By Alameda County Environmental Health at 3:04 pm, Jan 03, 2013



November 6, 2012

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 "Monitoring Well Installation 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, C

Mansour Sepehr, Ph.D.,PE Principal Hydrogeologist

cc: Mr. Athan Magganas w/report enclosure



# **Monitoring Well Installation Report**

6501 Shattuck Avenue, **Oakland**, California

November 6, 2012

Project 5032

**Prepared for:** 

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



### PERJURY STATEMENT

Site Location: 6501 Shattuck Avenue, Oakland, California Report Title: Monitoring Well Installation 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, Property Manager 2550 Appian Way, Suite 201 Pinole, California 94564

### 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 February 10, 2011.

Mansour Sepehr, PhD, PE Principal Hydrogeologist



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### 1. INTRODUCTION

SOMA Environmental Engineering, Inc. (SOMA) conducted a monitoring well installation and prepared this report at the request of Bruder LLC manager Mr. Athan Magganas, for the property located 6501 Shattuck Avenue, Oakland, California (the site). This report was prepared in response to Alameda County Health Care Services (ACHCS) approval correspondence dated February 10, 2011. This correspondence pertained to SOMA's workplan dated December 13, 2010, an addendum entitled "Addendum to Interim Remedial Excavation and Proposed Soil and Groundwater Investigation" dated December 13, 2010. The site map is shown in Figure 1.

Based on the initial soil and groundwater investigation conducted in July 2010, and the soil excavation activities that took place in October of 2011, three groundwater monitoring wells were installed to assess the groundwater quality beneath the site and to determine if the site is eligible for closure. Two wells were installed in the sidewalk areas adjacent to the site and one well was installed inside the subject site. This report documents all well installation related activities and evaluates the results of the most recent soil and groundwater sampling.

### 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 site 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.

Monitoring Well Installation Report

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.

The initial soil and groundwater investigation was conducted by SOMA in July of 2010, and a follow up investigation was conducted in June of 2011.

The remedial soil excavation was conducted in October of 2011. The approved excavation entailed removal of contaminated soil in the area of former USTs to a maximum depth of 15 feet below ground surface (bgs); a total of 770 tons of PHC- impacted soils were excavated and disposed of off-site at Potrero Hills Landfill.

### 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 coarsegrained 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

Based on the initial soil and groundwater investigation conducted in July 2010, and the soil excavation activities that took place in October of 2011, three groundwater monitoring wells were proposed to assess the groundwater quality beneath the site and to determine if the site is eligible for closure.

Based on ACHCS correspondence dated February 10, 2011, in order to determine the extent of groundwater contamination at the site, three groundwater monitoring wells MW-1 through MW-3 were installed.

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: Installation of wells MW-1 through MW-3
- Task 3: Waste Disposal
- Task 4: Well Survey
- Task 5: Well Development
- Task 6: Laboratory analysis of Soil and Groundwater Samples

# 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) for well installation activities. ACHCS was given the required minimum 72-hour notice in advance of drilling on August 24, 2012 and ACPWA was contacted on August 27, 2012 to schedule the grouting inspection with Vicky Hamlin.

Since two of the wells were proposed in the off-site areas, the City of Oakland permits pertaining to the well installation activities were also obtained. Since the City of Oakland prefers to have monitoring wells installed in the traffic lanes, a utility survey of present utility lines was conducted in advance of well permitting for this site. Several utility lines appeared to be present in the traffic lanes closest to the subject site both on 65<sup>th</sup> Street and on Shattuck Avenues. As such SOMA prepared a petition, dated July 6, 2012, to allow well installation in the sidewalk areas adjacent to the site. A copy of the request to install the proposed wells in sidewalk areas is included in Appendix A. Photographs illustrating the existing utility lines and well installation activities are included in Appendix B.

Once the approval for the sidewalk well installation was secured, SOMA prepared and submitted a traffic control plan along with obstruction and excavation permit applications to the City of Oakland. Copies of traffic control permit (TDS 12-0172), encroachment (ENMI12103), obstruction (OB120752), and excavation (X1201665) are included in Appendix A. All appropriate notifications were given and inspections relevant to above permits were scheduled prior to well installation.

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 August 24, 2012, 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 August 24, 2012 (Tickets 313189 and 317074). A private utility locator (Cruz Brothers Locators) surveyed proposed drilling areas on August 27, 2012 to locate any additional subsurface conduits.

Since wells MW-1 and MW-3 were located in concrete areas, on August 29, 2012, SOMA oversaw Osborne's Concrete Coring core the sidewalk areas at each of the proposed well locations.

### 2.2 Monitoring Well Installations

On August 29 and 30, 2012, a C-57 licensed driller Woodward Drilling (under SOMA's oversight) installed three 2-inch diameter groundwater monitoring wells (MW-1 through MW-3). Well locations are shown in Figure 2. To clear all subsurface utilities, each well location was hand cleared to 5 feet below ground surface (bgs).

A hollow stem auger (HSA) was used for drilling to construct these wells. The crew drilled and continuously sampled, where appropriate, for lithologic logging purposes (changing lithology) and visual observations such as odor and discoloration of encountered material. Soil samples were collected for chemical analysis in the areas of formerly elevated PID readings, odor, or visual observations indicative of contaminated area, in the absence of above indicators, a minimum of two samples was collected from each well borings from depths where contamination was historically present. Samples were collected using metal tubes. Since no groundwater was encountered during the initial drilling to 17 feet bgs, well boreholes were advanced to the approximate depth of 24 feet bgs and secured overnight to allow for groundwater accumulation, recovery, and proper well screening.

Soils observed during well installation of MW-1 through MW-3 were predominantly clayey and with very little variation from one boring to the next. Clayey sands were observed in all wells from the ground surface to 4 feet bgs, followed by a sandy lean clay layer 4 to 5 feet in thickness. A 3 to 4-foot clay layer was observed between approximately 8 and 12 feet bgs followed by sandy lean clay to the total explored depth. Moist soils were observed at approximately 15 feet bgs, however they did not produce any groundwater, wet stringers encountered below 20 feet bgs. As mentioned earlier, on August 29<sup>th</sup> only the minimal amount of groundwater was encountered below 21-feet bgs and well borings were secured and allowed to recover overnight. On August 30, 2012, groundwater was observed in all well boreholes and depth to water was recorded between 9 and 8 feet bgs. Geologic logs and PID readings are included in Appendix B.

Recorded PID readings ranged from 0 ppm to 187 ppmv in well MW-2, and from 0 to 0.9 ppmv in wells MW-1 and MW-3. The highest PID reading was recorded in MW-2 at 8 feet bgs. Field observations and PID readings were noted on geological boring logs (Appendix B). SOMA's field geologist logged continuous soil cores from each boring location, characterizing the content of each soil-filled tube using the Unified Soil Classification System (USCS). Upon soil sampling, both ends of each tube were secured using Teflon tape and tubes were immediately placed in a chilled ice chest. Soil samples were labeled with unique sample identifiers and delivered to a state-certified environmental laboratory under established chain of custody protocol for analysis. No groundwater samples were collected during well installation activities.

These new wells were constructed with 2-inch diameter, schedule 40, polyvinyl chloride 0.02-inch screen, and blank casing, and 2/12 sand packs. As The following are the screening intervals in the newly installed wells, which were based on observed groundwater presence in wells after an overnight accumulation:

Well ID	Top of the casing to screen (feet)	Screen Length (feet)	Sand Pack (feet bgs)	Bentonite Seal (feet bgs)	
MW-1	7	17	6-7	5-6	
MW-2	7	17	6-7	5-6	
MW-3	7	17	6-7	5-6	

The sand pack was installed from approximately 1 foot above the perforated well casing interval to the total depth of the wells. Approximately 1 foot of bentonite were installed above the sand pack, and a neat cement seal was installed to near

Monitoring Well Installation Report

ground surface. The grout seal was emplaced to near-surface grade where (with exception of well MW-2) a flush-mount traffic-rated well vault was installed with a concrete foundation. Since well MW-2 is located inside the site in the dirt substrate, an elevated box was installed at MW-2 well location. Photographic documentation and boring logs are included in Appendix B.

### 2.3 Soil Sample Collection and Analysis

During drilling activity, SOMA collected soil samples for analysis at depths where historical contamination was observed, or where PID readings or visual observations indicated presence of soil contamination.

During soil samples collection, SOMA's field geologist selected sediments of 6-inch-long sampling tubes and capped both ends of each sample with a Teflon liner and polyethylene end caps. Each soil sample was labeled with a unique identifier and immediately placed in a chilled ice chest for transport to a California state-certified environmental laboratory for analysis.

Samples collected during well installation activities were submitted to a California state-certified environmental laboratory for analysis as follows:

- Modified 8015B or equivalent for analysis of TPH as diesel (TPH-d) and as motor oil (TPH-mo); with silica gel clean-up
- 8260B or equivalent for analysis of TPH as gasoline (TPH-g) and volatile organic compounds (VOCs) in groundwater, including BTEX (benzene, toluene, ethylbenzene and xylenes) and oxygenate compounds

### 2.4 Well Survey and Well Development

On September 4, 2012, Gregg Drilling and Testing, developed the newly installed wells under SOMA's oversight. Wells were developed a minimum of 72 hours following installation; well development data sheets are included in Appendix E. The wells were developed by bailing out sediment-rich groundwater followed by pumping and surging the wells. This process continued until purged groundwater clarified substantially and groundwater quality parameters were stabilized.

The water-bearing intervals were developed by surging and bailing using a suitably sized surge block. Groundwater stabilization parameters were maintained during the development process and records of this data are included in Appendix E.

Also on September 4, 2012, a licensed surveyor surveyed (horizontally and vertically) newly installed wells; the survey report is included in Appendix D.

Monitoring Well Installation Report

### 2.5 Well Collar Repair

After wells were development, some settlement was noted in the concrete well collars of wells located in the sidewalk areas (MW-1 and MW-3). Therefore, on September 27, 2012 Woodward Drilling had visited the site and repaired these settled well surface areas. No charges were incurred for this additional repair work.

### 2.6 Waste Disposal

Upon completion of well installation activities, soil cuttings and rinsate waters were stored in several 55-gallon drums. The waste was profiled then removed from the site on October 24, 2012 for disposal at an appropriate off-site facility. Waste manifests are included in Appendix C.

### 2.7 Soil and Groundwater Analytical Results

Soil samples were collected from well MW-1 and MW-2 from 8 and 13 feet bgs, and from well MW-3 from 11 and 15 feet bgs. With exception of one sample collected from MW-2 at 8 feet bgs (PID reading of 187 ppmv) all the chemicals of concern (COC) were detected below the laboratory detection limits. In MW-2 at 8 feet bgs, only TPH-g and TPH-d were detected above the laboratory detection limits at 25 and 4.8 mg/kg, respectively. It should be noted that these detections were at levels below the Environmental Screening Levels (ESL) established by the California Regional Water Quality Control Board (2008). Figures 3 through 5, show TPH-g, TPH-d, and TPH-mo distribution in the shallow soils (7 to 15 feet bgs) combining the laboratory analytical data from the advanced wells and from remedial excavation (confirmation soil samples). As could be seen from these maps only minor, below the respective ESLs (indicating that they do not pose any threat to the human health or the environment) contaminant detections remain in shallow soils at the site. Laboratory analytical results and chain-of-custody records are included in Appendix F.

On September 11, 2012, the three newly installed monitoring wells (MW-1, MW-2, and MW-3) were monitored for the first time. In general, the groundwater flow direction was recorded as westerly to slightly northwesterly at a gradient of 0.011 feet/feet (Figure 6). As could be seen from this figure, the groundwater gradient is slightly different than the anticipated (pre-well installation) a more southwesterly gradient, which was based on the surrounding groundwater monitoring data (Figure 2).

TPH-g, TPH-d, TPH-mo, and all VOCs were below laboratory reporting-limit in MW-1, MW-2, and MW-3, except for 1,2-DCA which was detected in MW-1 at a low level of 1.3  $\mu$ g/L. Figure 7 shows a map of 1,2-DCA concentrations in groundwater (ESL for shallow groundwater that is current or potential source of drinking water is 0.5  $\mu$ g/L). As could be seen from this figure, this concentration

of 1,2-DCA was detected in well MW-1, located southwest (downgradient) of the former UST pit area.

At this time it is recommended to conduct several additional groundwater monitoring events to determine if any directional groundwater flow changes or vertical fluctuations occur during the calendar year and to determine if any groundwater plume exists beneath the site and if the existing well network is sufficient for the monitoring of such plume.

## 3. CONCLUSIONS AND RECOMMENDATIONS

During this most recent investigation, three groundwater monitoring wells were installed (MW-1 through MW-3). Well MW-2 was installed on-site and wells MW-1 and MW-3 were installed in the sidewalk areas adjacent to the site, on 65<sup>th</sup> Street and Shattuck Avenue.

No significant soil contamination was observed during the well installation and no elevated COC detections were reported for the collected soil samples.

With exception of 1,2-DCA all COC in groundwater were below the laboratory reporting limits or ESLs. In well MW-1, 1,2-DCA was detected at low concentration of 1.3 ug/L slightly exceeding ESL.

At this time it is recommended to conduct at least three additional groundwater monitoring events (as previously recommended in the Remedial excavation report dated January 9, 2012) to determine if any directional groundwater flow changes occur during the year and to determine if any groundwater plume exists beneath the site and if the existing well network is sufficient for monitoring of such groundwater plume.

