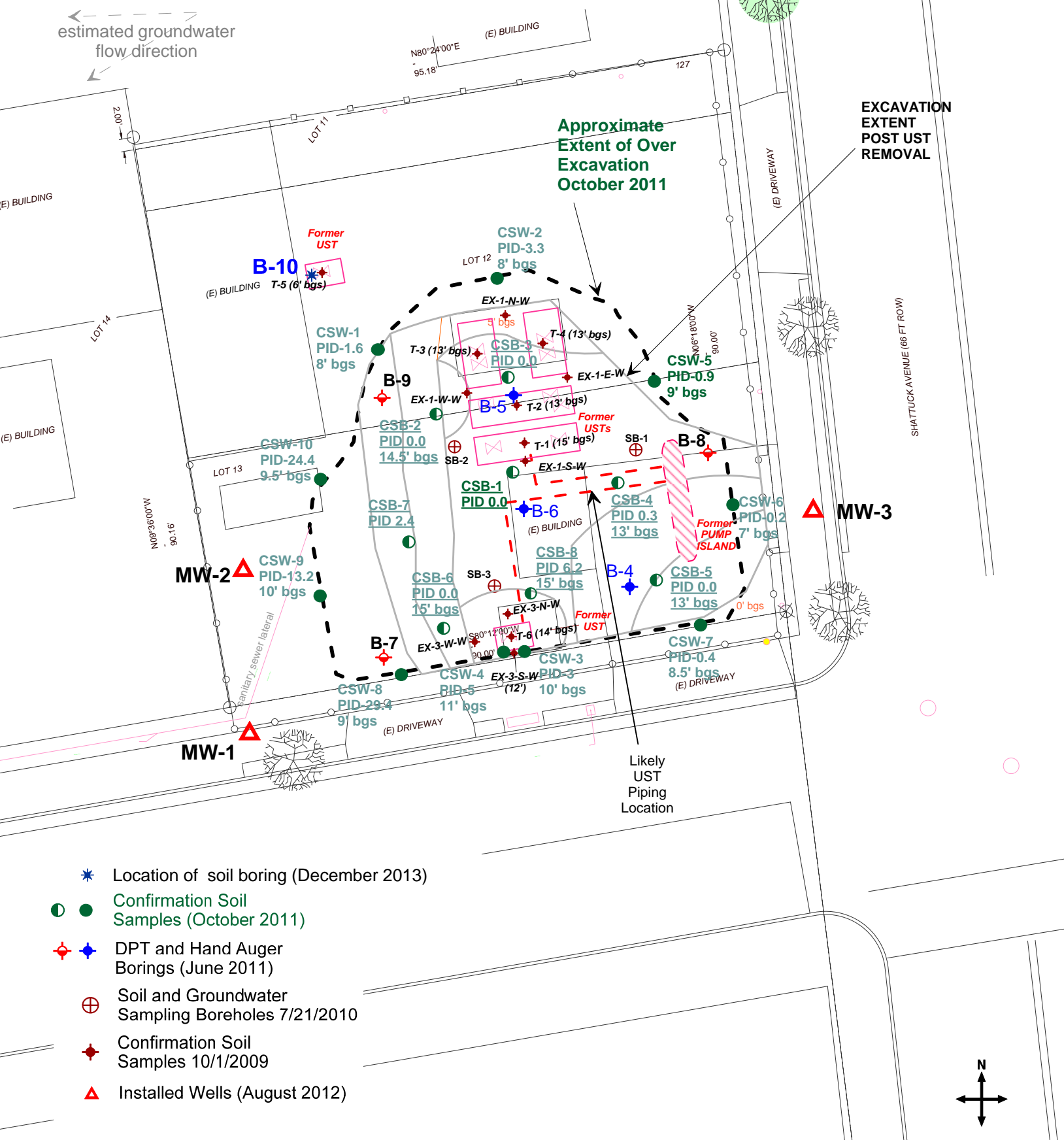
approximate scale in feet
0 50 100

Figure 1: Site vicinity map.

2996 SHATTUCK AVENUE-
groundwater flow predominantly
westerly, DTW 2.3-8.5' bgs

6407 TELEGRAPH-
groundwater flow southwest,
DTW 5-8' bgs

← estimated groundwater
flow direction



- * Location of soil boring (December 2013)
- Confirmation Soil Samples (October 2011)
- ◆ DPT and Hand Auger Borings (June 2011)
- ⊕ Soil and Groundwater Sampling Boreholes 7/21/2010
- ◆ Confirmation Soil Samples 10/1/2009
- ▲ Installed Wells (August 2012)

approximate scale in feet

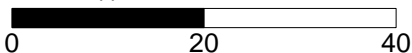


Figure 2: Site map showing boring location

TABLES

Table 1
Grab Groundwater Analytical Results
6501 Shattuck Ave, Oakland, CA

Sample ID	Date	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B (µg/L)
SB-1	7/21/2010	1,500	930	<300	5.1	1.8	32	25	1.9
SB-2	7/21/2010	1,700	5,300	1,400	59	4.8	18	13.7	0.66
SB-3	7/21/2010	4,000	11,000	800	30	4.1	15	10.9	<0.5
B-4	6/10/2011	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
B-5	6/10/2011	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
B-6	6/16/2011	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
B-7	6/10/2011	160 Y	61 Y	<300	1.1	0.9	1.2	0.9	<0.5
B-8	6/10/2011	<50	<63	<380	<0.5	<0.5	<0.5	<0.5	<0.5
B-9	6/10/2011	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5
B-10	12/20/2013	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5
ESL Drinking Water (Residential)		100	100	100	1	40	30	20	5
ESL Non-Drinking Water (Commercial)		500	640	640	46	130	43	100	1,800

Sample ID	Date	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	Nickel (µg/L)	Zinc (µg/L)
SB-1	7/21/2010	<5.0	<5.0	<5.0	<5.0	<20
SB-2	7/21/2010	<5.0	<5.0	<5.0	12	41
SB-3	7/21/2010	<5.0	<5.0	<5.0	19	350
B-10	12/20/2013	<5.0	<5.0	6.1	5.9	21
ESL Drinking Water (Residential)		0.25	50	2.5	8.2	81
ESL Non-Drinking Water (Commercial)		0.25	180	2.5	8.2	81

Notes:

ESL: California Regional Water Quality Control Board, Environmental Screening Levels, Interim Final 2013

< : below Laboratory Detection Limits

Y: Sample exhibits chromatographic pattern which does not resemble standard

Table 2
Soil Analytical Results
6501 Shattuck Ave, Oakland, CA

Sample ID	Soil Sample Depth (feet bgs)	Depth to Water (feet bgs)	Date	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	MtBE 8260B (mg/kg)
SB-1@2.5ft	9	10	7/21/2010	23Y	20	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25
SB-2@3ft	9	10	7/21/2010	510Y	50	<5.0	<0.5	<0.5	0.65	<0.5	<0.5
SB-3@1.5ft	8.5	8.5	7/21/2010	3.2Y	24	48	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
B-4	9	13.22	6/10/2011	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005
B-5	8	NA	6/10/2011	18 Y	59 Y	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25
B-6	7	NA	6/10/2011	<1.0	<1.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
B-7	10	12.45	6/10/2011	180	35 Y	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25
B-7	12	12.45	6/10/2011	<0.98	NA	NA	NA	NA	NA	NA	NA
B-8	4.5	NA	6/10/2011	<1.1	3.2 Y	23	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
B-9	8	11.5	6/10/2011	140	58 Y	6.1	<0.25	<0.25	<0.25	<0.25	<0.25
B-9	10	11.5	6/10/2011	<1.0	NA	NA	NA	NA	NA	NA	NA
CSW-1	10	NA	10/13/2011	1.7 ^Y	4.3 ^Y	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005
CSW-2@8ft	8	NA	10/17/2011	<0.017	<0.759	8.9	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
CSW-3@10'	10	NA	10/14/2011	38	7.8	<1.65	<0.15	<0.098	0.18	<0.19	<0.26
CSW-4@11'	11	NA	10/14/2011	<0.017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
CSW-5@9ft	9	NA	10/17/2011	<0.017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
CSW-6@7ft	7	NA	10/17/2011	<0.017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
CSW-7@8.5ft	8.5	NA	10/17/2011	<0.017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
CSW-8@9ft	9	NA	10/24/2011	0.56 ^X	2.9 ^X	10	<0.0038	<0.0025	<0.0022	<0.0046	<0.0065
CSW-9@10ft	10	NA	10/24/2011	<0.017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
CSW-10@9.5ft	9.5	NA	10/24/2011	3.4 ^X	8.2 ^X	7.5	<0.0075	<0.0049	<0.0043	<0.0093	<0.013
CSB-1	14	NA	10/13/2011	<1.0	<1.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
CSB-2	14.5	NA	10/13/2011	<1.0	<1.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
CSB-3	13	NA	10/13/2011	<1.1	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005
CSB-4	13	NA	10/17/2011	<0.0017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
CSB-5	13	NA	10/17/2011	<0.0017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
CSB-6	15	NA	10/24/2011	<0.0017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
CSB-7	14.5	NA	10/24/2011	5.4 ^X	24 ^X	25	<0.0075	<0.0049	<0.0043	<0.0093	<0.013
CSB-8	15	NA	10/24/2011	<0.0017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
Fill Black-1	NA	NA	10/14/2011	<0.0017	<0.759	23	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
Fill Black-2	NA	NA	10/14/2011	<0.0017	<0.759	7.6	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
Fill Brown-1	NA	NA	10/14/2011	<0.017	<0.759	42	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
Fill Brown-2	NA	NA	10/14/2011	<0.017	<0.759	28	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026
Compfill-3	NA	NA	10/28/2011	<0.017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	NA
B-10	7	17	12/20/2013	7.1 Y	NA	NA	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
B-10	9	17	12/20/2013	3.5 Y	NA	NA	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
B-10	10	17	12/20/2013	<1.0	NA	NA	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
B-10	15	17	12/20/2013	<1.0	NA	NA	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
B-10	21	17	12/20/2013	<0.98	NA	NA	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
ESL Drinking Water (Residential)				100	100	100	0.044	2.9	3.3	2.3	0.023
ESL Non-Drinking Water (Commercial)				500	110	500	1.2	9.3	4.7	11	8.4

