SOMA
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October 8, 2013

Ms. Dilan Roe, P.E.
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Freedom Food and Gas (Formerly Freedom ARCO Mini-Mart)
Site Address: 15101 Freedom Avenue, San Leandro, California
STID 4473/RO0000473

Dear Ms. Roe:

SOMA's "Third Quarter 2013 Groundwater Monitoring and Remediation Progress Report" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

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

Sincerely,

Mansour Sepehr, Ph.D.,PE
Principal Hydrogeologist

cc: Mr. Mohammad Pazdel w/report enclosure

Third Quarter 2013
Groundwater Monitoring and
Remediation Progress Report

Freedom Food and Gas
15101 Freedom Avenue
San Leandro, California

October 8, 2013

Project 2551/2553

Prepared for

Mr. Mohammad Pazdel
1770 Pistacia Court
Fairfield, California

SOMA ENVIRONMENTAL ENGINEERING, INC.
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PERJURY STATEMENT

Site Location: 15101 Freedom Avenue, San Leandro, California

"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".

Mohammad Pazdel
1770 Pistacia Court
Fairfield, California 94533
Responsible Party

CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of the responsible party, Mr. Mohammad Pazdel, for property located at 15101 Freedom Avenue, San Leandro, California, to comply with Alameda County Health Care Services requirements for the Third Quarter 2013 groundwater monitoring event.

Mansour Sepehr, PhD, PE
Principal Hydrogeologist

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1. INTRODUCTION

SOMA Environmental Engineering, Inc. (SOMA) has prepared this report on behalf of the responsible party, Mr. Mohammad Pazdel, for property located at 15101 Freedom Avenue, San Leandro, California. The site is located in an area of primarily residential properties and adjacent commercial areas (Figure 1). The property was formerly owned by Mr. Mohammad Pazdel. In late 2009, the property was sold to DDH, LLC, Assignee and in early 2010 it was sold to Mr. Mohammad Mashhoon. Under the new management, the site is currently operational with the business name "Freedom Food and Gas" (formerly "Freedom Arco Mini-Mart").

This report summarizes results of the Third Quarter 2013 groundwater monitoring event conducted on September 16, 17, and 20, 2013. It includes physical and chemical properties measured in the field and laboratory analysis results for each groundwater sample. It also presents the remediation progress report for Third Quarter 2013, which includes operation of a groundwater extraction and treatment system. During this reporting period, a month-long multi-phase extraction (MPE) event was conducted from August 1 through 30, 2013.

1.1 Field Activities

In September 2013, SOMA's field crew conducted a groundwater monitoring event in accordance with procedures and guidelines of Alameda County Health Care Services (ACHCS) and the California Regional Water Quality Control Board (CRWQCB). Figure 2 shows well locations.

On September 16, 2013, the following wells were measured for depth to groundwater: five on-site monitoring wells (MW-1 to MW-5) and two off-site wells (MW-6 and MW-7) in the First water-bearing zone (WBZ); two extraction wells (EX-1 and EX-2), two MPE wells (MPE-1 and MPE-2), and three on-site monitoring wells (MW-1D, MW-3D, and MW-4D) in the Second WBZ. On September 16 and 17, 2013, additional field measurements and groundwater samples were collected from all monitoring and MPE wells, except MW-6 which was not sampled due to the presence of Free-Product (FP). Grab groundwater samples were also collected from extraction well EX-1. Properties measured include pH, temperature, and electrical conductivity (EC). A grab groundwater sample was collected from EX-2 on September 20, 2013.

A natural attenuation study was conducted during this event to determine whether petroleum hydrocarbons in groundwater are biodegrading. Dissolved oxygen (DO) and oxidation reduction potential (ORP) measurements were taken for all monitoring and MPE wells.

1.2 Laboratory Analysis

Curtis & Tompkins Laboratories, a California state-certified laboratory, analyzed groundwater samples for the following: total petroleum hydrocarbons as gasoline (TPH-g); benzene, toluene, ethylbenzene, total xylenes (collectively termed BTEX); methyl tertiary-butyl ether (MtBE); and gasoline oxygenates, ethanol and lead scavengers. Samples were prepared using EPA Method 5030B and analyzed using EPA Method 8260B.

2. RESULTS

Following are results of field measurements and laboratory analysis for the Third Quarter 2013 groundwater monitoring event.

2.1 Field Measurements, First WBZ Wells

Table 1 presents calculated groundwater elevations and depths to groundwater for each monitoring well. Depths to groundwater ranged from 15.78 feet in MW-7 to 23.84 feet in MW-1. In MW-6, 0.05 feet of FP was observed during this monitoring event. Appendix A includes the procedure for FP measurement.

Corresponding groundwater elevations ranged from 27.74 feet in MW-6 to 30.62 feet in MW-1. Groundwater elevations at extraction wells EX-1 and EX-2 were 24.82 feet and 22.85 feet, respectively.

Figure 3 displays the contour map of groundwater elevations. As illustrated, groundwater flows towards extraction wells, at a gradient of 0.031 feet/feet. Since the previous monitoring event (Second Quarter 2013) the gradient has increased. Groundwater gradient calculations are attached in Appendix B.

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO in the First WBZ ranged from 0.61 mg/L in MPE-2 to 3.59 mg/L in MW-7. ORP showed negative redox potentials in MW-2, MW-3, MW-5, MPE-1 and MPE-2. Negative redox potentials indicate that contaminants in groundwater are conducive to anaerobic biodegradation. ORP showed positive redox potentials in MW-1, MW-4, and MW-7. Positive redox potentials are more energetically favorable in utilizing electron acceptors during chemical reactions. This promotes the removal of organic mass from the contaminated groundwater by indigenous bacteria in the subsurface during the release of the transfer of electrons.

Field measurements taken during this monitoring event are included in Appendix B (Table A).

2.2 Laboratory Analysis, First WBZ Wells

Appendix C includes the laboratory report and chain-of-custody form for this monitoring event.

Table 1 presents TPH-g, BTEX, and MtBE analysis results for the current and historical groundwater monitoring events.

TPH-g was below laboratory-reporting limit in MW-4. Detectable TPH-g concentrations ranged from 97 µg/L in EX-1 to 45,000 µg/L in MPE-1. As mentioned above (Section 1.1), MW-6 was not sampled due to the presence of FP in this well. Since the previous monitoring event (Second Quarter 2013), TPH-g increased in MW-1, MW-5, MW-7, EX-2, MPE-1 and significantly in MW-3 and decreased in MW-2, MW-4, EX-1, and MPE-2.

Figure 4 displays the contour map of TPH-g concentrations in groundwater. As illustrated, the highest TPH-g impact is in the southern portion of the site and in the vicinity of the dispenser islands around MPE-1.

The following BTEX concentrations were observed:

- Benzene was below laboratory-reporting limits in MW-2 and MW-7. Detectable benzene concentrations ranged from 14 µg/L in EX-1 to 2,400 µg/L in MPE-1.
- Toluene was below laboratory-reporting limits in MW-1, MW-2, MW-4, MW-7, and EX-1. Detectable toluene concentrations ranged from 7.9 µg/L in MW-5 to 1,400 µg/L in MPE-1.
- Ethylbenzene was below laboratory-reporting limit in EX-1 and was detected in concentrations ranging from 1.1 µg/L in MW-2 to 1,800 µg/L in MW-3.
- Total xylenes were below laboratory-reporting limits in MW-2, MW-4 and EX-1. Detectable concentrations ranged from 2.70 µg/L in MW-7 to 8,000 µg/L in MPE-1.

Figure 5 displays the contour map of benzene in groundwater. The highest benzene impact is in the southern portion of the site and in the vicinity of the dispenser islands around MPE-1. Since the previous monitoring event (Second Quarter 2013), benzene has increased in MW-4, MW-5, EX-2, and MPE-1, decreased in MW-1, MW-2, MW-3, EX-1, and MPE-2.

MtBE was below the laboratory-reporting limit in MW-1, MW-2, MW-3, and MPE-2. Detectable MtBE ranged from 4.1 µg/L in MW-7 to 150 µg/L in MPE-1. Figure 6 displays the contour map of MtBE concentrations in groundwater. The highest MtBE impact is in the southern portion of the site and in the vicinity of the dispenser islands around MPE-1. Since the previous monitoring event (Second

Quarter 2013), MtBE has increased in MW-4, MW-5, MW-7, and EX-1, and decreased in MW-2, EX-2, and MPE-1.

As shown in Table 1, TPH-g, benzene, toluene, ethylbenzene, and total xylenes all increased in more impacted well MPE-1 while TPH-g, benzene, ethylbenzene, and total xylenes decreased in MPE-2 since the previous monitoring event (Second Quarter 2013).

Table 2 shows analysis results for gasoline oxygenate and lead scavenger concentrations for the current as well as historical events.

The following gasoline oxygenate and lead scavenger concentrations were observed:

- In MW-1, MW-2, MW-3, MW-7, and MPE-2, all gasoline oxygenates and lead scavengers were below laboratory-reporting limits.
- Tertiary-butyl alcohol (TBA) was below laboratory-reporting limits in MW-1, MW-2, MW-3, MW-7, EX-2, and MPE-2. Detectable TBA concentrations ranged from 20 µg/L in MW-5 to 1,400 µg/L in MPE-1. Figure 7 shows the contour map of TBA concentrations in First WBZ wells. Since the previous monitoring event (Second Quarter 2013), TBA increased in MW-4, MW-5, EX-1, and MPE-1 and decreased in MW-2 and EX-2.
- Methyl tertiary-amyl ether (TAME) was detected in MW-5 at 5.7 µg/L and EX-1 at 1.9 µg/L, and was below the laboratory-reporting limit in remaining wells. Figure 7 displays the map of TAME concentrations in First WBZ wells.
- Ethyl tertiary-butyl ether (ETBE) was detected in EX-1 at 2.4 µg/L, and was below laboratory-reporting limits in remaining wells. Figure 7 displays the map of ETBE concentrations in First WBZ wells.
- 1,2-dichloroethane (1,2-DCA) was detected in EX-2 at 1.4 µg/L, and was below laboratory-reporting limits in remaining wells. Figure 7 displays the map of ETBE concentrations in First WBZ wells.
- Isopropyl ether (DIPE), 1,2-dibromoethane (EDB), and ethanol were below laboratory-reporting limits in all groundwater samples. Analysis results for ethanol are shown in Appendix C.

2.3 Field Measurements, Second WBZ Wells

Table 1 presents calculated groundwater elevations and depths to groundwater for each Second WBZ monitoring well. Depths to groundwater ranged from 23.05 feet in MW-4D to 24.02 feet in MW-1D. Corresponding groundwater elevations ranged from 30.07 feet in MW-4D to 30.45 feet in MW-3D.

Figure 8 displays the contour map of groundwater elevations in the Second WBZ. Groundwater flows from southwesterly at a gradient of 0.004 feet/feet. The groundwater gradient increased and the flow direction has remained similar to the previous monitoring event (Second Quarter 2013). Groundwater gradient calculations are attached in Appendix B.

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO in the Second WBZ ranged from 0.77 mg/L in MW-4D to 0.84 mg/L in MW-3D. ORP showed positive redox potentials in all second WBZ wells. Positive redox potentials are more energetically favorable in utilizing electron acceptors during chemical reactions. This promotes the removal of organic mass from the contaminated groundwater by indigenous bacteria in the subsurface during the release of the transfer of electrons.

Field measurements taken during this monitoring event are included in Appendix B.

2.4 Laboratory Analysis for Second WBZ Wells

Appendix C includes the laboratory report and chain-of-custody form for this monitoring event.

Table 1 presents TPH-g, BTEX, and MtBE analysis results for the current and historical groundwater monitoring events.

TPH-g and BTEX concentrations were below laboratory-reporting limits in all second WBZ wells. Since the previous monitoring event (Second Quarter 2013) TPH-g has decreased in MW-1D.

MtBE was below the laboratory-reporting limit in MW-1D and was detected in MW-3D and MW-4D at 2.1 µg/L and 4.6 µg/L, respectively. Since the previous monitoring event (Second Quarter 2013), MtBE has decreased in MW-3D and increased in MW-4D. Figure 9 shows the map of MtBE concentrations in Second WBZ.

Table 2 shows analysis results for gasoline oxygenate and lead scavenger concentrations for the current as well as historical events.

All gasoline oxygenate, lead scavenger, and ethanol concentrations were below laboratory-reporting limits in Second WBZ wells.

3. OPERATION OF TREATMENT SYSTEM

SOMA installed a groundwater treatment system at the site in December 2009. The system includes two extraction wells (EX-1 and EX-2), trenching containing

influent and effluent lines and electrical conduits, and the treatment system compound. During system operation, extracted groundwater is pumped from extraction wells through underground piping to a fenced treatment compound, adjacent to the existing service station building.

In the treatment compound, groundwater is treated using granular activated carbon (GAC) and subsequently discharged to the sanitary sewer. Two GAC vessels are connected in series. The first unit (1,000 gallons) serves as the primary treatment unit, and the second (55 gallons) provides an additional safety buffer prior to discharge. Effectiveness of the GAC units is monitored by collection and analysis of samples from the system discharge, including a sample collected from water that has passed only through the first GAC unit. When analytical results indicate that the first GAC unit is no longer effectively treating groundwater, the vessel will be removed from the treatment line and refurbished with new carbon. Since the system began discharging, approximately 2,449,583 gallons of groundwater have been treated and discharged at the site (as of September 24, 2013).

The treatment system operates under discharge permit issued by Oro Loma Sanitary District (OLSD) in May 2009. This discharge permit was most recently renewed in May 2012. Treated groundwater has been discharging to the OLSD sewer since December 9, 2009. Figure 10 shows the schematic diagram of the groundwater treatment system. Treatment system effluent is sampled monthly to comply with OLSD discharge permit requirements. Table 3 includes analytical results and operational history of the treatment system. As shown in Table 4, as of July 5, 2013, cumulative masses of TPH-g and BTEX extracted from groundwater were approximately 23.43 pounds, 1.13 pounds, 0.24 pounds, 0.52 pounds, and 3.35 pounds, respectively. Appendix D includes laboratory analytical results.

4. MULTI-PHASE EXTRACTION EVENTS

During Third Quarter 2013, SOMA performed an MPE event August 1-30, utilizing MPE-1, MPE-2 and MW-5.

The MPE operation was performed using a self-contained mobile treatment system (MTS), equipped with an electrical generator, propane tank, liquid ring vacuum pump rated at 25-horsepower and 428-standard cubic feet per minute (scfm), electrical submersible pumps, air/water separator vessel, discharge hoses and traffic-rated hose ramps, downhole stingers, and a thermal oxidizer for vapor abatement. The oxidizer operates under a valid various locations BAAQMD permit. Both soil vapor and groundwater were extracted from the subsurface. Extracted groundwater was discharged into an existing treatment system.

Physical and chemical parameters including applied vacuum, soil vapor extraction flow rates, oxidizer temperature, volume of groundwater extracted, VOC concentrations, and depth to groundwater in observation wells, were monitored, measured and recorded. VOC concentrations in the extracted soil vapor stream were continuously monitored using a photoionization detector (PID) calibrated to hexane. MPE operational data is presented in Table 5. Extraction data is presented in Table 6. Field data sheets are presented in Appendix E.

4.1 Smear Zone Dewatering

Steady-state dewatering of the smear zone at wells MPE-1, MPE-2, and MW-5 was achieved and maintained during the MPE event by vacuum. Dewatering was achieved by opening the dilution control valve at the extraction well to allow atmospheric air into the well casing, accelerating the removal of water from the well casing by vacuum. As the stinger was advanced into the well casing, water was removed by vacuum. As water was removed, vacuum was reestablished in the well casing and the stinger was advanced farther into the well casing. When the stinger reached the base of the well casing, and water ceased to be removed by vacuum, the stinger was elevated off the bottom of the well to maintain a steady-state groundwater flow into the well and to maximize mass removal rate out of the well, and then the dilution control valve was closed. During this event a total of 72,911 gallons of groundwater was extracted, treated and discharged into the sanitary sewer system. The estimated groundwater extraction rate for the MPE event based on gallons extracted and elapsed time (Table 5) was 2.85 gpm.

4.2 Soil Vapor Sampling and Analysis

Representative samples were analyzed from the stack of the thermal oxidizer to show compliance with the Bay Area Air Quality Management District permit. Influent soil vapor samples were collected through a sampling port located on the vacuum pump discharge manifold. Thermal oxidizer stack vapor samples were collected through a sampling port located at the top of the stack. The air samples were submitted under chain-of-custody documentation to Curtis and Tompkins Laboratories and analyzed for TPH-g using USEPA Analytical Method TO-3; and for BTEX and MtBE using USEPA Analytical Method TO-15. Soil vapor analytical results and abatement efficiencies are presented in Table 7. Certified laboratory analytical reports and chain-of-custody documentation are included in Appendix F.

Soil vapor samples (one influent and one effluent) were collected on August 2, 2013. These samples were collected during the first 24 hours of operation (Table 7). The effluent vapor sample collected at the oxidizer stack was used to demonstrate compliance with BAAQMD various locations permit.

4.3 Extraction Summary

The MPE event ran from 17:30 on August 1, 2013 to 12:00 on August 30, 2013. The total extraction time was 25,560 minutes or 426 hours.

Applied vacuum ranged from 18.1 to 24.4 inches of mercury, and vapor extraction flow rate ranged from 79 to 179 scfm (Tables 5 and 6). VOC concentrations in the extracted soil vapor stream ranged from 243 parts per million vapor (ppmv) as hexane to 2,304 ppmv (Table 6).

4.4 Evaluation of Mass Removal Rate

The total number of the MPE operational days was 17.75 days. The estimated mass of volatile organic compounds (VOCs) removed from soil vapor extraction and VOC mass removal rate for the August 2013 event was 841 lbs at 47 lbs/day (Table 6).

The overall estimated total mass of VOCs extracted by previous MPE events is 1,947 pounds. Figure 11 shows the extracted mass of VOCs during different MPE events at the site.

5. CONCLUSIONS AND RECOMMENDATIONS

Third Quarter 2013 groundwater monitoring and previous MPE events results are summarized below.

- Groundwater flows towards extraction wells in the First WBZ and southwesterly in the Second WBZ.
- The highest hydrocarbon concentrations were observed in the southern portion of the site and in the vicinity of the dispenser islands around MPE extraction well MPE-1. TPH-g concentrations in MPE-1, MPE-2 and MW-3 were significantly higher than in other site wells.
- Since the previous quarterly monitoring event (Second Quarter 2013), TPH-g increased in MW-1, MW-3, MW-5, MW-7, EX-2, and MPE-1 and decreased in MW-2, MW-4, EX-1, and MPE-2.
- In the Second WBZ, TPH-g and BTEX concentrations were below laboratory-reporting limits, and MtBE was below laboratory-reporting limit in MW-1D. Since the previous monitoring event (Second Quarter 2013), TPH-g decreased in MW-1D, MtBE decreased in MW-3D and increased in MW-4D.
- The total hydrocarbon removed by MPE operation which ended in August 2013 was estimated to be 1,947 pounds.

Based on results of this monitoring event and previous MPE events, SOMA recommends the following action items:

- Continue quarterly groundwater monitoring to increase understanding of seasonal variations in groundwater quality conditions.

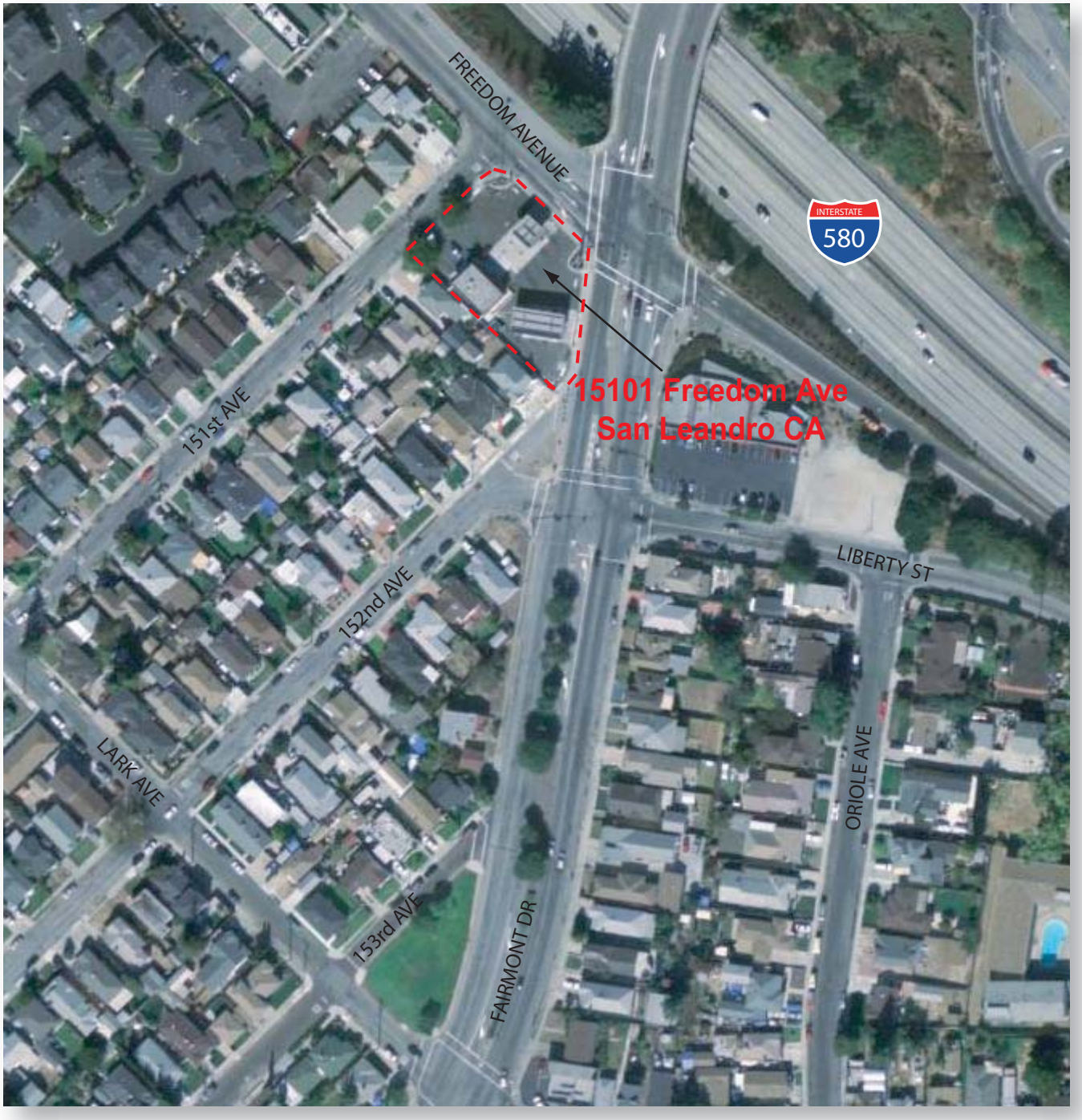
Other ongoing activities: Based on ACHCS SOMA submitted an Updated Site Conceptual Model and Data Gap Work Plan dated July 22, 2013. The workplan will be implemented upon approval.

6. REPORT LIMITATIONS

This report is the summary of work done by SOMA, including observations and descriptions of site conditions. It includes analysis results produced by Curtis & Tompkins Laboratories for the current groundwater monitoring event. Quantities and locations of wells were selected to provide the required information, but may not be representative of entire site conditions. All conclusions and recommendations are based on laboratory analysis results. Conclusions beyond those specifically stated in this document should not be inferred from this report.

SOMA warrants that services were provided in accordance with generally accepted practices in the environmental engineering and consulting field at the time of this sampling.

Figures



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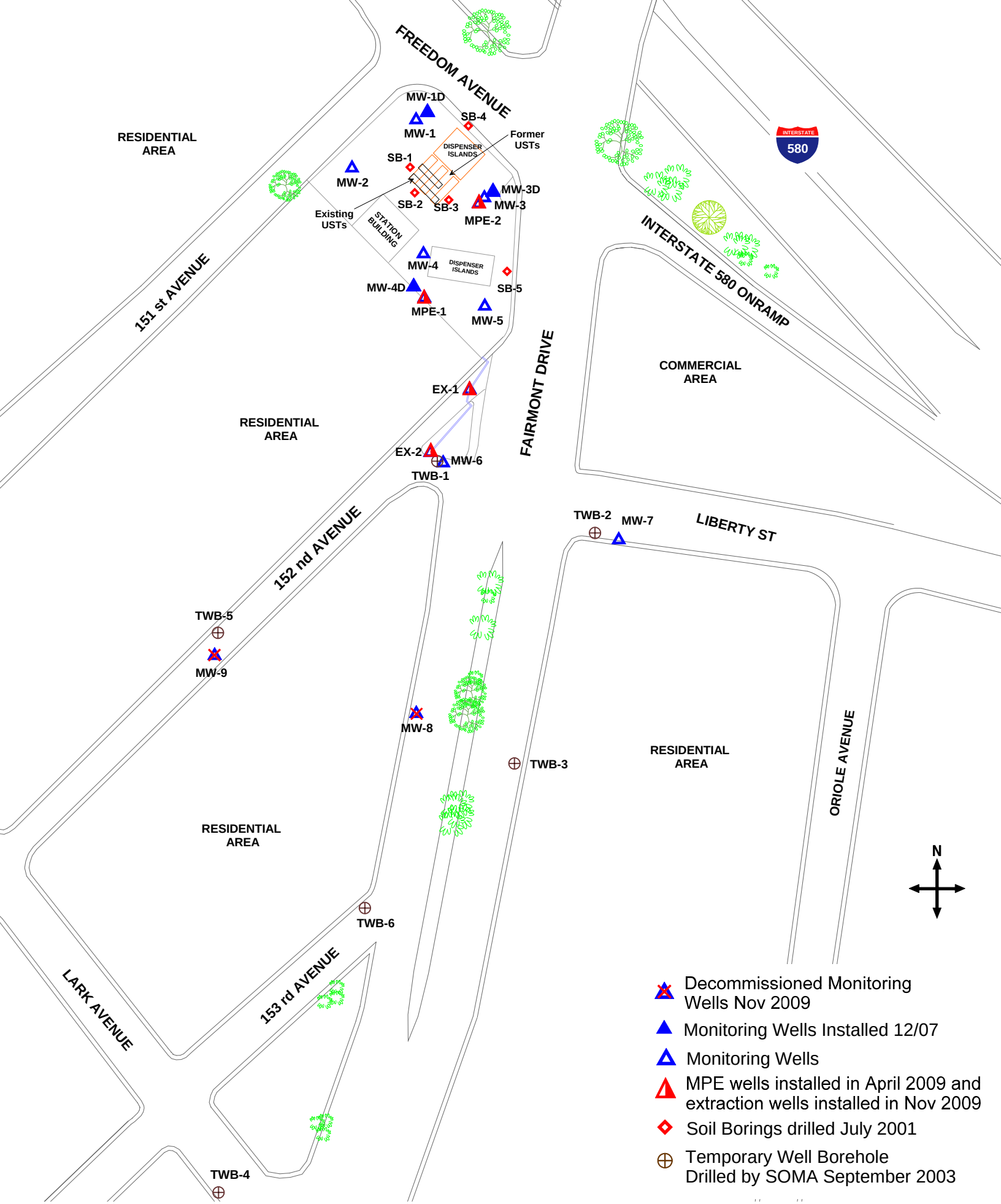
approximate scale in feet

0 150 300

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.



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0 50 100

Figure 2: Site map showing locations of groundwater monitoring wells, soil borings, and extraction wells.

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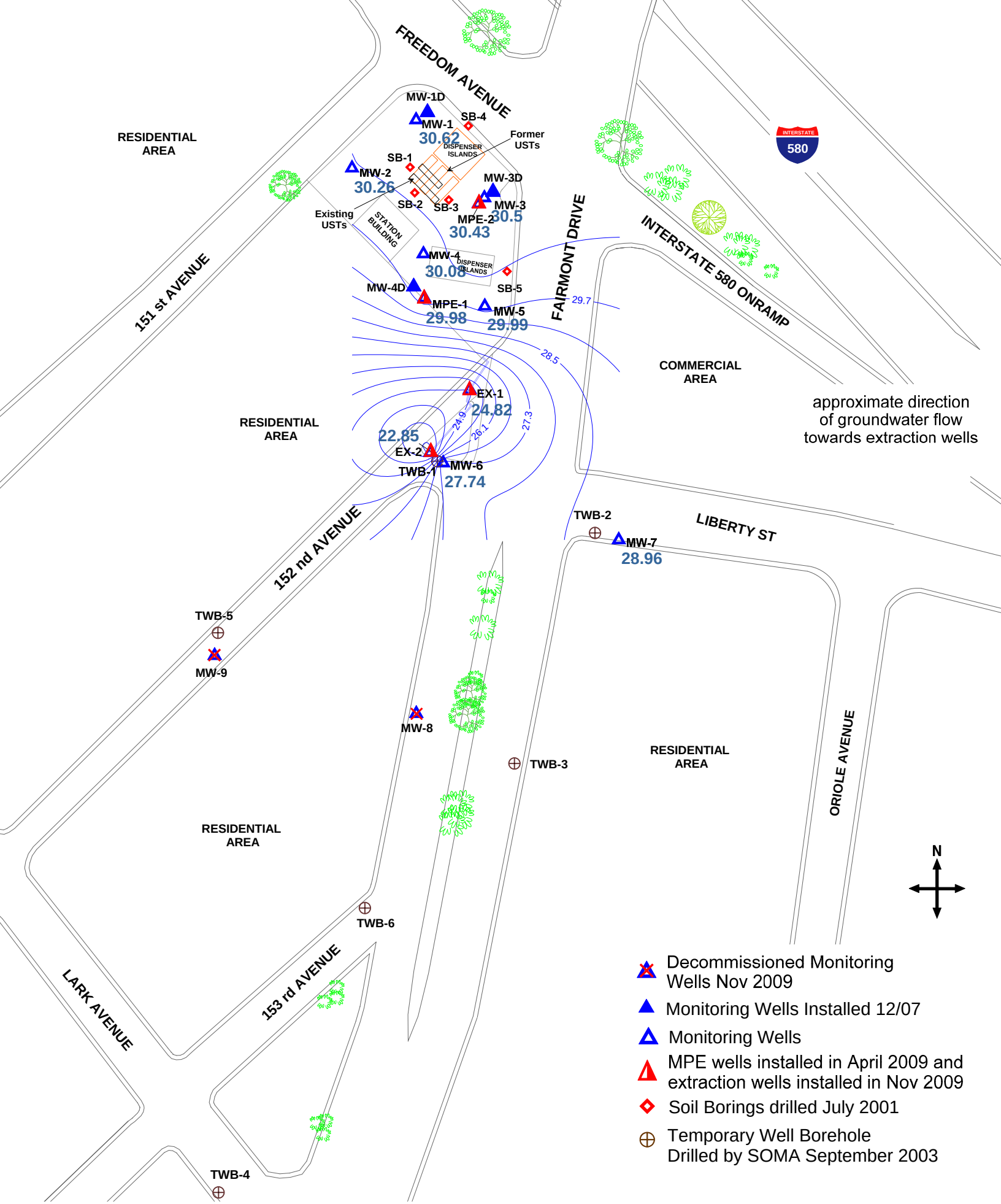

approximate scale in feet

0 50 100

Figure 3: Groundwater Elevation Contour Map in Feet, First WBZ, September 16, 2013

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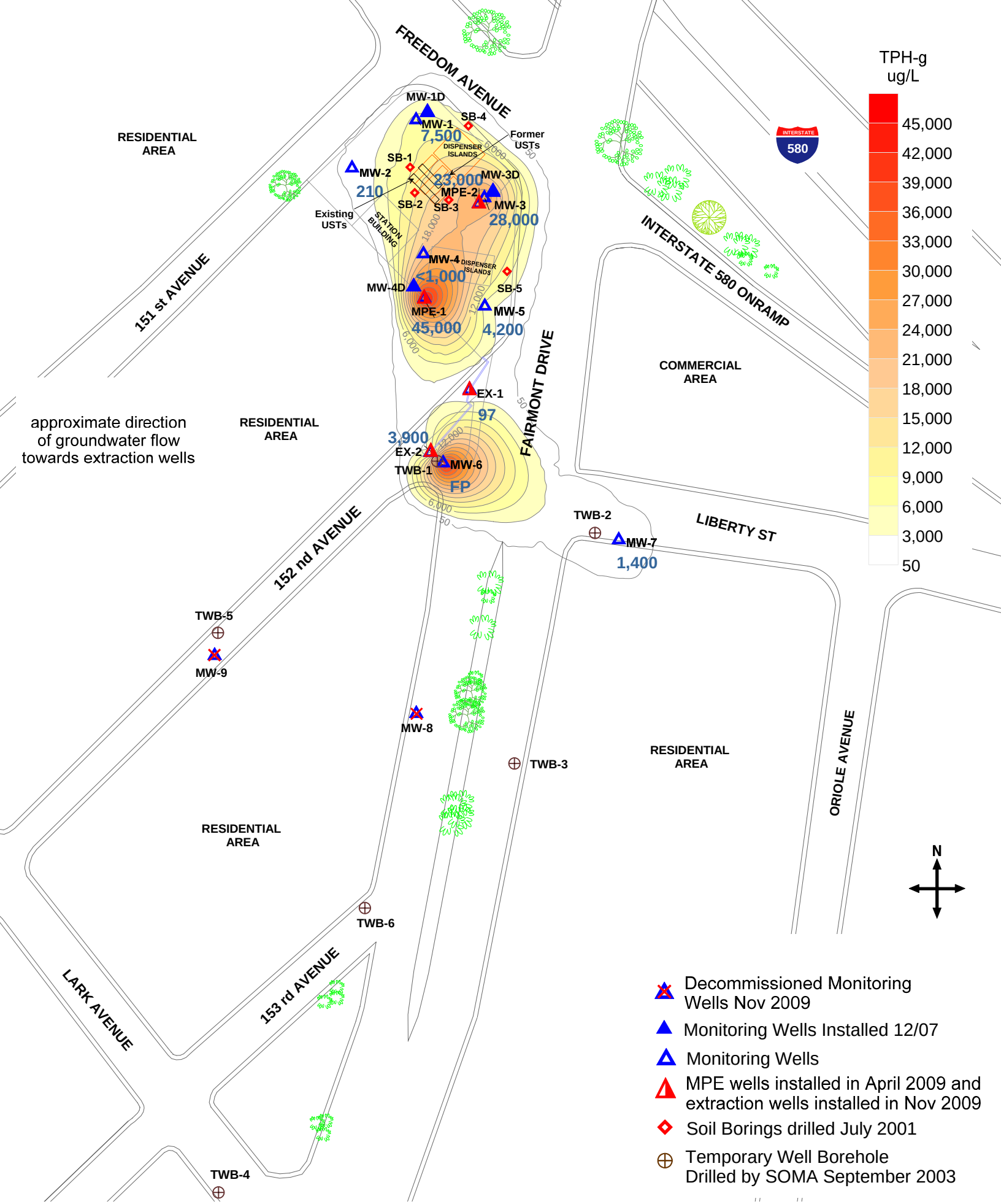

approximate scale in feet

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Figure 4: Contour Map of TPH-g Concentrations in Groundwater, First WBZ, September 2013