# **FIGURES**

Monitoring Well Installation Report



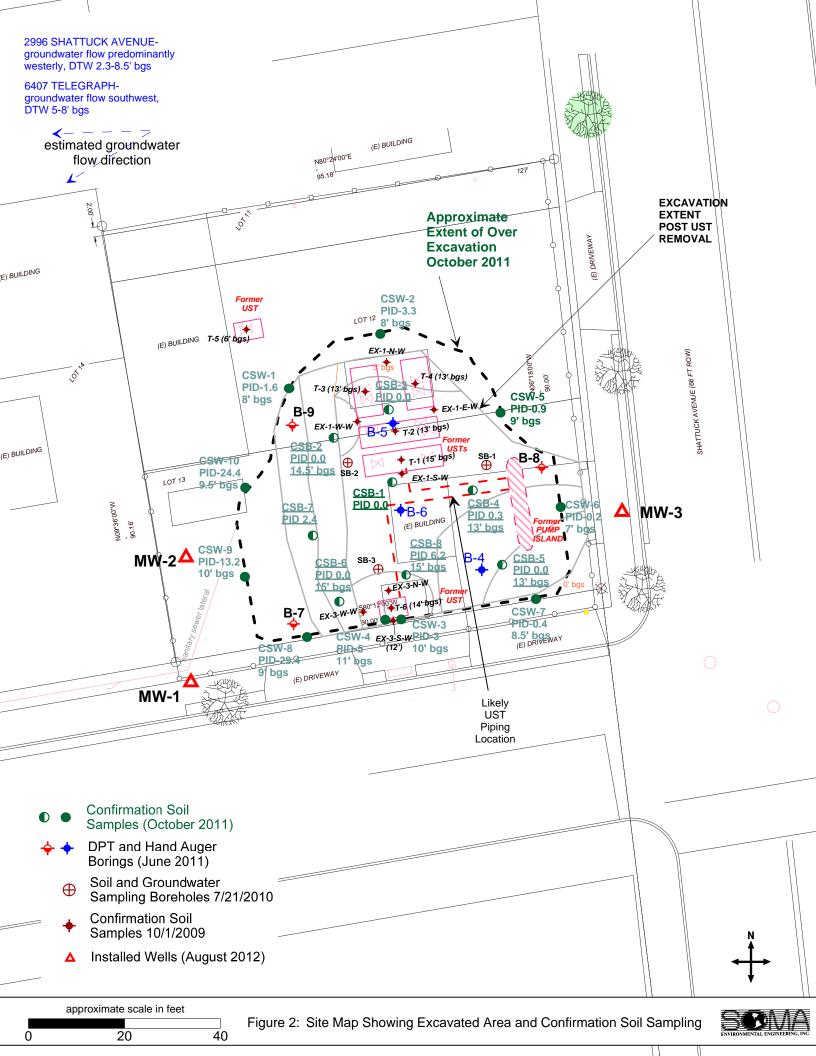


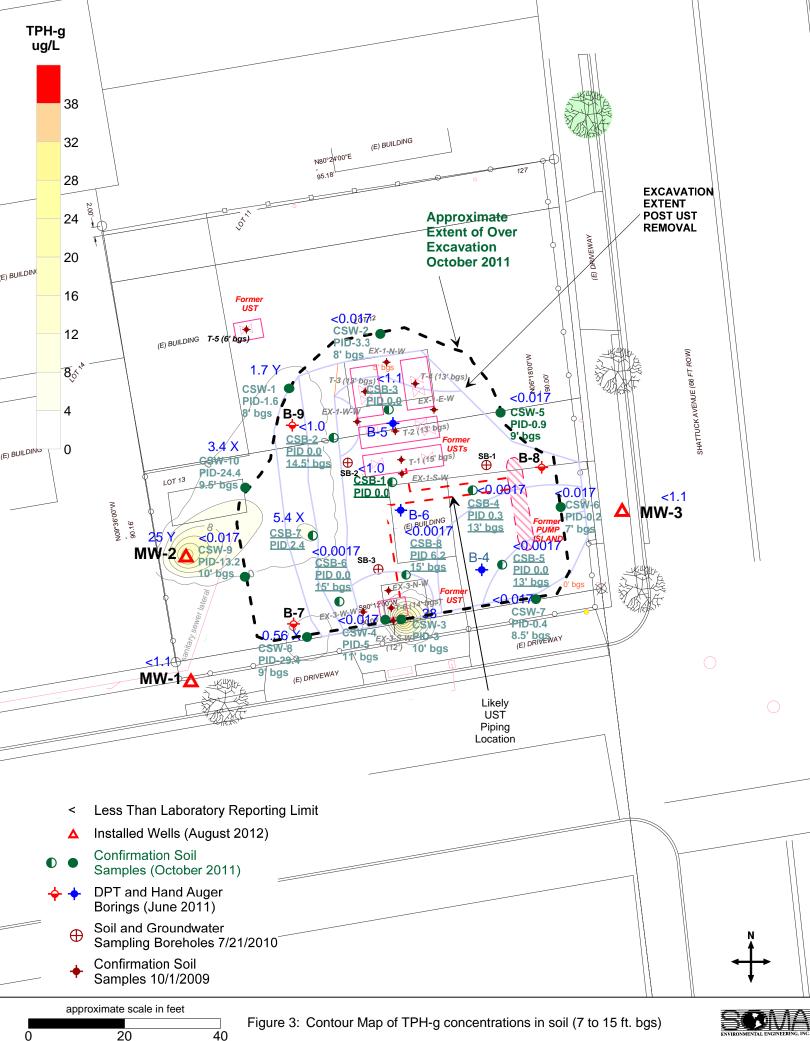
 approximate scale in feet

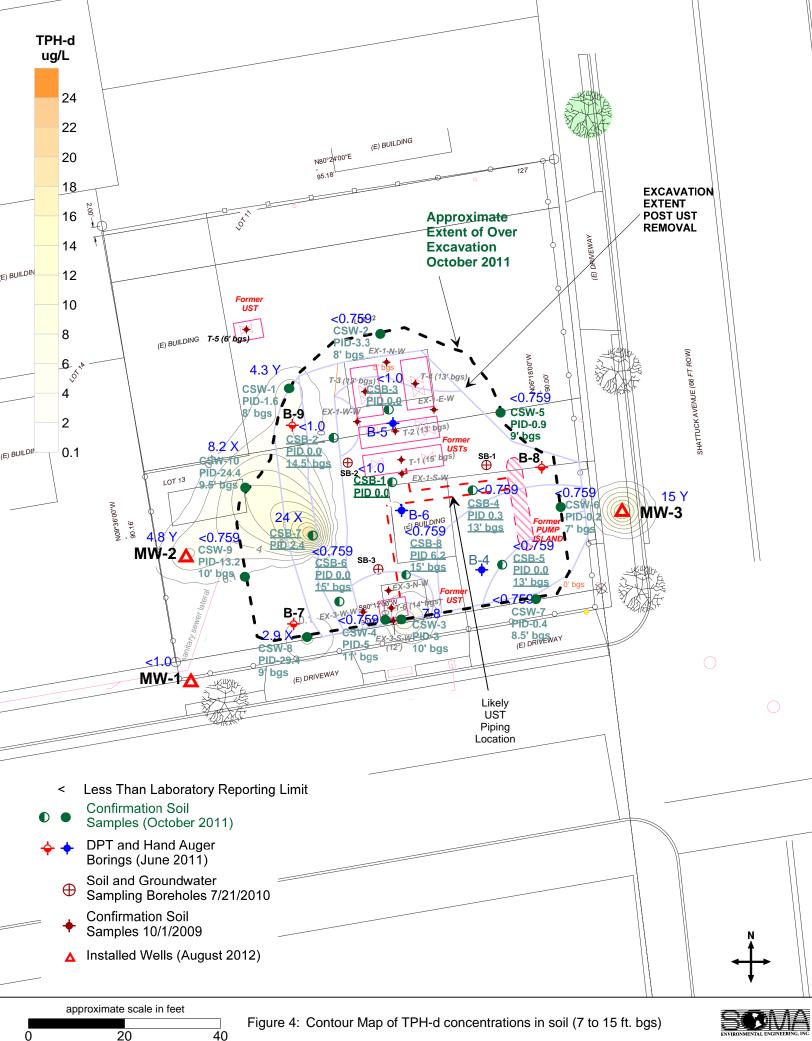
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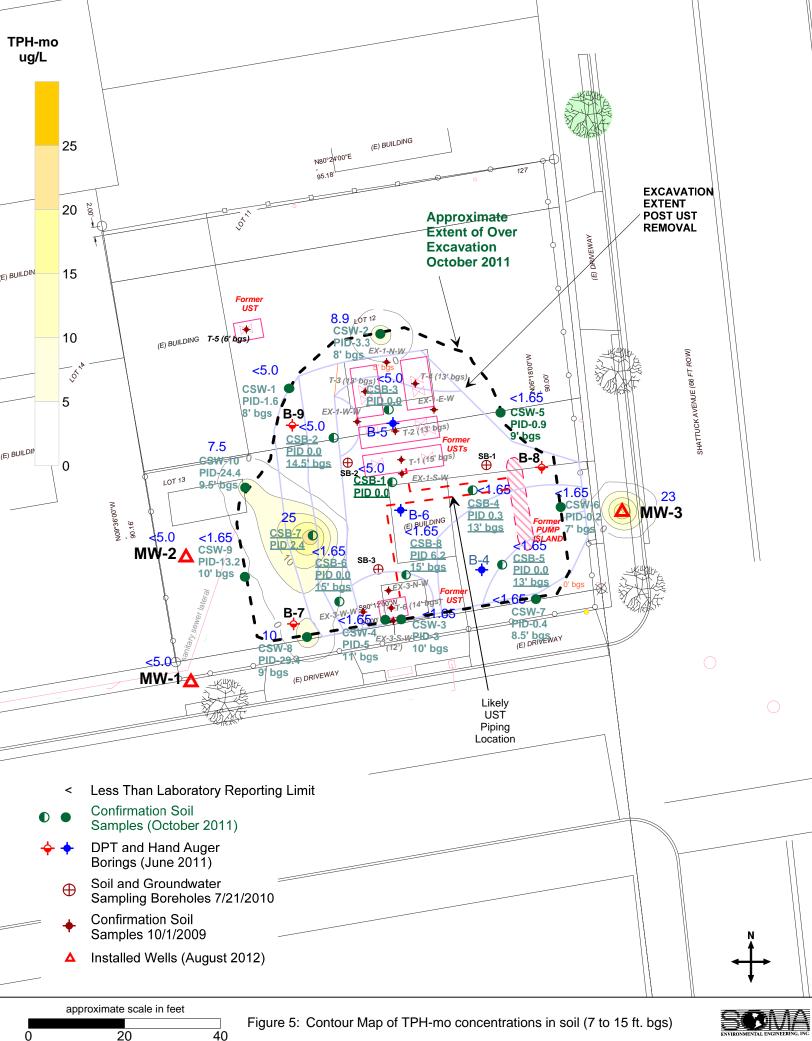
Figure 1: Site vicinity map.

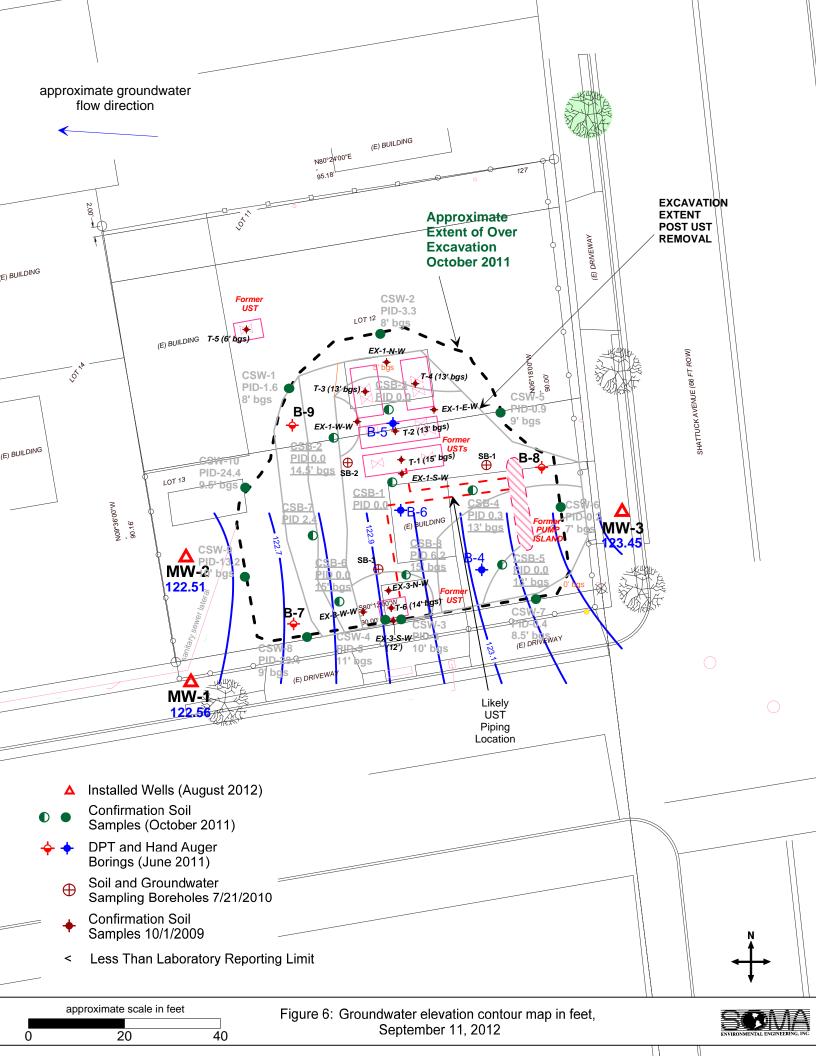


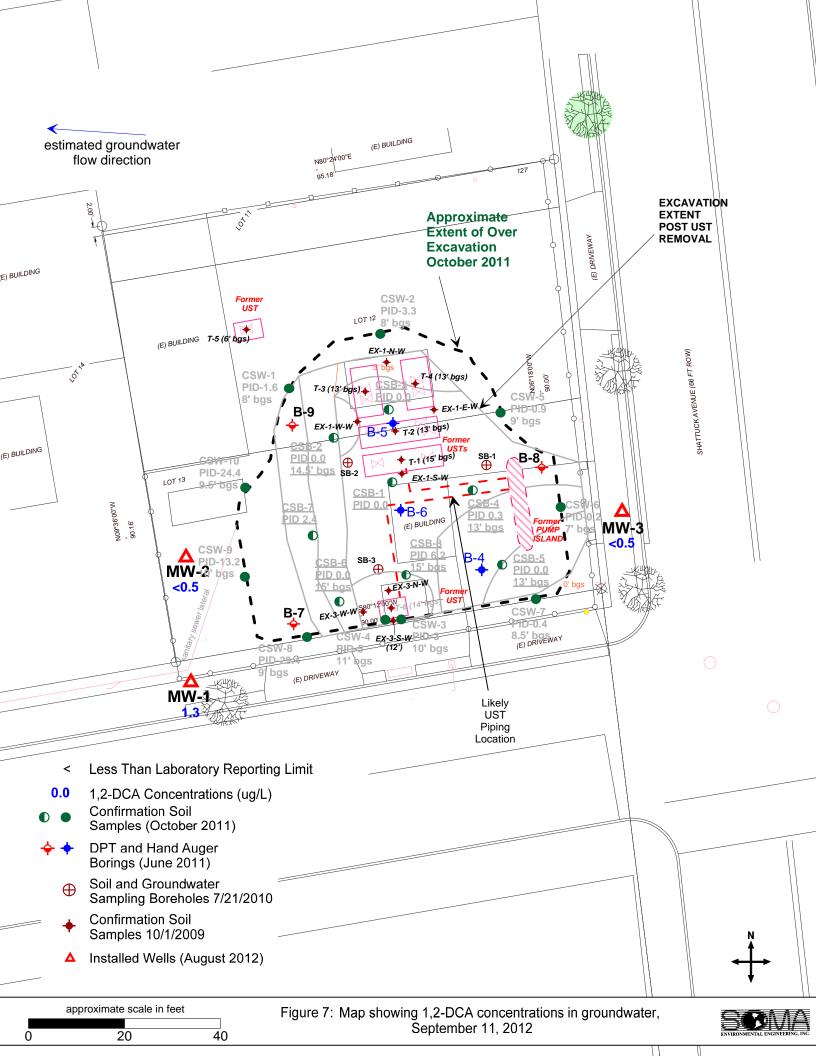












# TABLES

Monitoring Well Installation Report

# Table 1Soil Analytical Results6501 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)	Lead 6010 (mg/kg)	
Well Installation 2012													
MW-1	8	6.14	8/30/2012	<0.93	<1.0	<5.0	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	NA	
MW-1	13	6.14	8/30/2012	<1.1	<1.0	<5.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	NA	
MW-2	8	7.81	8/29/2012	25 Y	4.8 Y	<5.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	NA	
MW-2	13	7.81	8/29/2012	<1.0	<0.99	<5.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	NA	
MW-3	11	7.89	8/29/2012	<1.1	15 Y	23	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	NA	
MW-3	15	7.89	8/29/2012	<0.99	<1.0	<5.0	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	NA	
SB-1@2.5ft	9	10	7/21/2010	23Y	20	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25	7.9	
SB-2@3ft	9	10	7/21/2010	510Y	50	<5.0	<0.5	<0.5	0.65	<0.5	<0.5	5.7	
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	58	
B-4	9	13.22	6/10/2011	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	< 0.005	< 0.005	NA	
B-5	8	NA	6/10/2011	18 Y	59 Y	<5.0	<0.25	<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	<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	<0.25	
B-7	12	12.45	6/10/2011	<0.98	NA	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	< 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	<0.25	
B-9	10	11.5	6/10/2011	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	
CSW-1	10	Excavation	10/13/2011	1.7 <sup>Y</sup>	4.3 <sup>Y</sup>	<5.0	<0.005	<0.005	< 0.005	< 0.005	< 0.005	NA	
CSW-2@8ft	8	Excavation	10/17/2011	<0.017	<0.759	8.9	<0.0015	< 0.00098	<0.00086	<0.0019	<0.0026	NA	
CSW-3@10'	10	Excavation	10/14/2011	38	7.8	<1.65	<0.15	<0.098	0.18	<0.19	<0.26	NA	
CSW-4@11'	11	Excavation	10/14/2011	<0.017	<0.759	<1.65	<0.0015	< 0.00098	<0.00086	<0.0019	<0.0026	NA	
CSW-5@9ft	9	Excavation	10/17/2011	<0.017	<0.759	<1.65	<0.0015	< 0.00098	<0.00086	<0.0019	<0.0026	NA	
CSW-6@7ft	7	Excavation	10/17/2011	<0.017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026	NA	
CSW-7@8.5ft	8.5	Excavation	10/17/2011	<0.017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026	NA	
CSW-8@9ft	9	Excavation	10/24/2011	0.56 <sup>×</sup>	2.9 <sup>×</sup>	10	<0.0038	<0.0025	<0.0022	<0.0046	<0.0065	NA	
CSW-9@10ft	10	Excavation	10/24/2011	<0.017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026	NA	
CSW-10@9.5ft	9.5	Excavation	10/24/2011	3.4 <sup>×</sup>	8.2 <sup>X</sup>	7.5	<0.0075	<0.0049	<0.0043	<0.0093	<0.013	NA	

# Table 1Soil Analytical Results6501 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)	Lead 6010 (mg/kg)
CSB-1	14	Excavation	10/13/2011	<1.0	<1.0	<5.0	<0.0049	< 0.0049	<0.0049	< 0.0049	<0.0049	NA
CSB-2	14.5	Excavation	10/13/2011	<1.0	<1.0	<5.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	NA
CSB-3	13	Excavation	10/13/2011	<1.1	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	NA
CSB-4	13	Excavation	10/17/2011	<0.0017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026	NA
CSB-5	13	Excavation	10/17/2011	<0.0017	<0.759	<1.65	<0.0015	<0.00098	<0.00086	<0.0019	<0.0026	NA
CSB-6	15	Excavation	10/24/2011	<0.0017	<0.759	<1.65	<0.0015	< 0.00098	<0.00086	<0.0019	<0.0026	NA
CSB-7	14.5	Excavation	10/24/2011	5.4 <sup>×</sup>	24 <sup>X</sup>	25	<0.0075	<0.0049	<0.0043	<0.0093	<0.013	NA
CSB-8	15	Excavation	10/24/2011	<0.0017	<0.759	<1.65	<0.0015	< 0.00098	<0.00086	<0.0019	<0.0026	NA
Fill Black-1	NA	Backfill	10/14/2011	<0.0017	<0.759	23	<0.0015	< 0.00098	<0.00086	<0.0019	<0.0026	NA
Fill Black-2	NA	Backfill	10/14/2011	<0.0017	<0.759	7.6	<0.0015	< 0.00098	<0.00086	<0.0019	<0.0026	NA
Fill Brown-1	NA	Backfill	10/14/2011	<0.017	<0.759	42	<0.0015	< 0.00098	<0.00086	<0.0019	<0.0026	NA
Fill Brown-2	NA	Backfill	10/14/2011	<0.017	<0.759	28	<0.0015	< 0.00098	<0.00086	<0.0019	<0.0026	NA
Compfill-3	NA	Backfill	10/28/2011	<0.017	<0.759	<1.65	<0.0015	< 0.00098	<0.00086	<0.0019	NA	NA
E	SL Drinking Wat	ter (Residential)		83	83	370	0.044	2.9	2.3	2.3	0.023	200
ESL	Non-Drinking W	later (Commercia	l)	180	180	2500	0.27	9.3	4.7	11	8.4	750

Notes:

ESL: California Regional Water Quality Control Board, Environmental Screening Levels, Interim Final November 2007, Revised May 2008

< : below Laboratory Detection Limits

Y: Sample exhibits chromatographic pattern which does not resemble standard

Note: Depth to groundwater for 2010 and 2011 samples is tentative, since some locations had slower water recovery rates, and does not represent the actual stabilized groundwater elevation

across the site. For 2012 samples depth to groundwater was recorded during groundwater monitoring event conducted on 9/11/2012

# Table 2:Groundwater Analytical Results6501 Shattuck Ave, Oakland, CA

		Top of Casing	Depth to											
		Elevation	Groundwater	Groundwater	TPH-g	TPH-d	TPH-mo	Benzene	Toluene	Ethylbenz	Xylenes	MtBE	1,2-DCA	
Monitoring Well	Date	(Ft.)	(Ft.)	Elevation	μg/L	μg/L	μg/L	μg/L	μg/L	ene μg/L	μg/L	μg/L	μg/L	EDB µg/L
MW-1	9/11/2012	128.70	6.14	122.56	<50	<52	<310	<0.5	<0.5	<0.5	<0.5	<0.5	1.30	<0.5
MW-2	9/11/2012	130.32	7.81	122.51	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-3	9/11/2012	131.34	7.89	123.45	<50	<53	<320	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Note:

< : Below Laboratory Reporting Limit (Method Detection Limit)

All other VOCs were below laboratory-reporting limits in groundwater samples

# **APPENDIX A**

### DRILLING, TRAFFIC, ENCROACHMENT, EXCAVATION AND OBTSTRUCTION PERMITS AND OTHER PERMIT RELATED DOCUMENTATION

Monitoring Well Installation Report

### 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: 07/11/2012 By jamesy Permit Numbers: W2012-0484 to W2012-0486 Permits Valid from 07/17/2012 to 08/08/2012 City of Project Site:Oakland Application Id: 1341335735203 Site Location: 6501 Shattuck Avenue **Project Start Date:** Completion Date:08/08/2012 07/17/2012 Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org **Applicant:** SOMA Environmental Engineering, Inc - Elena Phone: 925-734-6400 Manzo 6620 Owens Drive, Suite A, Pleasanton, CA 94588 **Property Owner:** Athan Maganas Phone: --2550 Appian Way, Suite 201, Pinole, CA 94564 Client: \*\* same as Property Owner \*\*

	Total Due:	\$1191.00
Receipt Number: WR2012-0208	Total Amount Paid:	<u> </u>
Payer Name : Mansour Sepehr	Paid By: VISA	PAID IN FULL
	•	

#### **Works Requesting Permits:**

Well Construction-Monitoring-Monitoring - 3 Wells Driller: Woodward Drilling - Lic #: 710079 - Method: hstem

#### Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2012- 0484	07/11/2012	10/15/2012	MW-1	10.00 in.	2.00 in.	6.00 ft	20.00 ft
W2012- 0485	07/11/2012	10/15/2012	MW-2	10.00 in.	2.00 in.	6.00 ft	20.00 ft
W2012- 0486	07/11/2012	10/15/2012	MW-3	10.00 in.	2.00 in.	6.00 ft	20.00 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. 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.

Work Total: \$1191.00

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

4. 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.

5. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

6. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@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.

7. 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.

8. Minimum surface seal thickness is two inches of cement grout placed by tremie.

9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

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.

### Elena Manzo

From:support@usan.orgSent:Friday, August 24, 2012 1:50 PMTo:emanzo@somaenv.comSubject:USAN2012/08/24 #00000 0313189-000 NORM NEW										
00000 USA	N 08/24/12 13:50:02	0313189 NORMAL NOTIC	E							
Message Number:	0313189 Received by	USAN at 13:44 on 08/3	24/12 by ADM							
a construction of the second se	08/29/12 at 08:30 Weekend Work: N	Notice: 024 hrs	Priority: 2							
Expires: 09/21/12 at 23:59 Update By: 09/19/12 at 16:59										
Address: City: Business Tel:	SOMA ENVIRONMENTAL 6620 OWENS DR STE A PLEASANTON	State: CA 2 Fax: 925-72	ener va Costore des de la costo en							
Nature of Work:VERTICAL BORING TO MNTR WELLDone for:P/O MAGGANASExplosives: NForeman:ELIZABETH HIGHTOWERField Tel:Cell Tel: 925-330-5255Area Premarked:YPremark Method: WHITE PAINTPermit Type:CITYNumber: X1201665Vac / Pwr EquipUse In The Approx Location Of Member Facilities Requested: N ExcavationEnters Into Street Or Sidewalk Area:Y										
	6501 SHATTUC 65TH ST	K AVE								
	•	SIWLK ON THE 65TH ST ON SHATTUCK AV SI/O								
Place: OAKLAND		County: ALAMEDA	State: CA							
Long/Lat Long: -	122.266703 Lat: 37.	85005 Long: -122.26	5586 Lat: 37.850938							
Sent to: CTYBER = CITY BE COMOAK = COMCAST EBWCMS = EAST BA PGEOAK = PGE DIS SPRINT = SPRINT	-OAKLAND NY WATER	CTYOAK = CITY OAKLAND CONST DEPT COMRCH = COMCAST-RICHMOND PBTHAY = PACIFIC BELL HAYWARD PGERCH = PGE DISTR RICHMOND								
Member Contact I Member Utility CITY BERKELEY CITY OAKLAND C	Main Contact # (510)981-6408	Vacuum Contact #	Emergency # (510)981-6620	After hours # (510)981-6620						

COMCAST-OAKLAN COMCAST-RICHMO	(510)238-7288 (925)424-0181 (510)243-3019 (510)442-6893		(510)502-0667	
EAST BAY WATER PACIFIC BELL H	(510)385-8721 (510)287-0600 (510)645-2929	(510)645-2929	(510)645-2929	(800)332-
1321x8 PGE DISTR OAKL	(800)743-5000x00	(800)743-5000	(800)743-5000	(800)743-5000
PGE DISTR RICH SPRINT	(800)743-5000x00 (800)521-0579	(800)743-5000 (800)521-0579	(800)743-5000 (800)521-0579	(800)743-5000 (800)521-0579

The information contained herein ("Data") is provided to the recipient exclusively for informational purposes in response to a request by the recipient. Underground Service Alert of Northern California and Nevada, a California nonprofit mutual benefit corporation ("USA North"), makes absolutely no representations or warranties whatsoever, whether expressed or implied, as to the accuracy, thoroughness, value, quality, validity, suitability, condition or fitness for a particular purpose or use of the Data, nor as to whether the Data is errorfree, up-to-date, complete or based upon accurate or meaningful facts. Further, the Data should not be relied-upon by the recipient for any purposes. USA North does not assume, and expressly disclaims, any and all liability for any damages incurred directly or indirectly, whether foreseeable or not, as a result of errors, omissions or discrepancies contained within or concerning the Data.