Table 2
Soil Analytical Results
6501 Shattuck Ave, Oakland, CA

Sample ID	Soil Sample Depth (feet bgs)	Depth to Water (feet bgs)	Date	Phenanthrene (mg/kg)	Pyrene (mg/kg)	Chrysene (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
SB-1@2.5ft	9	10	7/21/2010	NA	NA	NA	NA	NA	7.9	NA	NA
SB-2@3ft	9	10	7/21/2010	NA	NA	NA	NA	NA	5.7	NA	NA
SB-3@1.5ft	8.5	8.5	7/21/2010	NA	NA	NA	NA	NA	58	NA	NA
B-4	9	13.22	6/10/2011	NA	NA	NA	NA	NA	NA	NA	NA
B-5	8	NA	6/10/2011	NA	NA	NA	NA	NA	<0.25	NA	NA
B-6	7	NA	6/10/2011	NA	NA	NA	NA	NA	<0.0048	NA	NA
B-7	10	12.45	6/10/2011	NA	NA	NA	NA	NA	<0.25	NA	NA
B-7	12	12.45	6/10/2011	NA	NA	NA	NA	NA	NA	NA	NA
B-8	4.5	NA	6/10/2011	NA	NA	NA	NA	NA	<0.0049	NA	NA
B-9	8	11.5	6/10/2011	NA	NA	NA	NA	NA	<0.25	NA	NA
B-9	10	11.5	6/10/2011	NA	NA	NA	NA	NA	NA	NA	NA
B-10	7	17	12/20/2013	0.061	0.093	0.076	0.55	31	7.5	36	54
B-10	9	17	12/20/2013	<0.0051	0.0065	<0.0051	0.54	33	5.6	36	48
B-10	10	17	12/20/2013	<0.005	0.0083	<0.005	0.95	41	10	62	52
B-10	15	17	12/20/2013	<0.005	<0.005	<0.005	0.67	44	9	68	52
B-10	21	17	12/20/2013	<0.0049	<0.0049	<0.0049	0.48	30	7.9	37	47
ESL Drinking Water (Residential)				11	85	3.8	12	1,000	80	150	600
ESL Non-Drinking Water (Commercial)				11	85	13	12	2,500	320	150	600

Notes:

ESL: California Regional Water Quality Control Board, Environmental Screening Levels, Interim Final 2013

< : below Laboratory Detection Limits

Y: Sample exhibits chromatographic pattern which does not resemble standard

X: Does not match pattern of reference Gasoline standard. Reported value is the result of contribution from hydrocarbons heavier than requested fuel in range of C5-C12 quantified as gasoline

X: Not typical of Diesel standard pattern (possibly fuel lighter than diesel)

Note: Depth to groundwater is tentative, since some locations had slower water recovery rates, and does not represent the actual stabilized groundwater elevation across the site

NA: Not Analyzed

APPENDIX A

DRILLING PERMIT

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: 11/26/2013 By jamesy

Permit Numbers: W2013-0964
Permits Valid from 12/19/2013 to 12/19/2013

Application Id: 1385404262251
Site Location: 6501 Shattuck Avenue
Project Start Date: 12/19/2013
Assigned Inspector: Contact Balance Hydrologics, Inc at (510) 473-5663 or acwells@balancehydro.com

City of Project Site:Oakland

Completion Date:12/19/2013

Applicant: SOMA Environmental Engineering - Mansour **Phone: 925-734-6400**

Sepehr
6620 Owens Drive, Suite A, Pleasanton, CA 94588

Property Owner: Athan Magganas **Phone: 510-520-1482**

2550 Appian Way, Pinole, CA 94564

Client: ** same as Property Owner **

Contact: Lizzie Hightower **Phone: 925-734-6400**

Cell: 925-330-5235

Receipt Number: WR2013-0452	Total Due:	\$265.00
Payer Name : Mansour Sepehr	Total Amount Paid:	\$265.00
	Paid By: VISA	PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 1 Boreholes
Driller: Gregg Drilling & Testing - Lic #: 485165 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2013-0964	11/26/2013	03/19/2014	1	3.00 in.	15.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

Alameda County Public Works Agency - Water Resources Well Permit

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

7. NOTE:

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

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

APPENDIX B

BORING LOGS

PROJECT: 5032

DATE DRILLED: December 20, 2013

SITE LOCATION: 6501 Shattuck Ave., Oakland

CASING ELEVATION: NA

DRILLER: Woodward Drilling

First Encountered GW: 20.00 feet
Stablized GW: 17 feet

DRILLING METHOD: DP

T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inches

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

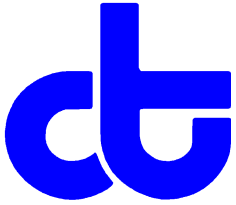
APPROVED BY: M. Sepehr

DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
0.2		SM	Hand auger to 5 ft. Fill Material: Brown, loose, dry, silty sand with coarse gravel up to 2.5 inches.					
5		CL	SANDY LEAN CLAY: Grayish-green, moist, ~30% fine- to medium-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, some gravel. PHC odor.					
0.7		CL	CLAY: Brown with greenish-gray mottling, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, some gravel, slight PHC odor.					
10		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine- to medium-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
1.0		CL	CLAY: Brown, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
1.2		CL	CLAY: Brown, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
1.4		CL	CLAY: Brown, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
1.4		CL	CLAY: Brown, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
1.4		CL	CLAY: Brown, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
0.9		CL	CLAY: Brown, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
0.7		CL	CLAY: Brown, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
0.5		CL	CLAY: Brown, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
0.5		CL	CLAY: Brown, moist, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
1.0		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
0.3		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
0.5		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
1.0		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
20		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
0.3		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
25								

COMMENTS: TD @ 21 feet

APPENDIX C

LABORATORY REPORT AND CHAIN OF CUSTODY FORM



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 251882
ANALYTICAL REPORT

SOMA Environmental Engineering Inc. Project : 5032
6620 Owens Dr. Location : 6501 Shattuck Ave., Oakland
Pleasanton, CA 94588 Level : II

Table with 2 columns: Sample ID and Lab ID. Rows include B-10@8FT through B-10@21FT, B-10@7FT, and B-10.

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: [Handwritten Signature]
Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

Date: 01/06/2014

CASE NARRATIVE

Laboratory number: 251882
Client: SOMA Environmental Engineering Inc.
Project: 5032
Location: 6501 Shattuck Ave., Oakland
Request Date: 12/20/13
Samples Received: 12/20/13

This data package contains sample and QC results for five soil samples and one water sample, requested for the above referenced project on 12/20/13. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

High surrogate recovery was observed for bromofluorobenzene (FID) in B-10@7FT (lab # 251882-014). No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Water:

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Soil:

No analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM) Water:

No analytical problems were encountered.

Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM) Soil:

High RPD was observed for pyrene in the MS/MSD for batch 206525; the parent sample was not a project sample. No other analytical problems were encountered.

Metals (EPA 6010B) Soil:

High RPD was observed for nickel in the MS/MSD for batch 206609; the parent sample was not a project sample, and the RPD was acceptable in the BS/BSD. Zinc was detected above the RL in the method blank for batch 206609; this analyte was detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Metals (EPA 6010B) Filtrate:

No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins, Ltd.
 Analytical Laboratory Since 1878
 2323 Fifth Street
 Berkeley, CA 94710
 (510)486-0900 Phone
 (510)486-0532 Fax

C&T LOGIN # 251882

Sampler: Lizzie Hightower

Project No: 5032

Report To: Joyce Bobek

Project Name: 6501 Shattuck Ave., Oakland

Company: SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE
1	B-10 @ 8 ft	12/20/13 10:09	X			6' Sleeve				X
2	B-10 @ 9 ft	10:04	X							X
3	B-10 @ 10 ft	09:59	X							X
4	B-10 @ 11 ft	10:25	X							X
5	B-10 @ 12 ft	10:17	X							X
6	B-10 @ 13 ft	10:49	X							X
7	B-10 @ 14 ft	10:42	X							X
8	B-10 @ 15 ft	11:04	X							X
9	B-10 @ 16 ft	11:00	X							X
10	B-10 @ 17 ft	11:23	X							X

VOCs (Full List) 8260GX	CA LUFT-5 Metals	PAHS 8270-SIM								
X	X	X	*(Hold)*							
X	X	X								
X	X	X								
X	X	X	*(Hold)*							
X	X	X	*(Hold)*							
X	X	X	*(Hold)*							
X	X	X	*(Hold)*							
X	X	X								
X	X	X	*(Hold)*							
X	X	X	*(Hold)*							

Notes: EDF OUTPUT REQUIRED

Lab filter water for
 CA LUFT-5 metals

RELINQUISHED BY:

L. Hightower 12/20/13 14:53 DATE/TIME
 _____ DATE/TIME
 _____ DATE/TIME

RECEIVED BY:

Pat Mennig 12/20/13 14:53 DATE/TIME
 _____ DATE/TIME
 _____ DATE/TIME

CHAIN OF CUSTODY

Curtis & Tompkins, Ltd.
 Analytical Laboratory Since 1878
 2323 Fifth Street
 Berkeley, CA 94710
 (510)486-0900 Phone
 (510)486-0532 Fax

C&T LOGIN # 25180¹²

Sampler: Lizzie Hightower

Project No: 5032

Report To: Joyce Bobek

Project Name: 6501 Shattuck Ave., Oakland

Company: SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE
11	B-10 @ 18 ft	12/20/13 11:29	X			6" Sleeve				X
12	B-10 @ 19 ft	↓ 11:16	X			↓				X
13	B-10 @ 21 ft	↓ 11:40	X			↓				X
14	B-10 @ 7 ft	↓ 09:40	X			↓				X
15	B-10	12/20/13 12:00	X			3 VOAs 2-1 L Amber	X			X
	↓	↓ ↓	X			500 mL Poly				X

VOCs (Full List) 8260GX	CA LUFT-5 Metals	PAHs 8270-SIM																		
X	X	X																		
X	X	X																		
X	X	X																		
X	X	X																		
X		X																		
	X																			

Notes: EDF OUTPUT REQUIRED
 Lab filter water for
 CA LUFT-5 metals

RELINQUISHED BY:
S. Hightower 12/20/13
 14:53 DATE/TIME

DATE/TIME

DATE/TIME

RECEIVED BY:
Pat Lamm 12/20/13
 14:53 DATE/TIME

DATE/TIME

DATE/TIME

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 251942 Date Received 12/20/13 Number of coolers 1
Client SOMA Project 6501 SHATTUCK AVE., OAKLAND

Date Opened 12/20/13 By (print) KR (sign) Julia Rankin (5032)
Date Logged in 12 By (print) MS (sign) MS

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, Cloth material, Foam blocks, Cardboard, Bags, Styrofoam, None, 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

Blank lines for handwritten comments

Total Volatile Hydrocarbons			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	206550
Units:	mg/Kg	Sampled:	12/20/13
Basis:	as received	Received:	12/20/13
Diln Fac:	1.000	Analyzed:	12/26/13

Field ID: B-10@21FT Lab ID: 251882-013
 Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	67-137

Field ID: B-10@7FT Lab ID: 251882-014
 Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	7.1 Y	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	140 *	67-137

Type: BLANK Lab ID: QC722093

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-137

*= Value outside of QC limits; see narrative
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC722092	Batch#:	206550
Matrix:	Soil	Analyzed:	12/26/13
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.046	105	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	251859-010	Batch#:	206550
Matrix:	Soil	Sampled:	12/19/13
Units:	mg/Kg	Received:	12/19/13
Basis:	as received	Analyzed:	12/26/13

Type: MS Lab ID: QC722094

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1083	10.87	7.872	71	42-120

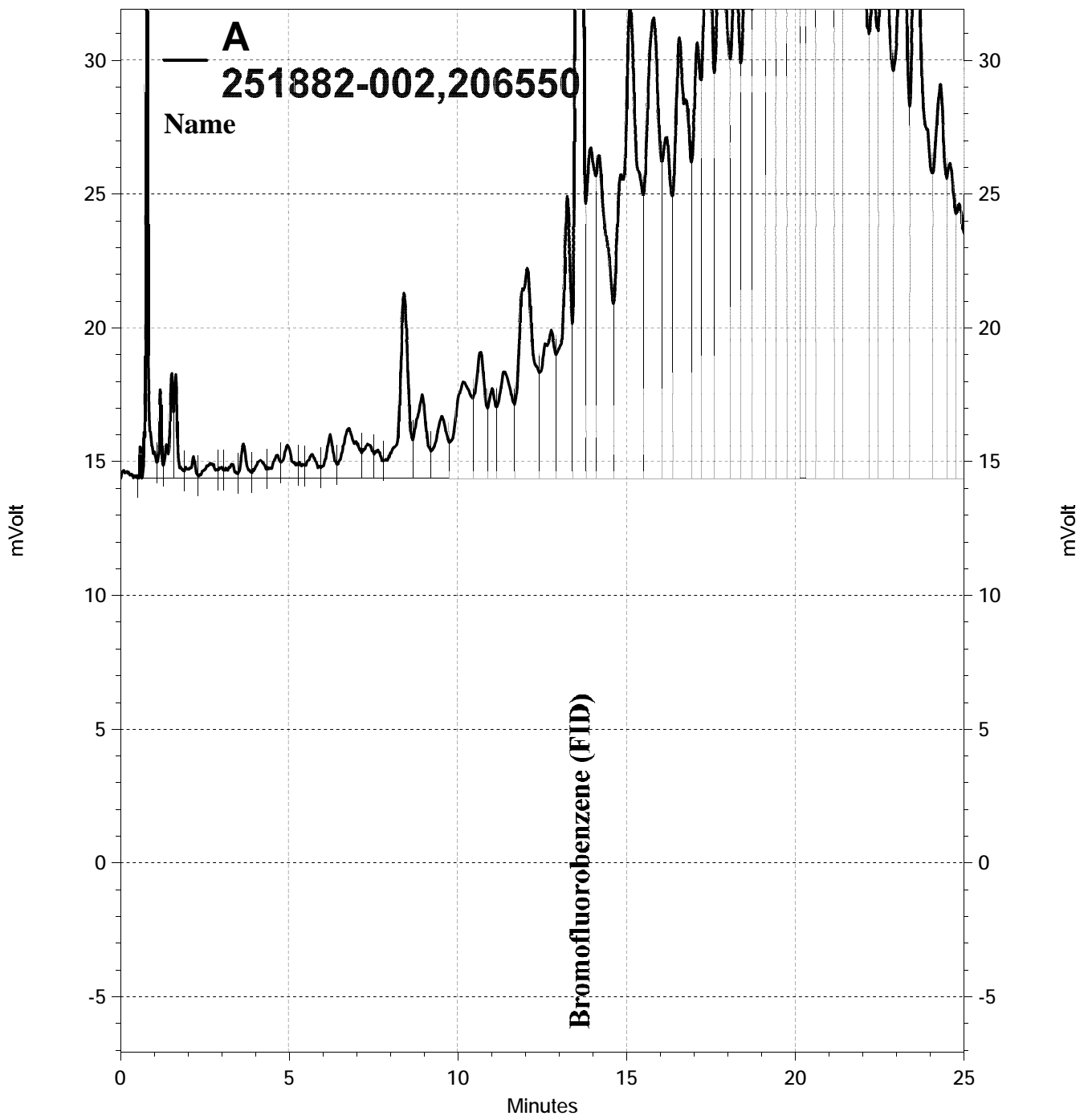
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	114	67-137