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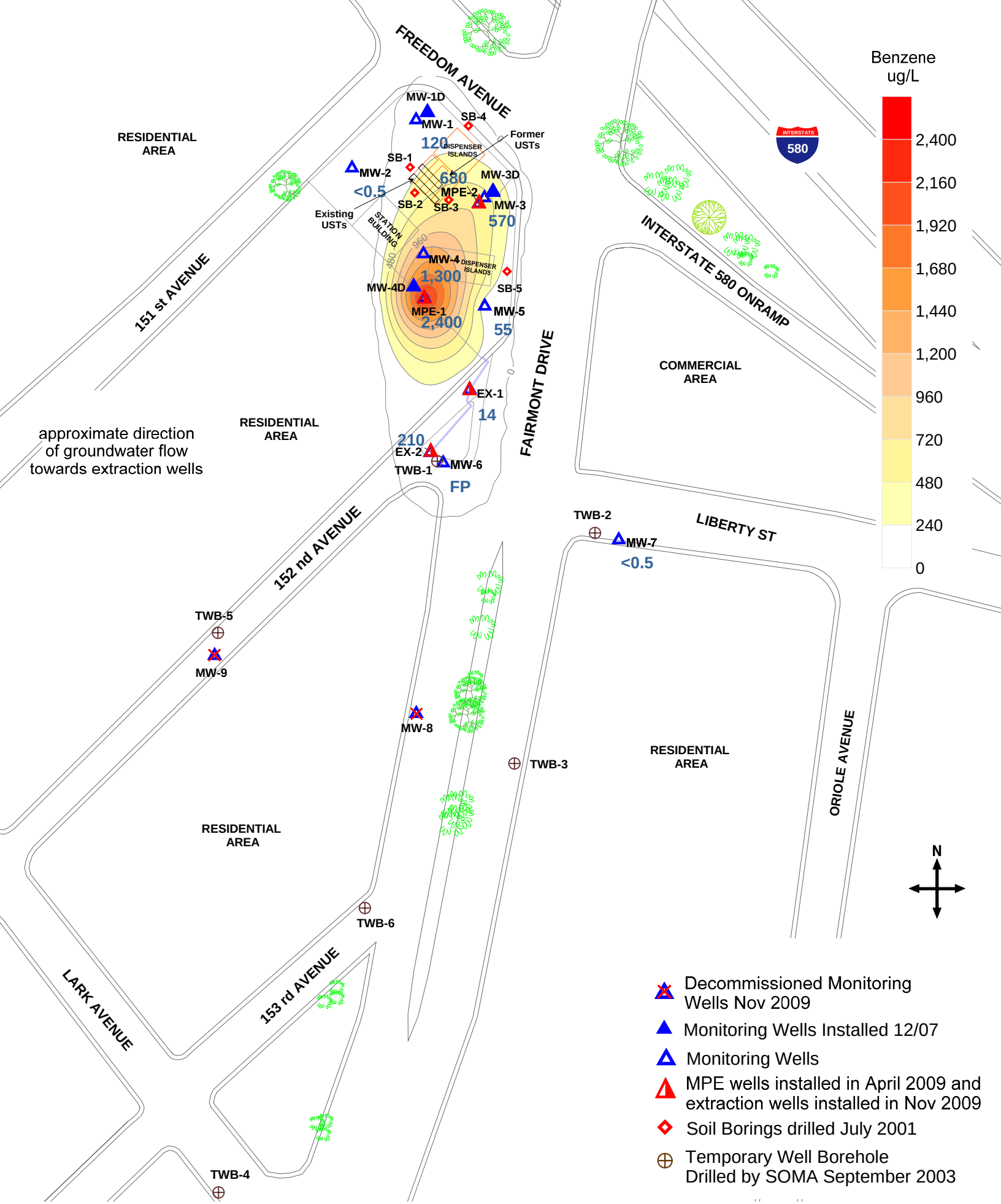

Figure 5: Contour Map of Benzene Concentrations in Groundwater, First WBZ, September 2013

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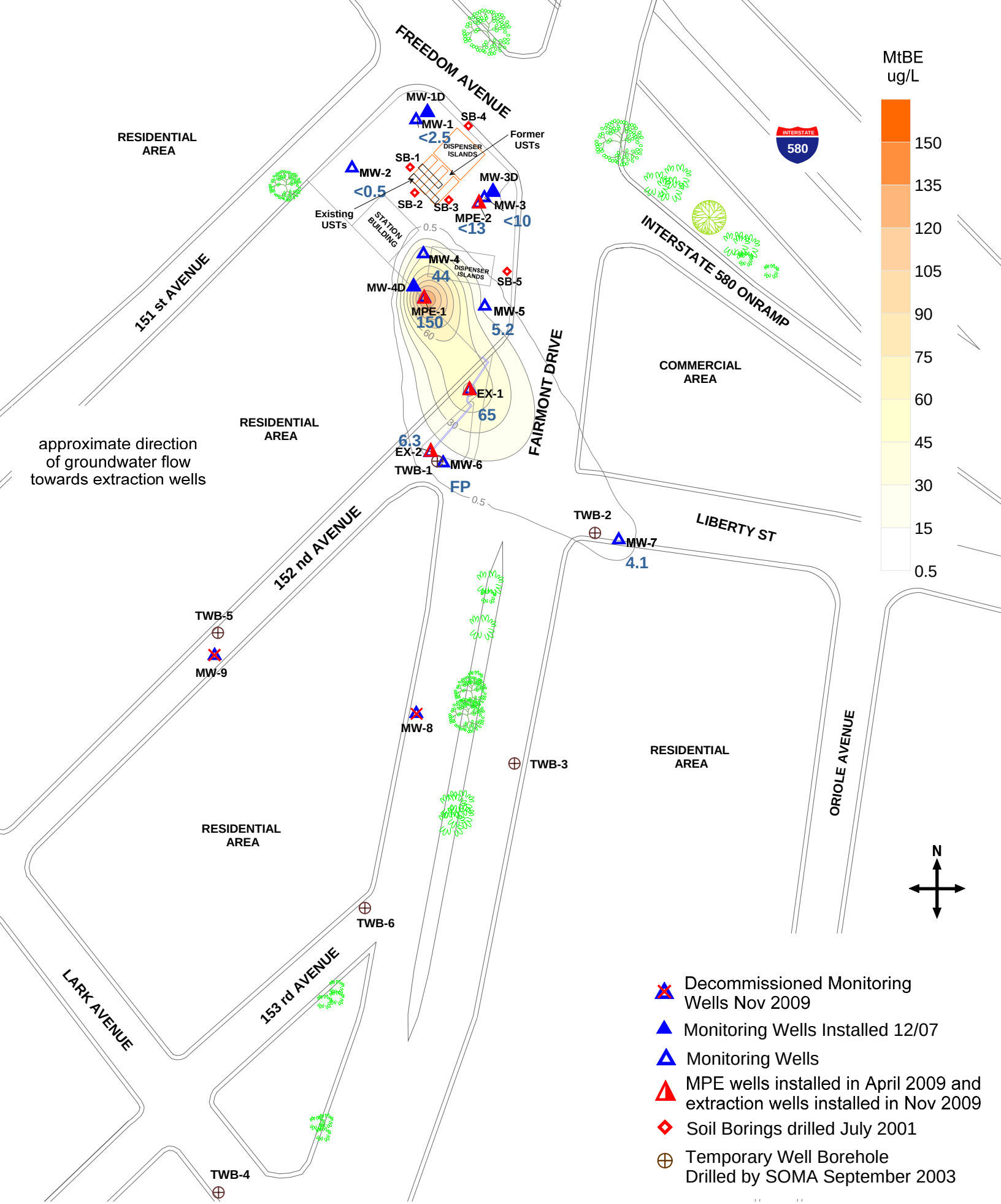

approximate scale in feet

0 50 100

Figure 6: Contour Map of MtBE Concentrations in Groundwater, First WBZ, September 2013

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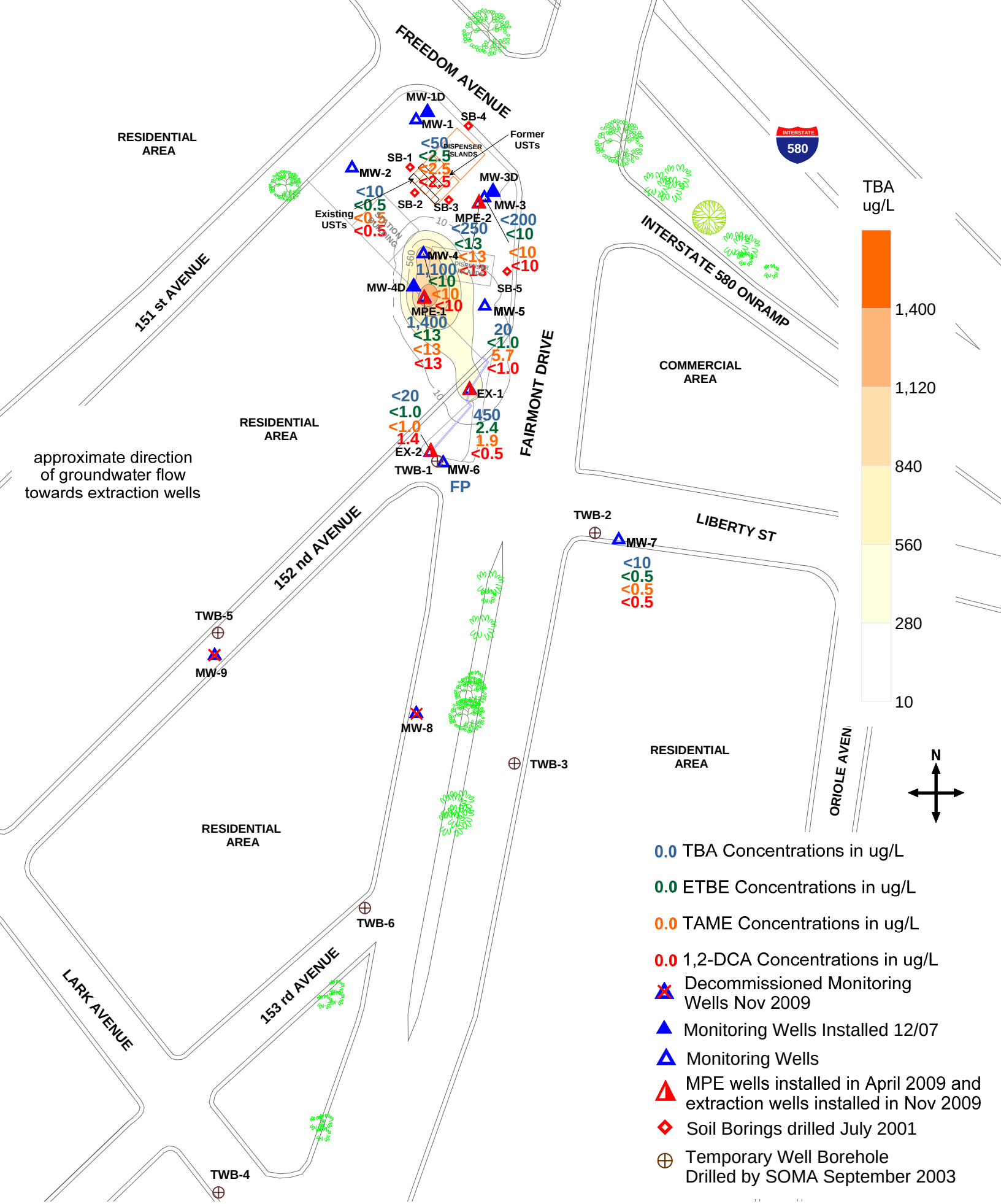

Figure 7: Contour Map of TBA and map of ETBE, TAME, and 1,2-DCA Concentrations in Groundwater, First WBZ, September 2013

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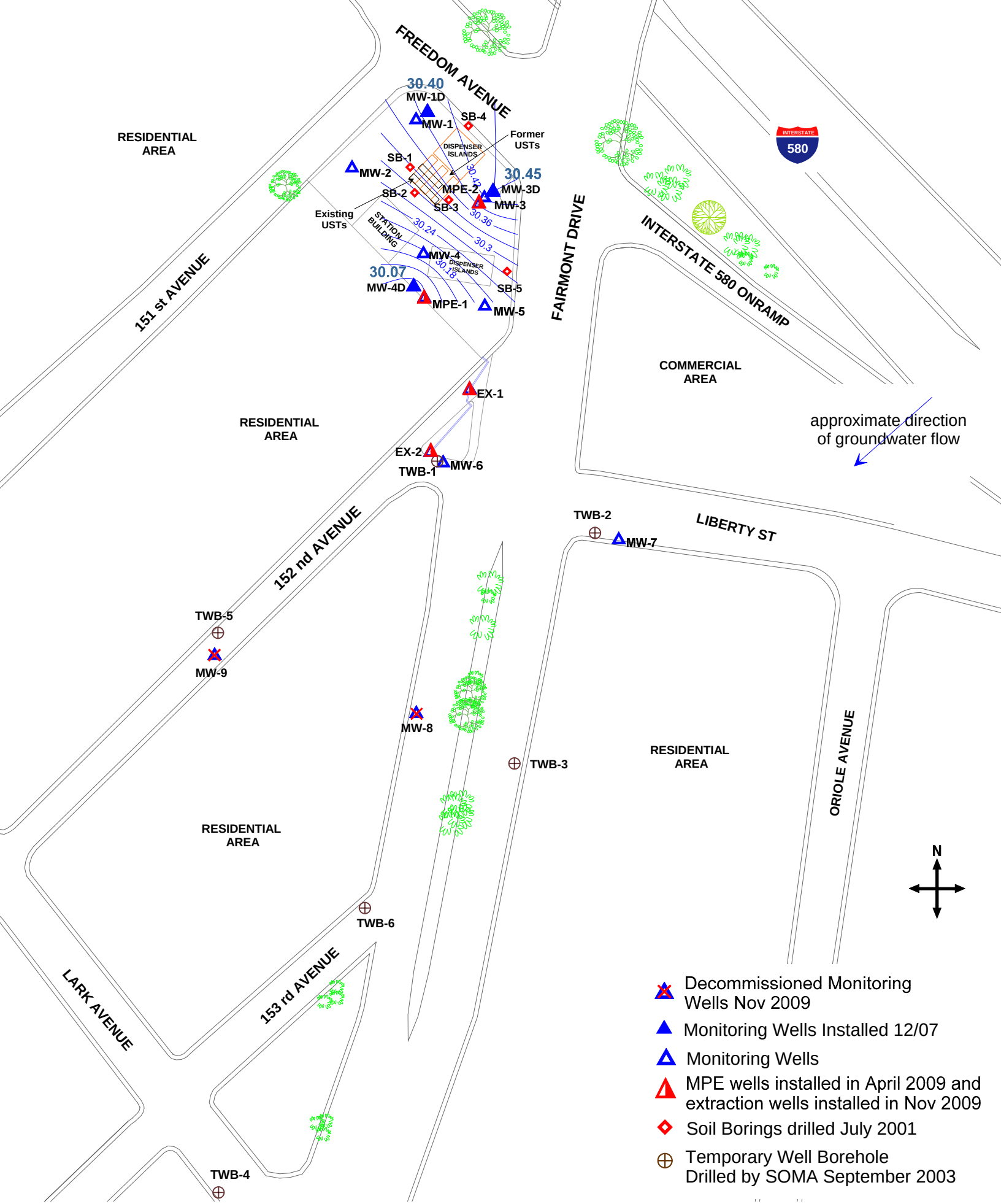

approximate scale in feet

0 50 100

Figure 8: Groundwater Elevation Contour Map in Feet, Second WBZ, September 16, 2013

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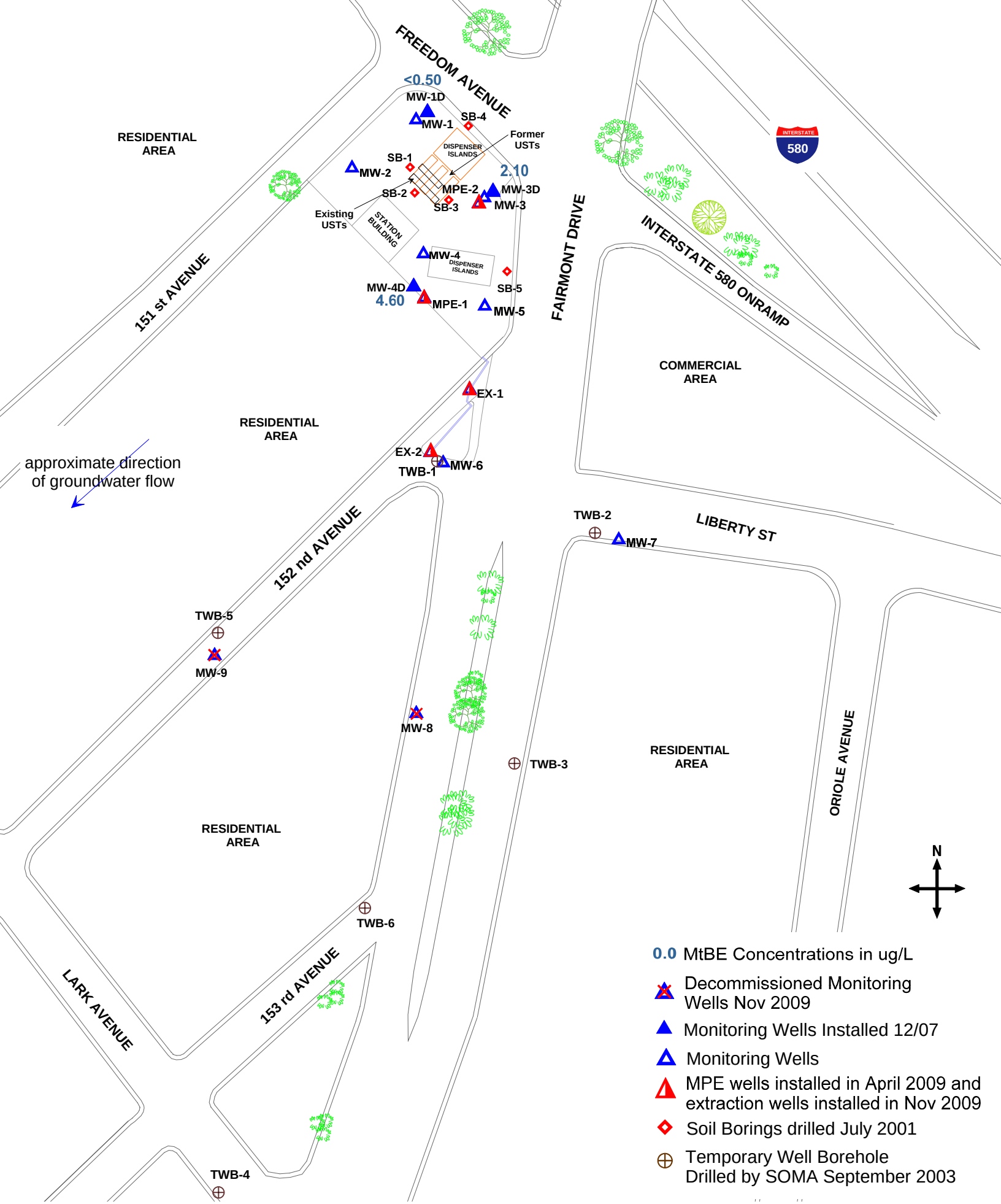

approximate scale in feet

0 50 100

Figure 9: Map Showing Concentrations of MtBE in Groundwater, Second WBZ, September 2013

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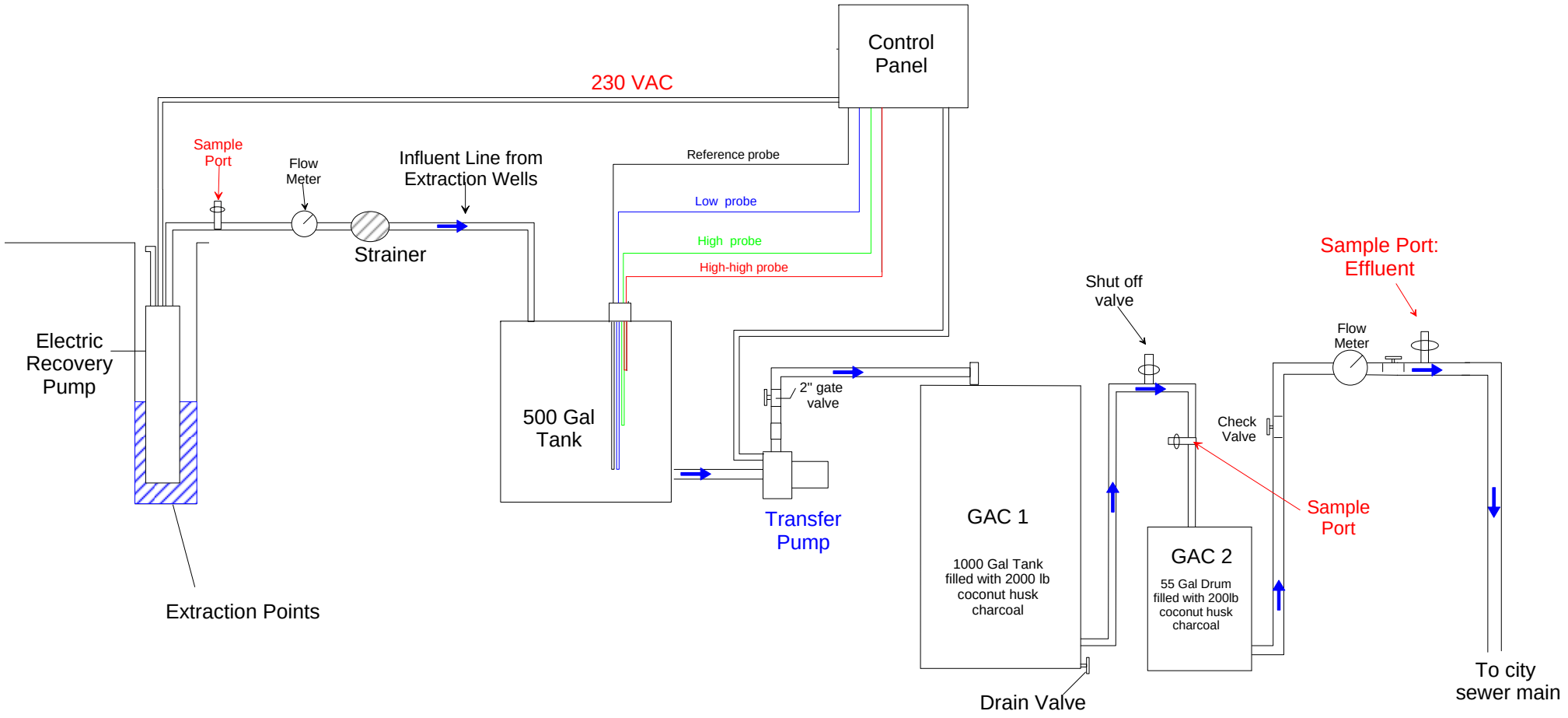

Figure 10: Schematic diagram of Groundwater Remediation System

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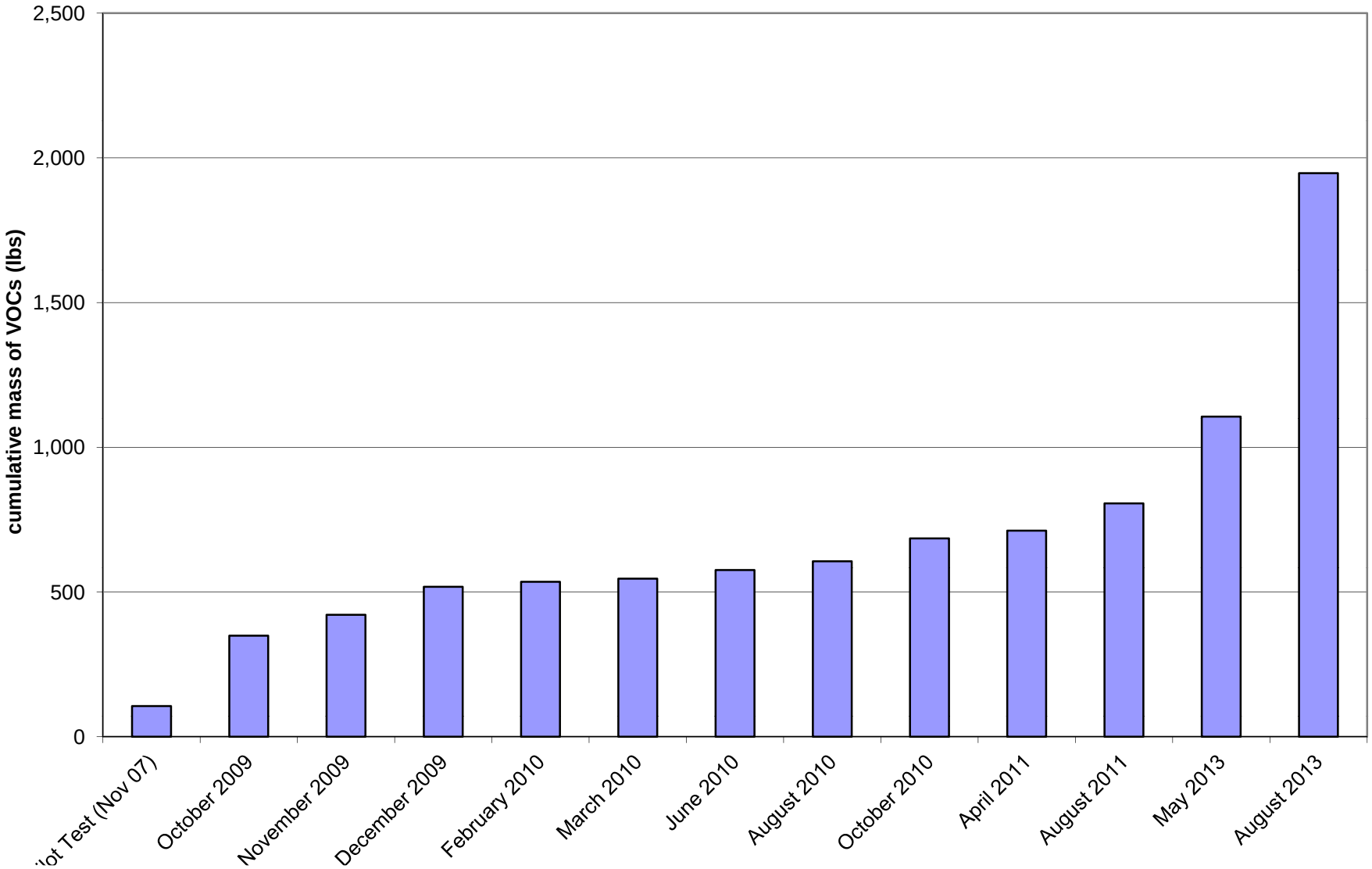

Figure 11: Cumulative mass of VOCs removed

Tables

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
1st WBZ											
MW-1	5/10/2002	51.71	22.85	-	28.86	5,700	360	4.5	340	450	2
	8/8/2002	51.71	23.31	-	28.40	9,100	590	2.6	830	362	<1.3
	11/8/2002	51.71	23.58	-	28.13	7,900	570	3.1	680	392	< 1.0
	2/21/2003	51.71	22.62	-	29.09	2,900	160	1.6 C	170	211	<0.5
	5/28/2003	51.71	22.43	-	29.28	1,700	55	<0.5	90	115	2.00
	8/12/2003	51.71	21.30	-	30.41	2,600	2.5	<0.5	190	130	<0.5
	10/9/2003	51.71	23.49	-	28.22	9,200	560.0	2.7 C	670	648	<1.0
	1/15/2004	51.71	22.43	-	29.28	5,500	190	<1.0	220	124.4	<0.5
	5/25/2004	51.71	22.94	-	28.77	8,000	400	1.50	420	393	3.40
	9/21/2004	54.46	23.49	-	30.97	9,300	580	9.30	690	683	4.60
	12/14/2004	54.46	23.01	-	31.45	7,360	337	<4.3	731	633	<4.3
	3/11/2005	54.46	21.48	-	32.98	2,510	45.2	<0.5	23.2	39.63	2.80
	6/15/2005	54.46	22.42	-	32.04	1,690	36.3	<2.0	59.5	28.73	2.01
	8/26/2005	54.46	23.00	-	31.46	7,310	318	<8.60	475	316	5.15
	11/11/2005	54.46	21.40	-	33.06	9,640	341	<8.6	467	329.7	6.04
	2/9/2006	54.46	21.81	-	32.65	775	14	<2.0	12.6	10.32	4.01
	5/9/2006	54.46	21.68	-	32.78	444	7.80	<2.0	12.1	6.31	1.75
	8/10/2006	54.46	22.79	-	31.67	5,090	324	<8.60	108	59.9	8.24
	10/26/2006	54.46	23.19	-	31.27	6,950	556	<4.0	190	136.09	8.61
	1/25/2007	54.46	22.82	-	31.64	2,640	196	<2.0	105	25.5	7.92
	4/26/2007	54.46	22.67	-	31.79	861	95.5	<2.0	17	6.36	4.00
	7/25/2007	54.46	23.25	-	31.21	4,520	412	<4.0	182	77.9	7.48
	10/23/2007	54.46	23.42	-	31.04	3,900	117	<2.0	87.1	23.87	4.54
	1/22/2008	54.46	22.59	-	31.87	2,260	81.3	<2.0	17.5	<2.0	4.23
	4/16/2008	54.46	22.89	-	31.57	2,320	248	<2.0	54.1	37.3	<0.5
	7/3/2008	54.46	23.33	-	31.13	5,240	414	<2.0	168	94	6.56
	10/15/2008	54.46	23.76	-	30.70	4,500 [Y]	260	<1.0	150	130	3.40
	1/7/2009	54.46	23.25	-	31.21	4,800	140	<1.3	48	32	1.70
	4/14/2009	54.46	22.52	-	31.94	1,800 [Y]	78	<0.5	35	18	2.50
	8/27/2009	54.46	23.6	-	30.86	4,500	330	<2.0	97	42	4.60
	12/2/2009	54.46	23.43	-	31.03	3,800 [Y]	250	<2.0	110	25	2.50

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-1 cont	3/17/2010	54.46	22.32	-	32.14	1,100	33	<0.50	46	18	1.70
	6/3/2010	54.46	22.88	-	31.58	10,000	330	4.3	680	841.5	5.20
	9/2/2010	54.46	23.28	-	31.18	8,900	440	<5.0	510	310	<5.0
	12/2/2010	54.46	23.21	-	31.25	7,400	250	<3.1	390	180	<3.1
	3/4/2011	54.46	21.95	N	32.51	2,400	67	<0.5	45	8.4	2.20
	5/20/2011	54.46	22.8	N	31.66	9,500	260	6.2	970	480	<3.6
	9/9/2011	54.46	22.81	N	31.65	6,400	220	<1.3	380	160	2.30
	12/2/2011	54.46	21.97	N	32.49	4,700 [x]	96	<1.7	310	200	<3.3
	3/2/2012	54.46	22.82	N	31.64	6,800	320	<2.5	430	120	<2.5
	6/7/2012	54.46	22.92	N	31.54	5,600	130	<2.5	360	160	2.9
	9/21/2012	54.46	23.56	N	30.90	8,000	300	<2.5	410	340	2.6
	12/14/2012	54.46	22.77	N	31.69	5,900	130	<2.5	320	97	<2.5
	3/28/2013	54.46	23.15	N	31.31	5,100	230	<2.5	280	48	3.6
	6/11/2013	54.46	23.48	N	30.98	6,800	200	<2.5	300	120	<2.5
	9/17/2013	**54.46**	**23.84**	**N**	**30.62**	**7,500**	**120**	**<2.5**	**410**	**260**	**<2.5**
MW-2	5/10/2002	49.66	22.83	-	26.83 *	3,100	67	8	250	215	56
	8/8/2002	49.66	21.41	-	28.25	2,700	4.6	<0.5	310	140	<0.5
	11/8/2002	49.66	21.79	-	27.87	3,400	4.6	< 0.5	310	160	< 0.5
	2/21/2003	49.66	20.51	-	29.15	890	1.7 C	0.80 C	68	38.92 C	<0.5
	5/28/2003	49.66	20.33	-	29.33	2,700	5.2 C	<0.5	120	140	1.2
	8/12/2003	49.66	23.18	-	26.48*	8,500	640	<2.5	560	659	<0.8
	10/9/2003	49.66	21.71	-	27.95	3100 H	4.3 C	<0.5	210	160	<0.5
	1/15/2004	49.66	20.31	-	29.35	660 H	1.5 C	<0.5	8.9	25	<0.5
	5/25/2004	49.66	21.09	-	28.57	4,500	5.1 C	<0.5	190	230	0.70
	9/21/2004	52.41	21.71	-	30.70	370	0.76 C	<0.5	25	16	0.50
	12/14/2004	52.41	21.20	-	31.21	880	1.0	<0.5	66	52	<0.5

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-2 cont.	3/11/2005	52.41	19.15	-	33.26	564	<0.5	<0.5	21	11.9	<0.5
	6/15/2005	52.41	20.30	-	32.11	2,040	1.2	<2.0	78.2	22	<0.5
	8/26/2005	52.41	20.97	-	31.44	1,500	0.930	<2.00	87.6	21	0.86
	11/11/2005	52.41	25.30	-	27.11	2,140	1.08	<2.0	104	29	0.79
	2/9/2006	52.41	19.41	-	33.00	1,410	<0.5	<2.0	99.6	21.4	0.72
	5/9/2006	52.41	19.41	-	33.00	1,100	<0.5	<2.0	86.5	17	<0.5
	8/10/2006	52.41	20.8	-	31.61	3,180	2.87	<2.0	88.9	24.8	<0.50
	10/26/2006	52.41	21.22	-	31.19	1,200	<0.5	<2.0	23.5	4.79	0.6
	1/25/2007	52.41	20.89	-	31.52	623	0.64	<2.0	42.4	4.37	0.66
	4/26/2007	52.41	20.65	-	31.76	169	<0.5	<2.0	15.2	2.3	<0.5
	7/25/2007	52.41	21.43	-	30.98	276	0.78	<2.0	22.1	4.04	<0.5
	10/23/2007	52.41	21.59	-	30.82	535	<0.5	<2.0	18	5.11	<0.5
	1/22/2008	52.31	20.45	-	31.86	132	<0.5	<2.0	12.2	<2.0	<0.5
	4/15/2008	52.41	20.89	-	31.52	852	<0.5	<2.0	27.2	4.78	<0.5
	7/2/2008	52.41	21.5	-	30.91	98.3	<0.5	<2.0	2.76	<2.0	<0.5
	10/15/2008	52.41	22.06	-	30.35	1,400 [Y]	<0.5	<0.5	60	17	<0.5
	1/7/2009	52.41	21.35	-	31.06	93	<0.5	<0.5	2.1	0.74	<0.5
	4/13/2009	52.41	20.52	-	31.89	480 [Y]	<0.5	<0.5	20	5.5	<0.5
	8/27/2009	52.41	21.85	-	30.56	130	<0.5	<0.5	2.5	0.61	<0.5
	12/1/2009	52.41	21.59	-	30.82	760 [Y]	<0.5	<0.5	14	1.5	<0.5
	3/17/2010	52.41	20.11	-	32.30	480	<0.5	<0.5	30	6.9	<0.5
	6/3/2010	52.41	21	-	31.41	690	<0.5	<0.5	14	2.6	<0.5
	9/2/2010	52.41	21.42	-	30.99	470	<0.5	<0.5	7.6	1	<0.5
	12/2/2010	52.41	21.44	-	30.97	470	<0.5	<0.5	7.6	3.3	<0.5
	3/4/2011	52.41	19.65	N	32.76	240	<0.5	<0.5	6.6	0.8	<0.5
	5/20/2011	52.41	20.75	N	31.66	310	<0.5	<0.5	4.8	<0.5	<0.5
	9/9/2011	52.41	21.05	N	31.36	1,000	<0.5	<0.5	12	0.76	<0.5
	12/2/2011	52.41	20.14	N	32.27	900 [x]	<2.9	<1.7	14	1.9	<3.3

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-2 cont.	3/2/2012	52.41	19.98	N	32.43	880	<0.5	<0.5	5.3	0.58	<0.5
	6/7/2012	52.41	21.04	N	31.37	720	<0.5	<0.5	7.9	0.79	<0.5
	9/21/2012	52.41	21.78	N	30.63	1,400	<0.5	<0.5	11	<0.5	<0.5
	12/14/2012	52.41	20.71	N	31.70	760	<0.5	<0.5	10	1.5	<0.5
	3/28/2013	52.41	21.24	N	31.17	890	<0.5	<0.5	4.3	<0.5	<0.5
	6/11/2013	52.41	21.67	N	30.74	510	150	<0.5	15	12.3	3.1
	9/16/2013	**52.41**	**22.15**	**N**	**30.26**	**210**	**<0.5**	**<0.5**	**1.1**	**<0.5**	**<0.5**
MW-3	5/10/2002	51.16	22.28	-	28.88	44,000	6,000	900	1,500	6,200	2,400
	8/8/2002	51.16	22.88	-	28.28	40,000	5,800	1,100	1,600	6,500	1,300
	11/8/2002	51.16	23.19	-	27.97	47,000	5,300	1,200	2,200	8,600	1,000
	2/21/2003	51.16	22.02	-	29.14	39,000	5,500	1,500	2,000	8,600	1,300
	5/28/2003	51.16	21.89	-	29.27	52,000	7,300	3,000	2,800	12,700	2,100
	8/12/2003	51.16	22.66	-	28.50	31,000	6,100	860	1,500	6,900	1,200
	10/9/2003	51.16	23.06	-	28.10	41,000	6,100	1,100	2,200	10,200	960
	1/15/2004	51.16	21.85	-	29.31	51,000	4,100	1,100	2,000	8,400	590
	5/25/2004	51.16	22.55	-	28.61	65,000	4,300	1,300	2,500	10,500	720
	9/21/2004	53.91	23.08	-	30.83	42,000	4,900	890	2,200	8,700	480
	12/14/2004	53.91	22.52	-	31.39	35,151	4,066	972	2,942	13,032	491
	3/11/2005	53.91	20.90	-	33.01	42,600	3,040	1,100	1,530	6,670	968
	6/15/2005	53.91	21.85	-	32.06	84,100	5,110	2,160	3,030	8,800	2,670
	8/26/2005	53.91	22.49	-	31.42	43,500	3,630	1,080	2,500	6,830	1,440
	11/11/2005	53.91	22.81	-	31.10	47,700	4,240	520	2,170	6,320	1,390
	2/9/2006	53.91	21.12	-	32.79	44,500	5,070	1360	1,920	4,840	3,280
	5/9/2006	53.91	21.09	-	32.82	48,100	2,510	1,140	1,950	5,030	2,210
	8/10/2006	53.91	22.26	-	31.65	42,100	3,450	869	1,760	5,650	3,570
	10/26/2006	53.91	22.73	-	31.18	33,400	4,800	331	1,170	3,510	4,790