#### Elena Manzo

From: Sent: To: Cc: Subject: Lee, Calvin [CLee4@oaklandnet.com] Wednesday, October 24, 2012 2:36 PM Elena Manzo Bacina, Chris RE: Old encroachment permit

Hi Elena,

The document was forwarded to the County Recorder on Sep. 19 for recordation.

After they send back to us a copy of the recorded version, I can then make a copy for you.

Until then, I also only have the same information that Mr. Bacina has copied below.

I'll keep an eye open for the document.

Thanks!

Calvin

From: Elena Manzo [mailto:emanzo@somaenv.com] Sent: Tuesday, October 16, 2012 3:24 PM To: Lee, Calvin Subject: RE: Old encroachment permit Dear Mr. Lee Chris Bacina recommended I contact you regarding a copy of an old(er) encroachment permit, is it possible for you to email it to me: ? Please contact Calvin Lee, copied here... Appl#: ENMI12103 Rev#: Type: Filed: 07/06/12 Parallel: Addr1: 6501 SHATTUCK AV Suite: Disp: Desc: Allow monitoring wells MW-1 on 65th St side & MW-3 on Applicant: BRUDER LLC Tel#: (510)222-1421 WC Exp: Est Cost: 0 New Cost: 0 Rev Cost: 0 Revision Data: LAST Rev#: Date Received: **Requested By:** Rcvd By: Comments: Plan Log Log Start In Out Log Station Indv Set# To Hold Out In Work Hold ENG-SVCS CQL 0 07/06/12 07/27/12 07/27/12 07/27/12 Comment: LOG OUT ON 07/30/12 APPLICNT CQL 0 07/27/12 08/02/12 08/02/12 08/02/12 Comment: ENG-SVCS CQL 0 08/02/12 08/02/12 08/02/12 08/02/12 Comment: OK TO ISSUE EXCAVATION PERMIT. COUNTER CQL 0 08/02/12 08/23/12 08/23/12 08/23/12 Comment: AGREEMENT SIGNED BY APPLICANT, ENG-SVCS; TO COUNTY

Elena Manzo Principal Scientist

SOMA Environmental Engineering, Inc.

							Building and Neigh 2 • Phone (510) 23		
	Applications	for which no per	mit is issue	d within	180 days	shall expire by	limitation. No refund	d more than 180	) days after expiration or final.
	Appl#	ENMI12103	Job	Site	6501	SHATTUCK	AV	Раг	ccel# 016 -1428-011-02
	Descr	Allow moni Shattuck S					side & MW-3 c final.	on	Filed 07/06/12
	Insura	nce Require	d? YES	Carri	er			Expires	
	ontractor Arch/Engr					Applent X	(510)222-1421		License Classes
Ap		SOMA ENVIR				4564	(925)734-6400		
	\$1,133. \$71.( \$917.( \$.( \$.(	73 FEES TO 1 00 Applic 00 Process 00 Gen Plan 00 Other	BE PAID	AT FI \$.0 \$93.8 \$.0 \$51.8	LING 0 Perm 6 Rec 0 Invs 7 Tech	it Mgmt tg Enh	\$438.35 F \$.00 A \$382.00 P \$.00 G \$.00 O	EES TO BE pplic rocess en Plan ther	PAID AT ISSUANCE \$.00 Permit \$36.29 Rec Mgmt \$.00 Invstg \$20.06 Tech Enh
				App	licati	on Process	ed By		Date:
	APP				P	ermit Issu	led By		Date:
	N	OTAF	PERN			Final	ed By	11.	Date:
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CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

App1# OB120752

Job Site 6501 SHATTUCK AV

Parcel# 016 -1428-011-02

50

08/30/12

Linear feet:

Expiration:

\$.00 FEES TO BE PAID AT ISSUANCE

Block sidewalk & reroute pedestrian traffic per TSD12-0172 Permit Issued 08/23/12 on both Shattuck Ave & 65th Street sides. No impact on vehicular traffic. One parking space on 65th St.

Nbr of days: 2 Effective: 08/29/12 **Display on Dashboard** 

SHORT TERM NON-METERED

Applcnt Phone# Lic# --License Classes--Owner BRUDER LLC (510)222-1421 Contractor WOODWARD DRILLING CO.,INC X (707)374-4300 710079 C57 Arch/Engr Agent SOMA ENVIRO/ELENA MANZO (925)734-6400 Applic Addr P.O.BOX 336, RIO VISTA, CA, 94571

 \$160.65
 FEES TO BE PAID AT FILING

 \$71.00
 Applic
 \$69.00
 Permit

 \$.00
 Process
 \$13.30
 Rec Mgmt

 \$.00
 Gen Plan
 \$.00
 Invstg

 \$.00
 Other
 \$7.35
 Tech Enh

# **Display on Dashboard**



For Towed Car Call 510-238-3021

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant:

Issued by:

ADDRESS:

DIST

Date: 08/23/12 Amt Paid: \$1,471.10 By: SYK Register RD3 Receipt# 169955

	CITY OF OAKLAND • 250 Frank H. Ogawa Plaza, 2n	Department of Planning, d Floor, Oakland, CA 9461				
Applications	for which no permit is issued with					ion or final.
Appl# X	1201666 Job Site	6501 SHATTUCK	AV	Parce	el# 016 -14	28-011-02
Descr	Install monitoring we permit for MW-1 on 65 Call PWA INSPECTION p	th St side.			rmit Issued	08/17/12
Work Type	EXCAVATION-PRIVATE P			Non-Meter	red	
USA #		Util Co. Job # Util Fund #:		Acctg#:		
Contractor	BRUDER LLC WOODWARD DRILLING CO.	Applent	Phone# (510)222-1421 (707)374-4300		icense Clas	ses
	SOMA ENVIRO/ELENA MAN P.O.BOX 336, RIO VIST		(925)734-6400			
	JOB SITE		\$71.00 A \$.00 P \$.00 G	YEES TO BE PA Applic Process Gen Plan Other	\$309.00 3 \$36.10 1 \$.00 3	
		Permit Iss	led By	0	Date:	
Inspection Inits	Date F F E S C	LD-CHK/Pre-Con xcavation/Anchor : idewalk repair ma: oncrete repair inalled				Date: 08/25/12 Amt Paid: \$1,471.10 By: SYK Register R03 Receipt# 169955

CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Permit No. X1201666 Parcel #: 016 -1428-011-02 Project Address: 6501 SHATTUCK AV

Page 2 of 2

Licensed Contractors' Declaration I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

#### Construction Lending Agency Declaration

I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued, as provided by Section 3097 of the Business and Professions Code. N/A under Lender implies No Lending Agency.

Lender \_\_\_\_\_ Address\_\_\_\_\_

Workers' Compensation Declaration

I hereby affirm under penalty of perjury one of the following declarations:

[] I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

[] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

CARRIER: \_\_\_\_\_POLICY NO. \_\_\_\_

[ ] I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS, IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3707 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Hazardous Materials Declaration

I hereby affirm that the intended occupancy [ ] WILL [ ] WILL NOT use, handle or store any hazardous, or acutely hazardous, materials. (Checking "WILL" acknowledges that Sections 25505, 25533, & 25534 of the Health & Safety Code, as well as filing instructions, were made available to you.)

I HEREBY CERTIFY THE FOLLOWING: That I have read this document; that the above information is correct; and that I have truthfully affirmed all applicable declarations contained in this document. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection. I am fully authorized by the owner and to perform the work authorized by this permit.

DIST:

PRINT NAME

# CITY OF OAKLAND



Public Works Agency • 250 Frank H. Ogawa Plaza • Suite 4344 • Oakland, California 94612-2033

Transportation Services Division

Office (510) 238-3466 FAX (510) 238-7415 TDD (510) 839-6451

# Traffic Engineering Services Analysis Fee Invoice

Date: August 20, 2012

TSD Invoice # : <u>12-0172</u>

To:	Elena Manzo	
Company:	SOMA Environmental Engineering	
Address:	6620 Owens Dr, Ste A, Pleasonton, CA	
Phone:	925-734-6400	

Created/Received By:

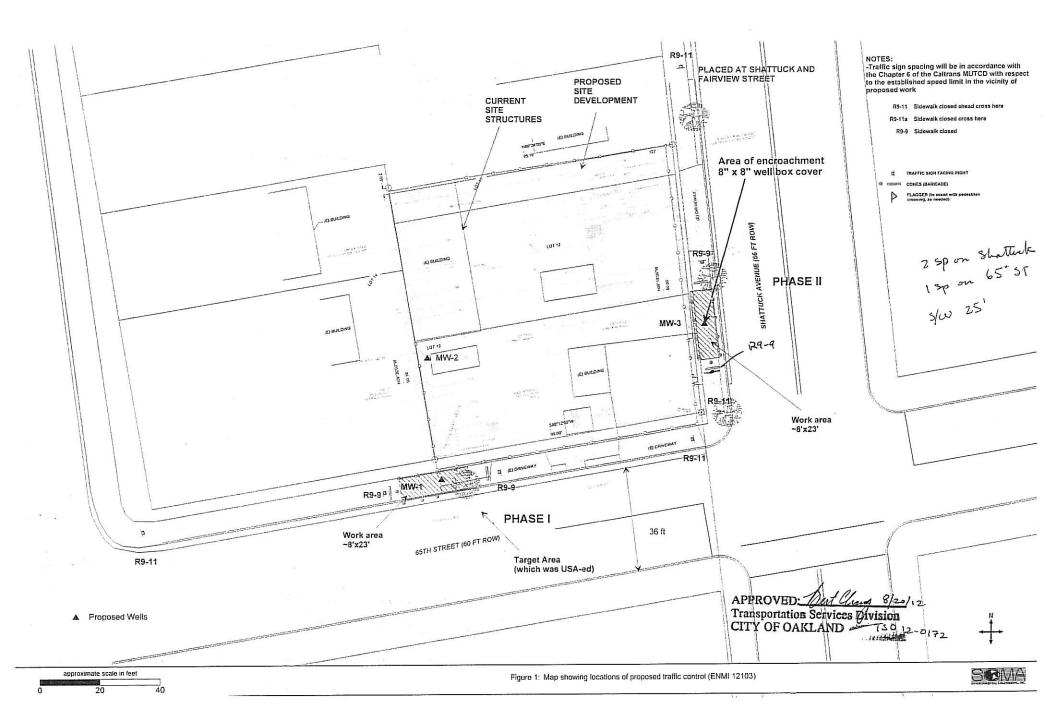
Bert Chang

Location	Description of Work	Project Name / Permit #	# of Hoເ	irs *
Shattuck Ave and 65th St	Sidewalk Closure		1	
		Total Hours	1	
		TSD Service Rate	\$	123.00
		Total Fee	\$	123.00

\* - minimum 1 hour service

FOR CITY USE O	NLY
Cost Center No.	W045
Organization No.	30264
Account No.	45119
Fund No.	1750

Cc: Rosalie



### APPLICATION FOR TRAFFIC CONTROL PLAN

City of Oakland

Public Works Agency Transportation Services Division

#### Please Read the Following Statements Below:

1. Processing time for a Traffic Control Application is a minimum of 10 business days.

Traffic Control review is scheduled only on Tuesdays and Thursdays from 8:30am thru 11:30am by appointment only.
 A scheduled appointment by phone or email with a TSD staff member is necessary to discuss

any and all traffic control application and plans.

4. Please call ahead to confirm that the traffic control application is ready for pickup @ 510-238-3467.

5. Businesses and residences adjacent to the work area must be provided 72 hour advance notice.

6. A completed traffic control application may be faxed to (510) 238-7415.

7. Incomplete traffic control applications will not be processed and returned to applicant immediately.

8. The initial approval for a traffic control plan is 1 month, the renewal submittal may be approved up to 3 months.

9. The traffic control provision dates cannot be changed or extended if work has already commenced.

 After receiving TSD approval of the traffic control application, contractor shall proceed to the Permit Center to 'Obstruction obtain an obstruction permit.

Contact Person:	Elena Manzo		Р	hone:	925-734-6400		
Name of Company:	SOMA Environmental Engineering, Inc			Fax:	925-734-6401		
Address of Company:	6620 Owens Drive, Suite A, Pleasanton	, CA					
Describe type of work to be performed: RE: ENMI 12103_Install one two inch groundwater monitoring well in the north sidewalk of 65th Street in front of 6501 Street and one groundwater monitoring well in the west sidewalk of Shattuck Avenue in front of 6501 Shattuck Avenue.							
Location of work:	sidewalk on 65th and Shattuck Ave	Between*	65th Street	And*	Shattuck Avenue		
Work date (s):	Mon-Fri	Sat-Sun	Work Hours:		to		
	w these Steps in Or				ontrol Plan:		

A. Drawing Area: The full width of all streets adjacent to the site MUST be included in the drawing. Include the entire block in which your work is located for every street that is adjacent to your site.

B. Include Street Names, Direction of Traffic on the Street, and North Arrow

C. Show Existing Number of Lanes in all Directions (with any pavement arrows)

D. Check the Box(s) that Apply: All checked items MUST be shown on the drawing

Lane Closure	Use of Median	~	Sidewalk Closure
Street Closures (must provide detour plan)	Use Parking Lane		(must provide pedestrian walk way)

E. Show All Dimensions of street widths (curb to curb), lane widths, sidewalk widths, and work area dimension. (Note: Traffic Control Application / Plans missing the above information will not be accepted or processed.)

F. Show the Name and Locations of all advanced warning devices, flaggers, delineators, warning and construction signs to be used.

RENEWAL PROCESS: Resubmit a completed Traffic Control Application with the old approved plan (with the necessary modifications / changes to the plans).

FOR HELP in preparing a traffic control plan, see Temporary Traffic Control Pocket Reference Guide 2007, Work Area Traffic Control Handbook 2006, or the California Manual on Uniform Traffic Control (MUTCD) 2003, Chapter 6. <a href="http://www.dot.ca.gov/hg/traffops/signtech/mutcdsupp/ca\_mutcd.htm">http://www.dot.ca.gov/hg/traffops/signtech/mutcdsupp/ca\_mutcd.htm</a> For City website: <a href="http://www.oaklandpw.com/Page548.aspx">http://www.oaklandpw.com/Page548.aspx</a>

\* Name the streets that are the boundaries of your work area.

Transportation Services Fee: \$123/hour (Check or Money Order Only)

Check the box that apply:

- New Application (Utility, Excavation)
- Renewal Application
- New Development w/ Mgmt Plan
- City of Oakland Project

## SPECIAL PROVISION 7-10.1 TRAFFIC REQUIREMENTS

Project Name: \_\_\_\_\_ Project Number: TSD 12-0172\_\_\_ Reviewed By: B.Chang\_\_\_\_ Date: 8/22/2012\_\_\_\_ Permit good from\_\_\_8/23/2012\_\_\_\_ to\_\_\_\_9/23/2012\_\_\_\_

#### ADD NEW SUBSECTION TO READ: SP 7-10.1.4 Vehicular Traffic

Attention is directed to Section 7-10. Public Convenience and Safety, of the City of Oakland Standard Specification for Public Works Construction, 2006 Edition (Include this paragraph for p-jobs. excavation permits or obstruction permits).

The Contractor shall conduct its work in such a manner as to provide public convenience and safety and according to the provisions in this subsection. The provisions shall not be modified or altered without written approval from the Engineer.

Standard traffic control devices shall be placed at the construction zone according to the latest edition of the <u>Work Area</u> <u>Traffic Control Handbook</u> or <u>Manual on Uniform Traffic Control Devices (MUTCD)</u>, <u>Chapter 6</u> – "Traffic Controls for Construction and Maintenance Work Zone," or as directed by the Engineer.

All trenches and excavations in any public street or roadway shall be back filled and opened to traffic, or covered with suitable steel plates securely placed and opened to traffic at all times except during actual construction operations unless otherwise permitted by the Engineer.

Each section of work shall be completed or temporarily paved and open to traffic in not more than 5 days after commencing work unless otherwise permitted in writing by the Engineer.

Where construction encroaches into the sidewalk area, a minimum of 5 ½ feet of unobstructed sidewalk shall be maintained at all times for pedestrian use. Pedestrian barricades, shelter, and detour signs per Caltrans standards may be required.

The contractor shall conduct its operation in such a manner as to leave the following traffic lanes unobstructed and in a condition satisfactory for vehicular travel during the Obstruction Period. At all times traffic lanes will be restricted and reopened to travel. Emergency access shall be provided at all times.

Street Name Limits	Obstruction Period	North Bound	South Bound	East Bound	West Bound
Shattuck Ave west side sidewalk approx 50ft north of 65 <sup>th</sup> Street	Mon. – Sun. 7:30am – 4:30pm	N/A	Sidewalk Closure	N/A	N/A
65 <sup>th</sup> St north side sidewalk approx 75ft west of Shattuck Ave	Mon. – Sun. 7:30am – 4:30pm	N/A	N/A	N/A	Sidewalk Closure

#### The Contractor Shall Also include all check item:

- 1. Design a construction traffic control plan and submit (2) copies to the Engineer for approval prior to starting any work.
- 2. Replace all signs, pavement markings, and traffic detector loops damaged or removed due to construction within 3 days of completion of work or the final pavement lift.
- 3. X Provide advance notice to Oakland Police at (510) 777-3333 (24-hrs) and Oakland Fire at (510) 238-3331 (2-rhs) when a single lane of traffic or less is provided on any street.
- ↓4. X Provide 72-hour advance notice to AC Transit at (510) 891-4750 when affecting a bus stop.
- -15. X For Caltrans roadways, ramps, or maintained facilities, the Contractor shall obtain appropriate permits and notify the Traffic Management Center 24 hours in advance of any work.
  - 6. Flagger control is required. Certified Flagger is required.
  - 7. Pedestrian walkway by K-rail, Canopy or Plywood is required. (See detour plan)
  - 8. X Pedestrian traffic shall be maintained and guided through the project at all times.
- - 10.  $\overline{\boxtimes}$  Allow all traffic movement at intersection.

Nothing specified herein shall prohibit emergency work and/or repair necessary to ensure public health and safety.

Incident 246

	CITY OF OAKLAND • 250 Frank H. Ogawa Plaza, 2n						
Applications	s for which no permit is issued with						tion or final.
Appl# X1	.201665 Job Site	6501	SHATTUCK A	ΑV	Pa:	rcel# 016 -14	28-011-02
	Install monitoring we permit for MW-3 on Sh Call PWA INSPECTION p EXCAVATION-PRIVATE P	attuck #	St side.			Permit Issued	08/17/12
USA #		Util Co Util Fi	o. Job # und #:		Acctg#	:	
Contractor Arch/Engr Agent	BRUDER LLC WOODWARD DRILLING CO. SOMA ENVIRO/ELENA MAN P.O.BOX 336, RIO VIST	zo	x	Phone# (510)222-1423 (707)374-430 (925)734-640	1 0 710079 C!		565
	JOB SITE			\$71.00 x \$.00 x \$.00 0	FEES TO BE Applic Process Gen Plan Other	\$.00	
	A	pplicat:	ion Process	ed By	9		
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-							d: \$1,471. Receipt#
DIST	CITY	OI	= C	AK	LA	ND	3/12 Amt Pai Register R03
							ate: 08/2 By: SYK

CITY OF OAKLAND • Department of Planning, Building and Neighborhood Preservation 250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Permit No. X1201665 Parcel #: 016 -1428-011-02 Project Address: 6501 SHATTUCK AV Page 2 of 2

Licensed Contractors' Declaration I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Construction Lending Agency Declaration

I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued, as provided by Section 3097 of the Business and Professions Code. N/A under Lender implies No Lending Agency.

Lender\_\_\_\_\_ Address\_\_\_\_\_

Workers' Compensation Declaration

I hereby affirm under penalty of perjury one of the following declarations:

[] I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

[] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

CARRIER: \_\_\_\_\_POLICY NO.

[ ] I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS, IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3707 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Hazardous Materials Declaration

I hereby affirm that the intended occupancy [ ] WILL [ ] WILL NOT use, handle or store any hazardous, or acutely hazardous, materials. (Checking "WILL" acknowledges that Sections 25505, 25533, & 25534 of the Health & Safety Code, as well as filing instructions, were made available to you.)

I HEREBY CERTIFY THE FOLLOWING: That I have read this document; that the above information is correct; and that I have truthfully affirmed all applicable declarations contained in this document. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection. I am fully authorized by the owner and to perform the work authorized by this permit.