Type: MSD Lab ID: QC722095

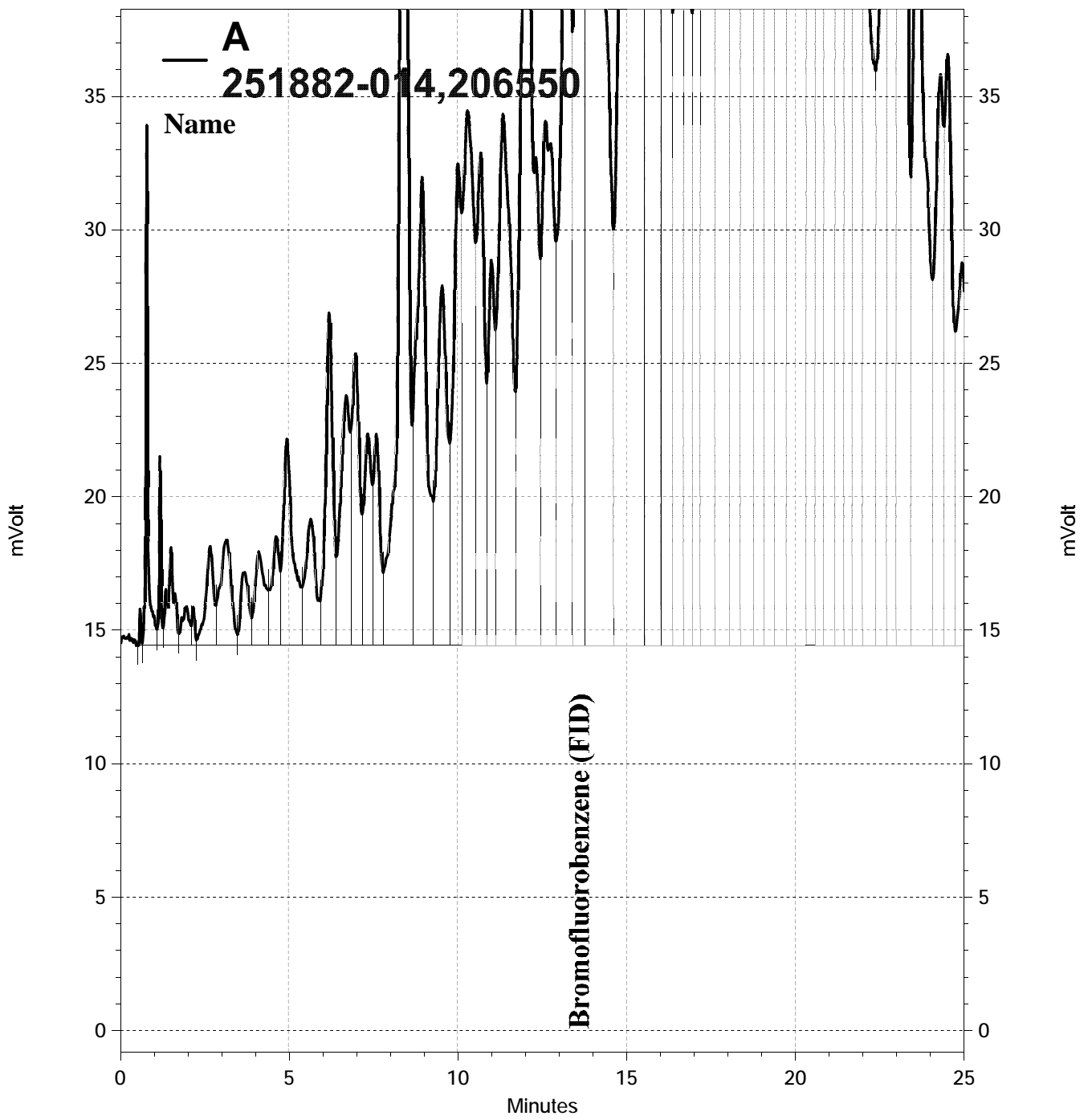
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.42	7.539	71	42-120	0	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	115	67-137

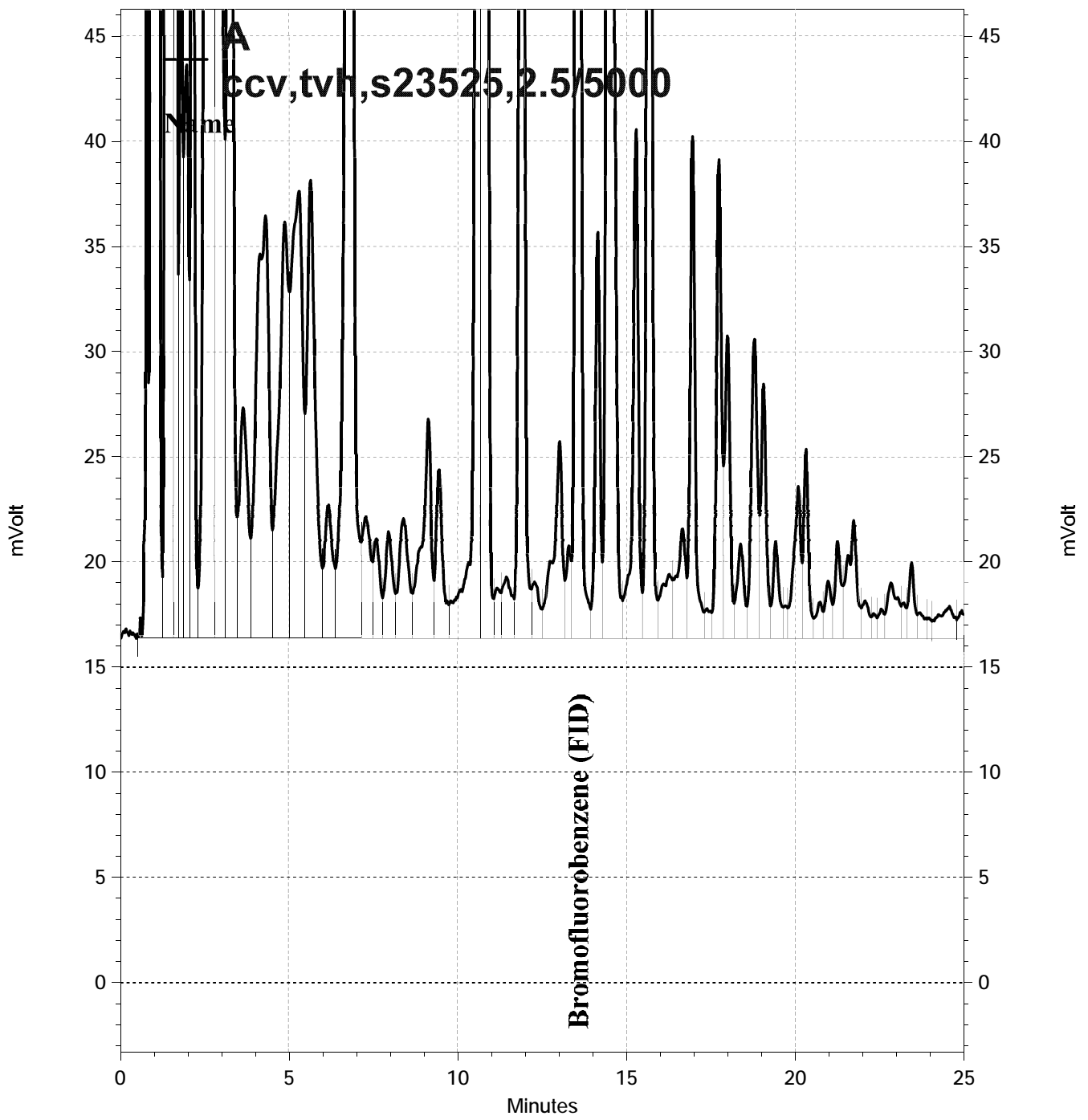
RPD= Relative Percent Difference



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\360-013, A



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\360-017, A



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\360-003, A

Purgeable Organics by GC/MS

Lab #: 251882	Location: 6501 Shattuck Ave., Oakland
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 5032	Analysis: EPA 8260B
Field ID: B-10	Batch#: 206492
Lab ID: 251882-015	Sampled: 12/20/13
Matrix: Water	Received: 12/20/13
Units: ug/L	Analyzed: 12/23/13
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Ethanol	ND	1,000
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	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
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
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
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 251882	Location: 6501 Shattuck Ave., Oakland
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 5032	Analysis: EPA 8260B
Field ID: B-10	Batch#: 206492
Lab ID: 251882-015	Sampled: 12/20/13
Matrix: Water	Received: 12/20/13
Units: ug/L	Analyzed: 12/23/13
Diln Fac: 1.000	