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Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-3 cont.	1/25/2007	53.91	22.34	-	31.57	19,300	4,820	167	1,540	3,740	3,430
	4/26/2007	53.91	22.24	-	31.67	30,700	2,350	158	1,470	4,320	1,330
	7/25/2007	53.91	22.83	-	31.08	34,900	5,400	364	2,080	6,360	1,980
	10/23/2007	53.91	23.01	-	30.9	22,600	4,070	<86	1,120	3,095	970
	1/22/2008	53.96	22.04	-	31.92	22,100	1,280	453	1,330	3,520	490
	4/16/2008	53.91	22.4	-	31.51	20,700	2,790	182	860	3,389	263
	7/3/2008	53.91	22.9	-	31.01	48,500	3,760	346	3,130	12,980	573
	10/16/2008	53.91	23.36	-	30.55	50,000	3,900	300	3,100	11,000	460
	1/8/2009	53.91	22.82	-	31.09	54,000	2,600	180	2,500	8,800	220
	4/13/2009	53.91	22.06	-	31.85	49,000	2,900	170	2,100	8,100	490
	8/27/2009	53.91	23.11	-	30.80	43,000	2,500	160	1,900	7,000	210
	12/2/2009	53.91	23.00	-	30.91	30,000	2,100	180	1,600	5,600	91
	3/17/2010	53.91	21.90	-	32.01	24,000	970	81	1,100	3,700	38
	6/3/2010	53.91	22.49	-	31.42	31,000	1,200	110	1,300	4,400	34
	9/2/2010	53.91	22.76	-	31.15	26,000	1,100	81	1,200	3,810	26
	12/2/2010	53.91	22.86	-	31.05	18,000	830	47	780	2,360	14
	3/4/2011	53.91	21.44	N	32.47	18,000	410	32	850	2,480	16
	5/20/2011	53.91	22.36	N	31.55	12,000	710	24	620	1,460	11
	9/9/2011	53.91	22.44	N	31.47	11,000	1,100	26	580	1,430	7.8
	12/2/2011	53.91	21.60	N	32.31	5,100 [x]	280	12	370	740	<1.7
	3/2/2012	53.91	22.39	N	31.52	13,000	440	23	690	1,570	<5.0
	6/7/2012	53.91	22.50	N	31.41	9,000	290	9.3	520	900	<5.0
	9/21/2012	53.91	23.17	N	30.74	12,000	710	26	630	1,230	8.2
	12/14/2012	53.91	22.32	Y	31.59	8,500	350	8.7	550	1,003	<5
	3/28/2013	53.91	22.69	Y	31.22	9,300	790	8.2	760	974	8.7
	6/11/2013	53.91	23.06	Y	30.85	14,000	700	26	860	1,630	6.1
	9/17/2013	**53.91**	**23.41**	**Y**	**30.50**	**28,000**	**570**	**37**	**1,800**	**3,560**	**<10**
MW-4	5/10/2002	50.54	21.78	-	28.76	880	25	1.0C	110	52	12,000
	8/8/2002	50.54	22.50	-	28.04	3,800	70	<5.0	300	115	4,800
	11/8/2002	50.54	22.81	-	27.73	5,100	150	10	460	258	2,400

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Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-4 cont.	2/21/2003	50.54	21.48	-	29.06	3,200	98	66	220	360	6,600
	5/28/2003	50.54	21.24	-	29.30	6,200	140	46	200	790	2,300
	8/12/2003	50.54	22.32	-	28.22	7,500	180	57	220	1450	1,900
	10/9/2003	50.54	22.74	-	27.80	5,800	250	32	300	970	7,800
	1/15/2004	50.54	21.19	-	29.35	5,900	270	17 C	150	640	7,300
	5/25/2004	50.54	22.03	-	28.51	9,100	210	51	200	1190	1800
	9/21/2004	53.31	22.76	-	30.55	5,200	290	12	370	600	7300
	12/14/2004	53.31	21.99	-	31.32	8,937	538	114	416	2379	5021
	3/11/2005	53.31	20.01	-	33.30	12,300	225	39.6	80.1	1465	3870
	6/15/2005	53.31	21.25	-	32.06	7,690	114	32.6	77.1	555	1150
	8/26/2005	53.31	22.03	-	31.28	8,850	175	24.6	150	851	1380
	11/11/2005	53.31	22.43	-	30.88	9,990	356	<43	196	700	3,640
	2/9/2006	53.31	20.31	-	33.00	6,850	205	<43	67.2	255.2	5,120
	5/9/2006	53.31	20.33	-	32.98	1,290	18.1	<8.6	12.9	25.87	799
	8/10/2006	53.31	21.74	-	31.57	7,830	118	<8.60	25.3	174.6	919
	10/26/2006	53.31	22.29	-	31.02	1,540	81.9	<43	96	46.4	3,610
	1/25/2007	53.31	21.86	-	31.45	4,370	163	<8.6	85.1	269.1	1,050
	4/26/2007	53.31	21.63	-	31.68	4,380	140	<8.6	67	276.8	576
	7/25/2007	53.31	22.49	-	30.82	4,970	220	<8.60	198	241.5	1,040
	10/23/2007	53.31	22.69	-	30.62	4,200	267	<8.6	147	155.5	1,220
	1/22/2008	53.36	21.39	-	31.97	2,180	133	<22.0	43.1	32.2	1,800
	4/15/2008	53.31	21.9	-	31.41	4,240	90.4	<22.0	107	380	674
	7/2/2008	53.31	22.55	-	30.76	2,300	193	<22.0	212	183	4,050
	10/16/2008	53.31	23.13	-	30.18	8,900	320	3.7	430	1,160	450
	1/8/2009	53.31	22.42	-	30.89	19,000	430	44	590	3,380	440
	4/13/2009	53.31	21.51	-	31.80	21,000	400	38	450	2,880	330
	8/27/2009	53.31	22.94	-	30.37	16,000	960	64	560	2,120	290
	12/2/2009	53.31	22.36	-	30.95	4,400	480	6	170	640	110

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-4 cont.	3/17/2010	53.31	21.39	-	31.92	14,000	260	6	230	1,220	93
	6/3/2010	53.31	22.23	-	31.08	18,000	240	4	310	770	41
	9/2/2010	53.31	22.51	-	30.80	1,800	800	<3.6	150	25	33
	12/2/2010	53.31	22.71	-	30.60	3,800	1,500	<10	200	115	29
	3/3/2011	53.31	20.64	N	32.67	2,400	28	<0.71	28	17	3
	5/19/2011	53.31	21.84	N	31.47	1,800	27	<0.5	29	11.2	4.8
	9/8/2011	53.31	22.11	N	31.20	3,600	300	2.6	270	68.5	59
	12/1/2011	53.31	21.38	N	31.93	1,400 [x]	370	<0.84	110	30.6	110
	3/2/2012	53.31	22.02	N	31.29	3,100	780	<2.0	150	59.6	50
	6/7/2012	53.31	22.24	N	31.07	2,000	290	<2.5	66	23	29
	9/21/2012	53.31	22.87	N	30.44	2,900	820	<2.5	75	17	72
	12/14/2012	53.31	21.84	N	31.47	840	48	<0.5	14	4.5	2.5
	3/28/2013	53.31	22.24	N	31.07	790	650	<5.0	26	<5.0	15
	6/11/2013	53.31	22.71	N	30.60	1,100	860	<5.0	64	<5.0	35
	9/17/2013	**53.31**	**23.23**	**N**	**30.08**	**<1,000**	**1,300**	**<10**	**22**	**<10**	**44**
MW-5	5/10/2002	47.79	19.02	-	28.77	25,000	1,000	1200	1,100	3,060	1,800
	8/8/2002	47.79	19.80	-	27.99	18,000	1,000	660	950	1,720	1,500
	11/8/2002	47.79	20.14	-	27.65	16,000	1,300	380	930	1,550	1,200
	2/21/2003	47.79	18.70	-	29.09	12,000	390	71	770	1,100	860
	5/28/2003	47.79	18.52	-	29.27	9,100	210	31	560	790	600
	8/12/2003	47.79	19.54	-	28.25	12,000	660	75	660	1,110	1,000
	10/9/2003	47.79	20.06	-	27.73	15,000	1,000	130	1,000	1,430	1,700
	1/15/2004	47.79	18.42	-	29.37	9,900	450 C	16	500	431	1,100
	5/25/2004	47.79	19.30	-	28.49	9,200	380	24	490	536	720
	9/21/2004	50.53	20.15	-	30.38	10,000	980	71	560	770	1200
	12/14/2004	50.53	19.30	-	31.23	10,502	587	64	1040	1133	1015
	3/11/2005	50.53	17.20	-	33.33	8,390	407	<5.5	83	42.5	1530
	6/15/2005	50.53	18.54	-	31.99	9,350	147	18.3	435	146.2	573
	8/26/2005	50.53	19.31	-	31.22	9,500	261	<22	726	321.3	749
	11/11/2005	50.53	19.75	-	30.78	10,000	443	41.5	527	278.5	1,430

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-5 cont.	2/9/2006	50.53	17.58	-	32.95	7,640	237	<22	187	50.2	2,050
	5/9/2006	50.53	17.54	-	32.99	8,360	111	<8.6	300	75.84	566
	8/10/2006	50.53	19.02	-	31.51	16,100	250	<22	455	187.4	1,590
	10/26/2006	50.53	19.61	-	30.92	10,100	430	<22	375	192.6	3,060
	1/25/2007	50.53	19.19	-	31.34	3,960	340	<22	323	150.1	1,740
	4/26/2007	50.53	18.89	-	31.64	4,590	187	<8.6	307	116.5	861
	7/25/2007	50.53	19.81	-	30.72	6,490	419	21.8	413	223.2	913
	10/23/2007	50.53	19.98	-	30.55	6,120	550	11	284	141.4	433
	1/22/2008	50.18	18.69	-	31.49	9,810	572	22	574	184.1	126
	4/15/2008	50.18	19.16	-	31.02	8,890	335	15.1	477	397.5	136
	7/3/2008	50.53	19.88	-	30.65	13,100	949	34.4	875	825.5	176
	10/16/2008	50.53	20.45	-	30.08	11,000	870	25	820	668	160
	1/8/2009	50.53	19.72	-	30.81	12,000	490	21	690	456	76
	4/13/2009	50.53	18.81	-	31.72	9,000 [Y]	200	11	390	198	44
	8/27/2009	50.53	21.30	-	29.23	7,400	610	15	320	185	66
	12/2/2009	50.53	20.00	-	30.53	8,400 [Y]	400	12	540	296	45
	3/17/2010	50.53	18.73	-	31.80	4,800	120	8.7	120	107	14
	6/4/2010	50.53	19.60	-	30.93	7,200	160	5.7	190	149.2	24
	9/2/2010	50.53	19.82	-	30.71	9,200	110	12	270	318	35
	12/2/2010	50.53	20.10	-	30.43	9,100	170	6.7	350	442	23
	3/4/2011	50.53	18.00	N	32.53	2,600	18	0.62	54	18.1	3
	5/20/2011	50.53	19.18	N	31.35	4,000	91	8.5	110	106	33
Pre-MPE	8/4/2011	50.53	NM	-	NC	3,000	23	0.95	92	43.7	5.4
	9/9/2011	50.53	19.41	N	31.12	4,200	120	2.8	140	61.1	22
	12/2/2011	50.53	18.59	N	31.94	6,900 [X]	96	12	220	104	32
	3/2/2012	50.53	19.30	N	31.23	5,400	43	1.8	110	85	7
	6/7/2012	50.53	19.45	N	31.08	3,700	32	<1.0	100	59	4.4
	9/21/2012	50.53	20.17	N	30.36	3,900	68	1.5	140	88.5	9.8
	12/14/2012	50.53	19.12	N	31.41	3,100	48	6.7	100	62.3	5.2
	3/28/2013	50.53	19.47	N	31.06	1,900	30	<1.0	59	48.4	4.5
	6/11/2013	50.53	20.03	N	30.50	2,900	22	3.9	110	131	3.0
	9/17/2013	**50.53**	**20.54**	**N**	**29.99**	**4,200**	**55**	**7.9**	**180**	**229**	**5.2**

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-6	9/21/2004	45.82	17.64	-	28.18	34,000	150	130	2200	8100	0.6
	12/14/2004	45.82	15.75	-	30.07	5,161	137	7	436	1136	<5.5
	3/11/2005	45.82	13.80	-	32.02	6,040	125	3.22	260	722.1	4.94
	6/15/2005	45.82	14.78	-	31.04	5,590	44.3	6.60	272	382	5.85
	8/26/2005	45.82	15.91	-	29.91	6,130	99	<8.6	378	492.9	5.66
	11/11/2005	45.82	16.55	-	29.27	11,400	101	<8.6	645	834.7	4.33
	2/9/2006	45.82	13.92	-	31.90	2,790	32.3	<8.6	131	131.22	7.30
	5/9/2006	45.82	13.95	-	31.87	3,730	25	<2.0	213	207.82	5.87
	8/10/2006	45.82	15.28	-	30.54	4,800	41.9	<2.0	201	189	10.4
	10/26/2006	45.82	16.11	-	29.71	6,080	37.4	<2.0	116	183	9.78
	1/25/2007	45.82	15.76	-	30.06	3,220	25.2	<2.0	219	174	14.7
	4/26/2007	45.82	15.18	-	30.64	3,110	28	<2.0	165	138.47	14.6
	7/25/2007	45.82	16.82	-	29.00	4,960	54.1	<2.0	199	255.87	8.05
	10/23/2007	45.82	16.91	-	28.91	9,610	64.3	<2.0	188	302.6	5.81
	1/21/2008	45.82	15.36	-	30.46	3,290	33	<2.0	149	131.31	3.86
	4/15/2008	45.82	15.73	-	30.09	2,070	10.8	<2.0	51.1	67	<0.5
	7/2/2008	45.82	16.9	-	28.92	7,900	42.4	<2.0	194	296	3.58
	10/15/2008	45.82	17.21	-	28.61	18,000 [Y]	42	1.4	320	673	1.7
	1/7/2009	45.82	17.08	-	28.74	13,000	47	<3.1	210	425	<3.1
	4/13/2009	45.82	15.52	-	30.30	7,200 [Y]	26	<1.3	170	312.6	2.6
	8/26/2009	45.82	17.82	-	28.00	10,000 [Y]	25	<2.0	130	294	2.2
	12/1/2009	45.82	17.34	-	28.48	11,000 [Y]	31	6.1	220	539	<2.0
	3/16/2010	45.82	14.81	-	31.01	31,000	63	140	970	4,200	64
	6/3/2010	45.82	15.72	-	30.10	27,000	22	67	840	3,100	32
	9/1/2010	45.82	16.86	-	28.96	33,000	24	34	1,100	3,780	12
	12/2/2010	45.82	16.98	-	28.84	70,000	32	55	1,700	5,670	18

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Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-6 cont.	3/3/2011	45.82	14.35	Y	31.47	7,000	18	<2.5	97	237	11
	5/20/2011	45.82	14.95	Y	30.87	14,000	14	<2.5	300	823	7.2
	9/8/2011	45.82	16.14	Y	29.68	23,000	28	<2.5	360	812	3.4
	12/1/2011	45.82	16.17	16.15	29.66	FP	FP	FP	FP	FP	FP
	3/2/2012	45.82	16.11	Y	29.71	14,000	23	<4.2	400	694.4	<4.2
	6/6/2012	45.82	16.31	Y	29.51	9,200	12	<1.7	210	320	<1.7
	9/20/2012*	45.82	17.36	17.32	28.49	FP	FP	FP	FP	FP	FP
	12/13/2012	45.82	15.46	Y	30.36	13,000	22	<0.71	83	62.8	5.1
	3/27/2013	45.82	16.3	Y	29.52	7,400	27	<1.3	190	221.8	<1.3
	6/10/2013	45.82	17.37	Y	28.45	12,000	20	<2.5	280	230	<2.5
	9/16/2013	**45.82**	**18.11**	**18.06**	**27.74**	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
MW-7	9/21/2004	44.74	15.21	-	29.53	2,900	<0.5	<0.5	52	61	8.1
	12/14/2004	44.74	13.90	-	30.84	<50	1.6	<0.5	29	58	6.0
	3/11/2005	44.74	11.46	-	33.28	2,230	<2.5	<2.5	39.4	51.4	12.4
	6/15/2005	44.74	12.97	-	31.77	2,940	0.85	<2.0	50.6	31.9	13.7
	8/26/2005	44.74	14.10	-	30.64	2,310	<0.50	<2.0	55.7	29.6	4.01
	11/11/2005	44.74	14.59	-	30.15	3,030	<0.5	<2.0	66.5	42.3	9.76
	2/9/2006	44.74	NM	-	NM	NA	NA	NA	NA	NA	NA
	5/9/2006	44.74	12.02	-	32.72	1,400	<0.5	<2.0	19.8	12.4	2.30
	8/10/2006	44.74	13.72	-	31.02	604	<0.50	<2.0	6.2	4.63	1.42
	10/26/2006	44.74	14.38	-	30.36	1350	<0.50	<2.0	16.6	10.8	1.87
	1/25/2007	44.74	13.93	-	30.81	340	<0.5	<2.0	6.84	2.44	1.63
	4/26/2007	44.74	14.44	-	30.30	552	<0.5	<2.0	11.4	6.11	4.12
	7/25/2007	44.74	14.79	-	29.95	1,230	<0.5	<2.0	27	19.24	3.2
	10/23/2007	44.74	14.88	-	29.86	1,730	0.67	<2.0	20.7	17.31	8.44
	1/21/2008	44.74	13.34	-	31.40	610	1.15	<2.0	8.4	4.34	17.2
	4/15/2008	44.74	13.91	-	30.83	1,460	<0.5	<2.0	15.9	19.7	17.3
	7/2/2008	44.74	14.87	-	29.87	1,450	<0.5	<2.0	11	6.8	22.1
	10/15/2008	44.74	15.68	-	29.06	1,900 [Y]	0.56	1.2	27	39.5	55

Table 1

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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-7 cont.	1/7/2009	44.74	14.72	-	30.02	2,700	1.2	2.9	11	25	39
	4/13/2009	44.74	13.54	-	31.20	2,300 [Y]	<0.5	<0.5	15	6.3	63
	8/26/2009	44.74	15.84	-	28.90	2,700 [Y]	<0.5	<0.5	48	53	140
	12/1/2009	44.74	15.03	-	29.71	1,800 [Y]	<0.5	<0.5	22	15	120
	3/16/2010	44.74	12.56	-	32.18	1,100	<0.5	<0.5	3.2	1.4	65
	6/3/2010	44.74	13.80	-	30.94	740	<0.5	<0.5	1.8	0.62	28
	9/1/2010	44.74	14.84	-	29.90	1,200	<0.5	<0.5	10	3.2	29
	12/2/2010	44.74	14.74	-	30.00	1,400	<0.5	<0.5	8	0.74	21
	3/3/2011	44.74	13.31	N	31.43	1,000	<0.5	<0.5	1.8	<0.5	16
	5/19/2011	44.74	13.43	N	31.31	810	<0.5	<0.5	2.2	0.79	7.8
	9/8/2011	44.74	14.38	N	30.36	1,000	<0.5	<0.5	8.3	2.9	5.4
	12/1/2011	44.74	13.57	N	31.17	1,500 [X]	<0.33	<0.19	12	5.7	13
	3/2/2012	44.74	14.16	N	30.58	1,000	<0.5	<0.5	4	1.1	5.1
	6/6/2012	44.74	14.00	N	30.74	780	<0.5	<0.5	2.9	1.0	2.6
	9/20/2012	44.74	15.26	N	29.48	1,200	<0.5	<0.5	4.3	0.92	2.7
	12/13/2012	44.74	13.34	N	31.40	1,100	<0.5	<0.5	0.99	<0.5	3.4
	3/27/2013	44.74	14.30	N	30.44	680	<0.5	<0.5	1.8	<0.5	4.2
	6/10/2013	44.74	15.06	N	29.68	890	<0.5	<0.5	2.6	<0.5	2.3
	9/16/2013	**44.74**	**15.78**	**N**	**28.96**	**1,400**	**<0.5**	**<0.5**	**7.9**	**2.70**	**4.1**
MW-8	9/21/2004	41.14	12.98	-	28.16	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2004	41.14	11.22	-	29.92	<50	<0.5	<0.5	<0.5	<1.0	<0.5
	3/11/2005	41.14	NM	-	NM	NA	NA	NA	NA	NA	NA
	6/15/2005	41.14	10.46	-	30.68	<200	0.53	<2.0	<0.5	<1.0	<0.5
	8/26/2005	41.14	11.53	-	29.61	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	11/11/2005	41.14	11.92	-	29.22	<50	<0.5	<2.0	1.36	1.8	<0.5
	2/9/2006	41.14	9.74	-	31.40	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	5/9/2006	41.14	9.90	-	31.24	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	8/10/2006	41.14	10.9	-	30.24	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	10/26/2006	41.14	11.68	-	29.46	<50	<0.50	<2.0	3.37	<1.0	<0.50

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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-8 cont.	1/25/2007	41.14	11.44	-	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/26/2007	41.14	10.81	-	30.33	<50	<0.5	<2.0	4.29	<2.0	<0.5
	7/25/2007	41.14	12.31	-	28.83	<50	<0.5	<2.0	4.39	<2.0	<0.5
	10/23/2007	41.14	12.37	-	28.77	<50	<0.5	<2.0	4.31	<2.0	<0.5
	1/21/2008	41.14	11.02	-	30.12	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/15/2008	41.14	11.44	-	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/2/2008	41.14	12.39	-	28.75	94.8	<0.5	<2.0	1	<2.0	<0.5
	10/15/2008	41.14	13.42	-	27.72	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	41.14	12.50	-	28.64	<50	<0.5	<0.5	<0.5	0.6	<0.5
	4/13/2009	41.14	11.23	-	29.91	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	41.14	13.24	-	27.90	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Well Decommissioned 11/13/2009										
MW-9	9/21/2004	40.26	12.18	-	28.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2004	40.26	10.91	-	29.35	<50	<0.5	<0.5	<0.5	<1.0	<0.5
	3/11/2005	40.26	10.52	-	29.74	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	6/15/2005	40.26	14.73	-	25.53	<200	<0.5	<2.0	<0.5	<1.0	<0.5
	8/26/2005	40.26	10.59	-	29.67	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	11/11/2005	40.26	11.25	-	29.01	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	2/9/2006	40.26	10.05	-	30.21	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	5/9/2006	40.26	9.06	-	31.20	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	8/10/2006	40.26	10.01	-	30.25	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	10/26/2006	40.26	10.81	-	29.45	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	1/25/2007	40.26	10.67	-	29.59	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/26/2007	40.26	10.05	-	30.21	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/25/2007	40.26	11.44	-	28.82	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/23/2007	40.26	11.59	-	28.67	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	1/21/2008	40.26	10.37	-	29.89	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/15/2008	40.26	10.56	-	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/2/2008	40.26	11.95	-	28.31	161	<0.5	<2.0	2.15	<2.0	<0.5
	10/15/2008	40.26	12.64	-	27.62	<50	<0.5	<0.5	<0.5	<0.5	<0.5

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-9 cont.	1/7/2009	40.26	11.75	-	28.51	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	40.26	10.89	-	29.37	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	40.26	12.50	-	27.76	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Well Decommissioned 11/13/2009										
Extraction Wells											
EX-1	12/2/2009	47.36	17.02	-	30.34	2,900	120	4	64	410	25
	3/16/2010	47.36	19.08	-	28.28	2,200	150	18	94	326	210
	6/3/2010	47.36	17.02	-	30.34	3,600	180	6.3	150	428	83
	9/1/2010	47.36	16.88	-	30.48	550	6.5	0.5	6.9	31.7	38
	12/2/2010	47.36	19.84	-	27.52	<200	3.1	<2.0	<2.0	<2.0	210
	3/3/2011	47.36	14.96	N	32.4	530	51	0.94	15	31.3	110
	5/19/2011	47.36	16.12	N	31.24	370	42	<0.71	7.6	17.2	110
	9/8/2011	47.36	16.47	N	30.89	110	5	<0.5	2.2	6.4	12
	12/1/2011	47.36	16.1	N	31.26	780 [x]	91	3	29	85	150
	3/2/2012	47.36	16.35	N	31.01	140	6	<0.5	3.5	8	14
	6/6/2012	47.36	24.76	N	22.6	250	22	<0.5	4.7	20	71
	9/20/2012	47.36	17.26	N	30.1	95	24	<0.5	<0.5	2.61	36
	12/13/2012	47.36	16.55	N	30.81	1,000	73	2.3	47	110	48
	3/27/2013	47.36	16.15	N	31.21	69	4.1	<0.5	3.3	10	1.8
	6/10/2013	47.36	24.25	N	23.11	340	37	<0.5	5.9	15.1	62
	9/16/2013	**47.36**	**22.54**	**N**	**24.82**	**97**	**14**	**<0.5**	**<0.5**	**<0.5**	**65**
EX-2	12/2/2009	45.96	17.56	-	28.4	7,100 [y]	9.3	3.2	440	770	<3.1
	3/16/2010	45.96	19.65	-	26.31	13,000	600	360	770	2,250	15
	6/3/2010	45.96	17.10	-	28.86	16,000	590	400	700	2,500	9.5
	9/1/2010	45.96	16.99	-	28.97	6,100	230	74	200	890	11
	12/2/2010	45.96	20.87	-	25.09	14,000	510	270	640	2,170	15
	3/3/2011	45.96	14.61	N	31.35	8,600	340	52	460	1,350	13
	5/19/2011	45.96	15.08	N	30.88	7,500	260	65	390	1,080	11
	9/8/2011	45.96	16.34	N	29.62	3,400	190	28	160	451	5.4
	12/1/2011	45.96	22.60	N	23.36	9,900 [x]	630	200	690	1,760	<3.3

Table 1

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Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
EX-2 cont.	3/2/2012	45.96	16.48	N	29.48	5,000	220	25	200	600	7.1
	6/6/2012	45.96	18.90	N	27.06	6,900	290	97	310	790	5.2
	9/20/2012	45.96	17.49	N	28.47	1,800	170	14	62	204	5.0
	12/13/2012	45.96	15.96	N	30	7,300	490	180	610	1,290	5.2
	3/27/2013	45.96	16.59	N	29.37	2,200	130	9.6	100	288	4.3
	6/10/2013	45.96	23.11	N	22.85	2,600	190	20	100	248	6.8
	9/20/2013	**45.96**	**23.11**	**N**	**22.85**	**3,900**	**210**	**37**	**170**	**450**	**6.3**
MPE Wells											
MPE-1	12/1/2009	51.96	21.41	-	30.55	NA	NA	NA	NA	NA	NA
	3/16/2010	51.96	20.22	-	31.74	NA	NA	NA	NA	NA	NA
	6/3/2010	51.96	21.18	-	30.78	NA	NA	NA	NA	NA	NA
	9/1/2010	51.96	21.25	-	30.71	NA	NA	NA	NA	NA	NA
	12/2/2010	51.96	21.64	-	30.32	NA	NA	NA	NA	NA	NA
	3/3/2011	51.96	19.33	-	32.63	NA	NA	NA	NA	NA	NA
	5/19/2011	51.96	20.6	-	31.36	NA	NA	NA	NA	NA	NA
Pre-MPE	8/4/2011	51.96	NM	-	NC	49,000	210	100	840	7,070	45
	9/8/2011	51.96	20.83	-	31.13	NA	NA	NA	NA	NA	NA
Post-MPE	9/26/2011	51.96	20.94	Y	31.02	62,000	6,300	3,700	1,800	9,400	1,200
	12/2/2011	51.96	20.14	Y	31.82	56,000	9,000	7,700	2,200	10,800	2,600
	3/2/2012	51.96	20.73	Y	31.23	97,000	11,000	11,000	2,600	12,600	2,700
	6/6/2012	51.96	20.96	Y	31.00	78,000	4,500	4,900	2,300	10,700	750
	9/20/2012	51.96	21.58	Y	30.38	89,000	8,600	9,200	3,400	14,800	1,900
	12/14/2012	51.96	20.57	Y	31.39	98,000	7,400	9,600	2,900	13,300	1,300
	3/27/2013	51.96	20.91	Y	31.05	61,000	6,600	4,500	2,200	9,400	1,500
	6/10/2013	51.96	21.47	Y	30.49	42,000	1,900	980	630	4,400	670
	9/17/2013	**51.96**	**21.98**	**Y**	**29.98**	**45,000**	**2,400**	**1,400**	**1,200**	**8,000**	**150**
MPE-2	12/1/2009	53.72	22.87	-	30.85	NA	NA	NA	NA	NA	NA
	3/16/2010	53.72	21.7	-	32.02	NA	NA	NA	NA	NA	NA
	6/3/2010	53.72	22.35	-	31.37	NA	NA	NA	NA	NA	NA
	9/1/2010	53.72	23.7	-	30.02	NA	NA	NA	NA	NA	NA
	12/2/2010	53.72	22.7	-	31.02	NA	NA	NA	NA	NA	NA

Table 1

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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MPE-2 cont.	3/3/2011	53.72	21.25	-	32.47	NA	NA	NA	NA	NA	NA
	5/19/2011	53.72	22.19	-	31.53	NA	NA	NA	NA	NA	NA
Pre-MPE	8/4/2011	53.72	NM	-	NC	46,000	2,100	80	1,900	5,300	75
	9/8/2011	53.72	22.31	-	31.41	NA	NA	NA	NA	NA	NA
Post-MPE	9/26/2011	53.72	22.38	N	31.34	37,000	1,800	33	1,700	2,760	<17
	12/2/2011	53.72	21.44	N	32.28	26,000	1,600	43	1,800	3,370	<17
	3/2/2012	53.72	22.24	N	31.48	36,000	1,100	19	1,700	2,970	<17
	6/7/2012	53.72	22.35	N	31.37	33,000	1,800	27	1,600	2,700	29
	9/21/2012	53.72	23.03	N	30.69	31,000	1,700	13	1,900	2,747	14
	12/14/2012	53.72	22.17	N	31.55	31,000	1,700	20	1,800	2,490	16
	3/28/2013	53.72	22.53	N	31.19	20,000	2,200	<20	1,300	960	<20
	6/11/2013	53.72	22.9	N	30.82	26,000	920	<13	1,500	1,352	<13
	9/17/2013	**53.72**	**23.29**	**N**	**30.43**	**23,000**	**680**	**15**	**1,400**	**1,059**	**<13**
2nd WBZ											
MW-1D	1/3/2008	54.42		-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	54.42	22.85	-	31.57	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	4/16/2008	54.42	23.10	-	31.32	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/3/2008	54.42	23.44	-	30.98	75.9	<0.5	<2.0	0.54	<2.0	<0.5
	10/15/2008	54.42	23.82	-	30.60	120	1.6	<0.5	2.8	3.6	<0.5
	1/8/2009	54.42	23.44	-	30.98	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	54.42	23.06	-	31.36	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	54.42	23.73	-	30.69	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	54.42	23.59	-	30.83	330 [Y]	<0.5	<0.5	1.3	2.2	<0.5
	3/16/2010	54.42	22.60	-	31.82	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	54.42	23.10	-	31.32	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	54.42	23.51	-	30.91	<50	<0.5	<0.5	0.52	1.8	<0.5
	12/3/2010	54.42	23.41	-	31.01	61	<0.5	<0.5	1.0	3.73	<0.5
	3/3/2011	54.42	22.27	N	32.15	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	54.42	22.89	N	31.53	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	54.42	23.08	N	31.34	220	<0.5	<0.5	0.6	1.4	<0.5
	12/1/2011	54.42	22.26	N	32.16	<22	<0.33	<0.19	<0.15	<0.20	<0.38

Table 1

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Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-1D cont.	3/2/2012	54.42	23.01	N	31.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	54.42	23.18	N	31.24	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	54.42	23.76	N	30.66	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	54.42	23.04	N	31.38	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	54.42	23.34	N	31.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	54.42	23.69	N	30.73	110	<0.5	<0.5	0.55	<0.5	<0.5
	9/16/2013	**54.42**	**24.02**	**N**	**30.40**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-3D	1/3/2008	54.10		-	-	<50	<0.50	<2.0	<0.50	<2.0	87.6
	1/22/2008	54.10	22.31	-	31.79	<50	<0.50	<2.0	<0.50	<2.0	88.3
	4/16/2008	54.10	22.64	-	31.46	<50	<0.5	<2.0	<0.5	<2.0	71.1
	7/3/2008	54.10	23.17	-	30.93	<50	<0.5	<2.0	<0.5	<2.0	67.4
	10/16/2008	54.10	23.62	-	30.48	<50	<0.5	<0.5	<0.5	<0.5	37
	1/8/2009	54.10	23.07	-	31.03	<50	<0.5	<0.5	<0.5	<0.5	29
	4/14/2009	54.10	22.36	-	31.74	<50	<0.5	<0.5	<0.5	<0.5	44
	8/26/2009	54.10	23.41	-	30.69	<50	<0.5	<0.5	<0.5	<0.5	20
	12/1/2009	54.10	23.27	-	30.83	110 Y	<0.5	<0.5	<0.5	0.52	24
	3/16/2010	54.10	22.10	-	32.00	<50	<0.5	<0.5	<0.5	<0.5	7.1
	6/4/2010	54.10	22.70	-	31.40	<50	<0.5	<0.5	<0.5	<0.5	17
	9/1/2010	54.10	23.09	-	31.01	78	<0.5	<0.5	1.1	4.71	24
	12/3/2010	54.10	22.90	-	31.20	<50	<0.5	<0.5	0.56	1.4	13
	3/3/2011	54.10	21.66	N	32.44	<50	1.3	<0.5	<0.5	0.59	14
	5/19/2011	54.10	22.61	N	31.49	<50	<0.5	<0.5	<0.5	<0.5	5.2
	9/8/2011	54.10	22.68	N	31.42	69	<0.5	<0.5	<0.5	0.62	4.8
	12/1/2011	54.10	22.86	N	31.24	<22	<0.33	<0.19	<0.15	<0.20	10
	3/2/2012	54.10	22.60	N	31.50	<50	<0.5	<0.5	<0.5	<0.5	4.2
	6/6/2012	54.10	22.77	N	31.33	<50	<0.5	<0.5	<0.5	<0.5	4.8
	9/20/2012	54.10	23.42	N	30.68	<50	<0.5	<0.5	<0.5	<0.5	5.1
	12/13/2012	54.10	22.57	N	31.53	<50	<0.5	<0.5	<0.5	<0.5	4.4
	3/27/2013	54.10	22.87	N	31.23	<50	<0.5	<0.5	<0.5	<0.5	4.4
	6/10/2013	54.10	23.27	N	30.83	<50	<0.5	<0.5	<0.5	<0.5	3.5
	9/16/2013	**54.10**	**23.65**	**N**	**30.45**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**2.1**

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Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-4D	1/4/2008	53.12		**-**	**-**	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	53.12	21.11	-	32.01	91.5	18.7	<2.0	7.08	11.42	219
	4/15/2008	53.12	21.67	-	31.45	<50	<0.5	<2.0	<0.5	<2.0	27
	7/3/2008	53.12	22.39	-	30.73	<50	<0.5	<2.0	<0.5	<2.0	6.27
	10/16/2008	53.12	22.98	-	30.14	<50	<0.5	<0.5	<0.5	<0.5	1.9
	1/8/2009	53.12	22.25	-	30.87	<50	<0.5	<0.5	<0.5	<0.5	2
	4/14/2009	53.12	21.34	-	31.78	<50	<0.5	<0.5	<0.5	<0.5	2.2
	8/27/2009	53.12	22.79	-	30.33	<50	<0.5	<0.5	<0.5	<0.5	2.2
	12/1/2009	53.12	22.49	-	30.63	120 [Y]	<0.5	<0.5	1.4	2.3	2.3
	3/16/2010	53.12	21.02	-	32.10	<50	<0.5	<0.5	<0.5	<0.5	0.65
	6/4/2010	53.12	21.93	-	31.19	<50	<0.5	<0.5	<0.5	<0.5	1.1
	9/1/2010	53.12	23.32	-	29.80	<50	<0.5	<0.5	0.85	3.76	2.2
	12/3/2010	53.12	22.46	-	30.66	<50	<0.5	<0.5	<0.5	0.67	<0.5
	3/3/2011	53.12	20.45	N	32.67	<50	<0.5	<0.5	<0.5	<0.5	0.58
	5/19/2011	53.12	21.57	N	31.55	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	53.12	21.92	N	31.20	59	<0.5	<0.5	<0.5	0.51	1.7
	12/1/2011	53.12	21.19	N	31.93	<22	<0.33	<0.19	<0.15	<0.20	4.2
	3/2/2012	53.12	21.8	N	31.32	<50	<0.5	<0.5	0.85	1.2	2.7
	6/6/2012	53.12	22.00	N	31.12	<50	<0.5	<0.5	<0.5	<0.5	1.3
	9/20/2012	53.12	22.67	N	30.45	<50	<0.5	<0.5	<0.5	<0.5	1.6
	12/13/2012	53.12	21.55	N	31.57	<50	<0.5	<0.5	<0.5	<0.5	0.94
	3/27/2013	53.12	21.98	N	31.14	<50	<0.5	<0.5	<0.5	<0.5	2.1
	6/10/2013	53.12	22.55	N	30.57	<50	<0.5	<0.5	<0.5	<0.5	1.7
	9/16/2013	**53.12**	**23.05**	**N**	**30.07**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**4.6**
1573 153 RD	7/2/2008	NS	NM	-	NC	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/16/2008	NS	NM	-	NC	<50	<0.5	<0.5	<0.5	<0.5	<0.5

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Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
Equipment Blanks											
EB-PMP	1/21/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PRB	1/21/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PMP2	1/22/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PRB2	1/22/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
ESL (ug/L)	-	-	-	-	-	**100**	**1**	**40**	**30**	**20**	**5**

Notes:

The first time SOMA monitored this Site was in May 2002.