DIST:

ADDRESS



July 6, 2012

City Engineer Community and Economic Development Agency 250 Frank H. Ogawa Plaza, Suite 2340 Oakland, CA 94612

# Re: Request to install the proposed groundwater monitoring wells in the sidewalk area adjacent to 6501 Shattuck Ave, Oakland, CA

Dear City Engineer:

SOMA Environmental Engineering, Inc. has prepared this letter on behalf of Mr. Athan Magganas, manager of Bruder LLC, owner of the property located at 6501 Shattuck Avenue, California (the site). This letter request was prepared in compliance with Alameda County Department of Environmental Health (ACDEH) requirements for the groundwater monitoring well installation, documented in their correspondence dated February 10, 2011 (attached hereto). The proposed well installation procedures were described in SOMA's report dated December 13, 2010, which was submitted to ACDEH for review and approval.

In order to select the appropriate well placement, the proposed areas of possible encroachment were marked using chalk-based white paint, and Underground Service Alert (USA) clearance, verifying that drilling areas were clear of underground utilities was obtained. Based on review of USA markings, it appears that multiple utility lines exist in the traffic lanes of Shattuck Avenue as well as 65<sup>th</sup> Street adjacent to the site. Pictures, showing the identified gas and AT&T lines in the aforementioned streets, are attached hereto. As such, based on the presence of several underground utility lines in the traffic lanes, SOMA requests to allow the installation of the proposed groundwater monitoring wells (MW-1 and MW-3) in the sidewalk areas adjacent to the site. A map showing the proposed areas of encroachment, along with a detailed drawing of proposed well covers, the anticipated well casing construction diagrams are also attached.

It is anticipated that these wells MW-1 and MW-3 will be monitored for a minimum of four consecutive quarters in order to evaluate the quality of the

July 6, 2012 Page 2 of 2

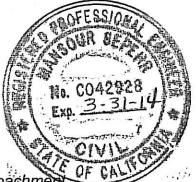
shallow groundwater beneath the site. If the chemical concentrations in groundwater are acceptable upon completion of the four quarterly sampling events, the site closure will be requested, and these wells will be properly decommissioned. At the time of well decommissioning, each sidewalk square, where these wells would be located, will be removed and the entire area resurfaced to match the existing grade, as required.

Thank you very much for your time and consideration of this matter. If you have any questions or comments concerning the above, please do not hesitate to call me or Ms. Elena Manzo, SOMA's Principal Scientist, at (925) 734-6400.

Sincerely,

Attachments:

Mansour Sepehr, PhD, PE Principal



Photographic Documentation Letter from the property owner requesting encroachment Request for overtime plan check Figure 1: Map showing locations of proposed encroachment Certificate of Insurance The most current, legible recorded Grant Deed with legal description Detailed drawing of well cover and casing Regulatory correspondence





June 26, 2012

City Engineer 250 Frank H. Ogawa Plaza, Suite 2310 Oakland, CA 94612

#### Re: Encroachment Permit Request for 6501 Shattuck Ave, Oakland, CA

Deer City Engineer,

At the request of the City of Oakland and under the direction of the city and other relevant agencies, BRUDER LLC recently removed underground tanks and contaminated soil from this property.

Alameda County Health Care Services Agencies was designated as the oversight agency for this site, and as part of the process for concluding the work, the county is requesting an installation of two groundwater monitoring wells in the sidewalk areas in front and to the side of this property. Each well box will be set level with the existing sidewalk and will consist of metal lid and collar measuring approximately 8-inches to 10-inches in diameter. Approximate well locations (wells MW-1 and MW-3) are shown on Figure 1, site plan is attached hereto. It is anticipated that upon completion of four quarters of groundwater monitoring utilizing these wells, they will be properly destroyed and this encroachment pennit rescinded.

We are applying to you for an encroachment and any other relevant permits to complete this well installation. As such, we would like to designate SOMA Environmental to act as an authorized representative for BRUDER LLC for the sole purpose of procuring necessary permits for construction of monitoring wells for this property.

Sincerely

A. Maypa

Athan Magganas Manager of BRUDER LLC Owner of 6501 Shattnek Ave 2550 Appian Way Ste 201 Pinole, CA 94564 510 222 1421



## **REQUEST FOR OVERTIME PLAN CHECK** EFFECTIVE JULY 6<sup>th</sup> 2010

I hereby request plan check services **OUTSIDE OF NORMAL WORK HOURS**. I understand that the plan check I am requesting can involve staff of multiple departments including: Building Services, Planning & Zoning, and Fire. I further understand that staff will perform plan check and permit processing work that involves review of survey, grading, plot plan and structural plans for compliance with the Fire Code, Building Code and Planning Code.

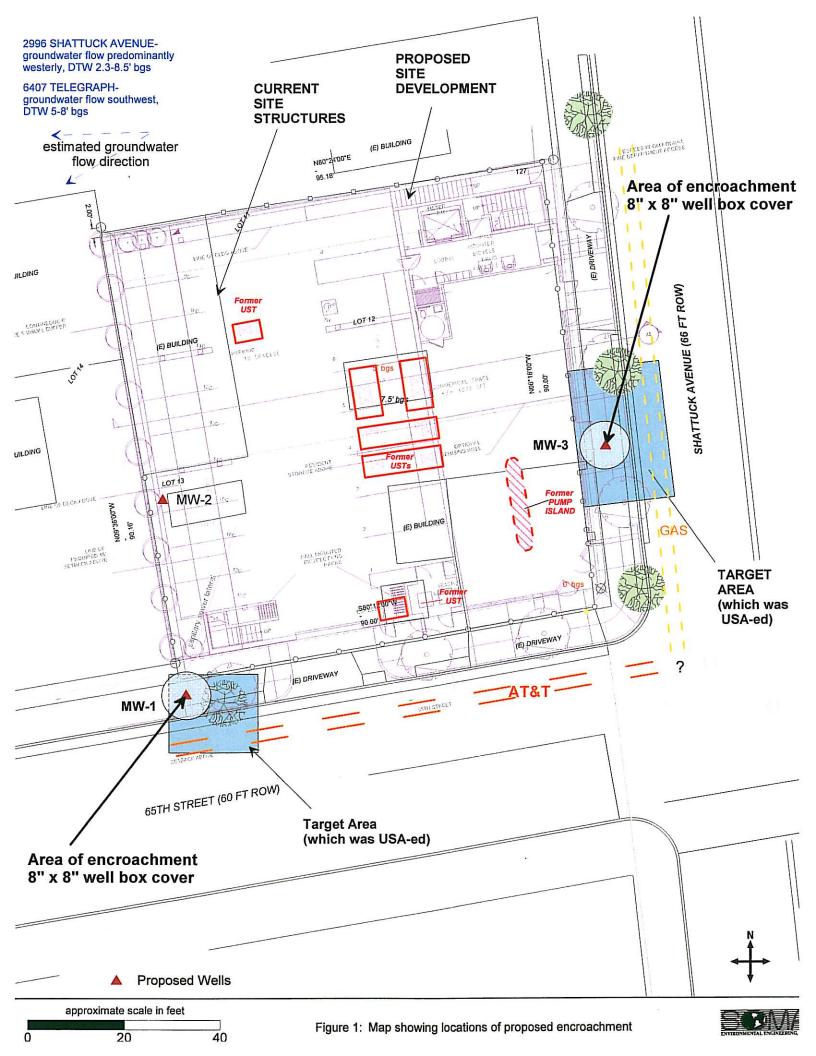
I agree to pay the overtime rates listed below. I understand that I will be charged a one-hour minimum by each department I select. I understand that the plan reviewer may determine that review by other departments is required. The plan reviewer will make a reasonable effort to notify me if referral to another department is deemed necessary.

I understand that the City of Oakland will not guarantee immediate availability of staff that can perform work outside of normal work hours, but will make reasonable effort to provide expedited service.

Applicant's signature Mansour Sepenr Print Name eman 10 @ Somaenv. cov Email Address	$\frac{July 3, 20}{Date}$ $\frac{G25 - 734 - 6}{Phone No.}$ $\frac{925 - 734 - 6}{Fax No.}$	12 5400 640)			
for 6501 Shattuck Ave,	LLOWING INFORMATION:				
Permit Application #:					
Zoning/Design Review Application #:					
Project Address:					
Type of Project/Work:					
REQUEST BUILDING       REQUEST FIRE       REQUEST ZONING         (plan review & processing)       No specific plan checker may be requested. Overtime work is assigned based on plan checker's availability for fastest turnaround.					
<u>OFFI</u>	E USE ONLY				
Plan Checker Assigned:	Hours @ \$219.18/	′hr*			
Process Coordinator Assigned:	Hours @ \$219.18/	'hr*			
Approved By:	Date: Amount Due: \$	an an an an an			
Planner Assigned:	Hours @ \$219.18/	ˈhr*			
Approved By:					
Fire Prevention Engineer Assigned:	Hours @ \$404.15*	/hr.:			
Approved By:	Date: Amount Due: \$				

\*includes 9.5% Records Management and 5.25% Technology Enhancement fees.

Z:\01 Active Projects\5030 (6501 Shattuck Ave, Oakland, ČA)\5032\01 MONITORING WELLS\Encroachment Permit\2010\_11 Overtime Plan Check.doc Revision: Effective July 6<sup>th</sup> 2010



# ACORD<sub>M</sub> CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

		10/2010		
PRODUCER Phone: 559-437-3360 Fax: 559-437-3385 Alliant Insurance Services, Inc. 7525 N. Cedar Ave.	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATIO ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICAT HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND O ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW			
Suite 101				
Fresno CA 93720	INSURERS AFFORDING COVERAGE	NAIC #		
INSURED	INSURERA: Star Ins Co	18023		
Woodward Drilling Company, Inc. P. O. Box 336	INSURER B: Seabright Insurance Company	15563		
Rio Vista CA 94571				
1.01	INSURER D:			
	INSURER E:			

#### COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. INSR ADD'L POLICY EFFECTIVE POLICY EXPIRATION DATE (MM/DD/YY) DATE (MM/DD/YY) POLICY NUMBER LIMITS TYPE OF INSURANCE X GENERAL LIABILITY EACH OCCURRENCE A CP0165365 8/20/2011 8/20/2012 \$2.000.000 х COMMERCIAL GENERAL LIABILITY \$100,000 PREMISES (Ea occurence) CLAIMS MADE X OCCUR \$5,000 MED EXP (Any one person) х PERSONAL & ADV INJURY \$2,000,000 XCU GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG GEN'L AGGREGATE LIMIT APPLIES PER: \$4,000,000 PRO-POLICY 1,000,000 100 S&A POLLUTION A X AUTOMOBILE LIABILITY CA0165365 8/20/2011 8/20/2012 COMBINED SINGLE LIMIT (Ea accident) \$2,000,000 X ANY AUTO ALLOWNED AUTOS BODILY INJURY S (Per person) SCHEDULED AUTOS HIRED AUTOS BODILY INJURY s NON-OWNED AUTOS (Per accident) PROPERTY DAMAGE (Per accident) \$ AUTO ONLY - EA ACCIDENT GARAGE LIABILITY S ANY AUTO EA ACC \$ OTHER THAN AUTO ONLY: AGG s 8/20/2012 EACH OCCURRENCE Α X EXCESS/UMBRELLA LIABILITY UM0165365 8/20/2011 \$5,000,000 X OCCUR CLAIMS MADE AGGREGATE \$5,000,000 S&A Pollution \$\$3,000,000 DEDUCTIBLE s X RETENTION \$10,000 s OTH X WC STATU-TORY LIMITS WORKERS COMPENSATION AND BB1113886 10/1/2011 10/1/2012 в EMPLOYERS' LIABILITY E.L. EACH ACCIDENT \$1,000,000 ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? E.L. DISEASE - EA EMPLOYEE \$1,000,000 If yes, describe under SPECIAL PROVISIONS below E.L. DISEASE - POLICY LIMIT \$ 1,000,000 OTHER

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS Certificate Holder is included as an Additional Insured with Waiver of Subrogation and Primary and Non-Contributory Wording to apply as respects to General Liability and Automobile Liability per attached forms Certificate Holder includes: SOMA Environmental Engineering, Inc., the City of Oakland, its officers, agents, employees, and volunteers.

CERTIFICATE HOLDER	CANCELLATION*10 Days Notice for Non Payment
SOMA Environmental Engineering, Inc. 6501 Shattuck Ave Oakland CA 94609	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30* DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.
	AUTHORIZED REPRESENTATIVE Duglas Diwton

© ACORD CORPORATION 1988

## IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

#### DISCLAIMER

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# DESIGNATED INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM GARAGE COVERAGE FORM MOTOR CARRIER COVERAGE FORM TRUCKERS COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" under the Who Is An Insured Provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Endorsement Effective: 7/3/2012	Countersigned By:
Named Insured: Woodward Drilling Company, Inc.	(Authorized Representative)

#### SCHEDULE

Name of Person(s) or Organization(s):	SOMA	Environmental	Engineering,	Inc.
		Shattuck Ave		
	Oakla	and CA 94609		

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to the endorsement.)

Each person or organization shown in the Schedule is an "insured" for Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured Provision contained in **Section II** of the Coverage Form.

CA 20 48 02 99

Copyright, Insurance Services Office, Inc., 1998

#### THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# BLANKET WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

#### **BUSINESS AUTO COVERAGE FORM**

It is hereby agreed and understood that the Coverage Form is amended as follows:

The following is added to the Transfer Of Rights Of Recovery Against Others To Us Condition under Section IV - Business Auto Conditions:

We waive any right of recovery we may have against any person or organization because of payments we make for injury or damage caused by an "accident" or "loss" arising out of your operations done under a contract with that person or organization when such contract requires a waiver of our rights of recovery against others.

All other policy terms, conditions, definitions and exclusions remain unchanged.

#### WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT-CALIFORNIA

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from US.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be \_\_\_\_% of the California workers' compensation premium otherwise due on such remuneration.

Schedule

Person or Organization

**Job Description** 

WHERE YOU ARE REQUIRED BY WRITTEN CONTRACT TO OBTAIN THIS AGREEMENT FROM US, PROVIDED THE CONTRACT IS SIGNED AND DATED PRIOR TO THE DATE OF LOSS TO WHICH THIS WAIVER APPLIES. IN NO INSTANCE SHALL THE PROVISIONS AFFORDED BY THIS ENDORSEMENT BENEFIT ANY COMPANY OPERATING AIRCRAFT FOR HIRE.

\*The premium charge for this endorsement shall be 2% of the premium developed in the State of California, but not less than \$500 policy minimum premium.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated. (The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective Insured Insurance Company 10/01/11 Policy No. BB1113886 Woodward Drilling Company Inc SeaBright Insurance Company Endorsement No. 10 Policy Effective Date 10/01/11

Countersigned By

WC 04 03 06 (Ed. 4-84)

@1998 by the Workers' Compensation Insurance Rating Bureau of California. All rights reserved.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

## ADDITIONAL INSUREDS – ENERGY CONTRACTORS

This endorsement modifies insurance provided under the following:

#### COMMERCIAL GENERAL LIABILITY COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

Under SECTION II - WHO IS AN INSURED, Paragraph 5. is added as follows:

- 5. a. Any person or organization with whom you agreed, because of a written contract, written agreement or permit, is an insured, but only with respect to:
  - (1) "Your work" for the additional insured(s) at the location designated in the contract, agreement or permit.
  - (2) Facilities owned or used by you.

This insurance applies on a primary basis if that is required by the written contract, written agreement or permit.

- b. This provision does not apply:
  - (1) Unless the written contract or written agreement has been executed or permit has been issued prior to the "bodily injury," "property damage," "personal injury" or "advertising injury."
  - (2) To any person or organization included as an insured by an endorsement issued by us and made part of this Coverage Form.
  - (3) to any lessor of equipment:
    - (a) after the equipment lease expires; or
    - (b) if the "bodily injury," "property damage," "personal injury" or "advertising injury" arises out of the sole negligence of the lessor.
  - (4) To any:
    - (a) Owners or other interests from whom land has been leased which takes place after the lease for that land expires; or
    - (b) Managers or lessors of premises if:
      - (i) the occurrence takes place after you cease to be a tenant in that premises; or
      - (ii) the "bodily injury," "property damage," "personal injury" or "advertising injury" arises out of structural alterations, new construction or demolition operations performed by or on behalf of the manager or lessor.

All other terms and conditions of this policy remain unchanged.

#### THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# BLANKET WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

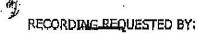
#### COMMERCIAL GENERAL LIABILITY COVERAGE PART

It is hereby agreed and understood that the Coverage Form is amended as follows:

The following is added to the Transfer Of Rights Of Recovery Against Others To Us Condition under Section IV - Commercial General Liability Conditions:

We waive any right of recovery we may have against any person or organization because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization when such contract requires a waiver of our rights of recovery against others.

All other policy terms, conditions, definitions and exclusions remain unchanged.

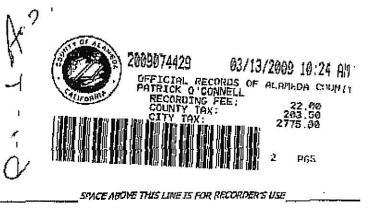


Old Republic Title Company

Order No.: 0190005779-BM APN: 016-1428-11-2

When Recorded Mail Document and Tax Statements to;

Bruder, LLC 2550 Appian Way, Sulbe 201 Pinole, CA 94564



# **Grant Deed**

The undersigned grantor(s) declare(s): Documentary Transfer Tax is \$203.50 (X) computed on full value of property conveyed, or ( ) computed on full value less of llens and encumbrances remaining at time of sale. ( ) Unincorporated area: (X) City of Oakland 2.775, 00

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, All Reza Khashabi, an unmarried man

hereby GRANT(S) to Bruder, LLC

that property in City of Oakland, Alameda County, State of California, described as: The southern 10 feet of lot 11 and all of lots 12 and 13, Block 4, Edgewood Park filed October 18, 1906, Map Book 21, Page 72, Alameda County Records.

Date: February 26, 2009

State of County of On . efore me, eza Notary Public, personally appeared In11

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(les), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY/OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS mWnartd and/officia Signature Name (typed or printed)



(Area reserved for official notarial seal)

B. Morrison Comm. # 1780685 Notary Public, California Contra Costa County Comm. Exp. Dec 15, 2011

Grant Deed

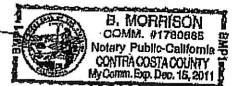
MAIL TAX STATEMENTS AS DIRECTED ABOVE

Particles )	
State of California	
Country of CONTRACESTA	
on 3.12-09 before mg. B. Morrison	, a Notary
Public, personally appeared ali Keza Khashaki	
, who proved to me on the h	oasis of

satisfactory evidence to be the person(s) whose name(s) is/are-subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct,

WITNESS my hand and of Signature Te isor Name: a (typed or printed)



(Area reserved for official notarial seal)

B. Morrison Comm. # 1780685 Notary Public - California Contra Costa Gunty Comm. Exp. Dec 15, 2011 him and the second s



The limited access manholes are round with a bolted and gasketed cover. Used for access ports in driveways where limited access and/or water resistant conditions are required. The bolts are standard hex head stainless steel. Meets H-20 load requirements. Each manhole is individually boxed.

The 418 has a plain cover. The 18" x 12" and 18" x 18" use a flat head screw.

The 418XA has a monitoring well manhole warning and an API symbol on the cover.

The 418XAH is the same as the 418XA but has a 14-gauge heavy skirt and nylon washers.

The 418XAP is the same as the 418XA but the cover is painted white with a black triangle .

The 418XAS is the same as the 418XA but with a steel cover.

The 418XAW is the same as the 418XA but with continuous welded construction, nylon washers, heavy skirt (14-gauge), and skirt anchor lugs.

The 418TM has a cover indicating "TANK MONITOR" for UST leak detection. Bolt down and gasket.