Analyte	Result	RL
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	206492
Units:	ug/L	Analyzed:	12/23/13
Diln Fac:	1.000		

Type: BS Lab ID: QC721845

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	120.2	96	37-151
Isopropyl Ether (DIPE)	25.00	25.14	101	56-124
Ethyl tert-Butyl Ether (ETBE)	25.00	23.81	95	61-122
Methyl tert-Amyl Ether (TAME)	25.00	22.92	92	65-120
1,1-Dichloroethene	25.00	22.48	90	65-134
Benzene	25.00	25.21	101	80-124
Trichloroethene	25.00	24.43	98	80-120
Toluene	25.00	24.05	96	80-122
Chlorobenzene	25.00	25.75	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	77-136
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC721846

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	129.5	104	37-151	7	30
Isopropyl Ether (DIPE)	25.00	25.68	103	56-124	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	25.19	101	61-122	6	22
Methyl tert-Amyl Ether (TAME)	25.00	23.28	93	65-120	2	22
1,1-Dichloroethene	25.00	23.45	94	65-134	4	20
Benzene	25.00	24.79	99	80-124	2	20
Trichloroethene	25.00	24.21	97	80-120	1	20
Toluene	25.00	23.62	94	80-122	2	20
Chlorobenzene	25.00	25.80	103	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	92	80-120
Bromofluorobenzene	101	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC721847	Batch#:	206492
Matrix:	Water	Analyzed:	12/23/13
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Ethanol	ND	1,000
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	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
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
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
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC721847	Batch#:	206492
Matrix:	Water	Analyzed:	12/23/13
Units:	ug/L		

Analyte	Result	RL
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	206492
Units:	ug/L	Analyzed:	12/23/13
Diln Fac:	1.000		

Type: BS Lab ID: QC721882

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	945.5	95	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	91	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC721883

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,084	108	70-130	14	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	77-136
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	101	80-120

RPD= Relative Percent Difference

Purgeable Organics by GC/MS

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@9FT	Diln Fac:	0.9690
Lab ID:	251882-002	Batch#:	206484
Matrix:	Soil	Sampled:	12/20/13
Units:	ug/Kg	Received:	12/20/13
Basis:	as received	Analyzed:	12/23/13

Analyte	Result	RL
Freon 12	ND	9.7
tert-Butyl Alcohol (TBA)	ND	97
Chloromethane	ND	9.7
Isopropyl Ether (DIPE)	ND	4.8
Vinyl Chloride	ND	9.7
Bromomethane	ND	9.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
Chloroethane	ND	9.7
Methyl tert-Amyl Ether (TAME)	ND	4.8
Trichlorofluoromethane	ND	4.8
Ethanol	ND	970
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.7
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.7
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.7
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@9FT	Diln Fac:	0.9690
Lab ID:	251882-002	Batch#:	206484
Matrix:	Soil	Sampled:	12/20/13
Units:	ug/Kg	Received:	12/20/13
Basis:	as received	Analyzed:	12/23/13

Analyte	Result	RL
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	93	76-128
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	92	80-120
Bromofluorobenzene	94	79-128

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Purgeable Organics by GC/MS

Lab #: 251882	Location: 6501 Shattuck Ave., Oakland
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 5032	Analysis: EPA 8260B
Field ID: B-10@10FT	Diln Fac: 0.9766
Lab ID: 251882-003	Batch#: 206484
Matrix: Soil	Sampled: 12/20/13
Units: ug/Kg	Received: 12/20/13
Basis: as received	Analyzed: 12/23/13

Analyte	Result	RL
Freon 12	ND	9.8
tert-Butyl Alcohol (TBA)	ND	98
Chloromethane	ND	9.8
Isopropyl Ether (DIPE)	ND	4.9
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Chloroethane	ND	9.8
Methyl tert-Amyl Ether (TAME)	ND	4.9
Trichlorofluoromethane	ND	4.9
Ethanol	ND	980
Acetone	ND	20
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.8
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.8
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.8
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	ND	4.9
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@10FT	Diln Fac:	0.9766
Lab ID:	251882-003	Batch#:	206484
Matrix:	Soil	Sampled:	12/20/13
Units:	ug/Kg	Received:	12/20/13
Basis:	as received	Analyzed:	12/23/13

Analyte	Result	RL
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	92	76-128
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	90	80-120
Bromofluorobenzene	88	79-128

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@15FT	Diln Fac:	0.9434
Lab ID:	251882-008	Batch#:	206484
Matrix:	Soil	Sampled:	12/20/13
Units:	ug/Kg	Received:	12/20/13
Basis:	as received	Analyzed:	12/23/13

Analyte	Result	RL
Freon 12	ND	9.4
tert-Butyl Alcohol (TBA)	ND	94
Chloromethane	ND	9.4
Isopropyl Ether (DIPE)	ND	4.7
Vinyl Chloride	ND	9.4
Bromomethane	ND	9.4
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Chloroethane	ND	9.4
Methyl tert-Amyl Ether (TAME)	ND	4.7
Trichlorofluoromethane	ND	4.7
Ethanol	ND	940
Acetone	ND	19
Freon 113	ND	4.7
1,1-Dichloroethene	ND	4.7
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.7
MTBE	ND	4.7
trans-1,2-Dichloroethene	ND	4.7
Vinyl Acetate	ND	47
1,1-Dichloroethane	ND	4.7
2-Butanone	ND	9.4
cis-1,2-Dichloroethene	ND	4.7
2,2-Dichloropropane	ND	4.7
Chloroform	ND	4.7
Bromochloromethane	ND	4.7
1,1,1-Trichloroethane	ND	4.7
1,1-Dichloropropene	ND	4.7
Carbon Tetrachloride	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Trichloroethene	ND	4.7
1,2-Dichloropropane	ND	4.7
Bromodichloromethane	ND	4.7
Dibromomethane	ND	4.7
4-Methyl-2-Pentanone	ND	9.4
cis-1,3-Dichloropropene	ND	4.7
Toluene	ND	4.7
trans-1,3-Dichloropropene	ND	4.7
1,1,2-Trichloroethane	ND	4.7
2-Hexanone	ND	9.4
1,3-Dichloropropane	ND	4.7
Tetrachloroethene	ND	4.7
Dibromochloromethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Chlorobenzene	ND	4.7
1,1,1,2-Tetrachloroethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7
Styrene	ND	4.7
Bromoform	ND	4.7
Isopropylbenzene	ND	4.7
1,1,2,2-Tetrachloroethane	ND	4.7
1,2,3-Trichloropropane	ND	4.7

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@15FT	Diln Fac:	0.9434
Lab ID:	251882-008	Batch#:	206484
Matrix:	Soil	Sampled:	12/20/13
Units:	ug/Kg	Received:	12/20/13
Basis:	as received	Analyzed:	12/23/13

Analyte	Result	RL
Propylbenzene	ND	4.7
Bromobenzene	ND	4.7
1,3,5-Trimethylbenzene	ND	4.7
2-Chlorotoluene	ND	4.7
4-Chlorotoluene	ND	4.7
tert-Butylbenzene	ND	4.7
1,2,4-Trimethylbenzene	ND	4.7
sec-Butylbenzene	ND	4.7
para-Isopropyl Toluene	ND	4.7
1,3-Dichlorobenzene	ND	4.7
1,4-Dichlorobenzene	ND	4.7
n-Butylbenzene	ND	4.7
1,2-Dichlorobenzene	ND	4.7
1,2-Dibromo-3-Chloropropane	ND	4.7
1,2,4-Trichlorobenzene	ND	4.7
Hexachlorobutadiene	ND	4.7
Naphthalene	ND	4.7
1,2,3-Trichlorobenzene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	93	76-128
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	86	80-120
Bromofluorobenzene	89	79-128