*: Due to minimal recharge rates in well MW-2, the groundwater elevation recorded on these dates did not match the overall site conditions, May 2002 & August 2003.

NC: Not Calculated

[1] : Top of casing elevations were surveyed to a datum of 67.07 M.S.L by Kier & Wright Civil Engineers & Land Surveyors on May 7, 2002. On October 11, 2004, the site was re-surveyed by Harrington Surveys, Inc. of Walnut Creek, CA to a datum of California Coordinate System, Zone 3, NAD 83.

[2] MtBE analyzed by EPA Method 8021B, and confirmed by EPA Method 8260B.

<: Not detected above the laboratory reporting limit.

Y: Sample exhibits chromatographic pattern which does not resemble standard

[C] Presence confirmed, but confirmation concentration differed by more than a factor of two.

C: Presence confirmed, but RPD between columns exceeds 40%.

H: Heavier hydrocarbons contributed to the quantitation.

x: Does not match pattern of reference Gasoline Standard. Hydrocarbons in the range of C5-C12 quantified as gasoline (possibly aged gasoline)

NA: Not Analyzed. Well MW-8 was inaccessible during the First Quarter 2005, car was parked over well.

Not Analyzed. Well MW-7 was inaccessible during the First Quarter 2006, car was parked over well.

NM: Not Measured. Well MW-8 was inaccessible during the First Quarter 2005, car was parked over well.

Not Measured. Well MW-7 was inaccessible during the First Quarter 2006, car was parked over well.

The first time SOMA monitored wells MW-6 to MW-9 was in September 2004.

EB-PMP/EB-PRB: Equipment Blanks for Pump and Probe

ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008);

Table F-1a,Groundwater Screening Levels (groundwater is a current or potential drinking water resource)

MW-8 and MW-9 were decommissioned November 13, 2009

FP: Groundwater not sampled due to presence of free-product in MW-6

Groundwater elevation corrected upon presence of FP as follows:

Corrected depth to groundwater is equal to (measured depth)- 0.68(free product thickness)

The correction factor is derived by the following: specific gravity of gas at 20^0C is 0.68, then specific gravity is multiplied by the thickness of free product

Table 2
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
1st WBZ							
MW-1	8/8/2002	78	<1.3	<1.3	<1.3	NA	NA
	11/1/2002	42	< 1.0	< 1.0	< 1.0	NA	NA
	2/21/2003	47	<0.5	<0.5	<0.5	NA	NA
	5/28/2003	25	<0.5	<0.5	<0.5	NA	NA
	8/12/2003	<10	<0.5	<0.5	<0.5	NA	NA
	10/9/2003	70	<1.0	<1.0	<1.0	NA	NA
	1/15/2004	55	<0.5	<0.5	<0.5	NA	NA
	5/25/2004	62	<0.7	<0.7	<0.7	NA	NA
	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<21.5	<4.3	<4.3	<17.2	NA	NA
	3/11/2005	81	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	68.9	<2.15	<2.15	<8.6	NA	NA
	11/11/2005	46	<2.15	<2.15	<8.6	NA	NA
	2/9/2006	11.3	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	0.51	<0.5
	8/10/2006	<43	<2.15	<2.15	<8.60	3.37	<2.15
	10/26/2006	39.4	<1.0	<1.0	<4.0	2.92	<1.0
	1/25/2007	41.4	<0.5	<0.5	<2.0	1.36	<0.5
	4/26/2007	39.6	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	46.5	<1.0	<1.0	<4.0	<1.0	<1.0
	10/23/2007	53.7	<0.5	<0.5	<2.0	<0.5	<0.5
	1/22/2008	23.8	<0.5	<0.5	2.16	<0.5	<0.5
	4/16/2008	8.36	<0.5	<0.5	<2.0	164	<0.5
	7/3/2008	30.5	<0.5	<0.5	<2.0	1.08	<0.5
	10/15/2008	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	1/7/2009	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	4/14/2009	15	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	12/2/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	3/17/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	26	<0.5	<0.5	<0.5	<0.5	<0.5
	9/2/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	12/2/2010	<63	<3.1	<3.1	<3.1	<3.1	<3.1
	3/4/2011	40	<0.5	<0.5	<0.5	<0.5	<0.5
	5/20/2011	<71	<3.6	<3.6	<3.6	<3.6	<3.6
	9/9/2011	33	<1.3	<1.3	<1.3	<1.3	<1.3
	12/2/2011	49	<3.2	<3.5	<2.8	<2.4	<1.7
	3/2/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	6/7/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	9/21/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	12/14/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	3/28/2013	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	6/11/2013	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	9/17/2013	**<50**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**
MW-2	8/8/2002	21	<0.5	<0.5	<0.5	NA	NA
	11/1/2002	15	<0.5	<0.5	<0.5	NA	NA
	2/21/2003	12	<0.5	<0.5	<0.5	NA	NA
	5/28/2003	31	<0.5	<0.5	<0.5	NA	NA
	8/12/2003	69	<0.8	<0.8	<0.8	NA	NA
	10/9/2003	12	<0.5	<0.5	<0.5	NA	NA
	1/15/2004	<10	<0.5	<0.5	<0.5	NA	NA
	5/25/2004	14	<0.5	<0.5	<0.5	NA	NA
	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA

Table 2
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-2 cont.	3/11/2005	<2.5	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	2.44	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/17/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/2/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/2/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/4/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/20/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/9/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/2/2011	<13	<3.2	<3.5	<2.8	<2.4	<1.7
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/7/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/21/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/28/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/11/2013	150	<0.5	1.6	<0.5	<0.5	<0.5
	9/16/2013	**<10**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-3	8/8/2002	<330	<8.3	<8.3	330	NA	NA
	11/1/2002	85	< 1.3	<1.3	220	NA	NA
	2/21/2003	140	<5.0	<5.0	320	NA	NA
	5/28/2003	520	<10	<10	530	NA	NA
	8/12/2003	180	<4.2	<4.2	270	NA	NA
	10/9/2003	<170	<8.3	<8.3	200	NA	NA
	1/15/2004	<100	<5.0	<5.0	150	NA	NA
	5/25/2004	<100	<5.0	<5.0	270	NA	NA
	9/21/2004	<140	<7.1	<7.1	110	NA	NA
	12/14/2004	<100	<20	<20	154	NA	NA
	3/11/2005	<215	<43	<43	256	NA	NA
	6/15/2005	<215	<10.8	<10.8	374	NA	NA
	8/26/2005	699	<21.5	<21.5	277	NA	NA
	11/11/2005	<430	<21.5	<21.5	171	NA	NA
	2/9/2006	<430	<21.5	<21.5	620	NA	NA
	5/9/2006	367	<10.8	<10.8	594	<10.8	<10.8
	8/10/2006	365	<10.8	<10.8	727	<10.8	<10.8
	10/26/2006	591	<10.8	<10.8	899	<10.8	<10.8
	1/25/2007	711	<10.8	<10.8	768	<10.8	<10.8
	4/26/2007	690	<10.8	<10.8	369	<10.8	<10.8
	7/25/2007	1,340	<10.8	<10.8	565	<10.8	<10.8
	10/23/2007	1,050	<21.5	<21.5	301	<21.5	<21.5
	1/22/2008	373	<10.8	<10.8	170	<0.5	<0.5
	4/16/2008	881	<5.50	<5.50	<22.0	1,850	12.1
	7/3/2008	426	<10.8	<10.8	124	<10.8	<10.8
	10/16/2008	<400	<20	<20	<20	<20	<20
	1/8/2009	<500	<25	<25	<25	<25	<25
	4/13/2009	<500	<25	<25	<25	<25	<25
	8/27/2009	<500	<25	<25	<25	<25	<25
	12/2/2009	270	<13	<13	<13	<13	<13

Table 2
Historical Gasoline Oxygenates Results
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Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-3 cont.	3/17/2010	<250	<13	<13	<13	<13	<13
	6/3/2010	<250	<13	<13	<13	<13	<13
	9/2/2010	<250	<13	<13	<13	<13	<13
	12/2/2010	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	3/4/2011	<170	<8.3	<8.3	<8.3	<8.3	<8.3
	5/20/2011	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	9/9/2011	<140	<7.1	<7.1	<7.1	<7.1	<7.1
	12/2/2011	<6.6	<1.6	<1.7	<1.4	<1.2	<0.86
	3/2/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	6/7/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	12/14/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	3/28/2013	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	6/11/2013	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	9/17/2013	**<200**	**<10**	**<10**	**<10**	**<10**	**<10**
MW-4	8/8/2002	1500	<17	<17	18	NA	NA
	11/1/2002	580	< 5.0	6	13	NA	NA
	2/21/2003	1600	<20	22	<20	NA	NA
	5/28/2003	690	<8.3	<8.3	17	NA	NA
	8/12/2003	550	<7.1	7.3	18	NA	NA
	10/9/2003	1400	<31	50	<31	NA	NA
	1/15/2004	1,300	<20	25	21	NA	NA
	5/25/2004	560	<8.3	<8.3	24	NA	NA
	9/21/2004	1,300	<50	<50	<50	NA	NA
	12/14/2004	826	<10.75	21	49	NA	NA
	3/11/2005	1,110	<10.8	12.1	<43	NA	NA
	6/15/2005	<110	<5.5	<5.5	22.9	NA	NA
	8/26/2005	902	<5.50	<5.50	37.4	NA	NA
	11/11/2005	884	<10.8	<10.8	<43	NA	NA
	2/9/2006	769	<10.8	16.4	45.6	NA	NA
	5/9/2006	405	<2.15	2.95	31.3	<2.15	<2.15
	8/10/2006	306	<2.15	<2.15	35.3	<2.15	<2.15
	10/26/2006	3430	<10.8	13.8	<43	<10.8	<10.8
	1/25/2007	822	<2.15	2.4	28	2.25	<2.15
	4/26/2007	556	<2.15	2.28	29.2	<2.15	<2.15
	7/25/2007	1,860	<2.15	9.94	24	<2.15	<2.15
	10/23/2007	3,400	<2.15	18.4	25.9	<2.15	<2.15
	1/22/2008	2,580	<5.50	64.7	<22	<0.5	<0.5
	4/15/2008	1,100	<5.50	11.7	<22	39.9	<5.50
	7/2/2008	8,720	<5.50	75.2	<22	<5.50	<5.50
	10/16/2008	700	<3.6	4.2	37	5.4	<3.6
	1/8/2009	1,500	<3.6	9.9	41	3.6	<3.6
	4/13/2009	1,100	<8.3	<8.3	28	<8.3	<8.3
	8/27/2009	4,900	<5.0	24	<5.0	<5.0	<5.0
	12/2/2009	6,800	<5.0	69	<5.0	<5.0	<5.0
	3/17/2010	1,900	<3.6	18	<3.6	<3.6	<3.6
	6/3/2010	930	<3.6	7.7	<3.6	<3.6	<3.6
	9/2/2010	7,200	<3.6	57	<3.6	<3.6	<3.6
	12/2/2010	3,800	<10	30	<10	<10	<10
	3/3/2011	410	<0.71	3.2	<0.71	<0.71	<0.71
	5/19/2011	130	<0.5	1.4	<0.5	<0.5	<0.5
	9/8/2011	380	<0.5	3.5	<0.5	1.1	<0.5
	12/1/2011	790	<1.6	5.4	8.2	<1.2	<0.86
	3/2/2012	920	<2.0	5.9	24	<2.0	<2.0
	6/7/2012	1,000	<2.5	13	<2.5	<2.5	<2.5
	9/21/2012	1,300	<2.5	14	<2.5	<2.5	<2.5
	12/14/2012	36	<0.5	0.65	<0.5	<0.5	<0.5
	3/28/2013	2,500	<5.0	29	<5.0	<5.0	<5.0
	6/11/2013	890	<5.0	12	<5.0	<5.0	<5.0
	9/17/2013	**1,100**	**<10**	**<10**	**<10**	**<10**	**<10**
MW-5	8/8/2002	<250	<6.3	<6.3	510	NA	NA
	11/1/2002	66	< 2.0	< 2.0	560	NA	NA

Table 2
Historical Gasoline Oxygenates Results
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Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-5 cont.	2/21/2003	<63	<3.1	<3.1	280	NA	NA
	5/28/2003	<33	<1.7	<1.7	110	NA	NA
	8/12/2003	130	<3.6	<3.6	270	NA	NA
	10/9/2003	<100	<5.0	<5.0	740	NA	NA
	1/15/2004	<63	<3.1	<3.1	300	NA	NA
	5/25/2004	<100	<5.0	<5.0	210	NA	NA
	9/21/2004	<130	<6.3	<6.3	550	NA	NA
	12/14/2004	40	<5.5	<5.5	444	NA	NA
	3/11/2005	88.8	<5.5	<5.5	448	NA	NA
	6/15/2005	<43	<2.15	<2.15	88.1	NA	NA
	8/26/2005	274	<5.50	<5.50	195	NA	NA
	11/11/2005	192	<5.50	<5.50	360	NA	NA
	2/9/2006	218	<5.50	<5.50	523	NA	NA
	5/9/2006	91.8	<2.15	<2.15	163	<2.15	<2.15
	8/10/2006	138	<5.50	<5.50	342	<5.50	<5.50
	10/26/2006	322	<5.50	<5.50	712	<5.50	<5.50
	1/25/2007	878	<5.50	<5.50	552	<5.50	<5.50
	4/26/2007	708	<2.15	<2.15	310	<2.15	<2.15
	7/25/2007	1,020	<2.15	<2.15	356	<2.15	<2.15
	10/23/2007	1,510	<2.15	<2.15	181	<2.15	<2.15
	1/22/2008	470	<0.5	4.56	62.1	<0.5	<0.5
	4/15/2008	566	<1.0	<1.0	29.6	231	5.66
	7/3/2008	2,320	<2.15	<2.15	53.3	<2.15	<2.15
	10/16/2008	990	<5.0	<5.0	82	<5.0	<5.0
	1/8/2009	360	<6.3	<6.3	51	<6.3	<6.3
	4/13/2009	280	<3.1	<3.1	<3.1	<3.1	<3.1
	8/27/2009	1,300	<5.0	<5.0	<5.0	<5.0	<5.0
	12/2/2009	320	<5.0	<5.0	25	<5.0	<5.0
	3/17/2010	570	<1.0	<1.0	<1.0	<1.0	<1.0
	6/4/2010	340	<1.0	<1.0	<1.0	<1.0	<1.0
	9/2/2010	320	<2.5	<2.5	13	<2.5	<2.5
	12/2/2010	200	<3.1	<3.1	<3.1	<3.1	<3.1
	3/4/2011	180	<0.5	<0.5	<0.5	<0.5	<0.5
	5/20/2011	480	<1.0	<1.0	<1.0	<1.0	<1.0
Pre- MPE	8/4/2011	110	<0.71	<0.71	2.6	<0.71	<0.71
	9/9/2011	260	<1.0	<1.0	11	<1.0	<1.0
	12/2/2011	95	<3.2	<3.5	14	<2.4	<1.7
	3/2/2012	59	<1.0	<1.0	4.1	<1.0	<1.0
	6/7/2012	22	<1.0	<1.0	2.8	<1.0	<1.0
	9/21/2012	66	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2012	<20	<1.0	<1.0	4.2	<1.0	<1.0
	3/28/2013	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	6/11/2013	<20	<1.0	<1.0	2.5	<1.0	<1.0
	9/17/2013	**20**	**<1.0**	**<1.0**	**5.7**	**<1.0**	**<1.0**
MW-6	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<5.5	<5.5	<5.5	<22	NA	NA
	3/11/2005	2.54	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<20	<1.0	<1.0	<4.0	NA	NA
	8/26/2005	<43	<2.15	<2.15	<8.6	NA	NA
	11/11/2005	<43	<2.15	<2.15	<8.6	NA	NA
	2/9/2006	<43	<2.15	<2.15	<8.6	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	7.21	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	5.66	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	6.68	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	13.9	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	6.78	1.49
	7/2/2008	4.54	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<63	<3.1	<3.1	<3.1	<3.1	<3.1
	4/13/2009	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	8/26/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	12/1/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0

Table 2
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-6 cont.	3/16/2010	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	6/3/2010	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	9/1/2010	<200	<10	<10	<10	<10	<10
	12/2/2010	<330	<17	<17	<17	<17	<17
	3/3/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	5/20/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	9/8/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	12/1/2011	NA	NA	NA	NA	NA	NA
	3/2/2012	<83	<4.2	<4.2	<4.2	<4.2	<4.2
	6/6/2012	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	9/20/2012	NA	NA	NA	NA	NA	NA
	12/13/2012	29	<0.71	<0.71	<0.71	<0.71	<0.71
	3/27/2013	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	6/10/2013	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	9/16/2013	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
MW-7	9/21/2004	<10	<0.5	<0.5	1.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	<12.5	<2.5	<2.5	<10	NA	NA
	6/15/2005	<10	<0.5	<0.5	2.23	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	NA	NA	NA	NA	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	6.49	<0.5	<0.5	2.58	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	6.01	<0.5	<0.5
	4/15/2008	8.8	<0.5	<0.5	<2.0	<0.5	1.26
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	14	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	11	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	16	<0.5	<0.5
	8/26/2009	<33	<0.5	<0.5	33	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	30	<0.5	<0.5
	3/16/2010	11	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	20	<0.5	<0.5	7.1	<0.5	<0.5
	9/1/2010	47	<0.5	<0.5	7.2	<0.5	<0.5
	12/2/2010	22	<0.5	<0.5	4.9	<0.5	<0.5
	3/4/2011	14	<0.5	<0.5	4.0	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	2.1	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	1.6	<0.5	<0.5
	12/1/2011	15	<0.36	<0.40	2.4	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	0.82	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/16/2013	**<10**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-8	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	NA	NA	NA	NA	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5

Table 2
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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-8 cont.	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	Well Decommissioned 11/13/2009						
MW-9	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	<2.5	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	2.8	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	1.83	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	3.07	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	2.92	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	<2.0	1.18	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	2.07	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	1.5	<0.5
	1/7/2009	<10	<0.5	<0.5	<0.5	1.4	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	0.97	<0.5
	8/26/2009	<10	<0.5	<0.5	<0.5	2.6	<0.5
	Well Decommissioned 11/13/2009						
EX-1	12/2/2009	150	<1.3	<1.3	<1.3	<1.3	<1.3
	3/16/2010	980	<1.3	2.4	27	<1.3	<1.3
	6/3/2010	570	<1.3	1.9	<1.3	<1.3	<1.3
	9/1/2010	470	<0.5	1.4	2	<0.5	<0.5
	12/2/2010	1,300	<2.0	3.6	15	<2.0	<2.0
	3/3/2011	690	<0.71	2.5	12	<0.71	<0.71
	5/19/2011	370	<0.71	1.9	13	<0.71	<0.71
	9/8/2011	32	<0.5	<0.5	0.53	<0.5	<0.5
	12/1/2011	1,200	<1.6	8.3	6.8	<1.2	<0.86
	3/2/2012	31	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	390	<0.5	2.9	4.8	0.57	<0.5
	9/20/2012	170	<0.5	1.5	<0.5	<0.5	<0.5
	12/13/2012	210	<0.5	2.7	5.2	<0.5	<0.5
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	280	<0.5	4.0	1.6	<0.5	<0.5
	9/16/2013	**450**	**<0.5**	**2.4**	**1.9**	**<0.5**	**<0.5**
EX-2	12/2/2009	<63	<3.1	<3.1	<3.1	<3.1	<3.1
	3/16/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	6/3/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	9/1/2010	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	12/2/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	3/3/2011	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	5/19/2011	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	9/8/2011	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	12/1/2011	74	<3.2	<3.5	<2.8	<2.4	<1.7

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EX-2 cont.	3/2/2012	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	6/6/2012	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	9/20/2012	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	12/13/2012	<71	<3.6	<3.6	<3.6	<3.6	<3.6
	3/27/2013	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	6/10/2013	32	<1.0	<1.0	<1.0	<1.0	<1.0
	9/20/2013	**<20**	**<1.0**	**<1.0**	**<1.0**	**1.4**	**<1.0**
MPE Wells							
MPE-1	8/4/2011	<500	<25	<25	<25	<25	<25
	9/26/2011	<500	<25	<25	600	<25	<25
	12/2/2011	830	<32	<35	750	<24	<17
	3/2/2012	<710	<36	<36	1,200	<36	<36
	6/6/2012	<630	<31	<31	430	<31	<31
	9/20/2012	<1,300	<63	<63	1,200	<63	<63
	12/14/2012	<1,300	<63	<63	940	<63	<63
	3/27/2013	<710	<36	<36	890	<36	<36
	6/10/2013	660	<13	<13	380	<13	<13
	9/17/2013	**1,400**	**<13**	**<13**	**<13**	**<13**	**<13**
MPE-2	8/4/2011	<330	<17	<17	<17	<17	<17
	9/26/2011	<330	<17	<17	<17	<17	<17
	12/2/2011	<66	<16	<17	<14	<12	<8.6
	3/2/2012	<330	<17	<17	<17	<17	<17
	6/7/2012	<250	<13	<13	<13	<13	<13
	9/21/2012	<250	<13	<13	<13	<13	<13
	12/14/2012	<250	<13	<13	<13	<13	<13
	3/28/2013	<400	<20	<20	<20	<20	<20
	6/11/2013	<250	<13	<13	<13	<13	<13
	9/17/2013	**<250**	**<13**	**<13**	**<13**	**<13**	**<13**
2nd WBZ							
MW-1D	1/3/2008	111	<0.5	<0.5	<2.0	NA	NA
	1/22/2008	12.9	<0.5	<0.5	<2.0	<0.5	<0.5
	4/16/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/16/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2011	<1.5	<0.36	<0.40	<0.32	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/16/2013	**<10**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-3D	1/3/2008	37.3	<0.5	3.12	15.3	NA	NA
	1/22/2008	15.6	<0.5	3.1	15.3	<0.5	<0.5
	4/16/2008	17.7	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	<2.0	<0.5	<0.5	7.45	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	4.7	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	3.4	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	5	<0.5	<0.5
	8/26/2009	<10	<0.5	<0.5	1.6	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	2.2	<0.5	<0.5

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MW-3D cont.	3/16/2010	<10	<0.5	<0.5	0.65	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	1.8	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	0.93	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	1.0	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2011	<1.5	<0.36	<0.40	0.52	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/16/2013	**<10**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-4D	1/4/2008	25	<0.5	<0.5	<2.0	NA	NA
	1/22/2008	124	<0.5	4.9	3.32	<0.5	<0.5
	4/15/2008	25.7	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	3.38	<0.5	<0.5	<2.0	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/16/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2011	<1.5	<0.36	<0.40	<0.32	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/16/2013	**<10**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
1573 153 RD	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
EB-PMP	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PMP2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
ESL		**12**	**NE**	**NE**	**NE**	**0.5**	**0.05**

Notes:
August 8, 2002 was the first time that samples were analyzed for Gasoline Oxygenates
<: Not detected above the laboratory reporting limit.
NA: Not Analyzed. Well MW-8 was inaccessible during the 1Q05 & well MW-7 (1Q06) car was parked over each well.
NE: Not Established
TBA: tert-Butyl Alcohol
DIPE: Isopropyl Ether
ETBE: Ethyl tert-Butyl Ether
TAME: Methyl tert-Amyl Ether
ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008); Table F-1a,Groundwater Screening Levels (groundwater is a current or potential drinking water resource)
MW-8 and MW-9 were decommissioned November 13, 2009
FP: Groundwater not sampled due to presence of free-product in MW-6

Table 3
Effluent Chemical Analytical Results and Operational History of Remediation System
15101 Freedom Ave, San Leandro, CA

Date	Volume (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH
2009											
8-Oct-2009	15,351	<50	120 Y	NA	NA	NA	NA	NA	NA	NA	NA
19-Nov-2009	8,287	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.7
9-Dec-2009	0	Installation of GWETS									
16-Dec-2009	20,000	<50	<50	<300	<0.5	0.65 C	<0.5	0.84 C	<10	<5	7.4
2010											
18-Jan-2010	215,453	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.4
15-Feb-2010	297,560	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	11	<5	6.7
15-Mar-2010	475,245	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5.0	6.5
19-Apr-2010	621,180	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	8	6.6
17-May-2010	705,770	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	8	6.7
16-Jun-2010	825,200	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	17	9	6.8
19-Jul-2010	910,652	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	8	6.6
16-Aug-2010	939,935	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.6
28-Sep-2010	970,450	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	10	6.8
26-Oct-2010	1,013,700	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.2
15-Nov-2010	1,052,591	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.5
7-Dec-2010	1,100,492	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.6
2011											
11-Jan-2011	1,179,075	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	12	6	6.6
10-Feb-2011	1,249,569	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.6
14-Mar-2011	1,336,784	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.5
11-Apr-2011	1,364,272	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.5
10-May-2011	1,466,472	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	12	7	6.6
7-Jun-2011	1,532,263	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	6	6.6

Table 3
Effluent Chemical Analytical Results and Operational History of Remediation System
15101 Freedom Ave, San Leandro, CA

Date	Volume (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH
28-Jul-2011	1,573,295	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	5	6.3
25-Aug-2011	1,613,935	77	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.1
23-Sep-2011	1,631,273	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.7
27-Oct-2011	1,642,277	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	7	7.1
18-Nov-2011	1,676,170	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.8
1-Dec-2011	1,694,889	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.97
2012											
19-Jan-2012	1,715,163	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	7.02
23-Feb-2012	1,794,185	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	<5	6.98
20-Mar-2012	1,803,832	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	<10	7	7.02
17-Apr-2012	1,876,439	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.95
29-May-2012	1,900,111	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.89
11-Jun-2012	1,914,130	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	7.1
12-Jul-2012	1,943,456	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	7.3
17-Aug-2012	1,955,438	<50	<52	<310	<0.5	<0.5	<0.5	<0.5	NA	NA	7.04
17-Sep-2012	1,979,852	<50	<54	<330	<0.5	<0.5	<0.5	<0.5	NA	NA	7.02
23-Oct-2012	1,989,022	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.95
12-Nov-2012	1,995,170	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.90
4-Dec-2012	2,024,040	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.86
2013											
7-Jan-2013	2,099,002	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	7.01
14-Feb-2013	2,186,595	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	7.08
14-Mar-2013	2,193,121	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.98
12-Apr-2013	2,198,793	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.83
10-Jun-2013	2,273,686	<50	<58	<350	<0.5	<0.5	<0.5	<0.5	NA	NA	6.91
5-Jul-2013	2,282,444	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.87
15-Aug-2013	2,403,250	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.64
24-Sep-2013	**2,449,583**	**<50**	**<50**	**<300**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**NA**	**NA**	**6.59**

Table 3
Effluent Chemical Analytical Results
and Operational History of Remediation System
15101 Freedom Ave, San Leandro, CA

Date	Volume (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH

Note:
NA: Not Available/Not Applicable
< : Less than Laboratory-reporting limit
In October and November 2009 discharge occurred only during MPE events
GWETS and totalizer installed in December 2009.
Week # 1 sampling conducted on Oct 8, 2009
C: Presence confirmed, but RPD between column exceeds 40%
Volume discharged during the October 2009 MPE event was 18,669 gallons
Volume discharged during the November 2009 MPE event was 10,507 gallons
Volume discharged during the December 2009 MPE event was 20,298 gallons
Volume discharged during the February 2010 MPE event was 6,339 gallons
Volume discharged during the March 2010 MPE event was 3,810 gallons
Volume discharged during the June 2010 MPE event was 15, 600 gallons
Volume discharged during the August 2010 MPE event was 1,421 gallons
Volume discharged during the October 2010 MPE event was 13,282 gallons
SOMA ceased COD and TSS testing based on a request from OLSD dated April 5, 2012

Table 4

Cumulative Masses of Petroleum Hydrocarbons Removed from the Groundwater Since Installation of the Treatment System

15101 Freedom Ave, San Leandro, CA

Date	Volume (gallons)	Influent Concentration (µg/L)					Mass removed (pounds)				
		TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes
2009											
9-Dec-2009	0	Installation of GWETS, began discharging treated groundwater to site sewer main									
2010											
18-Jan-2010	215,453	1,900	79	32.00	2.4	260	3.41	0.14	0.06	0.00	0.47
19-Apr-2010	621,180	2,100	75	28	56	332	10.50	0.40	0.15	0.19	1.59
19-Jul-2010	910,652	56 Y	<0.5	<0.5	<0.5	<0.5	10.64	0.40	0.15	0.19	1.59
26-Oct-2010	1,013,700	2,600	200	25	68	405	12.87	0.57	0.17	0.25	1.94
2011											
11-Jan-2011	1,179,075	1,700	80	19	50	295	15.21	0.68	0.20	0.32	2.34
11-Apr-2011	1,364,272	1,200	41	3.3	23	185	17.06	0.75	0.20	0.36	2.63
28-Jul-2011	1,573,295	540	21	2.8	5.4	49	18.00	0.78	0.21	0.37	2.71
27-Oct-2011	1,642,277	<50	1.50	<0.5	<0.5	2.9	18.00	0.78	0.21	0.37	2.71
2012											
19-Jan-2012	1,715,163	110 Y	<0.5	<0.5	<0.5	<0.5	18.07	0.78	0.21	0.37	2.71
17-Apr-2012	1,876,439	1,100	60	6.8	24	161	19.54	0.87	0.22	0.40	2.93
12-Jul-2012	1,943,456	320	30	1.6	15	34	19.72	0.88	0.22	0.41	2.95
23-Oct-2012	1,989,022	1,400 Y	130	12	42	153	20.25	0.93	0.22	0.42	3.01
2013											
7-Jan-2013	2,099,002	1,500	66	9.8	37	228	21.63	0.99	0.23	0.46	3.22
12-Apr-2013	2,198,793	1,600	110	3.8	64	131	22.96	1.08	0.24	0.51	3.32
5-Jul-2013	**2,282,444**	**680**	**71**	**1.8**	**22**	**33.9**	**23.43**	**1.13**	**0.24**	**0.52**	**3.35**

Notes:

< : Below laboratory-reporting limit

Y : sample exhibits chromatographic pattern which does not resmeble standard

Table 5

MPE Event
Operational Data : August 2013

15101 Freedom Ave.
San Leandro, California

DATE	TIME	PID (ppmv)	WELL MANIFOLD VACUUM (In of Hg)	OXIDIZER TEMPERATURE (^{0}F)	WELL FIELD FLOW VAPOR RATE (scfm)	TOTAL SYSTEM VAPOR FLOW RATE (scfm)	DILUTION AIR FLOW RATE (scfm)	SYSTEM (BLOWER) VACUUM (In of Hg)	SYSTEM TOTALIZER READING (gallons)	COMMENTS
8/1/2013	1730									begin extraction from MPE-1, MPE-2, and MW-5
	1800	1,039	14.8	1499	135	135	0	20.9	0	
	2000	950	10	1481	179	179	0	18.1		
	2100	988	10	1463	179	179	0	18.1		
8/2/2013	1000	964	13.7	1498	152	152	0	19.8	3,291	
	1100	937	13.5	1501	155	155	0	19.6		
	1200	915	13.2	1500	157	157	0	19.5		
	1300	902	13	1502	157	157	0	19.5		
	1400	896	12.8	1501	160	160	0	19.3		
	1500	887	12.7	1499	157	157	0	19.5		
	1600	880	12.7	1502	157	157	0	19.5		Shut down for the weekend
8/5/2013	1000	911	15.2	1499	122	122	0	21.7	10,155	
	1100	868	15.2	1498	119	119	0	21.9		
	1200	825	15.2	1501	117	117	0	22		
	1300	780	16.5	1500	119	119	0	21.9		
	1400	876	16.4	1503	120	120	0	21.8		
	1500	810	16.3	1498	119	119	0	21.9		
	1600	783	16.3	1499	119	119	0	21.9		
	1700	735	16.5	1502	119	119	0	21.9		
8/6/2013	900	685	17.2	1498	109	109	0	22.5	14,463	
	1000	651	17.2	1499	111	111	0	22.4		
	1100	1,863	19.3	1496	79	79	0	24.4		Extracting from MPE-2 and MW-5
	1200	1,110	19.4	1498	79	79	0	24.4		
	1300	933	19.4	1497	79	79	0	24.4		
	1400	906	19.5	1499	81	81	0	24.3		
	1500	876	19.5	1498	81	81	0	24.3		
	1600	893	19.6	1500	81	81	0	24.3		
	1700	927	19.6	1502	81	81	0	24.3	15,603	
8/7/2013	900	1,143	19.7	1502	79	79	0	24.4	17,472	Extracting from MPE-2
	1000	1,426	15.3	1498	120	120	0	21.8		Extracting from MPE-1
	1100	774	15.3	1500	120	120	0	21.8		
	1200	834	15.3	1503	120	120	0	21.8		
	1300	810	15.5	1501	120	120	0	21.8		
	1400	786	15.7	1499	120	120	0	21.8		
	1500	735	15.8	1502	122	122	0	21.7		
	1600	992	15.8	1498	122	122	0	21.7		
	1700	1,011	15.8	1500	122	122	0	21.7		
8/8/2013	800	1,193	15.8	1498	122	122	0	21.7	21,236	
	900	1,171	15.8	1501	122	122	0	21.7		
	1000	1,176	15.8	1499	122	122	0	21.7		

Table 5

MPE Event
Operational Data : August 2013

15101 Freedom Ave.
San Leandro, California

DATE	TIME	PID (ppmv)	WELL MANIFOLD VACUUM (In of Hg)	OXIDIZER TEMPERATURE (^{0}F)	WELL FIELD FLOW VAPOR RATE (scfm)	TOTAL SYSTEM VAPOR FLOW RATE (scfm)	DILUTION AIR FLOW RATE (scfm)	SYSTEM (BLOWER) VACUUM (In of Hg)	SYSTEM TOTALIZER READING (gallons)	COMMENTS
	1100	270	16.9	1504	128	128	0	21.3		Extracting from MW-5
	1200	1,069	15.3	1501	128	128	0	21.3		Extracting from MPE-1
	1300	1,124	15.3	1502	130	130	0	21.2		
	1400	1,107	15.2	1499	131	131	0	21.1		
	1500	1,116	15.2	1501	131	131	0	21.1		
	1600	1,103	15.2	1499	131	131	0	21.1		
8/9/2013	900	1,035	15.3	1500	131	131	0	21.1	23,989	
	1000	1,082	15.3	1499	131	131	0	21.1		
	1100	1,114	15.2	1503	131	131	0	21.1		
	1200	1,135	15.2	1498	133	133	0	21		
	1300	1,142	15.2	1502	133	133	0	21		
	1400	1,130	15.1	1500	133	133	0	21		
	1500	1,130	15.1	1498	133	133	0	21		Shut down for the weekend
8/12/2013	830									Extracting from MPE-2 and MW-5
	900	1,045	11.9	1494	165	165	0	19	31,771	
	1000	1,145	11.9	1500	165	165	0	19		
	1100	1,177	11.9	1500	165	165	0	19		
	1200	870	16.2	1502	119	119	0	21.9		Extracting from MPE-2
	1230	1,375	16.2	1501	117	117	0	22		Extracting from MW-5
	1240	1,277	12.1	1502	162	162	0	19.2		Extracting from MPE-2 and MW-5
	1300	1,241	12.1	1500	163	163	0	19.1		
	1400	1,217	12.1	1501	165	165	0	19		
	1500	1,263	12.1	1500	166	166	0	18.9		
	1600	1,295	12.1	1498	166	166	0	18.9		
	1700	1,575	15	1499	128	128	0	21.3	35,404	Extracting from MW-5
8/13/2013	1200	1,573	12	1499	166	166	0	18.9	41,301	Extracting from MPE-2 and MW-5
	1300	1,681	12	1501	166	166	0	18.9		
	1400	2,304	11.9	1500	166	166	0	18.9		
	1500	1,726	11.9	1502	166	166	0	18.9		
	1600	1,722	11.9	1501	166	166	0	18.9		
	1700	1,748	11.9	1499	166	166	0	18.9		
8/14/2013	900	1,474	12	1499	163	163	0	19.1	49,438	
	1000	1,519	12	1501	163	163	0	19.1		
	1100	1,573	12	1500	163	163	0	19.1		
	1200	1,621	12	1499	163	163	0	19.1		
	1300	1,670	11.9	1502	165	165	0	19		
	1400	1,809	11.9	1498	165	165	0	19		
	1500	1,855	11.9	1500	165	165	0	19		
	1600	1,837	11.9	1499	166	166	0	18.9		
	1700	1,818	12	1500	166	166	0	18.9		