I.D. NUMBER	Α	в	с	D	E	F	G	н	SET SCREW	WEIGHT
418	12" x 7"	CI	GS	Buna	SS	N	7"	12"	1/2"	31
418	18" x 12"	CI	GS	Buna	SS	N	13.25"	17.25"	1/2"	66
418	18" x 18"	CI	GS	Buna	SS	N	19.25"	17.25"	1/2"	69
4181300 AM	24" x 18"	CI	GS	Buna	SS	N	18.6875"	26.656"	3/8"	104
418TM-1100 AM	18" x 12"	CI	GS	Buna	SS	N	13.25"	17.25"	1/2"	72
418TM-1200 AM	18" x 18"	CI	GS	Buna	SS	N	17.25"	17.25"	1/2"	78
418XA-0500 AM	7" x 10"	CI	GS	Buna	SS	N	10"	6"	5/16"	8
418XA-0850 AM	8" x 8"	CI	GS	Buna	SS	Ν	8.125"	8.125"	3/8"	13.5
418XA-0900 AM	8" x 12"	CI	GS	Buna	SS	N	13"	8.125"	3/8"	15
418XA-0100 AM	9" x 7"	CI	GS	Buna	SS	N	7.0625"	9"	1/2"	17
418XA-0200 AM	12" x 7"	CI	GS	Buna	SS	N	7"	12"	1/2"	27
418XA-0300 AM	9" x 12"	CI	GS	Buna	SS	Ν	13.0625"	9"	1/2"	20
418XA-0400 AM	12" x 12"	CI	GS	Buna	SS	Ν	13"	12"	1/2"	30
418XA-1000 AM	18" x 12"	CI	GS	Buna	SS	Ν	13.25"	17.25"	1/2"	75
418XA-1100 AM	18" x 18"	CI	GS	Buna	SS	Ν	19.25"	17.25"	1/2"	78
418XAH0300 AM	9" x 12"	CI	14G	Buna	SS	Ν	13.0625"	9"	1/2"	22
418XAP0500 AM	7" x 10"	CI	GS	Buna	SS	Y	10"	6"	5/16"	8
418XAP0850 AM	8" x 8"	CI	GS	Buna	SS	Y	8.125"	8.125"	3/8"	13.5
418XAP0900 AM	8" x 12"	CI	GS	Buna	SS	Y	13"	8.125"	3/8*	17
418XAP0300 AM	9" x 12"	CI	GS	Buna	SS	Y	13.0625"	9"	1/2"	20
418XAP0200 AM	12" x 7"	CI	GS	Buna	SS	Y	7"	12"	1/2"	27
418XAP0400 AM	12" x 12"	CI	GS	Buna	SS	Y	13"	12"	1/2"	29
418XAP1200 AM	18" x 12"	CI	GS	Buna	SS	Y	13.25"	17.25"	1/2"	75
418XAP1300 AM	18" x 18"	CI	GS	Buna	SS	Y	19.25"	17.25"	1/2"	86
418XAS0400 AM	12" x 12"	ST	GS	Buna	SS	N	13"	12"	1/2"	27
418XAW0300 AM	9" x 12"	CI	GS	Buna	SS	N	13.0625"	9"	1/2"	20
418XAW0400 AM	12" x 12"	CI	GS	Buna	SS	N	13"	12"	1/2"	34
418XAW0700 AM	9" x 12"	CI	GS	Buna	SS	Y	13.0625"	9"	1/2"	20
418XAW0800 AM	12" x 12"	CI	GS	Buna	SS	Y	13"	12"	1/2"	34



Fig. 418XA

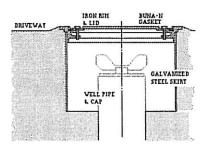


CHART KEY:

A—Size
B—Cover Material: CI (Cast Iron); ST (Steel)
C—Skirt Material: GS (Galvanized Sheet Metal); 14G (14-Gauge)
D—Gasket Material: Buna
E—Bolt Material: SS (Stainless Steel)
F—Painted Cover: Y (Yes) or N (No)
G—Height
H—Skirt Diameter
Set Screw—Size
Weight—Shipping Weight



Distributed By: Continental Supply, Co. 530-669-7958 (tel) • 800.464.9156 • 530.669.7966 (fax)

	ENVIRO		ERING, INC.	DRAFT: I	WW-1 and MW-3			PA	AGE 1 OF 1		
	P	ROJECT:									
	S	ITE LOCA									
	D	RILLER: I	RSI Drilli	ng							
	D	RILLING									
	B	ORING D									
	L	OGGED E	Y: NA		APPROVED BY: M. Sepeh	ſ					
PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DE (Inferred fr		SPLIT SPOON SAMPLED	CORE GW I FVFI	BLOWCOUNTS	WELL DIAGRAM NA		
12.1 24.9	-			Hand Auger top 5 feet, 2 inches asphalt SILTY CLAY:Black, moist to very moist, soft, me medium dry strength, rapid dilatancey, no PHC o	edium plastic, medium toughness, odor	ŭ	0				
139 46 83 18 66	- 5— -			SANDY LEAN CLAY: Black, moist, firm, fine- to rapid dilatancy, medium toughness, medium dry green staining at 6 feet	medium-grained sand, high plastic, y strength, PHC odor at 4.5 feet,				Bentonite Seal		
9 463 304	- - 10—		SC			ule 40 PVC Screen abt (0.020 inch) 111111111111111111111111111111111111					
_	- - 15—		CL	As Above: Rust mottling at 11 feet, decrease con LEAN CLAY: Grey, soft, moist, ~15% fine- to co to angular), 85% clay: high plastic, medium toug dilatancey, no PHC odor As Above: very soft, very moist			Schedu 20 5 20 5 20 5 20 5 20 5 20 5 20 5 20 5				
1.9 0.0 0.0 0.0	-			SANDY LEAN CLAY: Reddish-brown with grey h high plastic, rapid dilatancy, medium toughness, PHC odor As Above: fine- to medium-grained sand (angul	, medium dry strength, moist, no						
0.0 0.0	20— - - -			CLAYEY SAND: Reddish-brown, very soft, mois ~50% fine to very fine sand, clay: high plastic, m rapid dilatancy, no PHC odor Wet stringers	t to very moist, 5% coarse-grained sand, ledium toughness, medium dry strength,		▼				
	25 Screening interval may vary, and will depend on observed lithology The interval between 7-17' bgs will be targeted for well screening										

## ALAMEDA COUNTY HEALTH CARE SERVICES



AGENCY ALEX BRISCOE, Director

> ENVIRONMENTAL HEALTH DEPARTMENT ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

February 10, 2011

Athan Magganas Bruder LLC 2550 Appian Way, Suite 201 Pinole, CA 94564-2262

Ali Khashabi East Bay Smog Center & Auto Repair Address Unknown

# Subject: Interim Remedial Action for Fuel Leak Case No. RO0003066 and GeoTracker Global ID T10000002456, Gas Station / East Bay Smog Center & Auto Repair, 6501 Shattuck Avenue, Oakland, CA 94609

Dear Messrs. Magganas & Khashabi:

Thank you for the recently submitted document entitled, "Addendum to Interim Remedial Excavation and Proposed Soil and Groundwater Investigation," dated December 13, which was prepared by SOMA Environmental Engineers, Inc. for the subject site. Alameda County Environmental Health (ACEH) staff has reviewed the case file including the above-mentioned work plan for the above-referenced site. SOMA proposes to backfill the excavation with a clayey backfill material due to ACEH's concerns regarding potential vapor migration. SOMA also proposes to re-collect a confirmation sample where historical sample EX-3-S-W was collected as well as install three groundwater monitoring wells to delineate the groundwater contaminant plume.

ACEH does not oppose the majority of the proposed scope of work, but does have some reservations regarding the proposed monitoring well installations and requests that you address the following technical comments, perform the proposed work, and send us the technical reports described below.

#### **TECHNICAL COMMENTS**

 Expedited Site Assessment – SOMA plans to install three groundwater monitoring wells (MW-1 through MW-3) to assess groundwater conditions at the site. ACEH recommends that prior to installation of permanent groundwater monitoring points, a series of borings are installed so that monitoring well locations are based on the data obtained. This type of investigation usually involves drilling one or more borings for soil and depth-discrete groundwater sampling and analysis. Boring installation locations should be positioned to determine the extent of soil and groundwater contamination, groundwater flow direction and Messrs. Magganas & Khashabi RO0003066 February 10, 2011, Page 2

gradient to address the data gaps at the site. Please submit a revised site figure by the date specified below that illustrates proposed boring locations to define the extent of the groundwater contaminant plume.

#### TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

- March 14, 2011 Revised Site Figure
- May 11, 2011 Soil and Water Investigation Report

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,

gitally signed by Paresh Khal k: cn=Paresh Khatri, o= Alam sunty Environmental Health, i=Local Oversight Program,

Paresh C. Khatri

Hazardous Materials Specialist

Enclosure: Responsible Party(ies) Legal Requirements/Obligations ACEH Electronic Report Upload (ftp) Instructions

cc: Mansour Sepehr, SOMA Environmental Engineering, Inc., 6620 Owens Drive, Suite A, Pleasanton, CA 94588 (Sent via E-mail to: <u>msepehr@somaenv.com</u>)
Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (Sent via E-mail to: <u>lgriffin@oaklandnet.com</u>)
Vibeke Norgaard, 6501-ShattuckWatch Neighborhood Group (Sent via E-mail to: <u>vnorgaard@hotmail.com</u>)
Donna Drogos, ACEH (Sent via E-mail to: <u>donna.drogos@acqov.org</u>)
Paresh Khatri, ACEH (Sent via E-mail to: <u>paresh.khatri@acqov.org</u>)
GeoTracker
File

#### Responsible Party(ies) Legal Requirements/Obligations

#### REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and <u>other</u> data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (<u>http://www.swrcb.ca.gov/ust/electronic submittal/report rqmts.shtml</u>.

#### PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "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." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

#### UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

#### AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

Alemada County Environmental Cleanup	REVISION DATE: July 20, 2010						
Alameda County Environmental Cleanup Oversight Programs	ISSUE DATE: July 5, 2005						
(LOP and SLIC)	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010						
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions						

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

#### REQUIREMENTS

- Please <u>do not</u> submit reports as attachments to electronic mail.
- Entire report including cover letter must be submitted to the ftp site as a single portable document format (PDF) with no password protection.
- It is preferable that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements must be included and have either original or electronic signature.
- <u>Do not</u> password protect the document. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password.
   Documents with password protection <u>will not</u> be accepted.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention: RO#\_Report Name\_Year-Month-Date (e.g., RO#5555\_WorkPlan\_2005-06-14)

#### **Submission Instructions**

- 1) Obtain User Name and Password:
  - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
    - i) Send an e-mail to dehloptoxic@acgov.org
  - b) In the subject line of your request, be sure to include "ftp PASSWORD REQUEST" and in the body of your request, include the Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.
- 2) Upload Files to the ftp Site
  - a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
    - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site.
  - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
  - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
  - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
  - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
  - a) Send email to <u>dehloptoxic@acgov.org</u> notify us that you have placed a report on our ftp site.
  - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
  - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
  - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

# **APPENDIX B**

# PHOTOGRAPHIC DOCUMENTATION AND BORING LOGS

Monitoring Well Installation Report



**Plate 1.** Utility lines in the parking lane near the site



Plate 2. Utility lines in the parking lane near the site



Plate 3. Woodward Drilling setting up to drill MW-3



**Plate 4.** Woodward Drilling set up and drilling MW-2



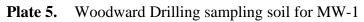




Plate 6. MW-2 completed with raised well box



Plate 7. MW-3 completed to grade

# NVIRONMENTAL ENGINEERING, INC

## PROJECT: 5032

SITE LOCATION: 6501 Shattuck Ave., Oakland

DRILLER: Woodward Drilling

DRILLING METHOD: DP/HSA

**BORING DIAMETER: 8-inches** 

LOGGED BY: E. Hightower

### DATE DRILLED: August 30, 2012

CASING ELEVATION: 128.70

First Encountered GW: 21.00 feet Stablized GW: 6.14 feet

T.O.C. TO SCREEN: 7 ft.

#### SCREEN LENGTH: 17 ft.

#### APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON	CORE SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
0.5	-		SC	Hand auger to 5 ft. CLAYEY SAND: Dark brown, dry, ~85% fine- to medium-grained sand, ~15% clay with medium dry strength, slow dilatancy, medium toughness, no HCI reaction, medium plasticity, no Petroleum Hydrocarbon (PHC) odor.					2 Schedule 40 PVC Casing
0.9	- 5— -		CL	SANDY LEAN CLAY: Dark brown, dry, ~30% fine- to medium-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, no HCI reaction, medium plasticity, no PHC odor.			T		Bentonite Seal
0.3	- - 10—		CL	CLAY: Grayish-brown, hard, dry, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
0.3	- 15-		CL	SANDY LEAN CLAY: Dark 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.	r				PVC Screen 020 inch)
0.5	-			As above, moist, brown					Schedule 40 P 20 stor (0 0)
0.7	20			As above, moist, brown, some wet stringers			⊻		
	25— C		S: TD @	24 feet					

PROJECT: 5032

SITE LOCATION: 6501 Shattuck Ave., Oakland

DRILLER: Woodward Drilling

DRILLING METHOD: DP/HSA

**BORING DIAMETER: 8-inches** 

LOGGED BY: E. Hightower

## DATE DRILLED: August 29, 2012

CASING ELEVATION: 130.32

First Encountered GW: 21.00 feet Stablized GW: 7.81 feet

T.O.C. TO SCREEN: 7 ft.

#### SCREEN LENGTH: 17 ft.

## APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON	CORE SAMPLEU	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			SC	Hand auger to 5 ft. CLAYEY SAND: Dark brown, dry, ~85% fine- to medium-grained sand, ~15% clay with medium dry strength, slow dilatancy, medium toughness, no HCI reaction, medium plasticity, no Petroleum Hydrocarbon (PHC) odor.					2 Schedule 40 PVC Casing
187 0.4			CL	SANDY LEAN CLAY: Dark brown, dry, ~30% fine- to medium-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, no HCI reaction, medium plasticity, PHC odor.			V		Bentonite Seal
	10—		CL	CLAY: Grayish-brown, hard, dry, medium dry strength, slow dilatancy, medium toughness, no HCl reaction, medium plasticity, no PHC odor.					
1.3			CL	SANDY LEAN CLAY: Dark 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.					212
0.4	15-			As above, moist, brown					
0.3	20-								20 stot (0.020 inch)
0.8	-			As above, moist, brown, some wet stringers			Y		
0.2	25-		S: TD @	24 feet					<u></u>
0.2	25-	COMMENT	S: TD @	24 feet					

## VVIRONMENTAL ENGINEERING, INC

PROJECT: 5032

SITE LOCATION: 6501 Shattuck Ave., Oakland

DRILLER: Woodward Drilling

DRILLING METHOD: DP/HSA

**BORING DIAMETER: 8-inches** 

LOGGED BY: E. Hightower

### DATE DRILLED: August 29, 2012

CASING ELEVATION: 131.34

First Encountered GW: 21.00 Stablized GW: 7.89

T.O.C. TO SCREEN: 7 ft.

#### SCREEN LENGTH: 17 ft.

## APPROVED BY: M. Sepehr

PID nnm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON	CORE SAMPLEU	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
		-	SC	Hand auger to 5 ft. CLAYEY SAND: Dark brown, dry, ~85% fine- to medium-grained sand, ~15% clay with medium dry strength, slow dilatancy, medium toughness, no HCI reaction, medium plasticity, no Petroleum Hydrocarbon (PHC) odor.					le 40 PVC Casing
0									2"Schedule
0.0		-	CL	SANDY LEAN CLAY: Dark brown, dry, ~30% fine- to medium-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, no HCI reaction, medium plasticity, no PHC odor.					Bentonite Seal
	10–		CL	CLAY: Grayish-brown, hard, dry, medium dry strength, slow dilatancy, medium toughness, no HCI reaction, medium plasticity, no PHC odor.			<b>•</b>		2/12 Sand
	5		CL	SANDY LEAN CLAY: Dark brown, moist, ~30% fine- to medium-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, no HCI reaction, medium plasticity, no PHC odor.	•				C Screen 0 inch)
5	ā 15−			As above, moist, brown					Schedule 40 PVC Screen 20 stot (0 020 inch)
с С	20-			As above, moist, brown, some wet stringers			⊻		
00									
	<sub>25</sub>		S: TD @	24 feet			I	<u> </u>	<u> </u>

# **APPENDIX C**

WASTE DISPOSAL MANIFEST

Monitoring Well Installation Report

### NON-HAZARDOUS WASTE MANIFEST

	Pleas	e print or type (Form designed for use on elite (12 p	plich) typewriter)								
		NON-HAZARDOUS WASTE MANIFEST	I. Generator's US EPA ID No.			Manifest Document No.	DC 12-0037	2. Page 1			
		3. Generator's Name and Mailing Address	~			VO	12-00-51	<u>v</u> , 1			
		athan Maggana.									
	1	4. Generators Phone (STA) 94 Soly									
	T	5 Transporter 1 Company Name	Δ <sup>6.</sup>	US EPA ID Number	_	A. State Trans		16			
		Woodward Drille	The second secon	1200355271	6	B. Transporter 1 Phone 707 - 374 - 4300					
		7. Transporter 2 Company Name	) a. I	US EPA ID Number		C. State Trans D. Transporter					
	and the second	9. Designated Facility Name and Site Address DODODARD DrubungG	1 10.	US EPA ID Number		E. Slate Facility's ID					
		550 River Road	impanyine.	9			- Alexandra - A				
		RIOVISTA CA 9457				F. Facility's Ph	707-374	-4300			
		11. WASTE DESCRIPTION	12. Co								
		а.			No.	Туре	Quantity	14. Unit WL/Vol.			
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ST											
WA		G. Additional Descriptions for Materials Listed Above	H. Handling Co	des for Wastes Listed Above	<u></u>						
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õ		6501 shattuck	AUR								
RD		Daktand CA.									
NON-HAZARDOUS WASTE		15. Special Handling Instructions and Additional Information	ation								
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		16. GENERATOR'S CERTIFICATION: I hereby certily to in proper condition for transport. The materials desc	that the contents of this shipme ribed on this manifest are not s	nt are fully and accurately described ubject to federal hazardous waste reg	and are in a gulations.	Il respects					
								Date			
		Elizabeth Hightoner	for Some	Signature 1 Qut			Month	Day Year			
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	R -	Printed/Typed Name		Signature	/	-	Month	Day Year			
	SP-	18. Transporter 2 Acknowledgement of Receipt of Mater	rials	Land	6	7	_ 10	24 12			
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ŀ	Ř	10. Dissemblandia Sama									
	FA	19. Discrepancy Indication Space									
	ĉ										
	i	20. Facility Owner or Operator; Certification of receipt of	the waste materials covered by	this manifest, except as noted in Ite	m 19.		[				
	ţŀ	Printed/Typed Name		Symature			Month	Date Day Year			
L	Y	U LOUCE HOODON		All			/ _	612			
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					SOVIN	IK		10000 Billion			

## NON-HAZARDOUS WASTE MANIFEST

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	Plea	se print or type (Form designed for use on elite (12 pitch) typewriter) NON-HAZARDOUS 1. Generator's US I	EPA ID No.		Manifest	T	2. Page 1			
		WASTE MANIFEST			Document No.	x 12-0038	of 1			
	1000	3. Generator's Name and Mailing Address Athun Mil GyciMas 2550 Applich Way Suill PIMOLE, Alburnetin CA 94 56 4. Generator's Phone (510) 520 1482	201 = 4							
	100	4. Generator's Phone (510) 520 1482		A CHARTER AND						
	11	S. Transporter J Company Name WOODWARD Drilling Gmps	LUS EPAID Number CALOOD 3552	76	A. State Transporter's ID 5-116 B. Transporter 1 Phone 707 374 4300					
		7. Transporter 2 Company Name	8. US EPA ID Number		C. State Trans					
		A Devicested Service the serve and Disk Address	10. US EPA ID Number		D. Transporter					
		9. Designated Facility Name and Sile Address Pictverc HIIIS LANDFILL			E. State Facili	y's ID				
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ARI	11	Oatcland CA								
NON-HAZARDOUS WASTE		15. Special Handling Instructions and Additional Information	Elonia							
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ĪŌ	1									
-				7						
		16. GENERATOR'S CERTIFICATION: I hereby certily that the contents of in proper condition for transport. The materials described on this manily and the second se	of this shipment are fully and accurately described itest are not subject to federal hazardous waste re	and are in gulations.	all respects					
	1						Date			
		Frinted Typed Name Elizaboth Hightuwar for Sci	MA Sugnature And A			Month	Day Year			
	T	17. Transporter 1 Acknowledgement of Receipt of Materials	L. Wight			1	Dale			
	CANC	Printed/Typed Name	Signature		مىرىيى ب	Month	Day Yoar			
	PO	18. Transporter 2 Acknowledgement of Receipt of Materials					Date			
	TRAZSPORTER	Printed/Typed Name	Signature			Month	Day Year			
	n F	19. Discrepancy Indication Space				-	<u> </u>			
	AC									
	Ĭ	20. Facility Owner or Operator, Certification of receipt of the waste materia	als covered by this manifest, except as noted in ite	om 19.						
	$\frac{1}{T}$	Prinled/Typed Name P(ILF S)(NFS	Signature				Date Day Year			
~ [	Y	PALE STORS				10	0 (2			
, a'	F-14	© 2002 LABELI ASTER (600) 621-5808 www.labelmaster.com		E SOVI	MIN .		Rev. 3/95			