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@21FT	Diln Fac:	0.9560
Lab ID:	251882-013	Batch#:	206484
Matrix:	Soil	Sampled:	12/20/13
Units:	ug/Kg	Received:	12/20/13
Basis:	as received	Analyzed:	12/23/13

Analyte	Result	RL
Freon 12	ND	9.6
tert-Butyl Alcohol (TBA)	ND	96
Chloromethane	ND	9.6
Isopropyl Ether (DIPE)	ND	4.8
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
Chloroethane	ND	9.6
Methyl tert-Amyl Ether (TAME)	ND	4.8
Trichlorofluoromethane	ND	4.8
Ethanol	ND	960
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.6
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.6
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.6
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@21FT	Diln Fac:	0.9560
Lab ID:	251882-013	Batch#:	206484
Matrix:	Soil	Sampled:	12/20/13
Units:	ug/Kg	Received:	12/20/13
Basis:	as received	Analyzed:	12/23/13

Analyte	Result	RL
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	92	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	93	80-120
Bromofluorobenzene	86	79-128

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@7FT	Diln Fac:	0.9785
Lab ID:	251882-014	Batch#:	206484
Matrix:	Soil	Sampled:	12/20/13
Units:	ug/Kg	Received:	12/20/13
Basis:	as received	Analyzed:	12/23/13

Analyte	Result	RL
Freon 12	ND	9.8
tert-Butyl Alcohol (TBA)	ND	98
Chloromethane	ND	9.8
Isopropyl Ether (DIPE)	ND	4.9
Vinyl Chloride	ND	9.8
Bromomethane	ND	9.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
Chloroethane	ND	9.8
Methyl tert-Amyl Ether (TAME)	ND	4.9
Trichlorofluoromethane	ND	4.9
Ethanol	ND	980
Acetone	ND	20
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.8
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.8
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.8
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	ND	4.9
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@7FT	Diln Fac:	0.9785
Lab ID:	251882-014	Batch#:	206484
Matrix:	Soil	Sampled:	12/20/13
Units:	ug/Kg	Received:	12/20/13
Basis:	as received	Analyzed:	12/23/13

Analyte	Result	RL
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	89	76-128
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	89	80-120
Bromofluorobenzene	104	79-128

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC721816	Batch#:	206484
Matrix:	Soil	Analyzed:	12/23/13
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
tert-Butyl Alcohol (TBA)	ND	100
Chloromethane	ND	10
Isopropyl Ether (DIPE)	ND	5.0
Vinyl Chloride	ND	10
Bromomethane	ND	10
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Chloroethane	ND	10
Methyl tert-Amyl Ether (TAME)	ND	5.0
Trichlorofluoromethane	ND	5.0
Ethanol	ND	1,000
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC721816	Batch#:	206484
Matrix:	Soil	Analyzed:	12/23/13
Units:	ug/Kg		

Analyte	Result	RL
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	96	76-128
1,2-Dichloroethane-d4	107	80-137
Toluene-d8	92	80-120
Bromofluorobenzene	88	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	B-10@21FT	Batch#:	206484
MSS Lab ID:	251882-013	Sampled:	12/20/13
Matrix:	Soil	Received:	12/20/13
Units:	ug/Kg	Analyzed:	12/23/13
Basis:	as received		

Type: MS Diln Fac: 0.9671
 Lab ID: QC721841

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<17.22	241.8	260.6	108	38-134
Isopropyl Ether (DIPE)	<1.396	48.36	39.23	81	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.5546	48.36	44.15	91	47-122
Methyl tert-Amyl Ether (TAME)	<0.5564	48.36	45.45	94	50-120
1,1-Dichloroethene	<1.224	48.36	48.87	101	46-138
Benzene	<0.6636	48.36	47.73	99	51-125
Trichloroethene	<0.7165	48.36	48.49	100	41-146
Toluene	<0.4466	48.36	44.31	92	45-123
Chlorobenzene	<0.3375	48.36	46.90	97	39-120

Surrogate	%REC	Limits
Dibromofluoromethane	89	76-128
1,2-Dichloroethane-d4	85	80-137
Toluene-d8	93	80-120
Bromofluorobenzene	94	79-128

Type: MSD Diln Fac: 0.9542
 Lab ID: QC721842

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	238.5	162.6	68	38-134	45	55
Isopropyl Ether (DIPE)	47.71	34.21	72	44-123	12	45
Ethyl tert-Butyl Ether (ETBE)	47.71	38.45	81	47-122	12	46
Methyl tert-Amyl Ether (TAME)	47.71	37.92	79	50-120	17	45
1,1-Dichloroethene	47.71	50.48	106	46-138	5	51
Benzene	47.71	43.87	92	51-125	7	46
Trichloroethene	47.71	46.35	97	41-146	3	55
Toluene	47.71	42.46	89	45-123	3	59
Chlorobenzene	47.71	42.86	90	39-120	8	54

Surrogate	%REC	Limits
Dibromofluoromethane	91	76-128
1,2-Dichloroethane-d4	84	80-137
Toluene-d8	89	80-120
Bromofluorobenzene	92	79-128

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC721872	Batch#:	206484
Matrix:	Soil	Analyzed:	12/23/13
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	93.75	73.14	78	46-146
Isopropyl Ether (DIPE)	18.75	13.44	72	61-126
Ethyl tert-Butyl Ether (ETBE)	18.75	16.09	86	66-123
Methyl tert-Amyl Ether (TAME)	18.75	17.34	92	69-120
1,1-Dichloroethene	18.75	21.09	112	68-135
Benzene	18.75	19.71	105	80-127
Trichloroethene	18.75	18.36	98	77-129
Toluene	18.75	18.44	98	79-125
Chlorobenzene	18.75	20.08	107	78-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	76-128
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	92	80-120
Bromofluorobenzene	88	79-128

Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	5032	Analysis:	EPA 8270C-SIM
Field ID:	B-10	Batch#:	206544
Lab ID:	251882-015	Sampled:	12/20/13
Matrix:	Water	Received:	12/20/13
Units:	ug/L	Prepared:	12/26/13
Diln Fac:	1.000	Analyzed:	12/27/13

Analyte	Result	RL
Naphthalene	ND	0.1
Acenaphthylene	ND	0.1
Acenaphthene	ND	0.1
Fluorene	ND	0.1
Phenanthrene	ND	0.1
Anthracene	ND	0.1
Fluoranthene	ND	0.1
Pyrene	ND	0.1
Benzo(a)anthracene	ND	0.1
Chrysene	ND	0.1
Benzo(b)fluoranthene	ND	0.1
Benzo(k)fluoranthene	ND	0.1
Benzo(a)pyrene	ND	0.1
Indeno(1,2,3-cd)pyrene	ND	0.1
Dibenz(a,h)anthracene	ND	0.1
Benzo(g,h,i)perylene	ND	0.1

Surrogate	%REC	Limits
Nitrobenzene-d5	78	50-135
2-Fluorobiphenyl	69	51-120
Terphenyl-d14	71	34-127

ND= Not Detected
 RL= Reporting Limit

Batch QC Report
Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	5032	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC722059	Batch#:	206544
Matrix:	Water	Prepared:	12/26/13
Units:	ug/L	Analyzed:	12/27/13

Analyte	Result	RL
Naphthalene	ND	0.1
Acenaphthylene	ND	0.1
Acenaphthene	ND	0.1
Fluorene	ND	0.1
Phenanthrene	ND	0.1
Anthracene	ND	0.1
Fluoranthene	ND	0.1
Pyrene	ND	0.1
Benzo(a)anthracene	ND	0.1
Chrysene	ND	0.1
Benzo(b)fluoranthene	ND	0.1
Benzo(k)fluoranthene	ND	0.1
Benzo(a)pyrene	ND	0.1
Indeno(1,2,3-cd)pyrene	ND	0.1
Dibenz(a,h)anthracene	ND	0.1
Benzo(g,h,i)perylene	ND	0.1

Surrogate	%REC	Limits
Nitrobenzene-d5	69	50-135
2-Fluorobiphenyl	65	51-120
Terphenyl-d14	88	34-127

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	5032	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC722060	Batch#:	206544
Matrix:	Water	Prepared:	12/26/13
Units:	ug/L	Analyzed:	12/30/13

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	1.000	0.6814	68	62-120
Pyrene	1.000	0.9467	95	51-121