Table 5

MPE Event
Operational Data : August 2013

15101 Freedom Ave.
San Leandro, California

DATE	TIME	PID (ppmv)	WELL MANIFOLD VACUUM (In of Hg)	OXIDIZER TEMPERATURE (^{0}F)	WELL FIELD FLOW VAPOR RATE (scfm)	TOTAL SYSTEM VAPOR FLOW RATE (scfm)	DILUTION AIR FLOW RATE (scfm)	SYSTEM (BLOWER) VACUUM (In of Hg)	SYSTEM TOTALIZER READING (gallons)	COMMENTS
8/15/2013	900	1,712	12.1	1499	177	177	0	18.2	52,087	
	1000	1,738	12.1	1501	177	177	0	18.2		
	1100	1,711	12.1	1498	177	177	0	18.2		
	1200	1,670	12.2	1499	162	162	0	19.2		
	1300	1,563	12.3	1501	162	162	0	19.2		
	1400	1,534	12.3	1498	160	160	0	19.3		
	1500	1,507	12.3	1501	160	160	0	19.3		
	1600	1,429	12.3	1499	162	162	0	19.2		
	1700	1,416	12.2	1501	165	165	0	19		
8/16/2013	900	1,380	12.5	1501	157	157	0	19.5	53,566	
	1000	1,408	12.5	1499	158	158	0	19.4		
	1100	1,371	12.5	1500	158	158	0	19.4		Shut down for the weekend
8/19/2013	830									Extracting from MPE-2 and MW-5
	900	851	12	1501	166	166	0	18.9	53,906	
	1000	795	19.5	1500	84	84	0	24.1		Extracting from MPE-2
	1030	851	17.5	1501	108	108	0	22.6		Extracting from MW-5
	1045									Extracting from MPE-1
	1100	243	17.1	1499	108	108	0	22.6		
	1200	775	12.7	1500	157	157	0	19.5		Extracting from MPE-2 and MW-5
	1300	812	12.8	1501	157	157	0	19.5		
	1400	784	12.7	1498	158	158	0	19.4		
	1500	772	13	1500	157	157	0	19.5		
	1600	749	13	1499	157	157	0	19.5		
	1700	730	13	1500	155	155	0	19.6		
8/20/2013	900	587	12.1	1500	163	163	0	19.1	55,537	Extracting from MPE-1 and MW-5
	1000	653	12.2	1502	162	162	0	19.2		
	1100	637	12.3	1501	160	160	0	19.3		
	1200	642	12.3	1502	160	160	0	19.3		
	1300	625	12.3	1501	160	160	0	19.3		
	1400	634	12.2	1499	160	160	0	19.3		
	1500	626	12.2	1501	160	160	0	19.3		
	1600	639	12.2	1499	160	160	0	19.3		
	1700	648	12.2	1500	160	160	0	19.3		
8/21/2013	900	735	12.2	1501	163	163	0	19.1	57,771	Extracting from MPE-2 and MW-5
	1000	789	12.2	1500	162	162	0	19.2		
	1100	813	12.2	1502	162	162	0	19.2		
	1200	843	12.2	1501	162	162	0	19.2		
	1300	785	12.3	1500	162	162	0	19.2		

Table 5

MPE Event
Operational Data : August 2013

15101 Freedom Ave.
San Leandro, California

DATE	TIME	PID (ppmv)	WELL MANIFOLD VACUUM (In of Hg)	OXIDIZER TEMPERATURE (^{0}F)	WELL FIELD FLOW VAPOR RATE (scfm)	TOTAL SYSTEM VAPOR FLOW RATE (scfm)	DILUTION AIR FLOW RATE (scfm)	SYSTEM (BLOWER) VACUUM (In of Hg)	SYSTEM TOTALIZER READING (gallons)	COMMENTS
	1400	810	12.2	1499	163	163	0	19.1		
	1500	874	12.2	1500	163	163	0	19.1		
	1600	921	12.3	1500	162	162	0	19.2		
	1700	909	12.3	1499	162	162	0	19.2		
8/22/2013	900	930	12.4	1500	160	160	0	19.3	59,380	
	1000	674	12.3	1501	160	160	0	19.3		
	1100	652	12.3	1501	160	160	0	19.3		
	1200	644	12.4	1499	158	158	0	19.4		
	1300	639	12.4	1500	158	158	0	19.4		
	1400	647	12.4	1501	160	160	0	19.3		
	1500	655	12.4	1500	160	160	0	19.3		
	1600	641	12.3	1499	162	162	0	19.2		
	1700	633	12.3	1501	162	162	0	19.2		
8/23/2013	900	591	12.2	1501	162	162	0	19.2	61,022	
	1000	673	12.2	1498	162	162	0	19.2		
	110	634	12.2	1500	162	162	0	19.2		
	1200	602	12.3	1501	160	160	0	19.3		
	1300	598	12.4	1500	160	160	0	19.3		
	1400	593	12.4	1501	160	160	0	19.3		
	1500	585	12.3	1500	160	160	0	19.3		
	1600	578	12.2	1499	162	162	0	19.2		Shut down for the weekend
8/26/2013	900	517	12.2	1499	157	157	0	19.5	62,296	
	1000	531	12.3	1501	158	158	0	19.4		
	1100	521	12.3	1500	158	158	0	19.4		
	1200	528	12.3	1498	160	160	0	19.3		
	1300	525	12.3	1502	160	160	0	19.3		
	1400	543	12.3	1500	160	160	0	19.3		
	1500	534	12.3	1501	160	160	0	19.3		
	1600	532	12.3	1499	160	160	0	19.3		
	1700	541	12.3	1501	160	160	0	19.3		
8/27/2013	900	479	12.4	1499	160	160	0	19.3	64,261	
	1000	485	12.4	1501	160	160	0	19.3		
	1100	491	12.5	1500	158	158	0	19.4		
	1200	511	12.4	1501	158	158	0	19.4		
	1300	514	12.3	1499	160	160	0	19.3		
	1400	534	12.3	1500	160	160	0	19.3		
	1500	553	12.3	1502	160	160	0	19.3		
	1600	564	12.3	1499	160	160	0	19.3		
	1700	593	12.3	1500	160	160	0	19.3		

Table 5

MPE Event
Operational Data : August 2013

15101 Freedom Ave.
San Leandro, California

DATE	TIME	PID (ppmv)	WELL MANIFOLD VACUUM (In of Hg)	OXIDIZER TEMPERATURE (^{0}F)	WELL FIELD FLOW VAPOR RATE (scfm)	TOTAL SYSTEM VAPOR FLOW RATE (scfm)	DILUTION AIR FLOW RATE (scfm)	SYSTEM (BLOWER) VACUUM (In of Hg)	SYSTEM TOTALIZER READING (gallons)	COMMENTS
8/28/2013	900	491	12.4	1499	158	158	0	19.4	68,130	
	1000	498	12.4	1501	158	158	0	19.4		
	1100	804	12.3	1500	160	160	0	19.3		
	1200	765	12.3	1499	160	160	0	19.3		
	1300	786	12.2	1498	160	160	0	19.3		
	1400	821	12.2	1500	160	160	0	19.3		
	1500	849	12.2	1499	160	160	0	19.3		
	1600	813	12.2	1501	162	162	0	19.2		
	1700	829	12.2	1502	162	162	0	19.2		
8/29/2013	900	701	12.3	1500	160	160	0	19.3	70,885	
	1000	846	12.3	1498	160	160	0	19.3		
	1100	909	12.3	1499	160	160	0	19.3		
	1200	1,027	12.3	1498	160	160	0	19.3		
	1300	1,005	12.3	1499	160	160	0	19.3		
	1400	973	12.2	1501	160	160	0	19.3		
	1500	940	12.2	1498	160	160	0	19.3		
	1600	902	12.2	1500	160	160	0	19.3		
	1700	868	12.1	1498	162	162	0	19.2		
8/30/2013	900	781	12.3	1500	157	157	0	19.5	71,972	
	1000	703	12.3	1498	157	157	0	19.5		
	1100	645	12.3	1501	158	158	0	19.4		
	1200	612	12.3	1499	160	160	0	19.3	72,911	
										End Extraction

Totalizer readings = 72,911 gallons = 2.85 gpm

Total time of test = 25,560 minutes = 426 hours = 17.75 days

Notes

ppmv	parts per million vapor
In of Hg	inches of mercury
In of H_20	inches of water
^{0}F	degrees Fahrenheit
scfm	standard cubic feet per minute

Table 6

MPE Event
Extraction Data and VOC Mass Removal Rate
August 2013

15101 Freedom Avenue
San Leandro, California

MPE WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
MPE-1,MPE-2,MW-5	**START**	**8/1/2013**	1730	0	0								
			1800	30	30	135	4,037	10.6511	1,039	0.0010	0.9539	0.0318	46
			2000	120	150	179	21,479	56.6720	950	0.0010	4.6409	0.0387	56
			2100	60	210	179	10,739	28.3360	988	0.0010	2.4133	0.0402	58
		8/2/2013	1000	780	990	152	118,571	312.8512	964	0.0010	25.9969	0.0333	48
			1100	60	1,050	155	9,311	24.5679	937	0.0009	1.9843	0.0331	48
			1200	60	1,110	157	9,406	24.8191	915	0.0009	1.9576	0.0326	47
			1300	60	1,170	157	9,406	24.8191	902	0.0009	1.9297	0.0322	46
			1400	60	1,230	160	9,597	25.3215	896	0.0009	1.9557	0.0326	47
			1500	60	1,290	157	9,406	24.8191	887	0.0009	1.8977	0.0316	46
	STOP		1600	60	1,350	157	9,406	24.8191	880	0.0009	1.8827	0.0314	45
	START	**8/5/2013**	1000	30	1,380	122	3,656	9.6463	911	0.0009	0.7575	0.0253	36
			1100	60	1,440	119	7,121	18.7901	868	0.0009	1.4059	0.0234	34
			1200	60	1,500	117	7,026	18.5389	825	0.0008	1.3184	0.0220	32
			1300	60	1,560	119	7,121	18.7901	780	0.0008	1.2634	0.0211	30
			1400	60	1,620	120	7,217	19.0413	876	0.0009	1.4378	0.0240	35
			1500	60	1,680	119	7,121	18.7901	810	0.0008	1.3120	0.0219	31
			1600	60	1,740	119	7,121	18.7901	783	0.0008	1.2682	0.0211	30
			1700	60	1,800	119	7,121	18.7901	735	0.0007	1.1905	0.0198	29
		8/6/2013	900	960	2,760	109	104,803	276.5256	685	0.0007	16.3280	0.0170	24
			1000	60	2,820	111	6,645	17.5341	651	0.0007	0.9839	0.0164	24
MPE-2, MPE-5			1100	60	2,880	79	4,741	12.5099	1,863	0.0019	2.0090	0.0335	48
			1200	60	2,940	79	4,741	12.5099	1,110	0.0011	1.1970	0.0199	29
			1300	60	3,000	79	4,741	12.5099	933	0.0009	1.0061	0.0168	24
			1400	60	3,060	81	4,836	12.7611	906	0.0009	0.9966	0.0166	24
			1500	60	3,120	81	4,836	12.7611	876	0.0009	0.9636	0.0161	23
			1600	60	3,180	81	4,836	12.7611	893	0.0009	0.9823	0.0164	24
			1700	60	3,240	81	4,836	12.7611	927	0.0009	1.0197	0.0170	24
MPE-2		**8/7/2013**	900	960	4,200	79	75,860	200.1582	1,143	0.0011	19.7209	0.0205	30
MPE-1			1000	60	4,260	120	7,217	19.0413	1,426	0.0014	2.3406	0.0390	56
			1100	60	4,320	120	7,217	19.0413	774	0.0008	1.2704	0.0212	30
			1200	60	4,380	120	7,217	19.0413	834	0.0008	1.3689	0.0228	33
			1300	60	4,440	120	7,217	19.0413	810	0.0008	1.3295	0.0222	32
			1400	60	4,500	120	7,217	19.0413	786	0.0008	1.2901	0.0215	31
			1500	60	4,560	122	7,312	19.2925	735	0.0007	1.2223	0.0204	29
			1600	60	4,620	122	7,312	19.2925	992	0.0010	1.6497	0.0275	40
			1700	60	4,680	122	7,312	19.2925	1,011	0.0010	1.6813	0.0280	40

Table 6

MPE Event
Extraction Data and VOC Mass Removal Rate
August 2013

15101 Freedom Avenue
San Leandro, California

MPE WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
		8/8/2013	800	900	5,580	122	109,678	289.3878	1,193	0.0012	29.7597	0.0331	48
			900	60	5,640	122	7,312	19.2925	1,171	0.0012	1.9474	0.0325	47
			1000	60	5,700	122	7,312	19.2925	1,176	0.0012	1.9557	0.0326	47
MPE-5			1100	60	5,760	128	7,693	20.2974	270	0.0003	0.4724	0.0079	11
MPE-1			1200	60	5,820	128	7,693	20.2974	1,069	0.0011	1.8704	0.0312	45
			1300	60	5,880	130	7,788	20.5486	1,124	0.0011	1.9909	0.0332	48
			1400	60	5,940	131	7,883	20.7998	1,107	0.0011	1.9848	0.0331	48
			1500	60	6,000	131	7,883	20.7998	1,116	0.0011	2.0009	0.0333	48
			1600	60	6,060	131	7,883	20.7998	1,103	0.0011	1.9776	0.0330	47
		8/9/2013	900	1020	7,080	131	134,013	353.5961	1,035	0.0010	31.5468	0.0309	45
			1000	60	7,140	131	7,883	20.7998	1,082	0.0011	1.9400	0.0323	47
			1100	60	7,200	131	7,883	20.7998	1,114	0.0011	1.9973	0.0333	48
			1200	60	7,260	133	7,978	21.0510	1,135	0.0011	2.0596	0.0343	49
			1300	60	7,320	133	7,978	21.0510	1,142	0.0011	2.0723	0.0345	50
			1400	60	7,380	133	7,978	21.0510	1,130	0.0011	2.0505	0.0342	49
	STOP		1500	60	7,440	133	7,978	21.0510	1,130	0.0011	2.0505	0.0342	49
MPE-2, MW-5	**START**	**8/12/2013**	900	30	7,470	165	4,941	13.0376	1,045	0.0010	1.1744	0.0391	56
			1000	60	7,530	165	9,882	26.0751	1,145	0.0011	2.5736	0.0429	62
			1100	60	7,590	165	9,882	26.0751	1,177	0.0012	2.6455	0.0441	63
MPE-2			1200	60	7,650	119	7,121	18.7901	870	0.0009	1.4091	0.0235	34
MW-5			1230	30	7,680	117	3,513	9.2694	1,375	0.0014	1.0987	0.0366	53
MPE-2, MW-5			1240	10	7,690	162	1,615	4.2621	1,277	0.0013	0.4692	0.0469	68
			1300	20	7,710	163	3,262	8.6080	1,241	0.0012	0.9208	0.0460	66
			1400	60	7,770	165	9,882	26.0751	1,217	0.0012	2.7354	0.0456	66
			1500	60	7,830	166	9,978	26.3264	1,263	0.0013	2.8662	0.0478	69
			1600	60	7,890	166	9,978	26.3264	1,295	0.0013	2.9388	0.0490	71
MW-5			1700	60	7,950	128	7,693	20.2974	1,575	0.0016	2.7557	0.0459	66
MPE-2, MW-5		**8/13/2013**	1200	1140	9,090	166	189,576	500.2007	1,573	0.0016	67.8235	0.0595	86
			1300	60	9,150	166	9,978	26.3264	1,681	0.0017	3.8147	0.0636	92
			1400	60	9,210	166	9,978	26.3264	2,304	0.0023	5.2285	0.0871	125
			1500	60	9,270	166	9,978	26.3264	1,726	0.0017	3.9169	0.0653	94
			1600	60	9,330	166	9,978	26.3264	1,722	0.0017	3.9078	0.0651	94
			1700	60	9,390	166	9,978	26.3264	1,748	0.0017	3.9668	0.0661	95

Table 6

MPE Event
Extraction Data and VOC Mass Removal Rate
August 2013

15101 Freedom Avenue
San Leandro, California

MPE WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
		8/14/2013	900	960	10,350	163	156,596	413.1830	1,474	0.0015	52.4985	0.0547	79
			1000	60	10,410	163	9,787	25.8239	1,519	0.0015	3.3813	0.0564	81
			1100	60	10,470	163	9,787	25.8239	1,573	0.0016	3.5015	0.0584	84
			1200	60	10,530	163	9,787	25.8239	1,621	0.0016	3.6084	0.0601	87
			1300	60	10,590	165	9,882	26.0751	1,670	0.0017	3.7536	0.0626	90
			1400	60	10,650	165	9,882	26.0751	1,809	0.0018	4.0660	0.0678	98
			1500	60	10,710	165	9,882	26.0751	1,855	0.0019	4.1694	0.0695	100
			1600	60	10,770	166	9,978	26.3264	1,837	0.0018	4.1688	0.0695	100
			1700	60	10,830	166	9,978	26.3264	1,818	0.0018	4.1256	0.0688	99
		8/15/2013	900	960	11,790	177	170,306	449.3570	1,712	0.0017	66.3136	0.0691	99
			1000	60	11,850	177	10,644	28.0848	1,738	0.0017	4.2075	0.0701	101
			1100	60	11,910	177	10,644	28.0848	1,711	0.0017	4.1422	0.0690	99
			1200	60	11,970	162	9,692	25.5727	1,670	0.0017	3.6813	0.0614	88
			1300	60	12,030	162	9,692	25.5727	1,563	0.0016	3.4454	0.0574	83
			1400	60	12,090	160	9,597	25.3215	1,534	0.0015	3.3483	0.0558	80
			1500	60	12,150	160	9,597	25.3215	1,507	0.0015	3.2894	0.0548	79
			1600	60	12,210	162	9,692	25.5727	1,429	0.0014	3.1500	0.0525	76
			1700	60	12,270	165	9,882	26.0751	1,416	0.0014	3.1827	0.0530	76
		8/16/2013	900	960	13,230	157	150,503	397.1056	1,380	0.0014	47.2381	0.0492	71
			1000	60	13,290	158	9,502	25.0703	1,408	0.0014	3.0428	0.0507	73
	STOP		1100	60	13,350	158	9,502	25.0703	1,371	0.0014	2.9628	0.0494	71
MPE-2, MW-5	**START**	**8/19/2013**	900	60	13,410	166	9,978	26.3264	851	0.0009	1.9312	0.0322	46
MPE-2			1000	60	13,470	84	5,027	13.2635	795	0.0008	0.9089	0.0151	22
MW-5			1030	30	13,500	108	3,227	8.5158	851	0.0009	0.6247	0.0208	30
MPE-1			1100	30	13,530	108	3,227	8.5158	243	0.0002	0.1784	0.0059	9
MPE-2, MW-5			1200	60	13,590	157	9,406	24.8191	775	0.0008	1.6580	0.0276	40
			1300	60	13,650	157	9,406	24.8191	812	0.0008	1.7372	0.0290	42
			1400	60	13,710	158	9,502	25.0703	784	0.0008	1.6943	0.0282	41
			1500	60	13,770	157	9,406	24.8191	772	0.0008	1.6516	0.0275	40
			1600	60	13,830	157	9,406	24.8191	749	0.0007	1.6024	0.0267	38
			1700	60	13,890	155	9,311	24.5679	730	0.0007	1.5460	0.0258	37

Table 6

MPE Event
Extraction Data and VOC Mass Removal Rate
August 2013

15101 Freedom Avenue
San Leandro, California

MPE WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
MPE-1, MW-5		**8/20/2013**	900	960	14,850	163	156,596	413.1830	587	0.0006	20.9068	0.0218	31
			1000	60	14,910	162	9,692	25.5727	653	0.0007	1.4395	0.0240	35
			1100	60	14,970	160	9,597	25.3215	637	0.0006	1.3904	0.0232	33
			1200	60	15,030	160	9,597	25.3215	642	0.0006	1.4013	0.0234	34
			1300	60	15,090	160	9,597	25.3215	625	0.0006	1.3642	0.0227	33
			1400	60	15,150	160	9,597	25.3215	634	0.0006	1.3838	0.0231	33
			1500	60	15,210	160	9,597	25.3215	626	0.0006	1.3664	0.0228	33
			1600	60	15,270	160	9,597	25.3215	639	0.0006	1.3948	0.0232	33
			1700	60	15,330	160	9,597	25.3215	648	0.0006	1.4144	0.0236	34
MPE-2, MW-5		**8/21/2013**	900	960	16,290	163	156,596	413.1830	735	0.0007	26.1780	0.0273	39
			1000	60	16,350	162	9,692	25.5727	789	0.0008	1.7392	0.0290	42
			1100	60	16,410	162	9,692	25.5727	813	0.0008	1.7922	0.0299	43
			1200	60	16,470	162	9,692	25.5727	843	0.0008	1.8583	0.0310	45
			1300	60	16,530	162	9,692	25.5727	785	0.0008	1.7304	0.0288	42
			1400	60	16,590	163	9,787	25.8239	810	0.0008	1.8031	0.0301	43
			1500	60	16,650	163	9,787	25.8239	874	0.0009	1.9455	0.0324	47
			1600	60	16,710	162	9,692	25.5727	921	0.0009	2.0302	0.0338	49
			1700	60	16,770	162	9,692	25.5727	909	0.0009	2.0038	0.0334	48
		8/22/2013	900	960	17,730	160	153,550	405.1443	930	0.0009	32.4788	0.0338	49
			1000	60	17,790	160	9,597	25.3215	674	0.0007	1.4711	0.0245	35
			1100	60	17,850	160	9,597	25.3215	652	0.0007	1.4231	0.0237	34
			1200	60	17,910	158	9,502	25.0703	644	0.0006	1.3917	0.0232	33
			1300	60	17,970	158	9,502	25.0703	639	0.0006	1.3809	0.0230	33
			1400	60	18,030	160	9,597	25.3215	647	0.0006	1.4122	0.0235	34
			1500	60	18,090	160	9,597	25.3215	655	0.0007	1.4297	0.0238	34
			1600	60	18,150	162	9,692	25.5727	641	0.0006	1.4130	0.0236	34
			1700	60	18,210	162	9,692	25.5727	633	0.0006	1.3954	0.0233	33
		8/23/2013	900	960	19,170	162	155,073	409.1637	591	0.0006	20.8445	0.0217	31
			1000	60	19,230	162	9,692	25.5727	673	0.0007	1.4835	0.0247	36
			1100	60	19,290	162	9,692	25.5727	634	0.0006	1.3976	0.0233	34
			1200	60	19,350	160	9,597	25.3215	602	0.0006	1.3140	0.0219	32
			1300	60	19,410	160	9,597	25.3215	598	0.0006	1.3053	0.0218	31
			1400	60	19,470	160	9,597	25.3215	593	0.0006	1.2943	0.0216	31
			1500	60	19,530	160	9,597	25.3215	585	0.0006	1.2769	0.0213	31
	STOP		1600	60	19,590	162	9,692	25.5727	578	0.0006	1.2741	0.0212	31

Table 6

MPE Event
Extraction Data and VOC Mass Removal Rate
August 2013

15101 Freedom Avenue
San Leandro, California

MPE WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
	START	8/26/2013	900	30	19,620	157	4,703	12.4096	517	0.0005	0.5530	0.0184	27
			1000	60	19,680	158	9,502	25.0703	531	0.0005	1.1475	0.0191	28
			1100	60	19,740	158	9,502	25.0703	521	0.0005	1.1259	0.0188	27
			1200	60	19,800	160	9,597	25.3215	528	0.0005	1.1525	0.0192	28
			1300	60	19,860	160	9,597	25.3215	525	0.0005	1.1459	0.0191	28
			1400	60	19,920	160	9,597	25.3215	543	0.0005	1.1852	0.0198	28
			1500	60	19,980	160	9,597	25.3215	534	0.0005	1.1656	0.0194	28
			1600	60	20,040	160	9,597	25.3215	532	0.0005	1.1612	0.0194	28
			1700	60	20,100	160	9,597	25.3215	541	0.0005	1.1808	0.0197	28
		8/27/2013	900	960	21,060	160	153,550	405.1443	479	0.0005	16.7283	0.0174	25
			1000	60	21,120	160	9,597	25.3215	485	0.0005	1.0586	0.0176	25
			1100	60	21,180	158	9,502	25.0703	491	0.0005	1.0611	0.0177	25
			1200	60	21,240	158	9,502	25.0703	511	0.0005	1.1043	0.0184	27
			1300	60	21,300	160	9,597	25.3215	514	0.0005	1.1219	0.0187	27
			1400	60	21,360	160	9,597	25.3215	534	0.0005	1.1656	0.0194	28
			1500	60	21,420	160	9,597	25.3215	553	0.0006	1.2070	0.0201	29
			1600	60	21,480	160	9,597	25.3215	564	0.0006	1.2311	0.0205	30
			1700	60	21,540	160	9,597	25.3215	593	0.0006	1.2943	0.0216	31
		8/28/2013	900	960	22,500	158	152,026	401.1250	491	0.0005	16.9773	0.0177	25
			1000	60	22,560	158	9,502	25.0703	498	0.0005	1.0762	0.0179	26
			1100	60	22,620	160	9,597	25.3215	804	0.0008	1.7549	0.0292	42
			1200	60	22,680	160	9,597	25.3215	765	0.0008	1.6698	0.0278	40
			1300	60	22,740	160	9,597	25.3215	786	0.0008	1.7156	0.0286	41
			1400	60	22,800	160	9,597	25.3215	821	0.0008	1.7920	0.0299	43
			1500	60	22,860	160	9,597	25.3215	849	0.0008	1.8531	0.0309	44
			1600	60	22,920	162	9,692	25.5727	813	0.0008	1.7922	0.0299	43
			1700	60	22,980	162	9,692	25.5727	829	0.0008	1.8274	0.0305	44
		8/29/2013	900	960	23,940	160	153,550	405.1443	701	0.0007	24.4813	0.0255	37
			1000	60	24,000	160	9,597	25.3215	846	0.0008	1.8466	0.0308	44
			1100	60	24,060	160	9,597	25.3215	909	0.0009	1.9841	0.0331	48
			1200	60	24,120	160	9,597	25.3215	1,027	0.0010	2.2416	0.0374	54
			1300	60	24,180	160	9,597	25.3215	1,005	0.0010	2.1936	0.0366	53
			1400	60	24,240	160	9,597	25.3215	973	0.0010	2.1238	0.0354	51
			1500	60	24,300	160	9,597	25.3215	940	0.0009	2.0518	0.0342	49
			1600	60	24,360	160	9,597	25.3215	902	0.0009	1.9688	0.0328	47
			1700	60	24,420	162	9,692	25.5727	868	0.0009	1.9134	0.0319	46

Table 6

MPE Event
Extraction Data and VOC Mass Removal Rate
August 2013

15101 Freedom Avenue
San Leandro, California

MPE WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
		8/30/2013	900	960	25,380	157	150,503	397.1056	781	0.0008	26.7340	0.0278	40
			1000	60	25,440	157	9,406	24.8191	703	0.0007	1.5040	0.0251	36
			1100	60	25,500	158	9,502	25.0703	645	0.0006	1.3939	0.0232	33
			1200	60	25,560	160	9,597	25.3215	612	0.0006	1.3358	0.0223	32
	TOTAL				**25,560**		**3,816,902**	**10071**			**841**	**0.0329**	**47**
	MEDIAN					**160**			**868**	**0.0009**			

Notes

Q	volumetric flow rate
SCFM	standard cubic feet per minute
ft^3	cubic feet per minute
VOC	volatile organic compounds
PID	photo-ionization detector
ppmv	parts per million vapor

DERIVATION OF MASS REMOVAL RATE

ppmv as hexane/1,000,000 = VOC mole %
ft3 of extracted air/(379 ft3 air/lb-mole air) = moles of extracted air
(moles of extracted air)(VOC mole %)(86.2 lb/lb-mole hexane) = lbs of VOC removed as hexane
(lbs of VOC mass removed as hexane)(elapsed time) = lbs/min of VOC removed as hexane
(lbs/min of VOC removed as hexane)(60 min/1 hour)(24 hours/1 day) = lbs/day of VOC removed as hexane

Table 7
SVE Abatement System Emissions
15101 Freedom Avenue, San Leandro, CA

Operation Start Date/Time	Onboard Analyzer Sample Date/Time	Onboard Analyzer		Lab Sample Date/Time	USEPA TO-3 MODIFIED		USEPA TO-15 MODIFIED		Q (SCFM)	Abatement Efficiency	Emissions Rate Benzene (lbs/day)
		Hydrocarbons (TPH-g + BTEX) (ppmv as hexane)			TPH-g (ppmv)		Benzene (ppmv)				
		Inlet	Outlet		Inlet	Outlet	Inlet	Outlet			
8/1/13 @ 18:00	8/2/13 @ 10:30	964	0	8/2/13 @ 10:00	500	0.083	1.6	<0.0015	152	100.0%	NA

SCFM standard cubic feet per minute

lbs/day pounds per day

Appendix A

Standard Operating Procedures for
Conducting Groundwater Monitoring Activities

Standard Operating Procedures for Conducting Groundwater Monitoring Activities

Water Level and Free-Product Measurements

Prior to measurement of groundwater depth at each well, equalization with the surrounding aquifer must be achieved. Initially, the well cap is removed and the pressure is allowed to dissipate, creating a more stable water table level within the well. After about 10-15 minutes, once the water level in the well stabilizes, the depth to groundwater is measured from the top of the casing to the nearest 0.01 foot using an electric sounder.

For free-product (FP) measurement, an oil-water interface probe is used. When the probe is lowered into the FP, the oil/water light and beeper are continuously on at which point a reading for depth to FP is noted. The probe is lowered further into the well until the water signal is given (light flashes and beeps intermittently). Then the probe is carefully raised until the FP signal is given and the reading is noted. This gives the depth to interface of product and water.

Purging and Field Measurements

Prior to sample collection, each well is purged using a battery-operated, 2-inch-diameter pump (Model ES-60 DC). During purging, groundwater is measured for parameters such as dissolved oxygen (DO), pH, temperature, electrical conductivity (EC), and oxygen-reduction potential (ORP) using a Hanna HI-9828 multi-parameter instrument. Turbidity is measured using a Hanna HI-98703 portable turbidimeter. The equipment is calibrated at the site using standard solutions and procedures provided by the manufacturer.

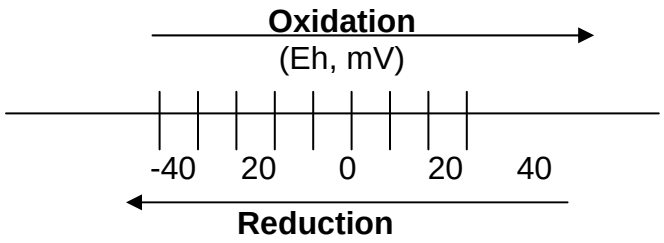
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater EC is directly related to the concentration of total dissolved solids (TDS) in solution.

There is a strong correlation between the turbidity level and the biological oxygen demand of natural water bodies. The main purpose for checking the turbidity level is to provide a general overview of the extent of the suspended solids in the groundwater.

ORP is the measure of the potential for an oxidation or reduction process to occur. In the oxidation process, a molecule or ion loses one or several electrons. In the reduction process, a molecule or ion gains one or several electrons. The unit of the redox potential is the volt or millivolt. The most important redox reaction in petroleum-contaminated groundwater is the oxidation of petroleum hydrocarbons in the presence of bacteria and free molecular oxygen. Because the solubility of O_2 in water is low (9 mg/L at 25 ^{o}C and 11 mg/L at 5 ^{o}C), and

because the rate of O_2 replenishment in subsurface environments is limited, DO can be entirely consumed when the oxidation of only a small amount of petroleum hydrocarbons occurs.

Oxidation of petroleum hydrocarbons can still occur when all the dissolved O_2 in the groundwater is consumed; however, the oxidizing agents (i.e., the constituents that undergo reduction) now become NO^-_3, MnO_2, Fe $(OH)_3$, SO_4^{2-} and others (Freeze and Cherry, 1979). As these oxidizing agents are consumed, the groundwater environment becomes more and more reduced. If the process advances far enough, the environment may become so strongly reduced that the petroleum hydrocarbons undergo anaerobic degradation, resulting in the production of methane and carbon dioxide. The concept of oxidation and reduction in terms of changes in oxidation states is illustrated below.



Purging of wells continues until the parameters for DO, pH, temperature, EC, turbidity, and redox stabilize, or three casing volumes are purged.

Once stabilization occurs, the groundwater samples are also tested on-site for ferrous iron (Fe^{+2}), nitrate (NO_3^-), and sulfate (SO_4^{-2}) concentrations.

Fe^{+2}, NO_3^-, and SO_4^{-2} are measured colorimetrically using the Hach Colorimeter Model 890, a microprocessor-controlled photometer suitable for colorimetric testing in the laboratory or the field. The required reagents for each specific test are provided in AccuVac ampuls.

Sampling

For sampling purposes, after purging a disposable polyethylene bailer is used to collect sufficient samples from each monitoring well for laboratory analyses. Groundwater samples are transferred into 40-mL VOA vials and preserved with hydrochloric acid. The vials are sealed to prevent air bubbles from developing within the headspace. For TPH-d analysis, groundwater samples are collected using 1-L, amber, non-preserved glass containers. Samples are placed in an ice-filled cooler and maintained at 4°C. A chain of custody form for all samples is prepared to accompany the samples, which are promptly delivered to a California state-certified analytical laboratory.

Appendix B

Table of Elevations and Coordinates on Monitoring Wells, Field Measurements of Physical, Chemical, and Natural Attenuation Parameters of Groundwater Samples, and Groundwater Gradient Calculations

Harrington Surveys Inc.

Land Surveying & Mapping

2278 Larkey Lane, Walnut Creek, Ca. 94596 Phone (925)935-7228 Fax (925)935-5118
Cel (925)788-7359 E-Mail (ben5132@pacbell.net)

Soma Environmental Engineering
2680 Bishop Dr. # 203
San Ramon, Ca. 94583

Oct. 14, 2004

Attn: Elena Manzo
Job # 2445

Ref: 15101 Freedom Ave, San Leandro, Ca.

HORZONTAL CONTROL, NAD 88:

Survey based on California Coordinate System, Zone 3, NAD 83.

CHABOT "B', NORTH 2,087,731.02 EAST 6,094,039.23 sft. LAT. N37°43'02.71762" W122°07"00.46339", NAVD 88, ELEV. 134.957.

CHABOT "A", NORTH 2,088,584.99 EAST 6,093,351.39 sft. LAT. N37°43'11.04190" W122°07'09.20691", NAVD 88, ELEV. 492.08.

VERTICAL CONTROL, NAVD 88:

NGS 1974, STATION K 1256, NAVD 88 ELEV. 58.50.
PID # HT1871

GPS: TRIMBLE 5800, LEICA TCA 1800, 1" HORZ. & VERT.

EPOCH DATE 1998.5

OBSERVATION: EPOCH=180.

FIELD SURVEY: OCT. 11, 2004.

Ben Harrington
PLS 5132

SURVEY REPORT
15101 FREEDOM AVE
SAN LEANDRO, CA.

HARRINGTON SURVEYS INC.
2278 LARKEY LANE
WALNUT CREEK, CA. 94597
925-935-7228 FAX. 935-5118

JOB NO. 2445
DATE: OCT. 12, 2004

	NAD 83	NAD 83	NAVD 88		NORTH	WEST
PT	NORTH (sft)	EAST(sft)	ELEV.	DESCRIPTION	LATITUDE (DMS)	LONGITUDE (DMS)
1	2087731.02	6094039.23	442.77	FD CHABOT B	37°43'02.71762"	122°07'00.46339"
2	2088584.99	6093351.39	492.08	FD CHABOT A	37°43'11.04190"	122°07'09.20691"
51	2084348.54	6092159.32	55.44	FD. X-8		
52	2084073.17	6092141.24	46.15	MW-6 PAV		
53	2084072.72	6092140.95	46.15	MW-6 PUNCH		
54	2084072.47	6092140.95	45.82	MW-6 NOTCH	37°42'26.22635"	122°07'23.29643
55	2083909.71	6091947.10	40.61	MW-9 PAV		
56	2083909.10	6091946.97	40.61	MW-9 PUNCH		
57	2083908.71	6091947.00	40.26	MW-9 NOTCH	37°42'24.57425"	122°07'25.67431"
58	2083861.20	6092118.11	41.38	MW-8 PAV		
59	2083860.43	6092118.36	41.44	MW-8 PUNCH		
60	2083860.03	6092118.52	41.14	MW-8 NOTCH	37°42'24.12245"	122°07'23.52966"
61	2084008.21	6092290.11	44.94	MW-7 PAV		
62	2084007.88	6092290.27	44.95	MW-7 PVNCH		
63	2084007.68	6092290.40	44.74	MW-7 NOTCH	37°42'25.61150"	122°07'21.42290"
64	2084206.49	6092175.95	51.03	MW-5 PAV		
65	2084206.17	6092176.55	50.96	MW-5 PUNCH		
66	2084206.01	6092176.79	50.53	MW-5 NOTCH	37°42'27.55260	122°07'22.87930
67	2084670.41	6092307.68	69.79	FD BM FAIR580		
68	2084443.65	6092198.88	53.70	MW-4 PAV		
69	2084444.39	6092199.72	53.74	MW-4 PUNCH		
70	2084444.59	6092199.51	53.31	MW-4 NOTCH	37°42'29.91496"	122°07'22.64809"
71	2084399.10	6092145.43	54.37	MW-3 PAV		
72	2084399.78	6092145.28	54.33	MW-3 PUNCH		
73	2084400.15	6092145.27	53.91	MW-3 NOTCH	37°42'29.46636"	122°07'23.31339"
74	2084329.47	6092199.72	54.82	MW-1 PAV		
75	2084330.44	6092199.45	54.79	MW-1 PUNCH		
76	2084330.75	6092199.20	54.46	MW-1 NOTCH	37°42'28.78955"	122°07'22.62738"
77	2084367.59	6092256.38	52.88	MW-2 PAV		
78	2084368.15	6092256.14	52.92	MW-2 PUNCH		
79	2084368.53	6092256.06	52.41	MW-2 NOTCH	37°42'29.17277"	122°07'21.92804"
80	2084930.49	6091759.33	58.50	FD BM K1256	37°42'34.64279"	122°07'28.23011"

AMMENDED REPORT
15101 FREEDOM AVE
SAN LEANDRO, CA.