3

# **APPENDIX D**

WELL SURVEY REPORT

Monitoring Well Installation Report

DATE: 9/04/2012 JOB#

#### TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL ENGINEERING 6501 SHATTUCK AVENUE OAKLAND CA 94609

OAKLAND, CA 94609									
WELL ID #	NORTHING (FT.) / LATITUDE (D.DEG.)	EASTING (FT.) / LONGITUDE (D.DEG.)	ELEVATION (FT.)	DESCRIPTION					
MW-1	2136901.934	6051727.243	128.70	2"PVC NOTCH NORTH SIDE					
	N37.850339023	W122.266261635	129.19	SET PUNCH NORTH SIDE RIM					
			129.22	CONC NORTH SIDE					
MW-2	2136927.936	2136927.936 6051726.241		2" PVC NOTCH NORTH SIDE					
	N37.850410368	W122.266266804	130.79	SET PUNCH NORTH SIDE RIM					
			130.58	GRND NORTH SIDE					
MW-3	2136937.443	6051817.078	131.34	2" PVC NOTCH NORTH SIDE					
	N37.85044118	W122.26595287	131.72	SET PUNCH NORTH SIDE RIM					
			131.73	CONC NORTH SIDE					
			101.10						
			••••••••••••••••••••••••••••••••••••••						
		· · · · · · · · · · · · · · · · · · ·							
		and the state of the	a an						
		·····							
COORDINAT	L AND VERTICAL CONTRO E VALUES ARE BASED ON S ARE NAVD 88 DATUM.	JL: I THE CALIFORNIA COORDIN	ATE SYSTEM, ZONE 3,	NI LANO					
NORTHING 2 GPS BASE20	KELEY H J HEINZ CO TOW 2,138,045.28, EASTING 6,04 20 MW-3 PUNCH NORTH S	15,147.46	.724	CONTRACT OF ALL CONTRACT OF AL					
MONUMENT	<b>RK USED:</b> CITY OF OAKLAN 32 FEET AT THE NORTHW RAZ AVENUE. ELEVATION	EST CORNER OF THE INTER	RSECTION OF SHATTU	CK AVENUE					
EQUIPMENT	USED: TRIMBLE GPS-R8 (	& TS S6, TOPCON AT-G2 LEV	EL	apengo					
			n an	$\overline{\mathcal{O}}$					

Edgis Land Surveying Land Surveying and Mapping 1374 Garland Avenue, Clovis, CA 93612 Phone (559) 803-2679 Fax (559) 222-2580 email: edgis@aol.com

# **APPENDIX E**

WELL DEVELOPMENT DATA SHEETS

Monitoring Well Installation Report

Page Ĺ of 🟒

## WELL DEVELOPMENT DATA SHEET 65型

## WELL ID \_\_\_\_\_\_

PROJECT NAME: 6501 Shattuck Bird, Oakland	DATE: 9412
PROJECT NO .: 5032	PREPARED BY: E. Hightoww

WELL TYPE: Monitoring	CONTRACTOR: Woodward	OPERATOR: Juan
RIG TYPE:		DATE OF DEVELOPMENT: 9/4/12
BAILER TYPE:	PUMP TYPE:	
DESCRIPTION OF DEVELOPMENT: らい	rge + bail, pump	
MEASURING POINT (MP) ELEVATION (F	MSL):	

WELL TD (FBMP)	BOTTOM CONDITION	SWL (FBMP)	WATER COLUMN	WELL DIAMETER	GAL	LONS/F	TOOT	1 CASING VOLUME	5 CASING VOLUMES
Before/After	Before/After		(FT)	(IN)	2	4	6	(GAL)	(GAL)
	(hard-soft)		62 Di	6	6				
24.301 24.30	had I had	6.40	17.90	(2) 4 6	(0.16)	0.65	1.47	2.86	14.32

TOP OF WELL SCREEN	BOTTOM OF WELL SCREEN	LENGTH OF WELL SCREEN
(FBGS)	(FBGS)	(FBGS)
7.84	24 Ft	17 ft.

TIME	ELAPSED TIME (MIN)	FLOW RATE (GPM)	CASING VOLUMES PURGED	VOLUME PURGED (GAL)	WATER LEVEL (FBMP)	TEMP. (°C)	Ph	CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	ODOR	COMMENTS
13:44	((()))		TOROLD		(1.0.111.)	19.3	7.24	2500	920		
13:48						19.0	7.22	2230	353		
13:50						19.2	7.21	2120	53		
13:55.	4DURX					19.1	221	1990	56		
14:00	NV I'O'N					19.1	7.11	1930	130		
14:03						19.0	7.09		133		
14.08						(8.8)	6.88	1530	372		
14:16						18.7	6.84	1520	1000		

Page  $\mathcal{L}$  of  $\mathcal{L}$ 

## WELL DEVELOPMENT DATA SHEET 65<sup>土</sup> (continued)

WELL ID MW-1

PROJE	CT NAME: (a CT NO.: 50	501 5	hatticle	Blud,	Dalclar	d	DATE:	9 4 12 RED BY: E, +			
PROJE	CT NO .: 50	032		,			PREPA	RED BY: E. H	Lightowe	~~	
									-9		
TIME	ELAPSED	FLOW	CASING	VOLUME	WATER	TEMP.	Ph	CONDUCTIVITY	TURBIDITY	ODOR	COMMENTS
	TIME	RATE	VOLUMES PURGED	PURGED	LEVEL (FBMP)	(°C)		(umhos/cm)	(NTU)		
14:24	(MIN)	(GPM)	PURGED	(GAL)		18.5	7.34	2627)	(000)		
14:24	* Drgt		1016	010				2630 2530	1000		
1000			245	~15		(8.1	7.36	2000	100		
	2 hour										
							_				
							_				
SF 1000 - 01 X4											
						¢.	-		1.		
		а. Б									
				-							
							-				
							-				
		Annen an	2	10 0.1800 A		•				•	

## WELL DEVELOPMENT DATA SHEET Shathuck

## WELL ID <u>MW-3</u>

······	
PROJECT NAME: 6501 Shattack Blvd, Oakland	DATE: 91412
PROJECT NO.: 5032	PREPARED BY: E, thighto ver

WELL TYPE: Monitoring CONTRACTOR: Woodward	OPERATOR: Juan
RIG TYPE:	DATE OF DEVELOPMENT: 9/4/12
BAILER TYPE: PUMP TYPE:	
DESCRIPTION OF DEVELOPMENT: Surge + bail, pump.	
MEASURING POINT (MP) ELEVATION (FMSL):	

WELL TD (FBMP)	BOTTOM CONDITION	SWL (FBMP)	WATER COLUMN	WELL DIAMETER	GAL	LONS/F	TOOT	1 CASING VOLUME	5 CASING VOLUMES
Before/After	Before/After		(FT)	(IN)	2	4	6	(GAL)	(GAL)
	(hard-soft)								
24.40124.80	Soft/hard 630 18.10		18.10	(2) 4 6	(0.16) 0.65		1.47	2.90	14.48

A

TOP OF WELL SCREEN	BOTTOM OF WELL SCREEN	LENGTH OF WELL SCREEN
(FBGS)	(FBGS)	(FBGS)
7 Ft.	24Ft	17.51.

TIME	ELAPSED TIME	FLOW RATE	CASING VOLUMES	VOLUME PURGED	WATER LEVEL (FBMP)	TEMP. (°C)	Ph	CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	ODOR	COMMENTS
14:55	(MIN)	(GPM)	PURGED	(GAL)		205	1.25	1650	39,13	None	
4	Dryt					198	7.13	1050	538	1	
15:20	- 0					19.8	7.13	1050	588		
15:33						19.7	7.05	1030	623		
15:3700	A				(B. 4)	19.5	6.98	1010	602		
16:50	n gr					19.3	6.88	1020	533		
16:03	ant					19.4	6.85	1030	498	5	
	.0-			210							

### WELL DEVELOPMENT DATA SHEET

# well in <u>MW-2</u>

PROJECT NAME: 6501 Shattuck Blvd. Oakland	DATE: 9412	
PROJECT NO .: 5032	PREPARED BY: E. Hightower	

WELL TYPE: Monitoring	CONTRACTOR: Woodword	OPERATOR: Juon
RIG TYPE:		DATE OF DEVELOPMENT: 9/4/12
BAILER TYPE:	PUMP TYPE:	
DESCRIPTION OF DEVELOPMENT: らいっと	it bail, pump	
MEASURING POINT (MP) ELEVATION (FMS	SL):	

WELL TD (FBMP)	BOTTOM CONDITION	SWL (FBMP)	WATER COLUMN	WELL DIAMETER	GAL	LONS/F	TOOT	1 CASING VOLUME	5 CASING VOLUMES
Before/After	Before/After	(1.2001)	(FT)	(IN)	2	4	6	(GAL)	(GAL)
	(hard-soft)	-			$\sim$				
24,50/24.50	hard/hard	11.50	13.00	(2) 4 6	( 0.16)	0.65	1.47	2.08	10,40

TOP OF WELL SCREEN	BOTTOM OF WELL SCREEN	LENGTH OF WELL SCREEN
(FBGS)	(FBGS)	(FBGS)
7 ft	24 ft	17£+

TIME	ELAPSED TIME (MIN)	FLOW RATE (GPM)	CASING VOLUMES PURGED	VOLUME PURGED (GAL)	WATER LEVEL (FBMP)	TEMP. (°C)	Ph	CONDUCTIVITY (umhos/cm)	TURBIDITY (NTU)	ODOR	COMMENTS
12:45			· ·			20.1	7.40	23000	1000	Nove	
12:46						19.4	7,32	2490	382	1	(a)
12:51						18.5	7.46	1880	816		
12:56				~15		18.2	7.45	1630	416		
de t	Dryst			1		18.3	7.43	1329	3.99		
13:31	. 0			~15.5		18.3	7.93	1329	384	V	
	Dryok									1	
-1/-/-	0										

# **APPENDIX F**

### LABORATORY REPORT AND CHAIN OF CUSTODY FORMS

Monitoring Well Installation Report



#### Laboratory Job Number 239313 ANALYTICAL REPORT

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

<u>Sample ID</u>	<u>Lab ID</u>
MW-1@8FT	239313-001
MW-1@13FT	239313-002
MW-1@18FT	239313-003
MW-1@23FT	239313-004
MW-2@8FT	239313-005
MW-2@13FT	239313-006
MW-2@18FT	239313-007
MW-2@23FT	239313-008
MW-3@6FT	239313-009
MW-3@11FT	239313-010
MW-3@15FT	239313-011
MW-3@21FT	239313-012

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.

The Barn

Signature:

Tracy Babjar

Tracy Babjar Project Manager (510) 204-2226 Date: <u>09/07/2012</u>

NELAP # 01107CA



#### CASE NARRATIVE

Laboratory number: Client: Project: Location: Request Date: Samples Received: 239313 SOMA Environmental Engineering Inc. 5032 6501 Shattuck Ave., Oakland 08/31/12 08/31/12

This data package contains sample and QC results for six soil samples, requested for the above referenced project on 08/31/12. 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 MW-2@8FT (lab # 239313-005). No other analytical problems were encountered.

#### TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

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

High surrogate recovery was observed for bromofluorobenzene in MW-2@8FT (lab # 239313-005). No other analytical problems were encountered.

# **CHAIN OF CUSTODY**

	rtis & Tompkins, Ltd. lytical Laboratory Since 1878 2323 Fifth Street		COTI	0	~ 1 6	1.44	239313						r				r	<b>.</b>		<b>T</b> 1		<b>—</b>			
	Berkeley, CA 94710 (510)486-0900 Phone (510)486-0532 Fax																								
		1					ie Hightower																		
	ct No: 5032		Repo	rt T	0:		Joyce Bo	bek						5											
Projec	ct Name: 6501 Shattuck Ave.	, Oakland	Comp	ban	<b>y</b> :		SOMA Envi	roni	men	tal				ĩ٩											
Turna	round Time: Standard		Telep	hoi	ne		925-734-64	00						Ē	8260										
			Fax:				925-734-64	D1						-   -											
		<u> </u>			la	trix		F	res	erv	vativ	'e		÷	(Full List)										
Lab No.	Sample ID.	Sampling Time		Soil	Water	Waste	# of Containers	HCL	H <sub>2</sub> SO <sub>4</sub>	HN03	ЫGE			1PH-9, 1PH-a, 1PH-mo 8015											
	MW-1@8ft	8/30/2012	9:42	*			6-inch sleeve				*				*							╡	+	╋	
2	MW-1@13ft	8/30/2012	9:51	*		T	6-inch sleeve				*		,	*	*					+		╡	+	$\uparrow$	
3	MW-1@18ft	8/30/2012	10:07	*			6-inch sleeve				*		-	*	*	*1	40	a	*	┟╴╴┨		╉	╈	+	
4	MW-1@23ft	8/30/2012	10:36	*			6-inch sleeve				*		,	*	*		-	A 1	X			+	$\uparrow$	-	
5	MW-2@8ft	8/29/2012	14:41	*			6-inch sleeve				*		<b>,</b>	*	*	•						╈	+	╉	
6	MW-2@13ft	8/29/2012 <sup>·</sup>	14:53	*			6-inch sleeve				*		-	*	*							-	+	+	
7	MW-2@18ft	8/29/2012	15:15	*			6-inch sleeve				*		,	*	*	*	Ho	d	×			1	╈	╈	
8	MW-2@23ft	8/29/2012 1	15:40	*			6-inch sleeve				*	-	,	*	*	A	1	10	K.	F		+	$\uparrow$	+	
q	MW-3@6ft	8/29/2012	10:21	*			6-inch sleeve				*		-	*	*	*	140	id	×				T		
TÜ	MW-3@11 ft	8/29/2012	10:55	*			6-inch sleeve				*		,	•	*								╡		
Notes:	EDF OUTPUT REQUIRE	D		RE	ELI	NQ	UISHED BY:		. 1	·			R	ECE		DB	Y:	L	Li	1					
	Silica-gel clean-up required			2	-	4	tight		<u> </u>	8		12 Te/TIM	E	ſ	lĺ	W	t	8	$\overline{\backslash}$	/ 8	3)31	ρ [	ርጉ ሥ DATE	4 pm =/TI	) ME
							0				DAT	E/TIM	E		· –(				Y			]	DATE	<u>=/TI</u>	ИE
				DATE/TIM								E									Γ	DATE		иЕ	

# **CHAIN OF CUSTODY**

Ana	rtis & Tompkins, Ltd. lytical Laboratory Since 1878 2323 Fifth Street Berkeley, CA 94710 (510)486-0900 Phone (510)486-0532 Fax ct No: 5032			oler	Liz	zie	393 공 Hightower Joyce Bot						15												
Projec	ct Name: 6501 Shattuck Ave.	, Oakland	Com	Company : SOMA Environmental						no 80	0														
Turna	round Time: Standard		Telep	ephone: 925-734-6400						-H-r	8260	9 9								i					
			Fax:				25-734-640	-					H-d, T	List)								1			
					latrix				<u> </u>	erv	ativ	/e	ЪЧ	Full											
Lab No.	Sample ID.	Sampling Time		Soil	Water Waste	c	# of Containers	ਸ਼	H <sub>2</sub> SO <sub>4</sub>	HNO3	ICE		TPH-g, TPH-d, TPH-mo 8015	VOCs (Full List)											
n	MW-3@15ft	8/29/2012	11:09	*			6-inch sleeve				*		*	*							1				
12	MW-3@21ft	8/29/2012	11:32	*		(	6-inch sleeve				*		*	*	¥	H	Þ٧	L	<b>*</b> F						
																				Ш					
																				$\square$			$\square$		
																				Ц	$\square$		$\perp$	_	
Notes																									
	EDF OUTPUT REQUIRE	required					SHED BY:	5	12 <sup>2</sup>			2 FE/TIME			ED B	Y:	Λ	1	2	2			s//12 е/тім	Б: ЛЕ	24pM
				DATE/TIME											-			[	DATI	E/TIN	٨E				
	· · · ·										DAT	re/time									ł	DATE	E/TIN	ле	

COOLER RECEIPT CHECKLIST	Curtis & Tompkins, Ltd.
Login #     2393/3     Date Received     8/3/12     Number       Client     SOMA     ENVIYONMENTAL     Project     5032	r of coolers
Date Opened <u>8/31/12</u> By (print) <u>KIISTra Salvack</u> (sign) <u>KISTra Salvack</u> (sign) <u>KISTra Salvack</u> (sign) <u>Ele</u>	sh e J J
1. Did cooler come with a shipping slip (airbill, etc) Shipping info	
<ul> <li>2A. Were custody seals present? □ YES (circle) on cooler on s How many Name Date</li> <li>2B. Were custody seals intact upon arrival?</li> <li>3. Were custody papers dry and intact when received?</li> <li>4. Were custody papers filled out properly (ink, signed, etc)?</li> <li>5. Is the project identifiable from custody papers? (If so fill out top of form 6. Indicate the packing in cooler: (if other, describe)</li> </ul>	YES NO QA YES NO YES NO NO NO
☐ Bubble Wrap ☐ Foam blocks ⊠Bags ☐ Cloth material ☐ Cardboard ☐ Styrofoam 7. Temperature documentation: * Notify PM if temperature exceeds 6	Paper towels
Type of ice used: ✔ Wet ☐ Blue/Gel ☐ None Temp(	(°C)
□ Samples Received on ice & cold without a temperature blank; te	mp_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?	JES NO
10. Are there any missing / extra samples?	YES NO
11. Are samples in the appropriate containers for indicated tests?	
12. Are sample labels present, in good condition and complete?	NO
13. Do the sample labels agree with custody papers?         14. Was sufficient amount of sample sent for tests requested?	VES NO
14. Was sufficient amount of sample sent for tests requested?	YES NO
<ul><li>15. Are the samples appropriately preserved?</li></ul>	$\frac{1125}{YES} NO \Phi 777$
17. Did you document your preservative check?	YES NO VA
18. Did you change the hold time in LIMS for unpreserved VOAs?	
19. Did you change the hold time in LIMS for preserved terracores?	
20. Are bubbles > 6mm absent in VOA samples?	
21. Was the client contacted concerning this sample delivery?	YES CO
If YES, Who was called?By	Date:
COMMENTS	

Rev 10, 11/11

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		Total	Volatil	e Hydrocarb	ons
Lab #: Client: Project#:	239313 SOMA Environmental 5032	Engineer	ing Inc.	Location: Prep: Analysis:	6501 Shattuck Ave., Oakland EPA 5030B EPA 8015B
Matrix: Units: Basis:	Soil mg/Kg as received			Diln Fac: Batch#: Received:	1.000 190154 08/31/12
Field ID:	MW-1@8FT			Sampled:	08/30/12
Type: Lab ID:	SAMPLE 239313-001			Analyzed:	09/05/12
Gasoline	Analyte		Result		RL
Gasollie		NI			0.93
Bromofluo	Surrogate	% <b>REC</b> 120	<b>Limits</b> 62-134		
Field ID:	robenzene (FID) MW-1@13FT	TZO	02-134	Sampled:	08/30/12
Type:	SAMPLE			Analyzed:	09/05/12
Lab ID:	239313-002				
	Analyte		Result		RL
Cogeline				-	
Gasoline		NI	)		1.1
	C7-C12 Surrogate	NI <b>%REC</b>	Limits	-	
Bromofluo	C7-C12 <b>Surrogate</b> robenzene (FID)	NI	)		1.1
	C7-C12 Surrogate	NI <b>%REC</b>	Limits	Sampled: Analyzed:	
Bromofluo Field ID: Type:	C7-C12 <b>Surrogate</b> robenzene (FID) MW-2@8FT SAMPLE	NI <b>%REC</b>	Limits	Sampled: Analyzed:	1.1 08/29/12
Bromofluo Field ID: Type:	C7-C12 Surrogate robenzene (FID) MW-2@8FT SAMPLE 239313-005 Analyte	NI <b>%REC</b>	<b>Limits</b> 62-134	Sampled: Analyzed:	1.1 08/29/12 09/05/12
Bromofluo Field ID: Type: Lab ID: Gasoline	C7-C12 Surrogate robenzene (FID) MW-2@8FT SAMPLE 239313-005 Analyte C7-C12 Surrogate	NI %REC 119 %REC	Limits 62-134 Result 25 Y Limits	Sampled: Analyzed:	1.1 08/29/12 09/05/12 RL
Bromofluo: Field ID: Type: Lab ID: Gasoline	C7-C12 Surrogate robenzene (FID) MW-2@8FT SAMPLE 239313-005 Analyte C7-C12	NI %REC 119	<b>Limits</b> 62-134 <b>Result</b> 25 Y	Sampled: Analyzed:	1.1 08/29/12 09/05/12 RL
Bromofluo: Field ID: Type: Lab ID: Gasoline Bromofluo:	C7-C12 Surrogate robenzene (FID) MW-2@8FT SAMPLE 239313-005 Analyte C7-C12 Surrogate robenzene (FID)	NI %REC 119 %REC	Limits 62-134 Result 25 Y Limits	Sampled: Analyzed:	1.1 08/29/12 09/05/12 RL 1.0
Bromofluo: Field ID: Type: Lab ID: Gasoline	C7-C12 Surrogate robenzene (FID) MW-2@8FT SAMPLE 239313-005 Analyte C7-C12 Surrogate	NI %REC 119 %REC	Limits 62-134 Result 25 Y Limits	Sampled: Analyzed:	1.1 08/29/12 09/05/12 RL
Field ID: Type: Lab ID: Gasoline Bromofluo: Field ID: Type:	C7-C12 Surrogate robenzene (FID) MW-2@8FT SAMPLE 239313-005 Analyte C7-C12 Surrogate robenzene (FID) MW-2@13FT SAMPLE	NI %REC 119 %REC	Limits 62-134 Result 25 Y Limits	Sampled: Analyzed: Sampled: Analyzed:	1.1 08/29/12 09/05/12 RL 1.0 08/29/12
Field ID: Type: Lab ID: Gasoline Bromofluo: Field ID: Type:	C7-C12 Surrogate robenzene (FID) MW-2@8FT SAMPLE 239313-005 Analyte C7-C12 Surrogate robenzene (FID) MW-2@13FT SAMPLE 239313-006 Analyte	NI %REC 119 %REC	Limits 62-134 8esult 25 Y Limits 62-134 Result	Sampled: Analyzed: Sampled: Analyzed:	1.1 08/29/12 09/05/12 RL 1.0 08/29/12 09/06/12
Bromofluo: Field ID: Type: Lab ID: Gasoline Bromofluo: Field ID: Type: Lab ID: Gasoline	C7-C12 Surrogate robenzene (FID) MW-2@8FT SAMPLE 239313-005 Analyte C7-C12 Surrogate robenzene (FID) MW-2@13FT SAMPLE 239313-006 Analyte	NI %REC 119 %REC 213 *	Limits 62-134 Result 25 Y Limits 62-134 Result	Sampled: Analyzed: Sampled: Analyzed:	1.1 08/29/12 09/05/12 RL 08/29/12 09/06/12 RL