Surrogate	%REC	Limits
Nitrobenzene-d5	74	50-135
2-Fluorobiphenyl	68	51-120
Terphenyl-d14	105	34-127

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	5032	Analysis:	EPA 8270C-SIM
Field ID:	ZZZZZZZZZZ	Batch#:	206544
MSS Lab ID:	251888-008	Sampled:	12/19/13
Matrix:	Water	Received:	12/20/13
Units:	ug/L	Prepared:	12/26/13
Diln Fac:	1.000	Analyzed:	12/27/13

Type: MS Lab ID: QC722061

Analyte	MSS Result	Spiked	Result	%REC	Limits
Acenaphthene	<0.01923	1.020	0.6364	62	53-120
Pyrene	<0.02304	1.020	0.8012	79	50-125

Surrogate	%REC	Limits
Nitrobenzene-d5	92	50-135
2-Fluorobiphenyl	81	51-120
Terphenyl-d14	105	34-127

Type: MSD Lab ID: QC722062

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	1.000	0.6443	64	53-120	3	48
Pyrene	1.000	0.8153	82	50-125	4	30

Surrogate	%REC	Limits
Nitrobenzene-d5	105	50-135
2-Fluorobiphenyl	79	51-120
Terphenyl-d14	108	34-127

RPD= Relative Percent Difference

Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Field ID:	B-10@9FT	Batch#:	206525
Lab ID:	251882-002	Sampled:	12/20/13
Matrix:	Soil	Received:	12/20/13
Units:	ug/Kg	Prepared:	12/26/13
Basis:	as received	Analyzed:	12/26/13
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	5.1
Acenaphthylene	ND	5.1
Acenaphthene	ND	5.1
Fluorene	ND	5.1
Phenanthrene	ND	5.1
Anthracene	ND	5.1
Fluoranthene	ND	5.1
Pyrene	6.5	5.1
Benzo(a)anthracene	ND	5.1
Chrysene	ND	5.1
Benzo(b)fluoranthene	ND	5.1
Benzo(k)fluoranthene	ND	5.1
Benzo(a)pyrene	ND	5.1
Indeno(1,2,3-cd)pyrene	ND	5.1
Dibenz(a,h)anthracene	ND	5.1
Benzo(g,h,i)perylene	ND	5.1

Surrogate	%REC	Limits
Nitrobenzene-d5	49	46-120
2-Fluorobiphenyl	56	52-120
Terphenyl-d14	75	54-132

ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Field ID:	B-10@10FT	Batch#:	206525
Lab ID:	251882-003	Sampled:	12/20/13
Matrix:	Soil	Received:	12/20/13
Units:	ug/Kg	Prepared:	12/26/13
Basis:	as received	Analyzed:	12/27/13
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	8.3	5.0
Benzo(a)anthracene	ND	5.0
Chrysene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzo(a)pyrene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	73	46-120
2-Fluorobiphenyl	56	52-120
Terphenyl-d14	127	54-132

ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Field ID:	B-10@15FT	Batch#:	206582
Lab ID:	251882-008	Sampled:	12/20/13
Matrix:	Soil	Received:	12/20/13
Units:	ug/Kg	Prepared:	12/27/13
Basis:	as received	Analyzed:	12/31/13
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	ND	5.0
Benzo(a)anthracene	ND	5.0
Chrysene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzo(a)pyrene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	88	46-120
2-Fluorobiphenyl	73	52-120
Terphenyl-d14	95	54-132

ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Field ID:	B-10@21FT	Batch#:	206582
Lab ID:	251882-013	Sampled:	12/20/13
Matrix:	Soil	Received:	12/20/13
Units:	ug/Kg	Prepared:	12/27/13
Basis:	as received	Analyzed:	12/31/13
Diln Fac:	1.000		

Analyte	Result	RL
Naphthalene	ND	4.9
Acenaphthylene	ND	4.9
Acenaphthene	ND	4.9
Fluorene	ND	4.9
Phenanthrene	ND	4.9
Anthracene	ND	4.9
Fluoranthene	ND	4.9
Pyrene	ND	4.9
Benzo(a)anthracene	ND	4.9
Chrysene	ND	4.9
Benzo(b)fluoranthene	ND	4.9
Benzo(k)fluoranthene	ND	4.9
Benzo(a)pyrene	ND	4.9
Indeno(1,2,3-cd)pyrene	ND	4.9
Dibenz(a,h)anthracene	ND	4.9
Benzo(g,h,i)perylene	ND	4.9

Surrogate	%REC	Limits
Nitrobenzene-d5	97	46-120
2-Fluorobiphenyl	80	52-120
Terphenyl-d14	99	54-132

ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Field ID:	B-10@7FT	Batch#:	206525
Lab ID:	251882-014	Sampled:	12/20/13
Matrix:	Soil	Received:	12/20/13
Units:	ug/Kg	Prepared:	12/26/13
Basis:	as received	Analyzed:	12/27/13
Diln Fac:	10.00		

Analyte	Result	RL
Naphthalene	ND	50
Acenaphthylene	ND	50
Acenaphthene	ND	50
Fluorene	ND	50
Phenanthrene	61	50
Anthracene	ND	50
Fluoranthene	ND	50
Pyrene	93	50
Benzo(a)anthracene	ND	50
Chrysene	76	50
Benzo(b)fluoranthene	ND	50
Benzo(k)fluoranthene	ND	50
Benzo(a)pyrene	ND	50
Indeno(1,2,3-cd)pyrene	ND	50
Dibenz(a,h)anthracene	ND	50
Benzo(g,h,i)perylene	ND	50

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	46-120
2-Fluorobiphenyl	DO	52-120
Terphenyl-d14	DO	54-132

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report
Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC721996	Batch#:	206525
Matrix:	Soil	Prepared:	12/26/13
Units:	ug/Kg	Analyzed:	12/27/13

Analyte	Result	RL
Naphthalene	ND	4.9
Acenaphthylene	ND	4.9
Acenaphthene	ND	4.9
Fluorene	ND	4.9
Phenanthrene	ND	4.9
Anthracene	ND	4.9
Fluoranthene	ND	4.9
Pyrene	ND	4.9
Benzo(a)anthracene	ND	4.9
Chrysene	ND	4.9
Benzo(b)fluoranthene	ND	4.9
Benzo(k)fluoranthene	ND	4.9
Benzo(a)pyrene	ND	4.9
Indeno(1,2,3-cd)pyrene	ND	4.9
Dibenz(a,h)anthracene	ND	4.9
Benzo(g,h,i)perylene	ND	4.9

Surrogate	%REC	Limits
Nitrobenzene-d5	64	46-120
2-Fluorobiphenyl	61	52-120
Terphenyl-d14	90	54-132

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC721997	Batch#:	206525
Matrix:	Soil	Prepared:	12/26/13
Units:	ug/Kg	Analyzed:	12/27/13

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	33.56	21.60	64	43-120
Pyrene	33.56	25.42	76	39-120

Surrogate	%REC	Limits
Nitrobenzene-d5	78	46-120
2-Fluorobiphenyl	71	52-120
Terphenyl-d14	85	54-132

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Field ID:	ZZZZZZZZZZ	Batch#:	206525
MSS Lab ID:	251888-010	Sampled:	12/20/13
Matrix:	Soil	Received:	12/20/13
Units:	ug/Kg	Prepared:	12/26/13
Basis:	as received	Analyzed:	12/27/13
Diln Fac:	4.000		

Type: MS Lab ID: QC721998

Analyte	MSS Result	Spiked	Result	%REC	Limits
Acenaphthene	5.381	33.06	25.26	60	47-120
Pyrene	167.4	33.06	238.9	216 NM	21-143

Surrogate	%REC	Limits
Nitrobenzene-d5	88	46-120
2-Fluorobiphenyl	71	52-120
Terphenyl-d14	92	54-132

Type: MSD Lab ID: QC721999

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	33.76	22.65	51	47-120	13	54
Pyrene	33.76	102.6	-192 NM	21-143	80	* 67

Surrogate	%REC	Limits
Nitrobenzene-d5	84	46-120
2-Fluorobiphenyl	69	52-120
Terphenyl-d14	88	54-132

*= Value outside of QC limits; see narrative

NM= Not Meaningful: Sample concentration > 4X spike concentration

RPD= Relative Percent Difference

Batch QC Report
Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC722215	Batch#:	206582
Matrix:	Soil	Prepared:	12/27/13
Units:	ug/Kg	Analyzed:	12/27/13