HARRINGTON SURVEYS INC.
2278 LARKEY LANE
WALNUT CREEK, CA. 94597
925-935-7228 FAX. 935-5118

JOB NO. 2445
DATE: FEB. 21,2008

	NAD 83	NAD 83	NAVD 88		NORTH	WEST
PT	NORTH (sft)	EAST(sft)	ELEV.	DESCRIPTION	LATITUDE (DMS)	LONGITUDE (DMS)
1	2087731.02	6094039.23	442.77	FD CHABOT B	37°43'02.71762"	122°07'00.46339"
2	2088584.99	6093351.39	492.08	FD CHABOT A	37°43'11.04190"	122°07'09.20691"
51	2084348.54	6092159.32	55.44	FD. X-8		
52	2084073.17	6092141.24	46.15	MW-6 PAV		
53	2084072.72	6092140.95	46.15	MW-6 PUNCH		
54	2084072.47	6092140.95	45.82	MW-6 NOTCH	37°42'26.22635"	122°07'23.29643
55	2083909.71	6091947.10	40.61	MW-9 PAV		
56	2083909.10	6091946.97	40.61	MW-9 PUNCH		
57	2083908.71	6091947.00	40.26	MW-9 NOTCH	37°42'24.57425"	122°07'25.67431"
58	2083861.20	6092118.11	41.38	MW-8 PAV		
59	2083860.43	6092118.36	41.44	MW-8 PUNCH		
60	2083860.03	6092118.52	41.14	MW-8 NOTCH	37°42'24.12245"	122°07'23.52966"
61	2084008.21	6092290.11	44.94	MW-7 PAV		
62	2084007.88	6092290.27	44.95	MW-7 PVNCH		
63	2084007.68	6092290.40	44.74	MW-7 NOTCH	37°42'25.61150"	122°07'21.42290"
64	2084206.49	6092175.95	51.03	MW-5 PAV		
65	2084206.17	6092176.55	50.96	MW-5 PUNCH		
66	2084206.01	6092176.79	50.53	MW-5 NOTCH	37°42'27.55260	122°07'22.87930
67	2084670.41	6092307.68	69.79	FD BM FAIR580		
68	2084251.32	6092125.25	53.70	MW-4 PAV	Ammended 2\21\08	From here down
69	2084250.55	6092124.46	53.74	MW-4 PUNCH		
70	2084250.36	6092124.67	53.31	MW-4 NOTCH	37°42'27.98205"	122°07'23.53734"
71	2084298.86	6092176.07	54.37	MW-3 PAV		
72	2084298.19	6092176.26	54.33	MW-3 PUNCH		
73	2084297.82	6092176.29	53.91	MW-3 NOTCH	37°42'28.46009"	122°07'22.90536"
74	2084365.28	6092117.89	54.82	MW-1 PAV		
75	2084364.32	6092118.22	54.79	MW-1 PUNCH		
76	2084364.03	6092118.49	54.46	MW-1 NOTCH	37°42'29.10470"	122°07'23.63882"
77	2084323.98	6092063.51	52.88	MW-2 PAV		
78	2084323.44	6092063.77	52.92	MW-2 PUNCH		
79	2084323.06	6092063.88	52.41	MW-2 NOTCH	37°42'28.69039"	122°07'24.30947"
80	2084930.49	6091759.33	58.50	FD BM K1256	37°42'34.64279"	122°07'28.23011"

DATE: 1/08/2008
JOB NUMBER 0208101
DATE OF SURVEY 1/03/08
INSTRUMENT LIECA SR520

TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS
SOMA ENVIRONMENTAL, PROJECT 15101 FREEDOM DRIVE - SAN LEANDRO

WELL ID#	NORTHING (ft.) LATITUDE	EASTING (ft.) LONGITUDE	ELEVATION (ft.)	DESCRIPTION
MW-1D	2084371.23	6092127.90	54.42	MW-1D NOTCH
	37.708104856	122.123200912	54.94	MW-1D RIM
	37º 42' 29.1" N	122º 07' 23" W	54.74	PAVEMENT
MW-3D	2084303.98	6092183.53	54.10	MW-3D NOTCH
	37.707922851	122.123004590	54.56	MW-3D RIM
	37º 42' 28.5" N	122º 07' 22" W	54.47	PAVEMENT
MW-4D	2084222.77	6092116.37	53.12	MW-4D NOTCH
	37.707696648	122.123231858	53.37	MW-4D RIM
	37º 42' 27.7" N	122º 07' 23" W	53.39	PAVEMENT

BENCH MARK: NGS BENCH MARK NO. HT1871

3.0 KM (1.85 MI) NORTH FROM SAM LORENZO. 1.85 MILES NORTH ALONG INTERSTATE HIGHWAY 580 FROM THE JUNCTION OF STATE HIGHWAY 238 IN SAN LORENZO, IN THE WEST CORNER OF THE CROSSING OF 150TH AVENUE, IN TOP OF THE CONCRETE BRIDGE DECK, 15.5 FEET NORTHWEST OF THE SOUTHWEST BOUND LANES OF THE AVENUE, 10.9 FEET NORTHEAST OF THE SOUTH CORNER OF THE SOUTHWEST END OF THE NORTHWEST CONCRETE GUARDRAIL, 0.7 FOOT NORTHEAST OF THE SOUTHWEST EDGE OF THE DECK, 0.9 FOOT SOUTHEAST OF THE NORTHWEST CONCRETE GUARDRAIL, AND ABOUT LEVEL WITH THE HIGHWAY.

ELEVATION = 58.50 NAVD 88 DATUM

HORIZONTAL AND VERTICAL CONTROL BASED ON HARRINGTON SURVEY DATED 10-12-2004

FD CHABOT A, CALIFORNIA STATE PLAIN COORDINATE SYSTEM, NAD 83, ZONE 3. NORTH 2,088,584.99 EAST 6,093,351.39. LAT N 37º43'11.04190" LONG W 122º07'09.20691", ELEVATION 492.08 NAVD 88.

FD CHABOT B, CALIFORNIA STATE PLAIN COORDINATE SYSTEM, NAD 83, ZONE 3. NORTH 2,087,731.02 EAST 6,094,039.23. . LAT N 37º43'02.71762" LONG W 122º07'00.46339", ELEVATION 442.77 NAVD 88.

DATE: 12/11/2009

JOB# 09039

TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS

SOMA ENVIRONMENTAL ENGINEERING
15101 FREEDOM AVENUE
SAN LEANDRO, CA 94579

WELL ID #	NORTHING (FT.) / LATITUDE (D.DEG.)	EASTING (FT.) / LONGITUDE (D.DEG.)	ELEVATION (FT.)	DESCRIPTION
EX-1	2084135.454	6092163.720	47.36	4" PVC NOTCH NORTH SIDE
	37.707459134	122.123062972	47.61	SET PUNCH NORTH SIDE RIM
			47.60	PAVEMENT NORTH SIDE
EX-2	2084082.018	6092130.224	45.96	4" PVC NOTCH NORTH SIDE
	37.707310806	122.123175540	47.04	SET PUNCH NORTH SIDE RIM
			47.00	CONCRETE NORTH SIDE
MPE-1	2084213.168	6092125.258	51.96	4" PVC NOTCH NORTH SIDE
	37.707670702	122.123200567	52.49	SET PUNCH NORTH SIDE RIM
			52.51	CONCRETE NORTH SIDE
MPE-2	2084293.133	6092171.374	53.72	4" PVC NOTCH NORTH SIDE
	37.707892479	122.123045970	54.29	SET PUNCH NORTH SIDE RIM
			54.27	PAVEMENT NORTH SIDE

HORIZONTAL AND VERTICAL CONTROL
SURVEY BASED ON PREVIOUS SURVEY BY HARRINGTON SURVEY INC. DATED: 2/21/2008
COORDINATE VALUES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 3, NAD83.
ELEVATIONS ARE NAVD 88 DATUM.

MW-2, PUNCH
NORTHING 2,084323.44, EASTING 6,092063.77, ELEVATION 52.92

MW-4 PUNCH
NORTHING 2,084250.55, EASTING 6,092124.46, ELEVATION 53.74

EQUIPMENT USED: TRIMBLE S6

Edgis Land Surveying
Land Surveying and mapping
1374 Garland Avenue, Clovis, CA 93612
Phone (559) 906-3554 Fax (559) 292-0560
email: edgis@aol.com

PROFESSIONAL LAND SURVEYOR
EDUARDO A. ESPINOZA
EXP. 9/30/10
No. L 6772
STATE OF CALIFORNIA

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-1	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	30.50 feet		San Leandro, CA
Top of Casing Elevation:	54.46 feet	**Date:**	September 17, 2013
Depth to Groundwater:	23.84 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.62 feet		
Water Column Height:	6.66 feet		
Purged Volume:	12 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ **Describe:** _____

Sheen: Yes ☐ No ☑ **Describe:** _____

Odor: Yes ☑ No ☐ **Describe:** Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
09:10	Started purging well						
09:11	2	3.13	6.41	20.35	1197	16.3	+32.6
09:13	6	2.04	6.40	20.47	1171	16.6	+16.2
09:15	10	1.78	6.44	20.45	1210	11.7	+5.5
09:16	12	1.56	6.44	20.47	1225	16.9	+2.5
09:21	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-2	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	30.15 feet		San Leandro, CA
Top of Casing Elevation:	52.41 feet	**Date:**	September 16, 2013
Depth to Groundwater:	22.15 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.26 feet		
Water Column Height:	8.00 feet		
Purged Volume:	14 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

Odor: Yes ☑ No ☐ Describe: Very Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
15:15	Started purging well						
15:16	2	1.06	6.79	20.77	1438	30.6	-51.1
15:18	6	1.14	6.64	20.84	1293	19.5	-48.7
15:20	10	1.08	6.66	20.89	1251	16.5	-54.5
15:22	14	1.04	6.68	20.82	1276	17.1	-51.3
15:27	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-3	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	29.90 feet		San Leandro, CA
Top of Casing Elevation:	53.91 feet	**Date:**	September 17, 2013
Depth to Groundwater:	23.41 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.50 feet		
Water Column Height:	6.49 feet		
Purged Volume:	12 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☑ No ☐ **Describe:** Cloudy

Sheen: Yes ☑ No ☐ **Describe:** Rainbow Sheen

Odor: Yes ☑ No ☐ **Describe:** Petro Odor

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
10:56	Started purging well						
10:57	2	2.03	6.66	20.94	1214	124	-32.3
10:59	6	1.16	6.65	20.97	1198	89.4	-40.7
11:01	10	1.03	6.65	20.93	1200	89.2	-44.0
11:02	12	0.94	6.64	20.93	1203	108	-44.7
11:07	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-4	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	30.20 feet		San Leandro, CA
Top of Casing Elevation:	53.31 feet	**Date:**	September 17, 2013
Depth to Groundwater:	23.23 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.08 feet		
Water Column Height:	6.97 feet		
Purged Volume:	12 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ **Describe:** _____

Sheen: Yes ☐ No ☑ **Describe:** _____

Odor: Yes ☑ No ☐ **Describe:** Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
09:41	Started purging well						
09:42	2	1.48	6.53	20.01	1304	20.4	-0.9
09:44	6	1.33	6.51	20.02	1332	12.8	+2.1
09:46	10	1.24	6.50	20.01	1351	13.3	+3.8
09:47	12	1.18	6.50	20.01	1353	11.7	+3.8
09:52	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-5	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	29.80 feet		San Leandro, CA
Top of Casing Elevation:	50.53 feet	**Date:**	September 17 2013
Depth to Groundwater:	20.54 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	29.99 feet		
Water Column Height:	9.26 feet		
Purged Volume:	14 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

Odor: Yes ☑ No ☐ Describe: Petro Odor

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
10:25	Started purging well						
10:26	2	2.24	6.92	21.37	1170	21.0	-33.2
10:28	6	1.00	6.91	21.47	1170	15.2	-52.4
10:30	10	0.71	6.88	21.46	1166	15.7	-63.3
10:32	14	0.65	6.85	21.44	1165	20.9	-64.7
10:37	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-6	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	27.30 feet		San Leandro, CA
Top of Casing Elevation:	45.82 feet	**Date:**	September 16, 2013
Depth to Groundwater:	18.11 feet / 18.076 ft.	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	27.71 feet / 27.74 ft. (corrected for FP)		
Water Column Height:	9.19 feet		
Purged Volume:	— gallons		
	Not purged		

Purging Method: Bailer ☐ Pump ☐

Sampling Method: Bailer ☐ Pump ☐ Not sampled

Color:	Yes ☐	No ☐	**Describe:**	Unknown	
Sheen:	Yes ☑	No ☐	**Describe:**	Free Product	
Odor:	Yes ☑	No ☐	**Describe:**	Strong Petro	

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP

Depth to Free Product: 18.06
0.05 feet of FP.

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-7	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	21.00 feet		San Leandro, CA
Top of Casing Elevation:	44.74 feet	**Date:**	September 16, 2013
Depth to Groundwater:	15.78 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	28.96 feet		
Water Column Height:	5.22 feet		
Purged Volume:	2.5 gallons		

Purging Method: Bailer ☑ Pump ☐

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☑ No ☐ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

Odor: Yes ☐ No ☑ Describe: _____

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
12:11	Started purging well						
12:14	1	8.18	6.34	19.60	1188	1000	+118.4
12:18	2	3.85	6.18	19.24	1272	999	+50.3
12:20	2.5	3.59	6.21	19.19	1264	999	+45.9
12:25	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	EX-1	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	— feet		San Leandro, CA
Top of Casing Elevation:	47.36 feet	**Date:**	September 16, 2013
Depth to Groundwater:	22.54 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	24.82 feet		
Water Column Height:	NC feet		
Purged Volume:	- gallons		
	Not Purged		

Purging Method: **Bailer** ☐ **Pump** ☐

Sampling Method: **Bailer** ☑ **Pump** ☐

Color: **Yes** ☐ **No** ☑ **Describe:** _____

Sheen: **Yes** ☐ **No** ☑ **Describe:** _____

Odor: **Yes** ☑ **No** ☐ **Describe:** Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
12:40	Grab	Sample					

ENVIRONMENTAL ENGINEERING, INC

Well No.:	EX-2	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	- feet		San Leandro, CA
Top of Casing Elevation:	45.96 feet	**Date:**	September 20, 2013
Depth to Groundwater:	23.11 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	22.85 feet		
Water Column Height:	NC feet		
Purged Volume:	- gallons Not Purged		

Purging Method: **Bailer** ☐ **Pump** ☐

Sampling Method: **Bailer** ☐ **Pump** ☑ (downhole pump)

Color: **Yes** ☐ **No** ☑ **Describe:** _____

Sheen: **Yes** ☐ **No** ☑ **Describe:** _____

Odor: **Yes** ☑ **No** ☐ **Describe:** Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
08:15	Grab Sample						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MPE-1	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	30.00 feet		San Leandro, CA
Top of Casing Elevation:	51.96 feet	**Date:**	September 17, 2013
Depth to Groundwater:	21.98 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	29.98 feet		
Water Column Height:	8.02 feet		
Purged Volume:	14 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☑ No ☐ **Describe:** Cloudy

Sheen: Yes ☑ No ☐ **Describe:** Rainbow Sheen

Odor: Yes ☑ No ☐ **Describe:** Petro Odor

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
11:44	Started purging well						
11:45	2	1.88	6.64	20.00	1419	20.3	-57.3
11:47	6	0.89	6.63	20.08	1415	16.9	-62.9
11:49	10	0.77	6.62	20.04	1445	19.7	-66.8
11:51	14	0.65	6.59	19.97	1467	16.2	-66.7
11:56	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MPE-2	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	30.00 feet		San Leandro, CA
Top of Casing Elevation:	53.72 feet	**Date:**	September 7, 2013
Depth to Groundwater:	23.29 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.43 feet		
Water Column Height:	6.71 feet		
Purged Volume:	12 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☑ No ☐ **Describe:** Cloudy

Sheen: Yes ☐ No ☑ **Describe:**

Odor: Yes ☑ No ☐ **Describe:** Petro odor

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
11:18	Started purging well						
11:19	2	1.25	6.69	21.15	1227	74.7	-63.1
11:21	6	0.78	6.69	21.21	1223	22.5	-75.6
11:23	10	0.64	6.69	21.17	1208	20.3	-80.8
11:24	12	0.61	6.69	21.15	1201	26.5	-80.7
11:29	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-1D	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	59.81 feet		San Leandro, CA
Top of Casing Elevation:	54.42 feet	**Date:**	September 16, 2013
Depth to Groundwater:	24.02 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.40 feet		
Water Column Height:	35.79 feet		
Purged Volume:	15 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

Odor: Yes ☐ No ☑ Describe: _____

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
13:26	Started purging well						
13:27	2	2.19	7.19	19.90	1219	38.8	+129.3
13:29	6	1.37	7.14	19.87	1221	45.6	+106.4
13:31	10	1.02	7.05	19.88	1223	25.4	+95.2
13:33	14	0.84	7.07	19.89	1225	21.7	+83.1
13:34	15	0.78	7.09	19.88	1225	19.0	+80.1
13:39	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-3D	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	59.81 feet		San Leandro, CA
Top of Casing Elevation:	54.10 feet	**Date:**	September 16, 2013
Depth to Groundwater:	23.65 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.45 feet		
Water Column Height:	36.16 feet		
Purged Volume:	14 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ Describe: _____

Sheen: Yes ☐ No ☑ Describe: _____

Odor: Yes ☐ No ☑ Describe: _____

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
13:56	Started purging well						
13:57	2	1.22	7.12	20.03	1146	107	+84.2
13:59	6	0.97	7.04	20.00	1206	21.1	+78.3
14:01	10	0.84	7.06	20.00	1224	21.9	+72.6
14:03	14	0.84	7.03	20.00	1236	16.0	+72.9
14:08	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-4D	**Project No.:**	2551
Casing Diameter:	2 inches	**Address:**	15101 Freedom Avenue
Depth of Well:	58.79 feet		San Leandro, CA
Top of Casing Elevation:	53.12 feet	**Date:**	September 16, 2013
Depth to Groundwater:	23.05 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.07 feet		
Water Column Height:	35.74 feet		
Purged Volume:	14 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☑ No ☐ **Describe:** Cloudy

Sheen: Yes ☐ No ☑ **Describe:**

Odor: Yes ☐ No ☑ **Describe:**

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
14:44	Started purging well @						
14:45	2	0.12	7.26	19.55	1222	22.1	+48.0
14:47	6	0.65	7.18	19.51	1221	51.6	+45.2
14:49	10	0.71	7.14	19.48	1220	71.4	+44.2
14:51	14	0.77	7.13	19.44	1220	24.2	+42.8
14:56	Sampled						

Table A
Historical Field Parameters
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity µS/cm	Turbidity NTU	ORP
1st WBZ							
MW-1	8/27/2009	0.38	6.32	20.8	1357	4.69	-95.7
	12/2/2009	0.15	6.4	20.82	1261	6.19	-136.4
	3/17/2010	0.58	5.68	20.97	1186	7.00	-155.9
	6/3/2010	0.91	6.11	20.81	1285	2.49	-131.6
	9/2/2010	0.92	6.04	20.66	1361	2.46	-86.4
	12/2/2010	0.97	5.96	20.74	1309	4.32	-119.7
	3/4/2011	1.4	6.69	20.96	1169	1.98	-101.2
	5/20/2011	1.51	6.22	20.68	1305	1.85	-164.5
	9/9/2011	1.73	6.02	20.53	1320	4.63	-179.2
	3/2/2012	1.39	6.53	20.84	1309	12.00	-204.4
	6/7/2012	0.89	6.51	20.00	1234	3.92	-20.0
	9/21/2012	0.55	6.12	19.96	1313	5.98	-31.4
	12/14/2012	0.63	6.6	19.71	1314	6.56	-99.2
	3/28/2013	1.07	6.4	20.67	1307	5.93	-70.5
	6/11/2013	0.71	6.52	20.43	1284	11.10	-49.4
	9/17/2013	**1.56**	**6.44**	**20.47**	**1225**	**16.90**	**2.5**
MW-2	8/27/2009	0.43	6.57	20.72	1530	2.59	-168.1
	12/1/2009	0.48	6.75	21.12	1297	5.01	-191.3
	3/17/2010	0.51	5.78	21.08	1025	5.65	-108
	6/3/2010	0.62	6.28	20.84	930	2.66	-150.2
	9/2/2010	0.66	6.29	20.73	1269	2.67	-174.2
	12/2/2010	0.63	6.06	20.94	1439	2062	-162.4
	3/4/2011	1.55	6.84	20.91	815	3.34	-87.8
	5/20/2011	1.22	6.39	20.59	981	2.58	-185.9
	9/9/2011	1.67	5.89	20.48	1303	6.19	-157.7
	3/2/2012	1.98	6.37	20.83	1014	11.8	-204.5
	6/7/2012	0.93	6.53	19.87	877	4.64	-22.9
	9/21/2012	0.63	5.97	20.01	1359	7.56	-55.0
	12/14/2012	1.06	6.67	19.91	1067	7.75	-82.3
	3/28/2013	1.35	6.46	20.59	1107	5.98	-88.0
	6/11/2013	0.5	6.61	20.44	1118	20.9	-42.7
	9/16/2013	**1.04**	**6.68**	**20.82**	**1276**	**17.1**	**-51.3**
MW-3	8/27/2009	1.90	6.36	20.82	1318	5.57	-119.3
	12/2/2009	1.80	6.52	20.94	1239	5.88	-206.6
	3/17/2010	1.60	5.78	21.28	1080	5.37	-166.4
	6/3/2010	1.05	6.24	21.16	1130	2.03	-134.8
	9/2/2010	1.17	6.18	21.04	1256	2.86	-131.2
	12/2/2010	1.27	6.06	21.03	1152	1.83	-171.9
	3/4/2011	1.26	6.77	21.18	1074	3.57	-109.8
	5/20/2011	1.04	6.4	20.9	1180	2.72	-220.1
	9/9/2011	1.05	6.13	20.74	1272	3.23	-179.4
	3/2/2012	1.72	6.58	20.87	1120	12.00	-162.7
	6/7/2012	0.54	6.66	20.13	1057	3.11	-20.9
	9/21/2012	0.60	6.08	20.04	1229	8.61	-74.9
	12/14/2012	0.53	6.66	19.81	1017	7.42	-59.3
	3/28/2013	0.90	6.49	20.71	1188	7.83	-56.8
	6/11/2013	0.38	6.64	20.67	1280	96.3	-39.6
	9/17/2013	**0.94**	**6.64**	**20.93**	**1203**	**108**	**-44.7**
MW-4	8/27/2009	2.90	6.26	20.11	1649	2.78	-115.5
	12/2/2009	0.87	6.4	20.12	1578	5.06	-173.2

Table A
Historical Field Parameters
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity µS/cm	Turbidity NTU	ORP
MW-4 cont.	3/17/2010	2.30	5.63	20.39	1506	4.01	-119.4
	6/3/2010	1.90	6.14	20.45	1418	1.56	-131.8
	9/2/2010	1.80	6.06	20.21	1305	1.45	-101.5
	12/2/2010	1.63	5.89	20.28	1465	102	-180
	3/3/2011	1.89	6.66	20.47	1278	0.97	-90.5
	5/19/2011	1.78	6.42	20.51	1251	1.5	-168.3
	9/8/2011	1.77	6.27	20.32	1430	3.82	-157.4
	3/2/2012	1.55	6.39	20.21	1486	8.00	-165.9
	6/7/2012	0.58	6.58	19.53	1315	2.62	-0.3
	9/21/2012	0.48	6.08	19.49	1425	5.12	-82.6
	12/14/2012	0.62	6.58	19.12	1216	5.42	-46
	3/28/2013	0.94	6.54	19.99	1350	5.03	-35.1
	6/11/2013	0.81	6.47	20.06	1372	16.20	-3
	9/17/2013	**1.18**	**6.5**	**20.01**	**1353**	**11.70**	**3.8**
MW-5	8/27/2009	1.00	6.38	20.8	1321	6.63	-91.9
	12/2/2009	1.50	6.47	21.03	1227	5.66	-109.1
	3/17/2010	1.10	5.82	21.28	1150	75.3	-60.7
	6/4/2010	1.10	5.99	20.87	1128	3.84	-33.8
	9/2/2010	1.03	6.16	21.22	1178	13.0	-168.4
	12/2/2010	1.05	6.02	21.46	1112	12.3	-167.7
	3/4/2011	1.11	6.89	21.46	1078	4.59	-106.9
	5/20/2011	1.18	6.47	21.02	1106	26.5	-222.5
	9/9/2011	1.14	6.2	21.07	1194	5.83	-215.4
	3/2/2012	1.70	6.72	21.34	1187	11.7	-228.6
	6/7/2012	0.40	6.68	20.29	1200	5.35	-50.7
	9/21/2012	0.44	6.24	20.73	1164	9.74	33.0
	12/14/2012	0.52	6.76	20.7	1173	17	-126.5
	3/28/2013	1.01	6.59	21.24	1068	6.39	-141.5
	6/11/2013	0.50	6.69	20.94	1016	17	-44.8
	9/17/2013	**0.65**	**6.85**	**21.44**	**1165**	**20.9**	**-64.7**
MW-6	8/26/2009	0.42	6.47	20.93	1201	6.53	-172.3
	12/1/2009	0.26	6.89	21.64	1171	6.83	-207.9
	3/16/2010	0.63	5.91	21.26	1544	6.72	-168.2
	6/3/2010	0.58	6.38	20.74	1346	2.61	-116.4
	9/1/2010	0.41	6.44	20.86	1419	2.77	-120.3
	12/2/2010	0.37	6.24	21.17	1362	4.5	-148
	3/3/2011	1.54	6.81	21	1262	1.87	-98.3
	5/20/2011	1.23	6.62	20.51	1312	2.53	-221.1
	9/8/2011	1.07	6.2	20.84	1292	5.17	-167.9
	3/2/2012	1.10	6.55	21.03	1197	13.2	-166.4
	6/6/2012	1.18	6.78	19.82	1091	3.46	-32.8
	9/20/2012	FP	FP	FP	FP	FP	FP
	12/13/2012	1.47	6.72	21.05	1231	9.99	-46.2
	3/27/2013	1.53	6.58	20.81	1179	6.82	-54.9
	6/10/2013	0.70	6.64	20.55	1209	13	-13.9
	9/16/2013	**FP**	**FP**	**FP**	**FP**	**FP**	**FP**
MW-7	8/26/2009	0.98	6.36	19.24	1375	145	-128.3
	12/1/2009	1.05	6.83	19.51	1340	997	-4.3

Table A
Historical Field Parameters
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity µS/cm	Turbidity NTU	ORP
MW-7 cont.	3/16/2010	0.83	5.88	18.37	1266	382	-37.9
	6/3/2010	0.77	6.46	18.67	1199	873	-30.4
	9/1/2010	0.98	6.4	19.83	1271	999	-60
	12/2/2010	1.01	6.23	19.17	1253	999	-85.6
	3/4/2011	3.66	6.68	18.33	1098	609	-49.5
	5/19/2011	1.35	6.42	17.71	1192	879	-53.7
	9/8/2011	2.01	6.07	18.91	1198	748	-17.8
	3/2/2012	1.82	6.39	18.12	1308	363	-69.3
	6/6/2012	2.78	6.57	17.41	1106	362	1.3
	9/20/2012	1.61	6.11	18.8	1303	1000	95.9
	12/13/2012	2.93	6.67	18.42	1274	524	-22
	3/27/2013	3.01	6.51	17.1	1256	335	2.1
	6/10/2013	2.55	6.22	17.81	1232	672	8
	9/16/2013	**3.59**	**6.21**	**19.19**	**1264**	**999**	**45.9**
MPE-1	6/6/2012	1.73	6.83	19.34	1269	16.8	-41.9
	9/20/2012	0.62	5.87	19.36	1389	16.2	20.2
	12/14/2012	0.7	6.76	19.14	1473	16.4	-63.5
	3/27/2013	2.01	6.64	19.96	1499	7.03	-214.9
	6/10/2013	0.59	6.62	20.05	1497	20	-59.7
	9/17/2013	**0.65**	**6.59**	**19.97**	**1467**	**16.2**	**-66.7**
MPE-2	3/2/2012	1.30	6.40	21.18	1303	8.70	-164.9
	6/7/2012	0.48	6.62	20.32	1309	3.63	-20.4
	9/21/2012	0.46	6.29	20.27	1284	7.05	72.4
	12/14/2012	0.47	6.68	20.14	1223	7.29	-60.5
	3/28/2013	0.84	6.51	20.93	1327	8.35	-64.3
	6/11/2013	0.52	6.63	20.34	1192	29.70	-56.8
	9/17/2013	**0.61**	**6.69**	**21.15**	**1201**	**26.50**	**-80.7**
2nd WBZ							
MW-1D	8/26/2009	0.45	7.04	19.93	1388	7.75	-11
	12/1/2009	0.51	7.4	19.79	1342	19.1	-21.7
	3/16/2010	0.57	6.45	19.99	1353	98.9	-28.2
	6/4/2010	0.58	6.66	19.98	1336	3.85	97.7
	9/1/2010	0.52	6.94	20.12	1404	4.41	-6.6
	12/3/2010	0.49	6.64	19.73	1328	7.12	-75.3
	3/3/2011	2.77	7.35	19.79	1294	9.97	18.8
	5/19/2011	2.81	7.07	19.95	1330	5.26	6.6
	9/8/2011	3.21	6.66	20.03	1309	9.98	-35.5
	3/2/2012	2.04	6.75	19.76	1306	22.0	-71.3
	6/6/2012	1.1	7.29	19.54	1228	10.8	58.7
	9/20/2012	0.42	6.85	19.57	1256	18.6	93.7
	12/13/2012	1.03	7.29	18.82	1234	11.4	93.7
	3/27/2013	1.45	7.08	19.7	1253	5.8	-1
	6/10/2013	0.52	7.27	19.8	1238	16	111.5
	9/16/2013	**0.78**	**7.09**	**19.88**	**1225**	**19**	**80.1**
MW-3D	8/26/2009	0.73	6.93	20.17	1276	1.73	-18.8
	12/1/2009	0.98	7.3	20.04	1236	2.48	-23.5
	3/16/2010	0.69	6.38	20.29	1272	8.05	-27.8
	6/4/2010	0.77	6.54	20.2	1254	0.42	78.1
	9/1/2010	0.79	6.85	20.33	1304	0.25	-29.4
	12/3/2010	0.81	6.49	20.04	1252	1.49	-79.2

Table A
Historical Field Parameters
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity µS/cm	Turbidity NTU	ORP
MW-3D cont.	3/3/2011	2	7.24	20.02	1254	0.85	54
	5/19/2011	1.99	6.91	20.21	1260	2.03	-14.8
	9/8/2011	1.73	6.52	20.19	1247	3.53	-32.6
	3/2/2012	2.17	6.99	20.02	1269	9.02	-84.2
	6/6/2012	0.33	7.16	19.76	1225	4.78	67.5
	9/20/2012	0.54	6.77	19.71	1233	4.70	88.0
	12/13/2012	0.85	7.14	19.02	1229	5.27	104.1
	3/27/2013	2.11	7.01	19.94	1241	5.31	66.3
	6/10/2013	0.73	7.19	20.32	1238	12.6	100.2
	9/16/2013	**0.84**	**7.03**	**20**	**1236**	**16**	**72.9**
MW-4D	8/27/2009	0.98	6.93	19.46	1280	4.31	-26.4
	12/1/2009	1.9	7.36	19.42	1249	4.66	-24.2
	3/16/2010	1.4	6.36	19.58	1283	24.8	-16.7
	6/4/2010	1.3	6.53	19.49	1259	5.1	115.8
	9/1/2010	1.44	6.92	19.67	1333	2.2	-26.9
	12/3/2010	1.3	6.5	19.4	1266	1.57	-116.6
	3/3/2011	2.11	7.36	19.42	1219	1.8	-96.4
	5/19/2011	2.12	6.95	19.56	1262	2.09	-15.5
	9/8/2011	2.03	6.57	19.62	1261	3.13	-54
	3/2/2012	2.15	6.92	19.39	1272	13.1	-86.5
	6/6/2012	0.32	7.27	19.25	1189	6.32	22.9
	9/20/2012	0.39	6.76	19.21	1232	6.12	91.1
	12/13/2012	0.89	7.2	18.46	1210	7.34	-15.7
	3/27/2013	2.01	7.02	19.39	1236	5.31	47.4
	6/10/2013	0.75	7.14	19.54	1223	24.7	43.7
	9/16/2013	**0.77**	**7.13**	**19.44**	**1220**	**24.2**	**42.8**

EPA On-line Tools for Site Assessment Calculation

Hydraulic Gradient -- Magnitude and Direction

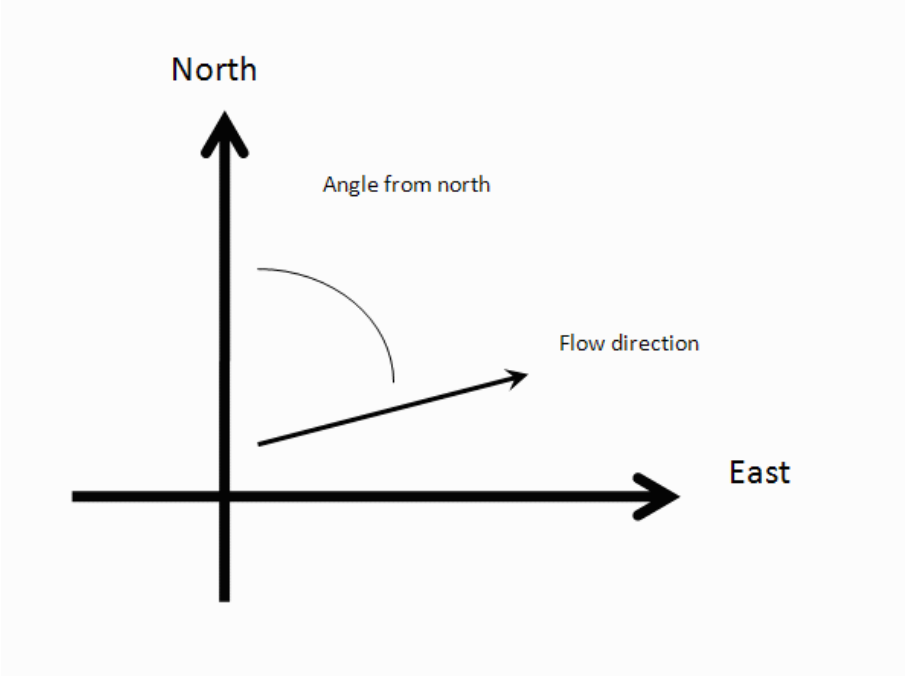
Gradient Calculation from fitting a plane to as many as thirty points

$a x_1 + b y_1 + c = h_1$
$a x_2 + b y_2 + c = h_2$
$a x_3 + b y_3 + c = h_3$
. . .
$a x_{30} + b y_{30} + c = h_{30}$

where (x_i,y_i) are the coordinates of the well and
h_i is the head

i = 1,2,3, ... , 30
The coefficients a, b, and c are calculated by a least-squares fitting of the the data to a plane

The gradient is calculated from the square root of $(a^2 + b^2)$ and the angle from the arctangent of a/b or b/a depending on the quadrant



Inputs

Example Data Set 1 | Example Data Set 2 | Calculate | Clear
Save Data | Recall Data | Go Back

Site Name: 15101 Freedom Ave
Date: September 16, 2013 Current Date
Calculation basis: Head
Coordinates: ft

	I.D.	x-coordinate	y-coordinate	head (ft)
1)	MW-1	6092119.016	2084364.691	30.62
2)	MW-2	6092063.978	2084323.224	30.26
3)	MW-3	6092176.317	2084298.343	30.50
4)	MW-4	6092124.294	2084251.598	30.08
5)	MW-5	6092177.071	2084206.361	29.99
6)	MW-6	6092140.881	2084072.911	27.74
7)	MW-7	6092290.918	2084008.071	28.96
8)	EX-1	6092163.5	2084133.982	24.82
9)	EX-2	6092131.08	2084082.713	22.85
10)	MPE-1	6092125.048	2084212.393	29.98
11)	MPE-2	6092171.793	2084292.312	30.43
12)				
13)				
14)				

15)				
16)				
17)				
18)				
19)				
20)				
21)				
22)				
23)				
24)				
25)				
26)				
27)				
28)				
29)				
30)				

Results

Number of Points Used in Calculation	11
Max. Difference Between Head Values	2.368
Gradient Magnitude (i)	0.03139
Flow direction as degrees from North (positive y axis)	228.0
Coefficient of Determination (R^2)	0.592

WCMS

Last updated on 1/10/2013

EPA On-line Tools for Site Assessment Calculation

Module Home Objectives Table of Contents Previous < Next >

Hydraulic Gradient

Gradient Calculation from fitting a plane to three points

$$a x_1 + b y_1 + c = h_1$$
$$a x_2 + b y_2 + c = h_2$$
$$a x_3 + b y_3 + c = h_3$$

where (x_i,y_i) are the coordinates of the well and
h_i is the head

$i = 1,2,3$

The gradient is calculated from the square root of $(a^2 + b^2)$ and the angle from the arctangent of a/b or b/a depending on the quadrant

Example Data Set 1 | Calculate | Clear
Save Data | Recall Data | Go Back

Site Name: 15101 Freedom Ave
Date: September 16, 2013 | Current Date
Calculation basis: Head
Coordinates: ft

x-coordinate	y-coordinate	head (ft)
6092128.064	2084372.231	30.40
6092183.856	2084303.621	30.45
6092116.755	2084222.948	30.07

Gradient Magnitude (i): 0.003844
Degrees from North (+ y axis): 239.3

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WCMS
Last updated on 1/10/2013

Appendix C

Laboratory Reports and Chain of Custody Forms
for the Third Quarter 2013 Monitoring Event

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

Laboratory Job Number 249156
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2551
Location : 15101 Freedom Avenue San Leandro
Level : II

Sample ID	Lab ID
MW-1	249156-001
MW-2	249156-002
MW-3	249156-003
MW-4	249156-004
MW-5	249156-005
MW-7	249156-006
MW-1D	249156-007
MW-3D	249156-008
MW-4D	249156-009
EX-1	249156-010
MPE-1	249156-011
MPE-2	249156-012

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.