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

Page 1 of 2



		Total	Volatil	e Hydrocar	bons	
Lab #: Client: Project#:	239313 SOMA Environmental 5032	Engineer	ing Inc.	Location: Prep: Analysis:	6501 Sha EPA 5030 EPA 8015	
Matrix: Units: Basis:	Soil mg/Kg as received			Diln Fac: Batch#: Received:	1.000 190154 08/31/12	
Field ID: Type:	MW-3@11FT SAMPLE			Sampled: Analyzed:	08/29/12 09/06/12	
Lab ID:	239313-010 Analyte		Result		RL	
Gasoline		ND			1.1	
Bromofluo:	<b>Surrogate</b> robenzene (FID)	<b>%REC</b> 122	<b>Limits</b> 62-134			
Field ID: Type: Lab ID:	MW-3@15FT SAMPLE 239313-011			Sampled: Analyzed:	08/29/12 09/06/12	
Gasoline	Analyte	ND	Result		<b>RL</b> 0.99	
	Surrogate	%REC	Limits		0.99	
Bromofluo	robenzene (FID)	130	62-134			
Type: Lab ID:	BLANK QC654703			Analyzed:	09/05/12	
Gasoline	Analyte C7-C12	ND	Result		<b>RL</b> 0.20	
Bromofluo:	<b>Surrogate</b> robenzene (FID)	<b>%REC</b> 93	<b>Limits</b> 62-134			

\*= Value outside of QC limits; see narrative Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit Page 2 of 2



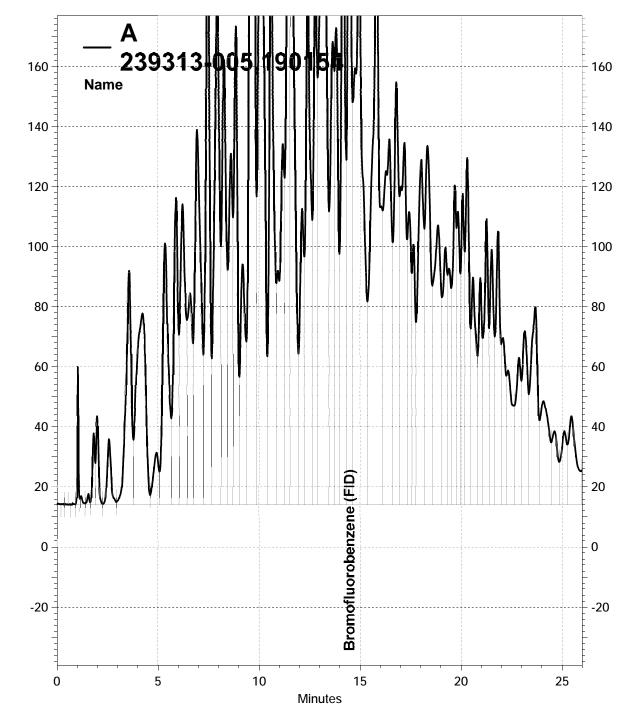
		Total Volatil	e Hydroca	arbons				
Lab #:	239313		Location:	6	501 Sha	ttuck	Ave., Oakl	and
Client:	SOMA Environmental	Engineering Inc.	Prep:	E	PA 5030	В		
Project#:	5032		Analysis:	E	PA 8015	В		
Туре:	LCS		Diln Fac:	1	.000			
Lab ID:	QC654866		Batch#:	1	90154			
Matrix:	Soil		Analyzed:	C	9/05/12			
Units:	mg/Kg							
	Analyte	Spiked		Result		%REC	Limits	
Gasoline (	C7-C12	1.000	)	0.93	923	3	80-120	

Surrogate	%REC	Limits	
Bromofluorobenzene (FID)	103	62-134	



		Total	Volatil	e Hydrocarl	bons				
Lab #: 2	39313			Location:	6501	Shattuck	Ave., O	akland	d
Client: S	OMA Environmental	Engineer	ing Inc.	Prep:	EPA	5030B			
Project#: 5	032			Analysis:	EPA	8015B			
Field ID:	ZZZZZZZZZZ			Diln Fac:	1.00	0			
MSS Lab ID:	239353-001			Batch#:	1901	54			
Matrix:	Soil			Sampled:	09/0	5/12			
Units:	mg/Kg			Received:	09/0	5/12			
Basis:	as received			Analyzed:	09/0	5/12			
Type: A Gasoline C7	MS nalyte -C12	MSS Re	<b>sult</b> 1.093	Lab ID: Spiked 9.80		4867 <b>Result</b> 9.616	<b>%REC</b> 87	<b>Lim</b> : 33-3	
s	urrogate	%REC	Limits						
	benzene (FID)	123	62-134						
Type:	MSD			Lab ID:	QC65	4868			
	Analyte		Spiked	R	esult	%REC	Limits	RPD 1	Lim
Gasoline C7	=		10.00		10.43	93	33-120	6 !	53
	urrogate	%REC	Limits						
Dromofluoro	hongono (ETD)	125	62-131						

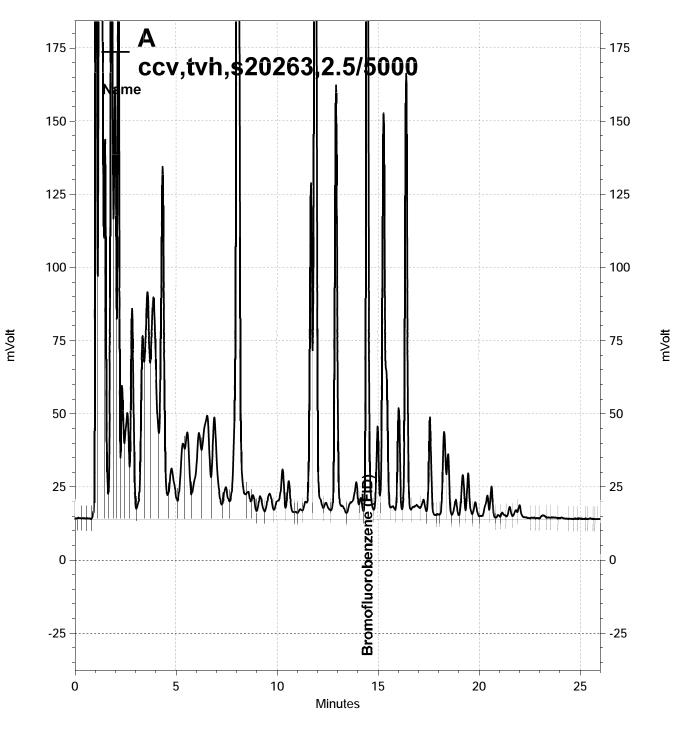
Bromofluorobenzene (FID) 125 62-134



- \\Lims\gdrive\ezchrom\Projects\GC04\Data\249-018, A

mVolt

mVolt



- \\Lims\gdrive\ezchrom\Projects\GC04\Data\249-002, A



		Total Extracta	ble Hydrocarbo	ns
Lab #: Client: Project#:		Engineering Inc.	Location: Prep: Analysis:	6501 Shattuck Ave., Oakland SHAKER TABLE EPA 8015B
Matrix: Units: Basis: Diln Fac:	Soil mg/Kg as received 1.000		Batch#: Received: Prepared: Analyzed:	190082 08/31/12 09/03/12 09/04/12
Field ID: Type: Lab ID:	MW-1@8FT SAMPLE 239313-001		Sampled: Cleanup Method:	08/30/12 EPA 3630C
	Analyte	Result	RL	
Diesel Cl	0-C24	ND	1.	
Motor Oil	C24-C36	ND	5.	0
	Surrogate	%REC Limits		
o-Terphen		80 54-129		
Field ID: Type:	MW-1@13FT SAMPLE		Sampled: Cleanup Method:	
Lab ID:	239313-002			
	Analyte	Result	RL	
Diesel Cl	0_02/	NTD	1	0
		ND	1.	
Motor Oil		ND ND	1. 5.	
Motor Oil	C24-C36 Surrogate	ND %REC Limits		
	C24-C36 Surrogate	ND		
Motor Oil	C24-C36 Surrogate yl	ND %REC Limits	5.	0
Motor Oil	C24-C36 Surrogate	ND %REC Limits		0
Motor Oil o-Terpheny Field ID: Type: Lab ID:	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte	ND <b>%REC Limits</b> 94 54-129 Result	5. Sampled: Cleanup Method: RL	0
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel Clu	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte 0-C24	ND <b>%REC Limits</b> 94 54-129 <b>Result</b> 4.8 Y	5. Sampled: Cleanup Method: <u>RL</u> 1.	0 08/29/12 EPA 3630C
Motor Oil o-Terpheny Field ID: Type: Lab ID:	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte 0-C24	ND <b>%REC Limits</b> 94 54-129 Result	5. Sampled: Cleanup Method: RL	0 08/29/12 EPA 3630C
Motor Oil o-Terphen Field ID: Type: Lab ID: Diesel Clo Motor Oil	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte 0-C24 C24-C36 Surrogate	ND <b>%REC Limits</b> 94 54-129 <b>Result</b> 4.8 Y ND <b>%REC Limits</b>	5. Sampled: Cleanup Method: <u>RL</u> 1.	0 08/29/12 EPA 3630C
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel Clu	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte 0-C24 C24-C36 Surrogate	ND <b>%REC Limits</b> 94 54-129 <b>Result</b> 4.8 Y ND	5. Sampled: Cleanup Method: <u>RL</u> 1.	0 08/29/12 EPA 3630C
Motor Oil o-Terphen Field ID: Type: Lab ID: Diesel Clo Motor Oil	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte 0-C24 C24-C36 Surrogate	ND <b>%REC Limits</b> 94 54-129 <b>Result</b> 4.8 Y ND <b>%REC Limits</b>	5. Sampled: Cleanup Method: <u>RL</u> 1.	0 08/29/12 EPA 3630C
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel Clu Motor Oil o-Terpheny	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte 0-C24 C24-C36 Surrogate yl	ND <b>%REC Limits</b> 94 54-129 <b>Result</b> 4.8 Y ND <b>%REC Limits</b>	5. Sampled: Cleanup Method: RL 1. 5.	0 08/29/12 EPA 3630C 0 0
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel Clo Motor Oil o-Terpheny Field ID:	<u>C24-C36</u> <u>Surrogate</u> yl MW-2@8FT SAMPLE 239313-005 <u>Analyte</u> 0-C24 C24-C36 <u>Surrogate</u> yl MW-2@13FT	ND <b>%REC Limits</b> 94 54-129 <b>Result</b> 4.8 Y ND <b>%REC Limits</b>	5. Sampled: Cleanup Method: RL 1. 5. Sampled:	0 08/29/12 EPA 3630C 0 0
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel Clu Motor Oil o-Terpheny Field ID: Type: Type:	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte 0-C24 C24-C36 Surrogate yl MW-2@13FT SAMPLE	ND <b>%REC Limits</b> 94 54-129 <b>Result</b> 4.8 Y ND <b>%REC Limits</b>	5. Sampled: Cleanup Method: RL 1. 5.	0 08/29/12 EPA 3630C 0 0
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel Clo Motor Oil o-Terpheny Field ID:	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte 0-C24 C24-C36 Surrogate yl MW-2@13FT SAMPLE 239313-006	ND %REC Limits 94 54-129 Result 4.8 Y ND %REC Limits 87 54-129	Sampled: Cleanup Method: RL 1. 5. Sampled: Cleanup Method:	0 08/29/12 EPA 3630C 0 0
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel Clo Motor Oil o-Terpheny Field ID: Type: Lab ID:	<u>C24-C36</u> <u>Surrogate</u> yl MW-2@8FT <u>SAMPLE</u> 239313-005 <u>Analyte</u> 0-C24 C24-C36 <u>Surrogate</u> yl MW-2@13FT <u>SAMPLE</u> 239313-006 <u>Analyte</u>	ND %REC Limits 94 54-129 Result 4.8 Y ND %REC Limits 87 54-129	5. Sampled: Cleanup Method: 1. 5. Sampled: Cleanup Method: RL	0 08/29/12 EPA 3630C 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel C10 Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel C10	<u>C24-C36</u> <u>Surrogate</u> yl MW-2@8FT <u>SAMPLE</u> 239313-005 <u>Analyte</u> 0-C24 C24-C36 <u>Surrogate</u> yl MW-2@13FT <u>SAMPLE</u> 239313-006 <u>Analyte</u> 0-C24	ND %REC Limits 94 54-129 Result 4.8 Y ND %REC Limits 87 54-129 87 54-129	5. Sampled: Cleanup Method: Sampled: Cleanup Method:	0 08/29/12 EPA 3630C 0 0 0 0 0 0 0 0 0 0 0 0 0
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel Clo Motor Oil o-Terpheny Field ID: Type: Lab ID:	<u>C24-C36</u> <u>Surrogate</u> yl MW-2@8FT SAMPLE 239313-005 <u>Analyte</u> 0-C24 C24-C36 <u>Surrogate</u> yl MW-2@13FT SAMPLE 239313-006 <u>Analyte</u> 0-C24 C24-C36	ND <b>%REC Limits</b> 94 54-129 94 54-129 <b>Result</b> 4.8 Y ND <b>%REC Limits</b> 87 54-129 87 54-129	5. Sampled: Cleanup Method: 1. 5. Sampled: Cleanup Method: RL	0 08/29/12 EPA 3630C 0 0 0 0 0 0 0 0 0 0 0 0 0
Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel C10 Motor Oil o-Terpheny Field ID: Type: Lab ID: Diesel C10	C24-C36 Surrogate yl MW-2@8FT SAMPLE 239313-005 Analyte 0-C24 C24-C36 Surrogate yl MW-2@13FT SAMPLE 239313-006 Analyte 0-C24 C24-C36 Surrogate Surrogate	ND %REC Limits 94 54-129 Result 4.8 Y ND %REC Limits 87 54-129 87 54-129	5. Sampled: Cleanup Method: 1. 5. Sampled: Cleanup Method: RL 0.	0 08/29/12 EPA 3630C 0 0 0 0 0 0 0 0 0 0 0 0 0



		Total Extracta	ble Hydrocarbo	ns
Lab #: Client: Project#:	239313 SOMA Environmental 5032	Engineering Inc.	Location: Prep: Analysis:	6501 Shattuck Ave., Oakland SHAKER TABLE EPA 8015B
Matrix: Units: Basis: Diln Fac:	Soil mg/Kg as received 1.000		Batch#: Received: Prepared: Analyzed:	190082 08/31/12 09/03/12 09/04/12
Field ID:	MW-3@11FT		Sampled:	08/29/12
Type: Lab ID:	SAMPLE 239313-010		Cleanup Method:	EPA 3630C
Diesel Cl	Analyte	Result	<b>RL</b>	0
Motor Oil	0-024 C24-C36	15 Y 23	1. 5.	
HOCOL OIL			5.	0
	Surrogate	%REC Limits		
o-Terphen	Ύ	88 54-129		
Field ID: Type: Lab ID:	MW-3@15FT SAMPLE 239313-011		Sampled: Cleanup Method:	08/29/12 EPA 3630C
	Analyte	Result	RL	
Diesel Cl Motor Oil	0-C24	ND ND	1. 5.	
	Surrogate	%REC Limits		
o-Terphen	yl	82 54-129		
Type: Lab ID:	BLANK QC654413		Cleanup Method:	EPA 3630C
	Analyte	Result	RL	
Diesel C1		ND	1.	
Motor Oil	024-036	ND	5.	U
	Surrogate	%REC Limits		
o-Terphen		109 54-129		



	1	Iotal Extracta	ble Hydrocar	bons
Lab #:	239313		Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental E	Engineering Inc.	Prep:	SHAKER TABLE
Project#:	5032		Analysis:	EPA 8015B
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC654414		Batch#:	190082
Matrix:	Soil		Prepared:	09/03/12
Units:	mg/Kg		Analyzed:	09/04/12

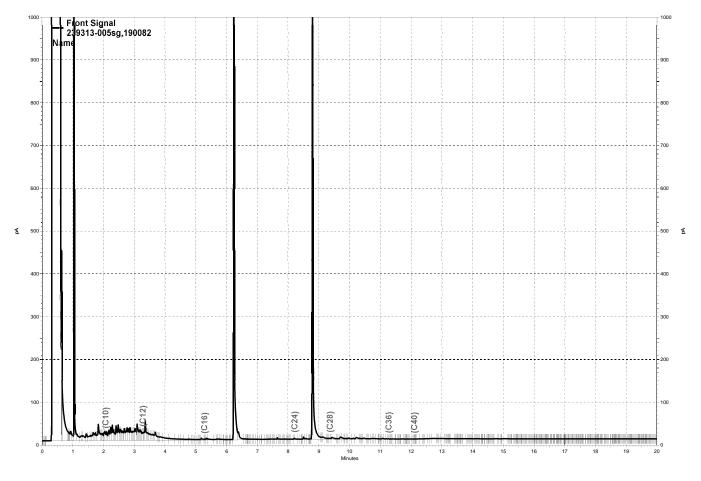
Cleanup Method: EPA 3630C

Analyte		Spiked	Result	%REC	Limits
Diesel C10-C24		49.68	41.46	83	51-131
Surrogate	%REC	Limits			
o-Terphenyl	89	54-129			

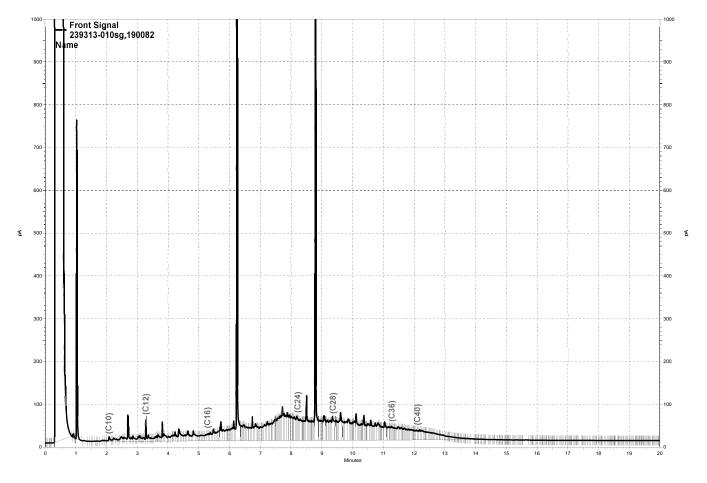


Lab #:	239313	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	SHAKER TABLE
Project#:	5032	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	190082
MSS Lab ID	: 239287-001	Sampled:	08/30/12
Matrix:	Soil	Received:	08/30/12
Units:	mg/Kg	Prepared:	09/03/12
Basis:	as received	Analyzed:	09/04/12
Diln Fac:	1.000		