Analyte	Result	RL
Naphthalene	ND	5.1
Acenaphthylene	ND	5.1
Acenaphthene	ND	5.1
Fluorene	ND	5.1
Phenanthrene	ND	5.1
Anthracene	ND	5.1
Fluoranthene	ND	5.1
Pyrene	ND	5.1
Benzo(a)anthracene	ND	5.1
Chrysene	ND	5.1
Benzo(b)fluoranthene	ND	5.1
Benzo(k)fluoranthene	ND	5.1
Benzo(a)pyrene	ND	5.1
Indeno(1,2,3-cd)pyrene	ND	5.1
Dibenz(a,h)anthracene	ND	5.1
Benzo(g,h,i)perylene	ND	5.1

Surrogate	%REC	Limits
Nitrobenzene-d5	62	46-120
2-Fluorobiphenyl	62	52-120
Terphenyl-d14	80	54-132

ND= Not Detected
 RL= Reporting Limit

Batch QC Report
Semivolatile Organics by GC/MS SIM

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC722216	Batch#:	206582
Matrix:	Soil	Prepared:	12/27/13
Units:	ug/Kg	Analyzed:	12/27/13

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	33.18	19.74	59	43-120
Pyrene	33.18	18.86	57	39-120

Surrogate	%REC	Limits
Nitrobenzene-d5	72	46-120
2-Fluorobiphenyl	62	52-120
Terphenyl-d14	80	54-132

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3550B
Project#:	5032	Analysis:	EPA 8270C-SIM
Field ID:	ZZZZZZZZZZ	Batch#:	206582
MSS Lab ID:	251929-006	Sampled:	12/23/13
Matrix:	Soil	Received:	12/23/13
Units:	ug/Kg	Prepared:	12/27/13
Basis:	as received	Analyzed:	12/31/13
Diln Fac:	2.000		

Type: MS Lab ID: QC722217

Analyte	MSS Result	Spiked	Result	%REC	Limits
Acenaphthene	<2.016	33.80	23.76	70	47-120
Pyrene	18.90	33.80	38.82	59	21-143

Surrogate	%REC	Limits
Nitrobenzene-d5	103	46-120
2-Fluorobiphenyl	75	52-120
Terphenyl-d14	89	54-132

Type: MSD Lab ID: QC722218

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	33.77	25.13	74	47-120	6	54
Pyrene	33.77	42.59	70	21-143	9	67

Surrogate	%REC	Limits
Nitrobenzene-d5	120	46-120
2-Fluorobiphenyl	76	52-120
Terphenyl-d14	104	54-132

RPD= Relative Percent Difference

California LUFT Metals			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050B
Project#:	5032	Analysis:	EPA 6010B
Units:	mg/Kg	Sampled:	12/20/13
Basis:	as received	Received:	12/20/13
Diln Fac:	1.000	Prepared:	12/27/13
Batch#:	206609	Analyzed:	12/31/13

Field ID: B-10@9FT Lab ID: 251882-002
 Type: SAMPLE Matrix: Soil

Analyte	Result	RL
Cadmium	0.54	0.24
Chromium	33	0.24
Lead	5.6	0.24
Nickel	36	0.24
Zinc	48	0.97

Field ID: B-10@10FT Lab ID: 251882-003
 Type: SAMPLE Matrix: Soil

Analyte	Result	RL
Cadmium	0.95	0.26
Chromium	41	0.26
Lead	10	0.26
Nickel	62	0.26
Zinc	52	1.0

Field ID: B-10@15FT Lab ID: 251882-008
 Type: SAMPLE Matrix: Soil

Analyte	Result	RL
Cadmium	0.67	0.27
Chromium	44	0.27
Lead	9.0	0.27
Nickel	68	0.27
Zinc	52	1.1

b= See narrative
 ND= Not Detected
 RL= Reporting Limit

California LUFT Metals			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050B
Project#:	5032	Analysis:	EPA 6010B
Units:	mg/Kg	Sampled:	12/20/13
Basis:	as received	Received:	12/20/13
Diln Fac:	1.000	Prepared:	12/27/13
Batch#:	206609	Analyzed:	12/31/13

Field ID: B-10@21FT Lab ID: 251882-013
 Type: SAMPLE Matrix: Soil

Analyte	Result	RL
Cadmium	0.48	0.24
Chromium	30	0.24
Lead	7.9	0.24
Nickel	37	0.24
Zinc	47	0.97

Field ID: B-10@7FT Lab ID: 251882-014
 Type: SAMPLE Matrix: Soil

Analyte	Result	RL
Cadmium	0.55	0.26
Chromium	31	0.26
Lead	7.5	0.26
Nickel	36	0.26
Zinc	54	1.1

Type: BLANK Matrix: Miscell.
 Lab ID: QC722310

Analyte	Result	RL
Cadmium	ND	0.25
Chromium	ND	0.25
Lead	ND	0.25
Nickel	ND	0.25
Zinc	1.4 b	1.0

b= See narrative
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

California LUFT Metals			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050B
Project#:	5032	Analysis:	EPA 6010B
Matrix:	Miscell.	Batch#:	206609
Units:	mg/Kg	Prepared:	12/27/13
Diln Fac:	1.000	Analyzed:	12/31/13

Type: BS Lab ID: QC722311

Analyte	Spiked	Result	%REC	Limits
Cadmium	10.00	10.73	107	80-120
Chromium	100.0	104.3	104	80-120
Lead	100.0	103.0	103	80-120
Nickel	25.00	26.38	106	80-120
Zinc	25.00	26.82	107	80-120

Type: BSD Lab ID: QC722312

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	10.00	10.41	104	80-120	3	20
Chromium	100.0	101.8	102	80-120	2	20
Lead	100.0	100.0	100	80-120	3	20
Nickel	25.00	25.67	103	80-120	3	20
Zinc	25.00	25.62	102	80-120	5	20

RPD= Relative Percent Difference

Batch QC Report

California LUFT Metals			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3050B
Project#:	5032	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	206609
MSS Lab ID:	251888-010	Sampled:	12/20/13
Matrix:	Soil	Received:	12/20/13
Units:	mg/Kg	Prepared:	12/27/13
Basis:	as received	Analyzed:	12/31/13
Diln Fac:	1.000		

Type: MS Lab ID: QC722313

Analyte	MSS Result	Spiked	Result	%REC	Limits
Cadmium	9.926	10.64	19.68	92	72-120
Chromium	75.77	106.4	187.8	105	61-120
Lead	3,525	106.4	3,638 >LR	106 NM	52-122
Nickel	189.2	26.60	308.6	449 NM	46-135
Zinc	5,368	26.60	4,078 >LR	-4850 NM	39-141

Type: MSD Lab ID: QC722314

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	9.174	20.01	110	72-120	9	22
Chromium	91.74	154.2	85	61-120	11	31
Lead	91.74	3,726 >LR	218 NM	52-122	NC	49
Nickel	22.94	190.4	5 NM	46-135	46 *	37
Zinc	22.94	5,612 >LR	1067 NM	39-141	NC	37

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Dissolved California LUFT Metals

Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	5032	Analysis:	EPA 6010B
Field ID:	B-10	Sampled:	12/20/13
Matrix:	Filtrate	Received:	12/20/13
Units:	ug/L	Prepared:	12/27/13
Diln Fac:	1.000	Analyzed:	01/03/14
Batch#:	206618		

Type: SAMPLE Lab ID: 251882-015

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	6.1	5.0
Nickel	5.9	5.0
Zinc	21	20

Type: BLANK Lab ID: QC722344

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	5.0
Nickel	ND	5.0
Zinc	ND	20

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Dissolved California LUFT Metals			
Lab #:	251882	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	5032	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	206618
Units:	ug/L	Prepared:	12/27/13
Diln Fac:	1.000	Analyzed:	01/03/14

Type: BS Lab ID: QC722345

Analyte	Spiked	Result	%REC	Limits
Cadmium	50.00	53.35	107	80-120
Chromium	200.0	200.0	100	80-120
Lead	100.0	105.2	105	80-120
Nickel	500.0	501.0	100	80-120
Zinc	500.0	519.1	104	80-120

Type: BSD Lab ID: QC722346

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	50.00	54.44	109	80-120	2	20
Chromium	200.0	201.6	101	80-120	1	20
Lead	100.0	105.4	105	80-120	0	20
Nickel	500.0	508.5	102	80-120	1	20
Zinc	500.0	524.9	105	80-120	1	20

RPD= Relative Percent Difference