Signature: Tracy Babjar Date: 09/26/2013

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**249156**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2551**
Location:	**15101 Freedom Avenue San Leandro**
Request Date:	**09/18/13**
Samples Received:	**09/18/13**

This data package contains sample and QC results for twelve water samples, requested for the above referenced project on 09/18/13. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

CHAIN OF CUSTODY

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

C&T LOGIN # 249156

Sampler: Lizzie Hightower/

Project No: 2551

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave.,San Leandro

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPHg, BTEX, MtBE 8260B	Analyses: Gasoline Oxygenates & Lead Scavengers
1	MW-1	9/17/13 09:21		*		3-VOAs	*			*	*	*
2	MW-2	9/16/13 15:27		*		3-VOAs	*			*	*	*
3	MW-3	9/17/13 11:07		*		3-VOAs	*			*	*	*
4	MW-4	9/17/13 09:52		*		3-VOAs	*			*	*	*
5	MW-5	9/17/13 10:37		*		3-VOAs	*			*	*	*
~~—~~	~~MW-6~~			*		3-VOAs	*			*	*	*
6	MW-7	9/16/13 12:25		*		3-VOAs	*			*	*	*
7	MW-1D	9/16/13 13:39		*		3-VOAs	*			*	*	*
8	MW-3D	9/16/13 14:08		*		3-VOAs	*			*	*	*
9	MW-4D	9/16/13 14:56		*		3-VOAs	*			*	*	*
10	EX-1	9/16/13 12:40		*		3-VOAs	*			*	*	*
~~—~~	~~EX-2~~			*		3-VOAs	*			*	*	*
11	MPE-1	9/17/13 11:56		*		3-VOAs	*			*	*	*
12	MPE-2	9/17/13 11:29		*		3-VOAs	*			*	*	*

Notes: **EDF OUTPUT REQUIRED**
Ethanol

RELINQUISHED BY:		RECEIVED BY:	
E Hightower	9/18/13 08:30 DATE/TIME		9/18/13 930 DATE/TIME
	9/18/13 1620 DATE/TIME		9/18/13 1620 DATE/TIME
	DATE/TIME		DATE/TIME

intact cold RG

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 24915G Date Received 9/18/13 Number of coolers 1
Client SOMA Project 2551

Date Opened 9/18/13 By (print) MG (sign) [signature]
Date Logged in [signature] By (print) [signature] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.8

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

9/18 MG ☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	203072
Lab ID:	249156-001	Sampled:	09/17/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/19/13
Diln Fac:	5.000		

Analyte	Result	RL
Gasoline C7-C12	7,500	250
tert-Butyl Alcohol (TBA)	ND	50
Isopropyl Ether (DIPE)	ND	2.5
Ethyl tert-Butyl Ether (ETBE)	ND	2.5
Methyl tert-Amyl Ether (TAME)	ND	2.5
Ethanol	ND	5,000
MTBE	ND	2.5
1,2-Dichloroethane	ND	2.5
Benzene	120	2.5
Toluene	ND	2.5
1,2-Dibromoethane	ND	2.5
Ethylbenzene	410	2.5
m,p-Xylenes	260	2.5
o-Xylene	ND	2.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	77-134
1,2-Dichloroethane-d4	107	72-140
Toluene-d8	99	80-120
Bromofluorobenzene	92	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	203136
Lab ID:	249156-002	Sampled:	09/16/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	210	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	1.1	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-134
1,2-Dichloroethane-d4	110	72-140
Toluene-d8	95	80-120
Bromofluorobenzene	85	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	203136
Lab ID:	249156-003	Sampled:	09/17/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	20.00		

Analyte	Result	RL
Gasoline C7-C12	28,000	1,000
tert-Butyl Alcohol (TBA)	ND	200
Isopropyl Ether (DIPE)	ND	10
Ethyl tert-Butyl Ether (ETBE)	ND	10
Methyl tert-Amyl Ether (TAME)	ND	10
Ethanol	ND	20,000
MTBE	ND	10
1,2-Dichloroethane	ND	10
Benzene	570	10
Toluene	37	10
1,2-Dibromoethane	ND	10
Ethylbenzene	1,800	10
m,p-Xylenes	3,300	10
o-Xylene	260	10

Surrogate	%REC	Limits
Dibromofluoromethane	101	77-134
1,2-Dichloroethane-d4	102	72-140
Toluene-d8	96	80-120
Bromofluorobenzene	89	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	203136
Lab ID:	249156-004	Sampled:	09/17/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	20.00		

Analyte	Result	RL
Gasoline C7-C12	ND	1,000
tert-Butyl Alcohol (TBA)	1,100	200
Isopropyl Ether (DIPE)	ND	10
Ethyl tert-Butyl Ether (ETBE)	ND	10
Methyl tert-Amyl Ether (TAME)	ND	10
Ethanol	ND	20,000
MTBE	44	10
1,2-Dichloroethane	ND	10
Benzene	1,300	10
Toluene	ND	10
1,2-Dibromoethane	ND	10
Ethylbenzene	22	10
m,p-Xylenes	ND	10
o-Xylene	ND	10

Surrogate	%REC	Limits
Dibromofluoromethane	99	77-134
1,2-Dichloroethane-d4	107	72-140
Toluene-d8	100	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	203072
Lab ID:	249156-005	Sampled:	09/17/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/19/13
Diln Fac:	2.000		

Analyte	Result	RL
Gasoline C7-C12	4,200	100
tert-Butyl Alcohol (TBA)	20	20
Isopropyl Ether (DIPE)	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	1.0
Methyl tert-Amyl Ether (TAME)	5.7	1.0
Ethanol	ND	2,000
MTBE	5.2	1.0
1,2-Dichloroethane	ND	1.0
Benzene	55	1.0
Toluene	7.9	1.0
1,2-Dibromoethane	ND	1.0
Ethylbenzene	180	1.0
m,p-Xylenes	170	1.0
o-Xylene	59	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-134
1,2-Dichloroethane-d4	107	72-140
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	203136
Lab ID:	249156-006	Sampled:	09/16/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1,400	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	4.1	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	7.9	0.50
m,p-Xylenes	2.7	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-134
1,2-Dichloroethane-d4	103	72-140
Toluene-d8	94	80-120
Bromofluorobenzene	87	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-1D	Batch#:	203136
Lab ID:	249156-007	Sampled:	09/16/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-134
1,2-Dichloroethane-d4	97	72-140
Toluene-d8	99	80-120
Bromofluorobenzene	87	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-3D	Batch#:	203136
Lab ID:	249156-008	Sampled:	09/16/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	2.1	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-134
1,2-Dichloroethane-d4	104	72-140
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-4D	Batch#:	203136
Lab ID:	249156-009	Sampled:	09/16/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	4.6	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	102	77-134
1,2-Dichloroethane-d4	104	72-140
Toluene-d8	100	80-120
Bromofluorobenzene	88	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	EX-1	Batch#:	203136
Lab ID:	249156-010	Sampled:	09/16/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	97	50
tert-Butyl Alcohol (TBA)	450	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	2.4	0.50
Methyl tert-Amyl Ether (TAME)	1.9	0.50
Ethanol	ND	1,000
MTBE	65	0.50
1,2-Dichloroethane	ND	0.50
Benzene	14	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-134
1,2-Dichloroethane-d4	105	72-140
Toluene-d8	97	80-120
Bromofluorobenzene	86	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MPE-1	Units:	ug/L
Lab ID:	249156-011	Sampled:	09/17/13
Matrix:	Water	Received:	09/18/13

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	45,000	1,300	25.00	203136	09/20/13
tert-Butyl Alcohol (TBA)	1,400	250	25.00	203136	09/20/13
Isopropyl Ether (DIPE)	ND	13	25.00	203136	09/20/13
Ethyl tert-Butyl Ether (ETBE)	ND	13	25.00	203136	09/20/13
Methyl tert-Amyl Ether (TAME)	ND	13	25.00	203136	09/20/13
Ethanol	ND	25,000	25.00	203136	09/20/13
MTBE	150	13	25.00	203136	09/20/13
1,2-Dichloroethane	ND	13	25.00	203136	09/20/13
Benzene	2,400	13	25.00	203136	09/20/13
Toluene	1,400	13	25.00	203136	09/20/13
1,2-Dibromoethane	ND	13	25.00	203136	09/20/13
Ethylbenzene	1,200	13	25.00	203136	09/20/13
m,p-Xylenes	5,900	50	100.0	203257	09/24/13
o-Xylene	2,100	13	25.00	203136	09/20/13

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	104	77-134	25.00	203136	09/20/13
1,2-Dichloroethane-d4	106	72-140	25.00	203136	09/20/13
Toluene-d8	99	80-120	25.00	203136	09/20/13
Bromofluorobenzene	85	80-120	25.00	203136	09/20/13

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MPE-2	Batch#:	203136
Lab ID:	249156-012	Sampled:	09/17/13
Matrix:	Water	Received:	09/18/13
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	25.00		

Analyte	Result	RL
Gasoline C7-C12	23,000	1,300
tert-Butyl Alcohol (TBA)	ND	250
Isopropyl Ether (DIPE)	ND	13
Ethyl tert-Butyl Ether (ETBE)	ND	13
Methyl tert-Amyl Ether (TAME)	ND	13
Ethanol	ND	25,000
MTBE	ND	13
1,2-Dichloroethane	ND	13
Benzene	680	13
Toluene	15	13
1,2-Dibromoethane	ND	13
Ethylbenzene	1,400	13
m,p-Xylenes	980	13
o-Xylene	79	13

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-134
1,2-Dichloroethane-d4	104	72-140
Toluene-d8	96	80-120
Bromofluorobenzene	83	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	203072
Units:	ug/L	Analyzed:	09/19/13
Diln Fac:	1.000		

Type: BS Lab ID: QC707798

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	80.02	128	37-144
Isopropyl Ether (DIPE)	12.50	12.20	98	52-123
Ethyl tert-Butyl Ether (ETBE)	12.50	11.79	94	57-120
Methyl tert-Amyl Ether (TAME)	12.50	11.55	92	59-120
MTBE	12.50	13.33	107	58-120
1,2-Dichloroethane	12.50	13.11	105	73-136
Benzene	12.50	13.47	108	78-125
Toluene	12.50	14.23	114	79-123
1,2-Dibromoethane	12.50	12.40	99	78-120
Ethylbenzene	12.50	13.02	104	80-126
m,p-Xylenes	25.00	27.43	110	80-123
o-Xylene	12.50	13.12	105	75-120

Surrogate	%REC	Limits
Dibromofluoromethane	105	77-134
1,2-Dichloroethane-d4	107	72-140
Toluene-d8	96	80-120
Bromofluorobenzene	88	80-120

Type: BSD Lab ID: QC707799

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	80.86	129	37-144	1	31
Isopropyl Ether (DIPE)	12.50	13.33	107	52-123	9	20
Ethyl tert-Butyl Ether (ETBE)	12.50	12.82	103	57-120	8	23
Methyl tert-Amyl Ether (TAME)	12.50	12.43	99	59-120	7	22
MTBE	12.50	13.78	110	58-120	3	23
1,2-Dichloroethane	12.50	13.51	108	73-136	3	20
Benzene	12.50	14.01	112	78-125	4	20
Toluene	12.50	13.60	109	79-123	4	20
1,2-Dibromoethane	12.50	12.42	99	78-120	0	20
Ethylbenzene	12.50	13.93	111	80-126	7	20
m,p-Xylenes	25.00	29.54	118	80-123	7	20
o-Xylene	12.50	13.80	110	75-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	77-134
1,2-Dichloroethane-d4	105	72-140
Toluene-d8	102	80-120
Bromofluorobenzene	94	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC707800	Batch#:	203072
Matrix:	Water	Analyzed:	09/19/13
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	109	77-134
1,2-Dichloroethane-d4	109	72-140
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	203072
Units:	ug/L	Analyzed:	09/19/13
Diln Fac:	1.000		

Type: BS Lab ID: QC707938

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	899.5	90	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	77-134
1,2-Dichloroethane-d4	107	72-140
Toluene-d8	98	80-120
Bromofluorobenzene	89	80-120

Type: BSD Lab ID: QC707939

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,038	104	80-120	14	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	77-134
1,2-Dichloroethane-d4	106	72-140
Toluene-d8	100	80-120
Bromofluorobenzene	94	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	203136
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	1.000		

Type: BS Lab ID: QC708072

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	69.67	111	37-144
Isopropyl Ether (DIPE)	12.50	11.33	91	52-123
Ethyl tert-Butyl Ether (ETBE)	12.50	11.11	89	57-120
Methyl tert-Amyl Ether (TAME)	12.50	11.92	95	59-120
MTBE	12.50	12.35	99	58-120
1,2-Dichloroethane	12.50	11.78	94	73-136
Benzene	12.50	13.29	106	78-125
Toluene	12.50	12.70	102	79-123
1,2-Dibromoethane	12.50	12.59	101	78-120
Ethylbenzene	12.50	13.65	109	80-126
m,p-Xylenes	25.00	29.24	117	80-123
o-Xylene	12.50	14.00	112	75-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-134
1,2-Dichloroethane-d4	98	72-140
Toluene-d8	100	80-120
Bromofluorobenzene	88	80-120

Type: BSD Lab ID: QC708073

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	67.59	108	37-144	3	31
Isopropyl Ether (DIPE)	12.50	10.83	87	52-123	4	20
Ethyl tert-Butyl Ether (ETBE)	12.50	9.740	78	57-120	13	23
Methyl tert-Amyl Ether (TAME)	12.50	10.88	87	59-120	9	22
MTBE	12.50	11.25	90	58-120	9	23
1,2-Dichloroethane	12.50	11.34	91	73-136	4	20
Benzene	12.50	11.54	92	78-125	14	20
Toluene	12.50	11.88	95	79-123	7	20
1,2-Dibromoethane	12.50	11.42	91	78-120	10	20
Ethylbenzene	12.50	12.34	99	80-126	10	20
m,p-Xylenes	25.00	25.45	102	80-123	14	20
o-Xylene	12.50	12.08	97	75-120	15	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-134
1,2-Dichloroethane-d4	98	72-140
Toluene-d8	98	80-120
Bromofluorobenzene	86	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	203136
Units:	ug/L	Analyzed:	09/20/13
Diln Fac:	1.000		

Type: BS Lab ID: QC708074

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,003	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	77-134
1,2-Dichloroethane-d4	99	72-140
Toluene-d8	101	80-120
Bromofluorobenzene	86	80-120

Type: BSD Lab ID: QC708075

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	999.9	100	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	77-134
1,2-Dichloroethane-d4	99	72-140
Toluene-d8	97	80-120
Bromofluorobenzene	87	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC708076	Batch#:	203136
Matrix:	Water	Analyzed:	09/20/13
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	101	77-134
1,2-Dichloroethane-d4	107	72-140
Toluene-d8	100	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	203257
Units:	ug/L	Analyzed:	09/24/13
Diln Fac:	1.000		

Type: BS Lab ID: QC708566

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	61.63	99	37-144
Isopropyl Ether (DIPE)	12.50	11.15	89	52-123
Ethyl tert-Butyl Ether (ETBE)	12.50	10.84	87	57-120
Methyl tert-Amyl Ether (TAME)	12.50	11.68	93	59-120
MTBE	12.50	11.70	94	58-120
1,2-Dichloroethane	12.50	13.49	108	73-136
Benzene	12.50	13.36	107	78-125
Toluene	12.50	13.43	107	79-123
1,2-Dibromoethane	12.50	12.02	96	78-120
Ethylbenzene	12.50	14.10	113	80-126
m,p-Xylenes	25.00	28.11	112	80-123
o-Xylene	12.50	14.34	115	75-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	77-134
1,2-Dichloroethane-d4	107	72-140
Toluene-d8	93	80-120
Bromofluorobenzene	88	80-120

Type: BSD Lab ID: QC708567

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	68.67	110	37-144	11	31
Isopropyl Ether (DIPE)	12.50	11.67	93	52-123	5	20
Ethyl tert-Butyl Ether (ETBE)	12.50	12.06	96	57-120	11	23
Methyl tert-Amyl Ether (TAME)	12.50	13.75	110	59-120	16	22
MTBE	12.50	13.58	109	58-120	15	23
1,2-Dichloroethane	12.50	15.34	123	73-136	13	20
Benzene	12.50	14.76	118	78-125	10	20
Toluene	12.50	14.04	112	79-123	4	20
1,2-Dibromoethane	12.50	13.23	106	78-120	10	20
Ethylbenzene	12.50	15.00	120	80-126	6	20
m,p-Xylenes	25.00	30.48	122	80-123	8	20
o-Xylene	12.50	14.81	118	75-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-134
1,2-Dichloroethane-d4	112	72-140
Toluene-d8	94	80-120
Bromofluorobenzene	84	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	203257
Units:	ug/L	Analyzed:	09/24/13
Diln Fac:	1.000		

Type: BS Lab ID: QC708568

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	978.1	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-134
1,2-Dichloroethane-d4	109	72-140
Toluene-d8	94	80-120
Bromofluorobenzene	85	80-120

Type: BSD Lab ID: QC708569

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	998.9	100	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-134
1,2-Dichloroethane-d4	106	72-140
Toluene-d8	92	80-120
Bromofluorobenzene	86	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249156	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC708570	Batch#:	203257
Matrix:	Water	Analyzed:	09/24/13
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-134
1,2-Dichloroethane-d4	114	72-140
Toluene-d8	99	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Data File: \\Gcmsserver\DD\chem\MSVOA10.i\091913.b\JIJ22TVH.D