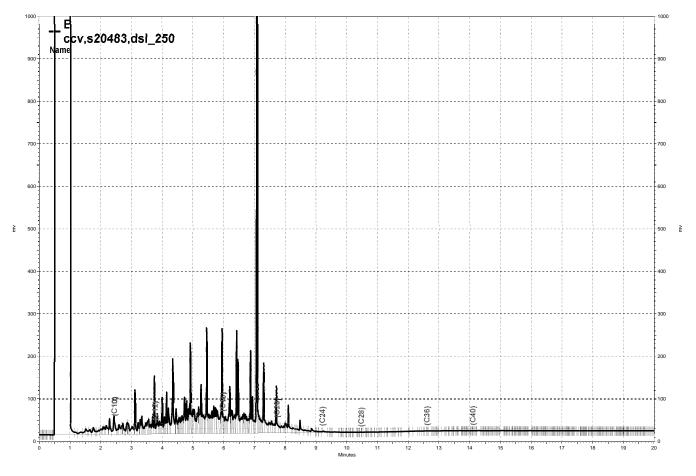
Type:	MS			Lab ID:	QC6	54415		
	Analyte	MSS Res	ult	Spiked		Result	%REC	Limits
Diesel Cl	-		.628	49.9		57.49	110	34-144
	Surrogate	%REC	Limits					
o-Terphen	yl	101	54-129					
Type:	MSD			Lab ID:	QC6	54416		
	Analyte		Spiked		Result	%REC	Limits	RPD Lim
Diesel Cl	0-C24		49.57		50.30	96	34-144	13 52
	Surrogate	%REC	Limits					
o-Terphen	yl	83	54-129					



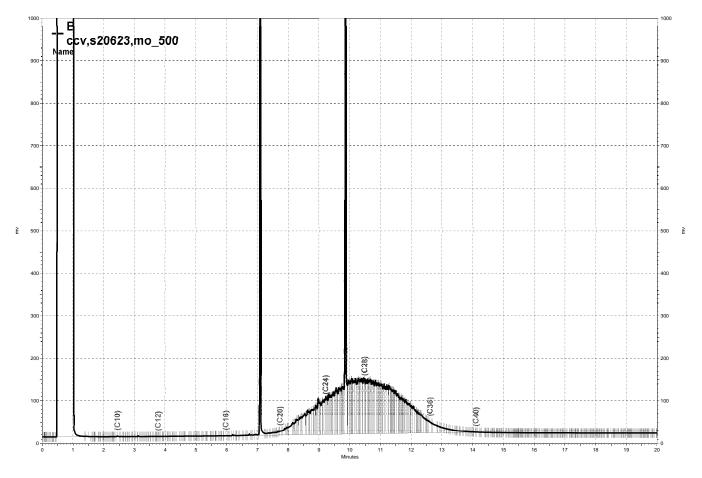
-\\lims\gdrive\ezchrom\Projects\GC27\Data\248a007.dat, Front Signal



-\\lims\gdrive\ezchrom\Projects\GC27\Data\248a009.dat, Front Signal



-\\Lims\gdrive\ezchrom\Projects\GC15B\Data\248b003, B



-\\Lims\gdrive\ezchrom\Projects\GC15B\Data\248b004, B



Lab #:	239313	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	MW-1@8FT	Diln Fac:	0.9091
Lab ID:	239313-001	Batch#:	190102
Matrix:	Soil	Sampled:	08/30/12
Units:	ug/Kg	Received:	08/31/12
Basis:	as received	Analyzed:	09/04/12

Analyte	Result	RL	
Freon 12	ND	9.1	
Chloromethane	ND	9.1	
Vinyl Chloride	ND	9.1	
Bromomethane	ND	9.1	
Chloroethane	ND	9.1	
Trichlorofluoromethane	ND	4.5	
Acetone	ND	18	
Freon 113	ND	4.5	
1,1-Dichloroethene	ND	4.5	
Methylene Chloride	ND	18	
Carbon Disulfide	ND	4.5	
MTBE	ND	4.5	
trans-1,2-Dichloroethene	ND	4.5	
Vinyl Acetate	ND	45	
1,1-Dichloroethane	ND	4.5	
2-Butanone	ND	9.1	
cis-1,2-Dichloroethene	ND	4.5	
2,2-Dichloropropane	ND	4.5	
Chloroform	ND	4.5	
Bromochloromethane	ND	4.5	
1,1,1-Trichloroethane	ND	4.5	
1,1-Dichloropropene	ND	4.5	
Carbon Tetrachloride	ND	4.5	
1,2-Dichloroethane	ND	4.5	
Benzene	ND	4.5	
Trichloroethene	ND	4.5	
1,2-Dichloropropane	ND	4.5	
Bromodichloromethane	ND	4.5	
Dibromomethane	ND	4.5	
4-Methyl-2-Pentanone	ND	9.1	
cis-1,3-Dichloropropene	ND	4.5	
Toluene	ND	4.5	
trans-1,3-Dichloropropene	ND	4.5	
1,1,2-Trichloroethane	ND	4.5	
2-Hexanone	ND	9.1	
1,3-Dichloropropane	ND	4.5	
Tetrachloroethene	ND	4.5	

ND= Not Detected RL= Reporting Limit Page 1 of 2



Lab #:	239313		Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	5032		Analysis:	EPA 8260B
Field ID:	MW-1@8FT		Diln Fac:	0.9091
Lab ID:	239313-001		Batch#:	190102
Matrix:	Soil		Sampled:	08/30/12
Units:	ug/Kg		Received:	08/31/12
Basis:	as received		Analyzed:	09/04/12

Analyte	Result	RL	
Dibromochloromethane	ND	4.5	
1,2-Dibromoethane	ND	4.5	
Chlorobenzene	ND	4.5	
1,1,1,2-Tetrachloroethane	ND	4.5	
Ethylbenzene	ND	4.5	
m,p-Xylenes	ND	4.5	
o-Xylene	ND	4.5	
Styrene	ND	4.5	
Bromoform	ND	4.5	
Isopropylbenzene	ND	4.5	
1,1,2,2-Tetrachloroethane	ND	4.5	
1,2,3-Trichloropropane	ND	4.5	
Propylbenzene	ND	4.5	
Bromobenzene	ND	4.5	
1,3,5-Trimethylbenzene	ND	4.5	
2-Chlorotoluene	ND	4.5	
4-Chlorotoluene	ND	4.5	
tert-Butylbenzene	ND	4.5	
1,2,4-Trimethylbenzene	ND	4.5	
sec-Butylbenzene	ND	4.5	
para-Isopropyl Toluene	ND	4.5	
1,3-Dichlorobenzene	ND	4.5	
1,4-Dichlorobenzene	ND	4.5	
n-Butylbenzene	ND	4.5	
1,2-Dichlorobenzene	ND	4.5	
1,2-Dibromo-3-Chloropropane	ND	4.5	
1,2,4-Trichlorobenzene	ND	4.5	
Hexachlorobutadiene	ND	4.5	
Naphthalene	ND	4.5	
1,2,3-Trichlorobenzene	ND	4.5	

Surrogate	%REC	Limits
Dibromofluoromethane	101	78-131
1,2-Dichloroethane-d4	112	75-141
Toluene-d8	104	80-120
Bromofluorobenzene	98	79-128

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



Lab #:	239313	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	MW-1@13FT	Diln Fac:	0.9653
Lab ID:	239313-002	Batch#:	190102
Matrix:	Soil	Sampled:	08/30/12
Units:	ug/Kg	Received:	08/31/12
Basis:	as received	Analyzed:	09/04/12

Analyte	Result	RL	
Freon 12	ND	9.7	
Chloromethane	ND	9.7	
Vinyl Chloride	ND	9.7	
Bromomethane	ND	9.7	
Chloroethane	ND	9.7	
Trichlorofluoromethane	ND	4.8	
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	

ND= Not Detected RL= Reporting Limit Page 1 of 2



Lab #:	239313		Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	5032		Analysis:	EPA 8260B
Field ID:	MW-1@13FT		Diln Fac:	0.9653
Lab ID:	239313-002		Batch#:	190102
Matrix:	Soil		Sampled:	08/30/12
Units:	ug/Kg		Received:	08/31/12
Basis:	as received		Analyzed:	09/04/12

Analyte	Result	RL	
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	
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	100	78-131
1,2-Dichloroethane-d4	115	75-141
Toluene-d8	106	80-120
Bromofluorobenzene	95	79-128

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



	Purgeable Org	anics by GC/MS	
Lab #: 239313		Location:	6501 Shattuck Ave., Oakland
Client: SOMA Environmental Project#: 5032	Engineering Inc.	Prep: Analysis:	EPA 5030B EPA 8260B
Project#: 5032 Field ID: MW-2@8FT		Diln Fac:	0.9381
Lab ID: 239313-005		Batch#:	190102
Matrix: Soil		Sampled:	08/29/12
Units: ug/Kg		Received:	08/31/12
Basis: as received		Analyzed:	09/04/12
Analyte	Result	RL	
Freon 12	ND		. 4
Chloromethane	ND		. 4
Vinyl Chloride	ND		. 4
Bromomethane	ND		. 4
Chloroethane Trichlorofluoromethane	ND ND		. 4 . 7
Acetone	24	19	. /
Freon 113	ND		.7
1,1-Dichloroethene	ND		.7
Methylene Chloride	ND	19	
Carbon Disulfide	ND		.7
MTBE	ND	4	.7
trans-1,2-Dichloroethene	ND		.7
Vinyl Acetate	ND	47	
1,1-Dichloroethane	ND		.7
2-Butanone	ND		. 4
cis-1,2-Dichloroethene	ND		. 7
2,2-Dichloropropane Chloroform	ND ND		. 7 . 7
Bromochloromethane	ND		. 7
1,1,1-Trichloroethane	ND		.7
1,1-Dichloropropene	ND		.7
Carbon Tetrachloride	ND		.7
1,2-Dichloroethane	ND		.7
Benzene	ND		.7
Trichloroethene	ND		.7
1,2-Dichloropropane	ND		. 7
Bromodichloromethane	ND		.7
Dibromomethane	ND		. 7
4-Methyl-2-Pentanone cis-1,3-Dichloropropene	ND ND		. 4 . 7
Toluene	ND		. 7
trans-1,3-Dichloropropene	ND		.7
1,1,2-Trichloroethane	ND		.7
2-Hexanone	ND		. 4
1,3-Dichloropropane	ND		.7
Tetrachloroethene	ND		. 7
Dibromochloromethane	ND		.7
1,2-Dibromoethane	ND		.7
Chlorobenzene	ND		. 7
1,1,1,2-Tetrachloroethane Ethylbenzene	ND ND		. 7 . 7
m,p-Xylenes	ND ND		.7
o-Xylene	ND		. 7
Styrene	ND		.7
Bromoform	ND		.7
Isopropylbenzene	ND		.7
1,1,2,2-Tetrachloroethane	ND	4	.7
1,2,3-Trichloropropane	ND		. 7
Propylbenzene	ND		. 7
Bromobenzene	ND		.7
1,3,5-Trimethylbenzene	ND		. 7
2-Chlorotoluene	ND	4	.7

\*= Value outside of QC limits; see narrative ND= Not Detected RL= Reporting Limit Page 1 of 2



	Purgeable (	rganics by G	C/MS
Lab #: 239313		Location:	6501 Shattuck Ave., Oakland
Client: SOMA Environmental	Engineering In	c. Prep:	EPA 5030B
Project#: 5032		Analysis:	EPA 8260B
Field ID: MW-2@8FT		Diln Fac:	0.9381
Lab ID: 239313-005		Batch#:	190102
Matrix: Soil		Sampled:	08/29/12
Units: ug/Kg		Received:	08/31/12
Basis: as received		Analyzed:	09/04/12
Analyte	Result		RL
4-Chlorotoluene	ND		4.7
tert-Butylbenzene	ND		4.7
1,2,4-Trimethylbenzene	ND	1	4.7
sec-Butylbenzene	9.	L	4.7
para-Isopropyl Toluene	ND		4.7 4.7
1,3-Dichlorobenzene	ND		4.7
1,4-Dichlorobenzene	ND 5.	0	4.7
n-Butylbenzene 1,2-Dichlorobenzene	D. ND	0	4.7
1,2-Dibromo-3-Chloropropane	ND ND		4.7
1,2,4-Trichlorobenzene	ND ND		4.7
Hexachlorobutadiene	ND		4.7
Naphthalene	ND		4.7
1,2,3-Trichlorobenzene	ND		4.7
1,2,5 iffenitorobenizene	ND		1.7
Surrogate	%REC Limit	S	
Dibromofluoromethane	97 78-13	1	
1,2-Dichloroethane-d4	109 75-14	1	
Toluene-d8	101 80-12		
Bromofluorobenzene	166 * 79-12	8	

\*= Value outside of QC limits; see narrative ND= Not Detected RL= Reporting Limit Page 2 of 2



Lab #:	239313	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	MW-2@13FT	Diln Fac:	0.9363
Lab ID:	239313-006	Batch#:	190102
Matrix:	Soil	Sampled:	08/29/12
Units:	ug/Kg	Received:	08/31/12
Basis:	as received	Analyzed:	09/04/12

Analyte	Result	RL	
Freon 12	ND	9.4	
Chloromethane	ND	9.4	
Vinyl Chloride	ND	9.4	
Bromomethane	ND	9.4	
Chloroethane	ND	9.4	
Trichlorofluoromethane	ND	4.7	
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	

ND= Not Detected RL= Reporting Limit Page 1 of 2



Lab #:	239313		Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	5032		Analysis:	EPA 8260B
Field ID:	MW-2@13FT		Diln Fac:	0.9363
Lab ID:	239313-006		Batch#:	190102
Matrix:	Soil		Sampled:	08/29/12
Units:	ug/Kg		Received:	08/31/12
Basis:	as received		Analyzed:	09/04/12

Analyte	Result	RL	
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	
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	78-131
1,2-Dichloroethane-d4	100	75-141
Toluene-d8	102	80-120
Bromofluorobenzene	98	79-128

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



Lab #:	239313	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	MW-3@11FT	Diln Fac:	0.9747
Lab ID:	239313-010	Batch#:	190102
Matrix:	Soil	Sampled:	08/29/12
Units:	ug/Kg	Received:	08/31/12
Basis:	as received	Analyzed:	09/04/12

Analyte	Result	RL	
Freon 12	ND	9.7	
Chloromethane	ND	9.7	
Vinyl Chloride	ND	9.7	
Bromomethane	ND	9.7	
Chloroethane	ND	9.7	
Trichlorofluoromethane	ND	4.9	
Acetone	ND	19	
Freon 113	ND	4.9	
1,1-Dichloroethene	ND	4.9	
Methylene Chloride	ND	19	
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	9.7	
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	9.7	
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	9.7	
1,3-Dichloropropane	ND	4.9	
Tetrachloroethene	ND	4.9	

ND= Not Detected RL= Reporting Limit Page 1 of 2



Lab #:	239313		Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	5032		Analysis:	EPA 8260B
Field ID:	MW-3@11FT		Diln Fac:	0.9747
Lab ID:	239313-010		Batch#:	190102
Matrix:	Soil		Sampled:	08/29/12
Units:	ug/Kg		Received:	08/31/12
Basis:	as received		Analyzed:	09/04/12

Analyte	Result	RL	
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	
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 93	3	78-131
1,2-Dichloroethane-d4 10	00	75-141
Toluene-d8 10	)3	80-120
Bromofluorobenzene 98	3	79-128

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



Lab #:	239313	Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	5032	Analysis:	EPA 8260B
Field ID:	MW-3@15FT	Diln Fac:	0.9242
Lab ID:	239313-011	Batch#:	190102
Matrix:	Soil	Sampled:	08/29/12
Units:	ug/Kg	Received:	08/31/12
Basis:	as received	Analyzed:	09/04/12

Analyte	Result	RL	
Freon 12	ND	9.2	
Chloromethane	ND	9.2	
Vinyl Chloride	ND	9.2	
Bromomethane	ND	9.2	
Chloroethane	ND	9.2	
Trichlorofluoromethane	ND	4.6	
Acetone	ND	18	
Freon 113	ND	4.6	
1,1-Dichloroethene	ND	4.6	
Methylene Chloride	ND	18	
Carbon Disulfide	ND	4.6	
MTBE	ND	4.6	
trans-1,2-Dichloroethene	ND	4.6	
Vinyl Acetate	ND	46	
1,1-Dichloroethane	ND	4.6	
2-Butanone	ND	9.2	
cis-1,2-Dichloroethene	ND	4.6	
2,2-Dichloropropane	ND	4.6	
Chloroform	ND	4.6	
Bromochloromethane	ND	4.6	
1,1,1-Trichloroethane	ND	4.6	
1,1-Dichloropropene	ND	4.6	
Carbon Tetrachloride	ND	4.6	
1,2-Dichloroethane	ND	4.6	
Benzene	ND	4.6	
Trichloroethene	ND	4.6	
1,2-Dichloropropane	ND	4.6	
Bromodichloromethane	ND	4.6	
Dibromomethane	ND	4.6	
4-Methyl-2-Pentanone	ND	9.2	
cis-1,3-Dichloropropene	ND	4.6	
Toluene	ND	4.6	
trans-1,3-Dichloropropene	ND	4.6	
1,1,2-Trichloroethane	ND	4.6	
2-Hexanone	ND	9.2	
1,3-Dichloropropane	ND	4.6	
Tetrachloroethene	ND	4.6	

ND= Not Detected RL= Reporting Limit Page 1 of 2



Lab #:	239313		Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	5032		Analysis:	EPA 8260B
Field ID:	MW-3@15FT		Diln Fac:	0.9242
Lab ID:	239313-011		Batch#:	190102
Matrix:	Soil		Sampled:	08/29/12
Units:	ug/Kg		Received:	08/31/12
Basis:	as received		Analyzed:	09/04/12

Analyte	Result	RL	
Dibromochloromethane	ND	4.6	
1,2-Dibromoethane	ND	4.6	
Chlorobenzene	ND	4.6	
1,1,1,2-Tetrachloroethane	ND	4.6	
Ethylbenzene	ND	4.6	
m,p-Xylenes	ND	4.6	
o-Xylene	ND	4.6	
Styrene	ND	4.6	
Bromoform	ND	4.6	
Isopropylbenzene	ND	4.6	
1,1,2,2-Tetrachloroethane	ND	4.6	
1,2,3-Trichloropropane	ND	4.6	
Propylbenzene	ND	4.6	
Bromobenzene	ND	4.6	
1,3,5-Trimethylbenzene	ND	4.6	
2-Chlorotoluene	ND	4.6	
4-Chlorotoluene	ND	4.6	
tert-Butylbenzene	ND	4.6	
1,2,4-Trimethylbenzene	ND	4.6	
sec-Butylbenzene	ND	4.6	
para-Isopropyl Toluene	ND	4.6	
1,3-Dichlorobenzene	ND	4.6	
1,4-Dichlorobenzene	ND	4.6	
n-Butylbenzene	ND	4.6	
1,2-Dichlorobenzene	ND	4.6	
1,2-Dibromo-3-Chloropropane	ND	4.6	
1,2,4-Trichlorobenzene	ND	4.6	
Hexachlorobutadiene	ND	4.6	
Naphthalene	ND	4.6	
1,2,3-Trichlorobenzene	ND	4.6	

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	103	75-141
Toluene-d8	103	80-120
Bromofluorobenzene	97	79-128

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



	Purgeable Or	ganics by GC/MS	3
Lab #:	239313	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:	QC654485	Batch#:	190102
Matrix:	Soil	Analyzed:	09/04/12
Units:	ug/Kg		

Analyte	Result	RL	
Freon 12	ND	10	
Chloromethane	ND	10	
Vinyl Chloride	ND	10	
Bromomethane	ND	10	
Chloroethane	ND	10	
Trichlorofluoromethane	ND	5.0	
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	

ND= Not Detected RL= Reporting Limit

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	Purgeable Org	ganics by GC/MS	
Lab #:	239313	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:	QC654485	Batch#:	190102
Matrix:	Soil	Analyzed:	09/04/12
Units:	ug/Kg		

Analyte	Result	RL	
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	
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	97	78-131
1,2-Dichloroethane-d4	106	75-141
Toluene-d8	104	80-120
Bromofluorobenzene	98	79-128

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



		Purgeable Org	anics by GC/MS	
Lab #:	239313		Location:	6501 Shattuck Ave., Oakland
Client:	SOMA Environmental	Engineering Inc.	Prep:	EPA 5030B
Project#:	5032		Analysis:	EPA 8260B
Туре:	LCS		Diln Fac:	1.000
Lab ID:	QC654486		Batch#:	190102
Matrix:	Soil		Analyzed:	09/04/12
Units:	ug/Kg			

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	18.71	94	70-129
Benzene	20.00	19.71	99	77-125
Trichloroethene	20.00	20.73	104	77-122
Toluene	20.00	22.16	111	78-120
Chlorobenzene	20.00	20.88	104	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	78-131
1,2-Dichloroethane-d4	106	75-141
Toluene-d8	102	80-120
Bromofluorobenzene	98	79-128