Date : 19-SEP-2013 22:01

Client ID: DYNA P&T

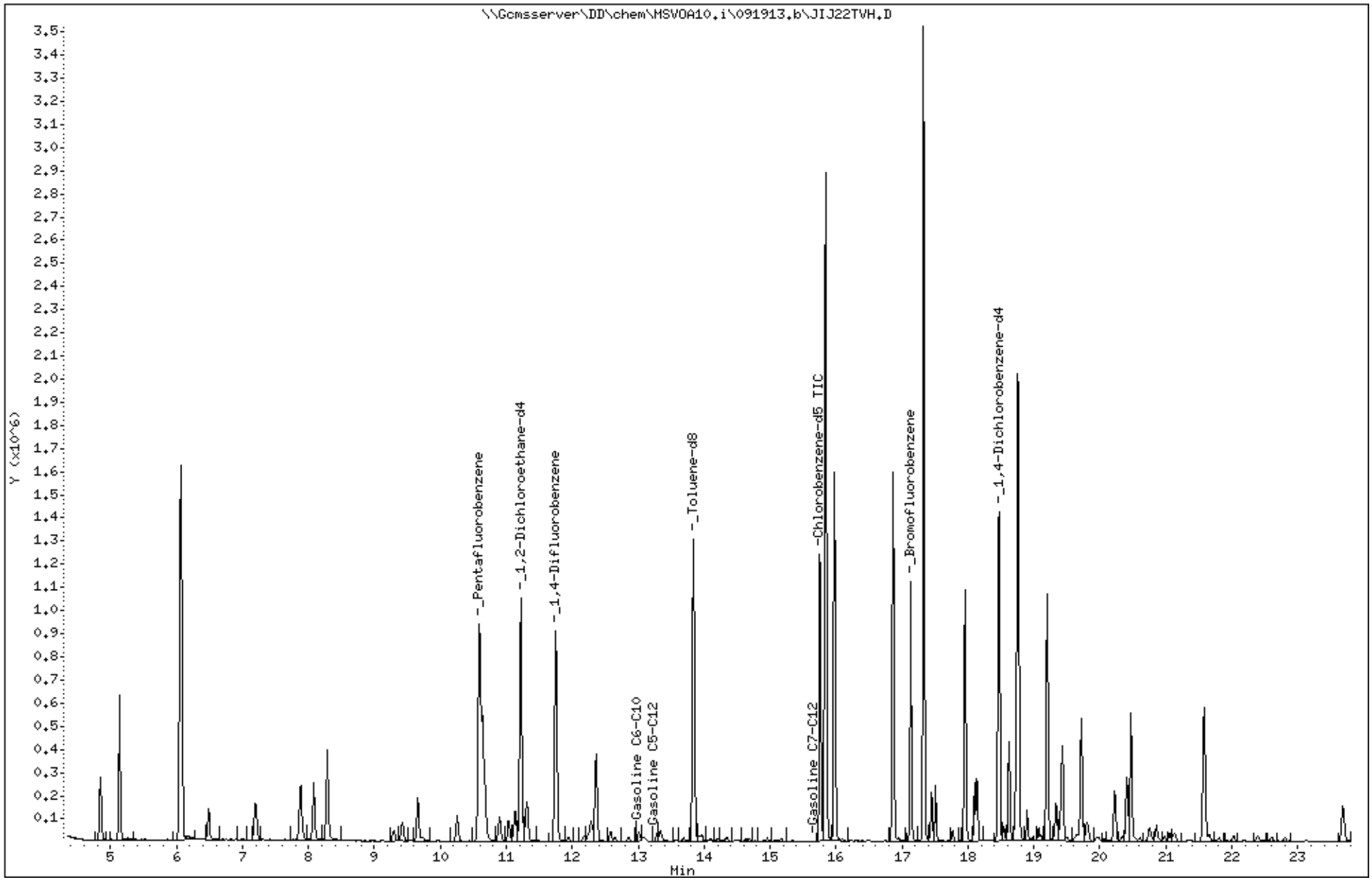
Instrument: MSVOA10.i

Sample Info: S,249156-001

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 20-SEP-2013 20:03

Client ID: DYNA P&T

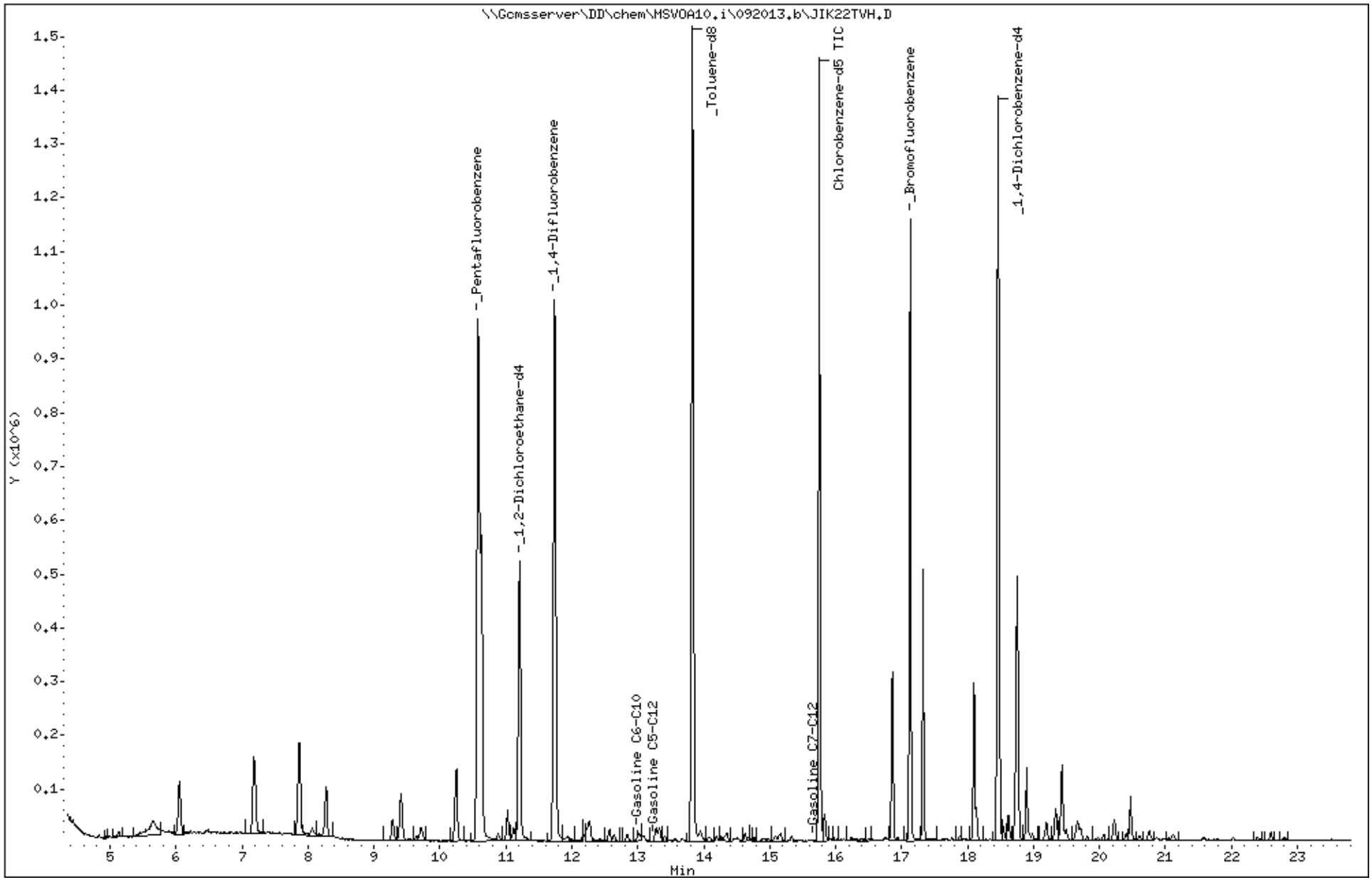
Instrument: MSVOA10.i

Sample Info: S,249156-002

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 20-SEP-2013 23:08

Client ID: DYNA P&T

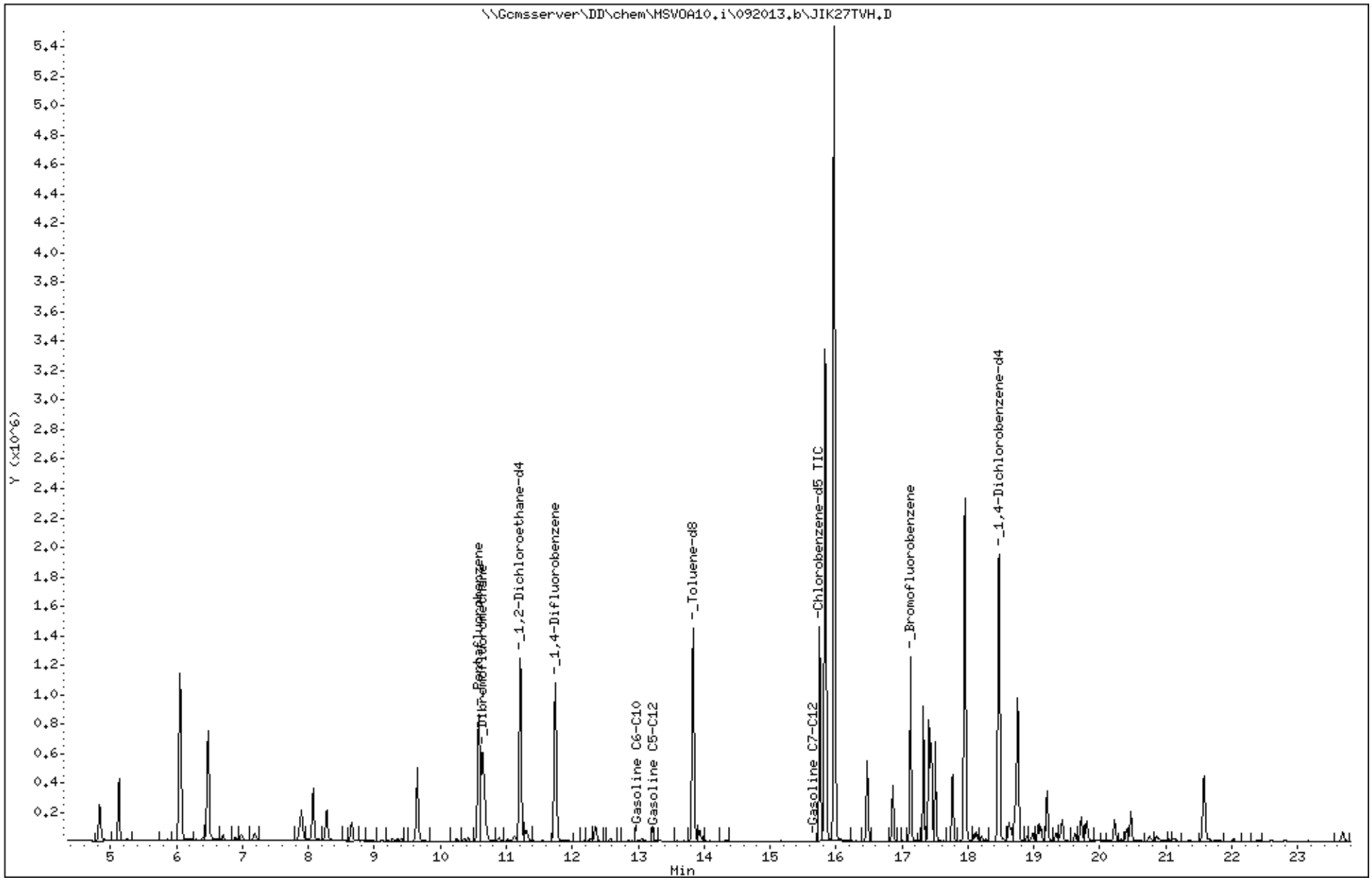
Instrument: MSVOA10.i

Sample Info: S,249156-003

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 19-SEP-2013 23:51

Client ID: DYNA P&T

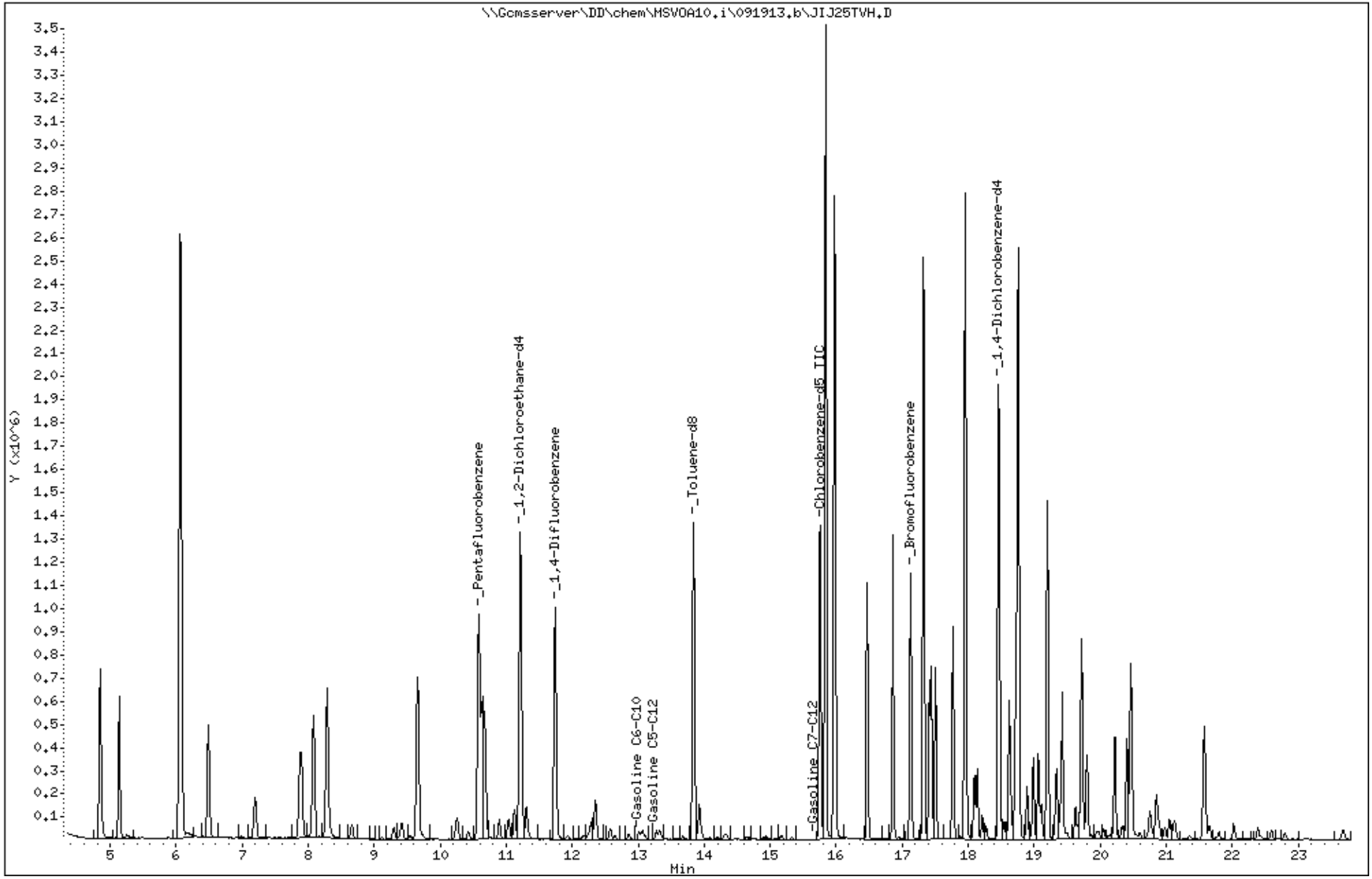
Instrument: MSVOA10.i

Sample Info: S,249156-005

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 20-SEP-2013 16:59

Client ID: DYNA P&T

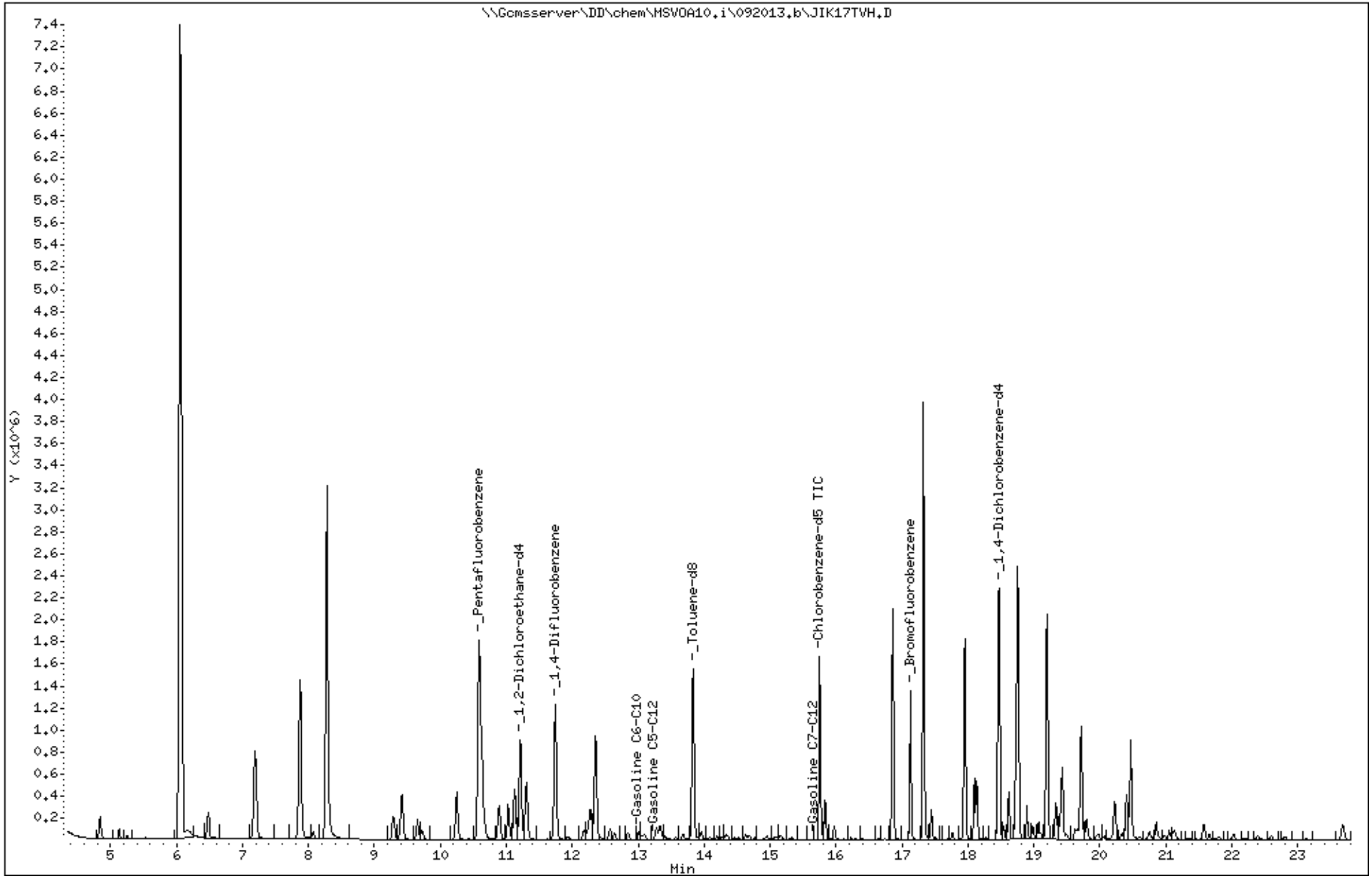
Instrument: MSVOA10.i

Sample Info: S,249156-006

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 20-SEP-2013 20:40

Client ID: DYNA P&T

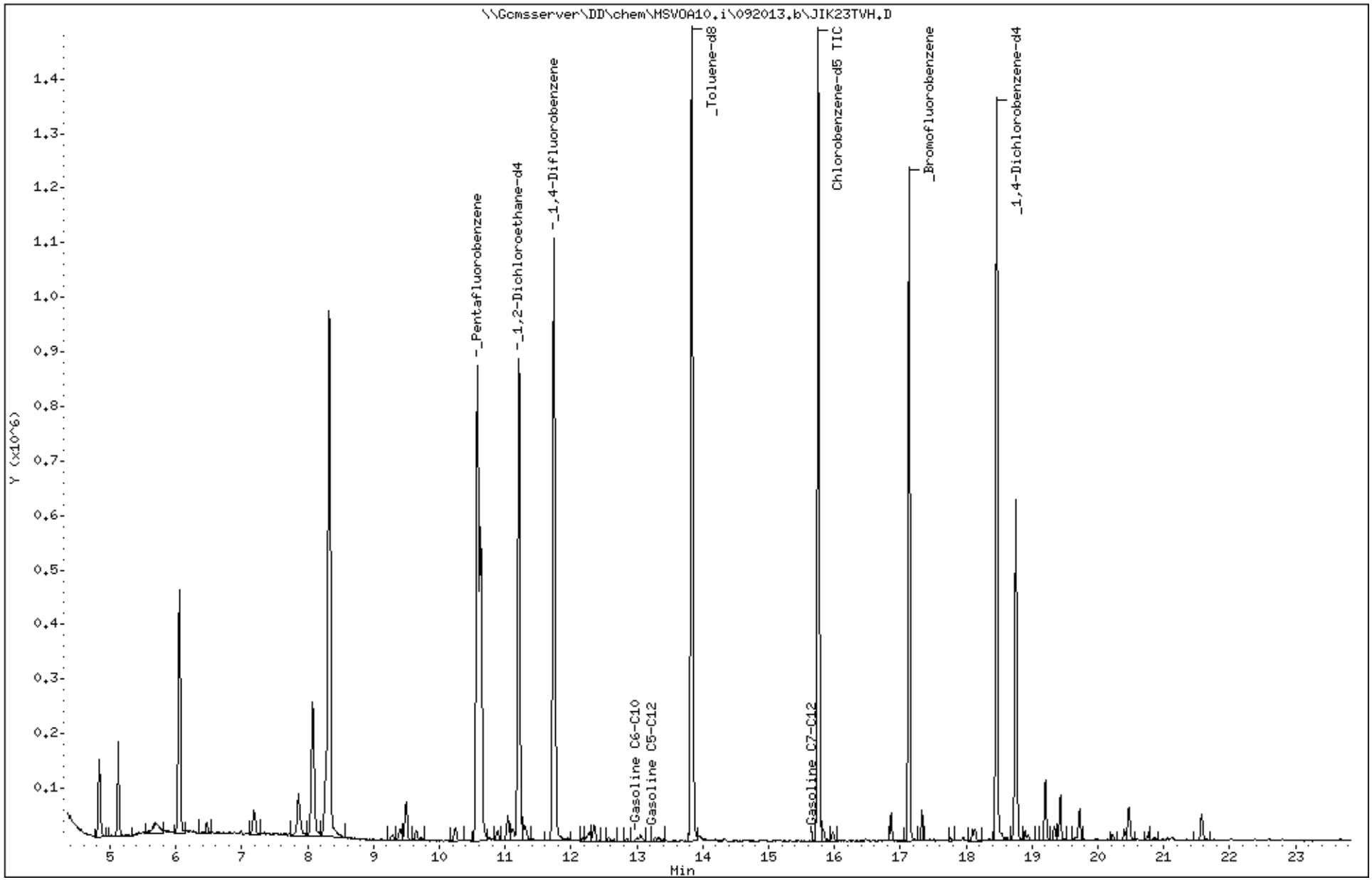
Instrument: MSVOA10.i

Sample Info: S,249156-010

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 20-SEP-2013 21:54

Client ID: DYNA P&T

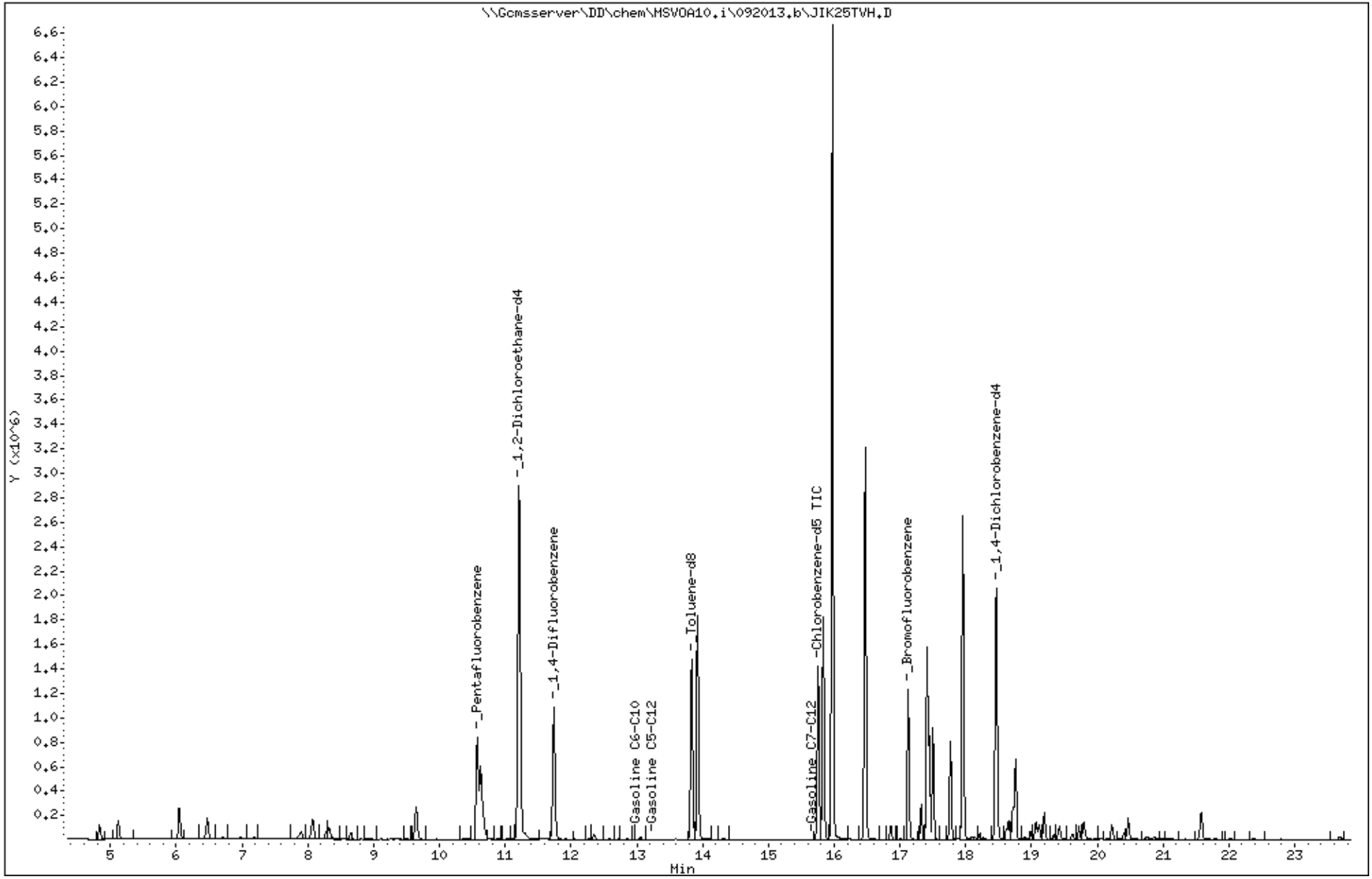
Instrument: MSVOA10.i

Sample Info: S,249156-011

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 20-SEP-2013 22:31

Client ID: DYNA P&T

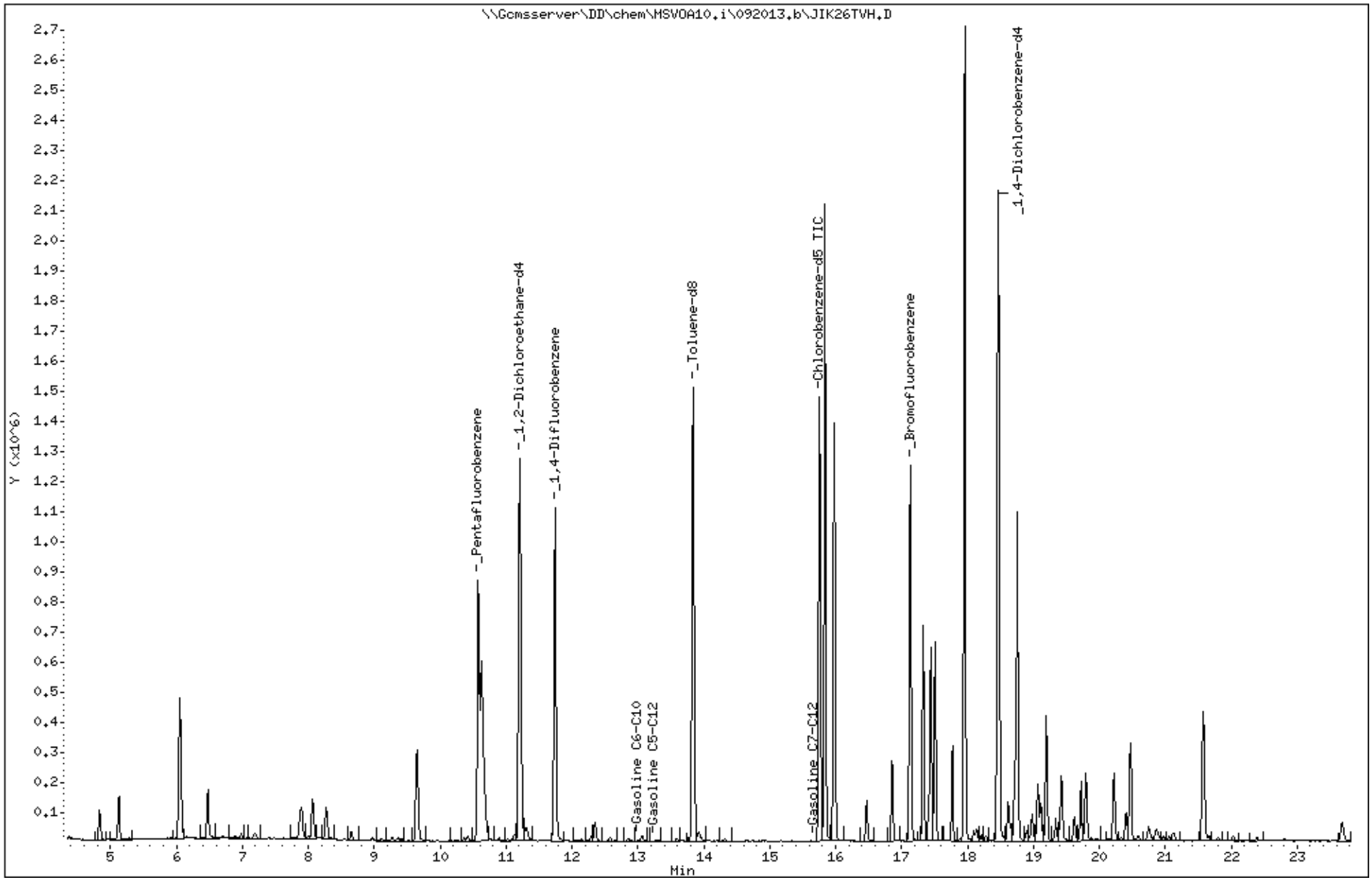
Instrument: MSVOA10.i

Sample Info: S,249156-012

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 19-SEP-2013 15:52

Client ID: DYNA P&T

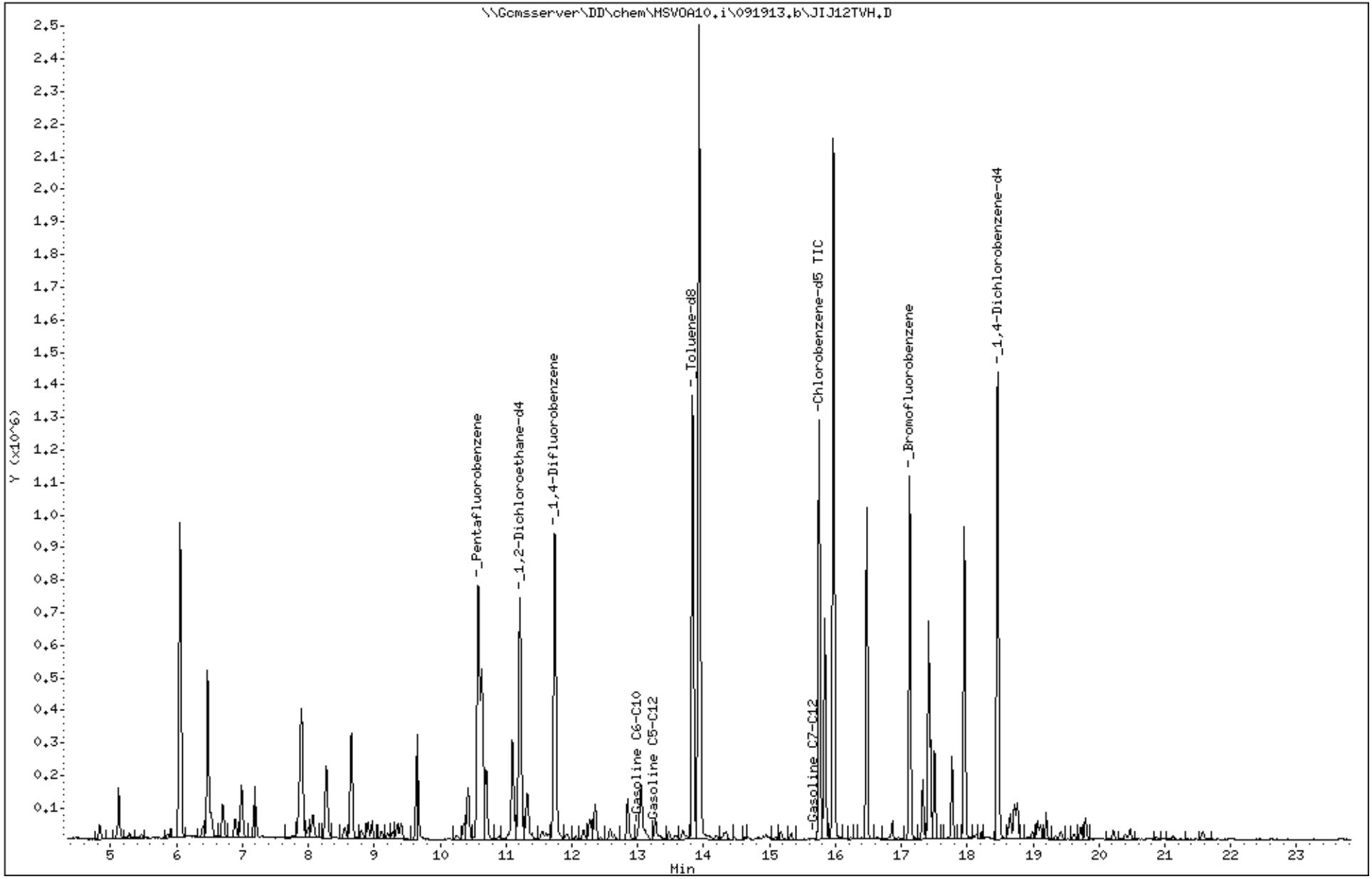
Instrument: MSVOA10.i

Sample Info: CCV/BS,QC707938

Operator: VOA

Column phase:

Column diameter: 2.00



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

Laboratory Job Number 249257
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.	Project : 2551
6620 Owens Dr.	Location : 15101 Freedom Avenue San Leandro
Pleasanton, CA 94588	Level : II

Sample ID	Lab ID
EX-2	249257-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 09/30/2013

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**249257**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2551**
Location:	**15101 Freedom Avenue San Leandro**
Request Date:	**09/20/13**
Samples Received:	**09/20/13**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 09/20/13. The sample was received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

CHAIN OF CUSTODY

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

C&T LOGIN # 244257

Sampler: Lizzie Hightower/

Project No: 2551

Report To: **Joyce Bobek**

Project Name: 15101 Freedom Ave.,San Leandro

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPHg, BTEX, MtBE 8260B	Analyses: Gasoline Oxygenates & Lead Scavengers
	EX-2	9/20/13 08:15		*		3-VOAs	*			*	*	*

Notes: **EDF OUTPUT REQUIRED**
Ethanol

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
[signature]	9/20/13 1703	[signature]	9/20/13 1305
[signature]	9/20/13 1705	[signature]	9/20/13 DATE/TIME
	DATE/TIME		DATE/TIME

wet Gel RC

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 249257 Date Received 9.20.13 Number of coolers 1
Client SOMA Project Freedom Ave

Date Opened 9.20.13 By (print) PV (sign) PV
Date Logged in ↓ By (print) MG (sign) MG

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples (☐ NO)
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 0.9

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	249257	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	EX-2	Units:	ug/L
Lab ID:	249257-001	Sampled:	09/20/13
Matrix:	Water	Received:	09/20/13

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	3,900	100	2.000	203395	09/26/13
tert-Butyl Alcohol (TBA)	ND	20	2.000	203395	09/26/13
Isopropyl Ether (DIPE)	ND	1.0	2.000	203395	09/26/13
Ethyl tert-Butyl Ether (ETBE)	ND	1.0	2.000	203395	09/26/13
Methyl tert-Amyl Ether (TAME)	ND	1.0	2.000	203395	09/26/13
Ethanol	ND	2,000	2.000	203395	09/26/13
MTBE	6.3	1.0	2.000	203395	09/26/13
1,2-Dichloroethane	1.4	1.0	2.000	203395	09/26/13
Benzene	210	5.0	10.00	203440	09/27/13
Toluene	37	1.0	2.000	203395	09/26/13
1,2-Dibromoethane	ND	1.0	2.000	203395	09/26/13
Ethylbenzene	170	1.0	2.000	203395	09/26/13
m,p-Xylenes	370	1.0	2.000	203395	09/26/13
o-Xylene	80	1.0	2.000	203395	09/26/13

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	101	77-134	2.000	203395	09/26/13
1,2-Dichloroethane-d4	128	72-140	2.000	203395	09/26/13
Toluene-d8	100	80-120	2.000	203395	09/26/13
Bromofluorobenzene	93	80-120	2.000	203395	09/26/13

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249257	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	203395
Units:	ug/L	Analyzed:	09/26/13
Diln Fac:	1.000		

Type: BS Lab ID: QC709112

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	71.53	114	37-144
Isopropyl Ether (DIPE)	12.50	10.57	85	52-123
Ethyl tert-Butyl Ether (ETBE)	12.50	10.95	88	57-120
Methyl tert-Amyl Ether (TAME)	12.50	11.78	94	59-120
MTBE	12.50	11.99	96	58-120
1,2-Dichloroethane	12.50	13.31	106	73-136
Benzene	12.50	12.63	101	78-125
Toluene	12.50	13.33	107	79-123
1,2-Dibromoethane	12.50	12.33	99	78-120
Ethylbenzene	12.50	13.84	111	80-126
m,p-Xylenes	25.00	28.55	114	80-123
o-Xylene	12.50	13.98	112	75-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	77-134
1,2-Dichloroethane-d4	107	72-140
Toluene-d8	98	80-120
Bromofluorobenzene	88	80-120

Type: BSD Lab ID: QC709113

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	69.51	111	37-144	3	31
Isopropyl Ether (DIPE)	12.50	9.742	78	52-123	8	20
Ethyl tert-Butyl Ether (ETBE)	12.50	10.53	84	57-120	4	23
Methyl tert-Amyl Ether (TAME)	12.50	11.07	89	59-120	6	22
MTBE	12.50	12.09	97	58-120	1	23
1,2-Dichloroethane	12.50	12.90	103	73-136	3	20
Benzene	12.50	11.75	94	78-125	7	20
Toluene	12.50	11.49	92	79-123	15	20
1,2-Dibromoethane	12.50	11.38	91	78-120	8	20
Ethylbenzene	12.50	12.38	99	80-126	11	20
m,p-Xylenes	25.00	27.17	109	80-123	5	20
o-Xylene	12.50	12.55	100	75-120	11	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	77-134
1,2-Dichloroethane-d4	108	72-140
Toluene-d8	101	80-120
Bromofluorobenzene	88	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249257	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	203395
Units:	ug/L	Analyzed:	09/26/13
Diln Fac:	1.000		

Type: BS Lab ID: QC709114

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	966.8	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-134
1,2-Dichloroethane-d4	109	72-140
Toluene-d8	97	80-120
Bromofluorobenzene	91	80-120

Type: BSD Lab ID: QC709115

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,047	105	80-120	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	77-134
1,2-Dichloroethane-d4	111	72-140
Toluene-d8	94	80-120
Bromofluorobenzene	89	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249257	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC709116	Batch#:	203395
Matrix:	Water	Analyzed:	09/26/13
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	96	77-134
1,2-Dichloroethane-d4	115	72-140
Toluene-d8	102	80-120
Bromofluorobenzene	86	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249257	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	203440
Units:	ug/L	Analyzed:	09/27/13
Diln Fac:	1.000		

Type: BS Lab ID: QC709328

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	60.71	97	37-144
Isopropyl Ether (DIPE)	12.50	8.929	71	52-123
Ethyl tert-Butyl Ether (ETBE)	12.50	9.187	73	57-120
Methyl tert-Amyl Ether (TAME)	12.50	9.873	79	59-120
MTBE	12.50	10.02	80	58-120
1,2-Dichloroethane	12.50	11.91	95	73-136
Benzene	12.50	10.77	86	78-125
Toluene	12.50	10.31	82	79-123
1,2-Dibromoethane	12.50	10.19	81	78-120
Ethylbenzene	12.50	10.77	86	80-126
m,p-Xylenes	25.00	21.76	87	80-123
o-Xylene	12.50	10.32	83	75-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	77-134
1,2-Dichloroethane-d4	113	72-140
Toluene-d8	95	80-120
Bromofluorobenzene	85	80-120

Type: BSD Lab ID: QC709329

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	64.42	103	37-144	6	31
Isopropyl Ether (DIPE)	12.50	9.904	79	52-123	10	20
Ethyl tert-Butyl Ether (ETBE)	12.50	9.734	78	57-120	6	23
Methyl tert-Amyl Ether (TAME)	12.50	10.18	81	59-120	3	22
MTBE	12.50	11.36	91	58-120	13	23
1,2-Dichloroethane	12.50	12.37	99	73-136	4	20
Benzene	12.50	11.39	91	78-125	6	20
Toluene	12.50	10.87	87	79-123	5	20
1,2-Dibromoethane	12.50	10.35	83	78-120	2	20
Ethylbenzene	12.50	11.54	92	80-126	7	20
m,p-Xylenes	25.00	23.16	93	80-123	6	20
o-Xylene	12.50	11.30	90	75-120	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	77-134
1,2-Dichloroethane-d4	113	72-140
Toluene-d8	93	80-120
Bromofluorobenzene	86	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	249257	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC709330	Batch#:	203440
Matrix:	Water	Analyzed:	09/27/13
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	NA	
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	104	77-134
1,2-Dichloroethane-d4	118	72-140
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-120

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Data File: \\Gcmsserver\DD\chem\MSVOA10.i\092613.b\JIQ24TVH.D

Date : 26-SEP-2013 22:05

Client ID: DYNA P&T

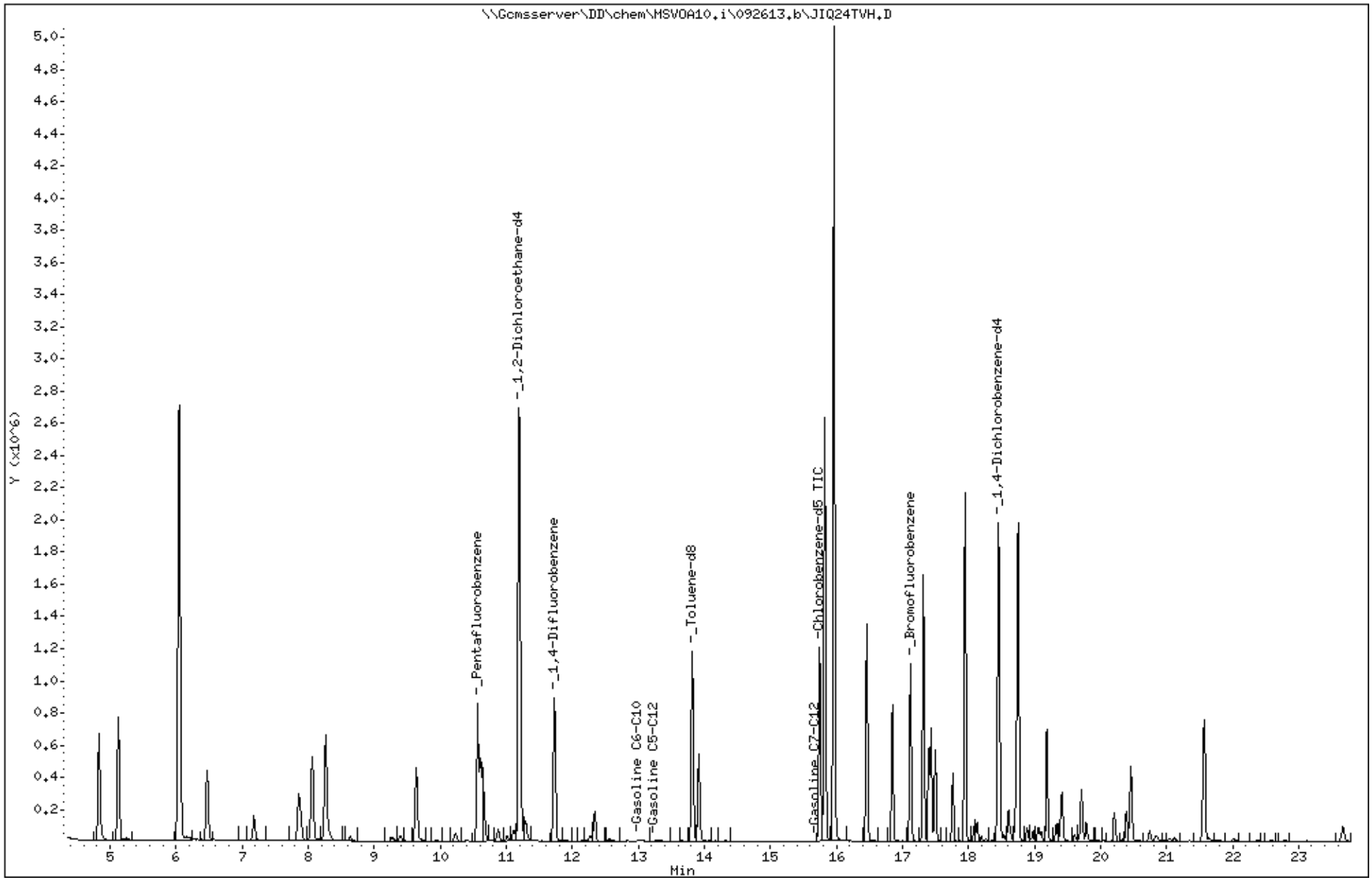
Instrument: MSVOA10.i

Sample Info: s,249257-001

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 26-SEP-2013 15:57

Client ID: DYNA P&T

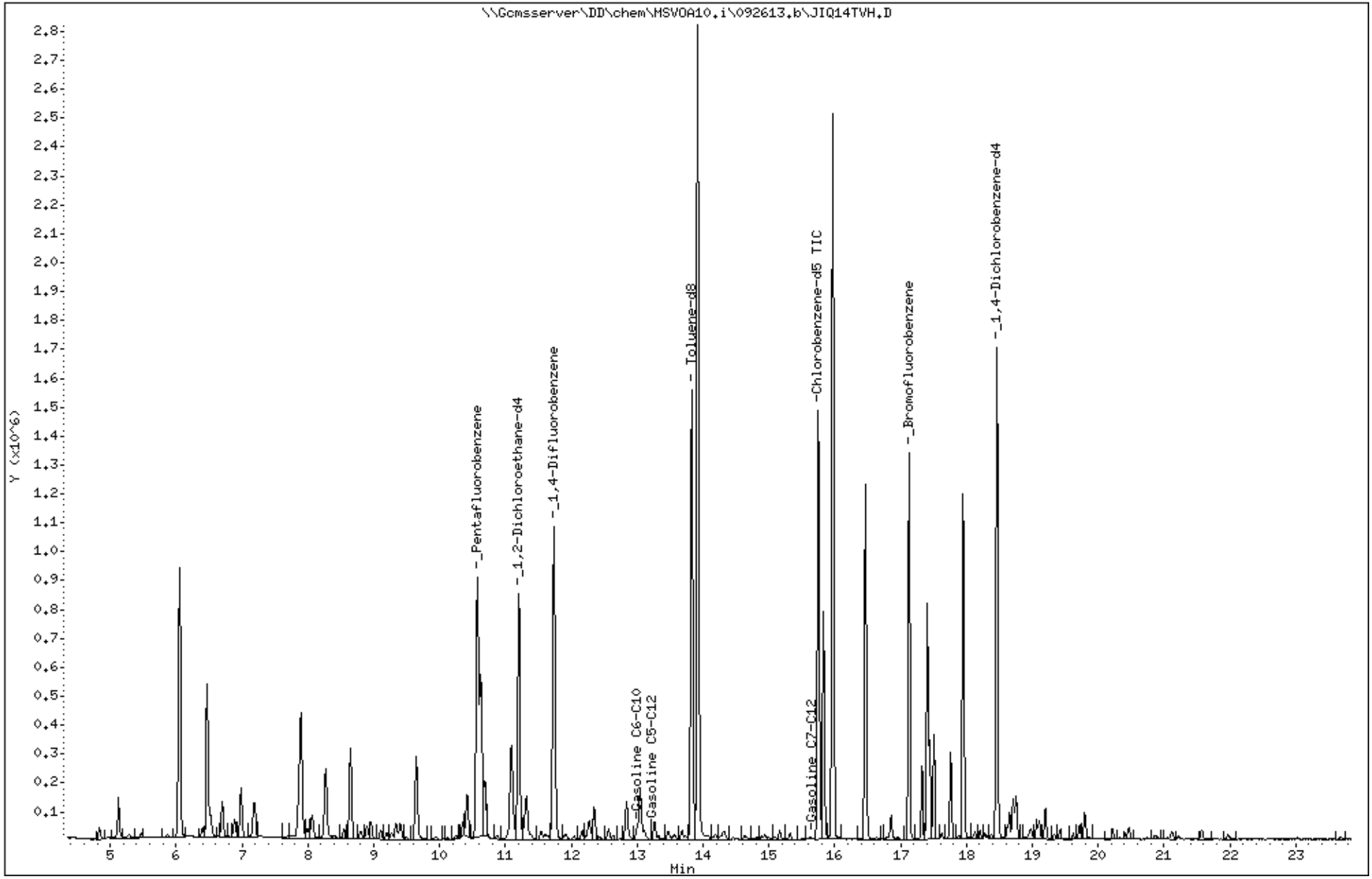
Instrument: MSVOA10.i

Sample Info: CCV/BS,QC709114

Operator: VOC

Column phase:

Column diameter: 2.00



Appendix D

Laboratory Reports and Chain of Custody Forms for the Treatment System

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

Laboratory Job Number 246732
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.	Project : 2553
6620 Owens Dr.	Location : 15101 Freedom Ave. San Leandro
Pleasanton, CA 94588	Level : II

Sample ID	Lab ID
EFFLUENT	246732-001
GAC-1	246732-002
INFLUENT	246732-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 07/12/2013

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**246732**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2553**
Location:	**15101 Freedom Ave. San Leandro**
Request Date:	**07/05/13**
Samples Received:	**07/05/13**

This data package contains sample and QC results for three water samples, requested for the above referenced project on 07/05/13. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

CHAIN OF CUSTODY

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

LOGIN # 246732

Sampler: Parsa Motavalli

Project No: 2553

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave, San Leandr

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPH-g 8015	Analyses: TPH-d, TPH-mo 8015	Analyses: BTEX 8020
1	EFFLUENT	7/5/13		*		6 VOAs	*			*	*		*
		10:00 AM,		*		2-500 ml Ambers				*		*	
2	GAC-1	7/5/13		*		6 VOAs	*			*	*		*
		10:00 AM,											
3	INFLUENT	7/5/13		*		6 VOAs	*			*	*		*
		10:00 AM,											

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:	RECEIVED BY:
7/5/13 10:45 DATE/TIME	7/5/13 10:45 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 246732 Date Received 7/5/13 Number of coolers 1
Client SOMA Project 15101 Freedom Ave.

Date Opened 7/5/13 By (print) AM (sign)
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc)_____ YES (NO)
   Shipping info_____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☑ NO
   How many _____ Name_____ Date_____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received?_____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form)___ (YES) NO
6. Indicate the packing in cooler: (if other, describe)_____

☐ Bubble Wrap ☑ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

   Type of ice used: ☐ Wet ☐ Blue/Gel ☑ None Temp(°C)_____

   ☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

   ☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present?_____ YES (NO)
   If YES, what time were they transferred to freezer?_____
9. Did all bottles arrive unbroken/unopened?_____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called?_____ By_____ Date:_____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	246732	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Matrix:	Water	Batch#:	200393
Units:	ug/L	Sampled:	07/05/13
Diln Fac:	1.000	Received:	07/05/13

Field ID: EFFLUENT
Type: SAMPLE
Lab ID: 246732-001
Analyzed: 07/06/13

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	97	76-128	EPA 8015B
Bromofluorobenzene (PID)	112	70-136	EPA 8021B

Field ID: GAC-1
Type: SAMPLE
Lab ID: 246732-002
Analyzed: 07/06/13

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	96	76-128	EPA 8015B
Bromofluorobenzene (PID)	112	70-136	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	246732	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Matrix:	Water	Batch#:	200393
Units:	ug/L	Sampled:	07/05/13
Diln Fac:	1.000	Received:	07/05/13

Field ID: INFLUENT
Type: SAMPLE
Lab ID: 246732-003
Analyzed: 07/06/13

Analyte	Result	RL	Analysis
Gasoline C7-C12	680	50	EPA 8015B
Benzene	71	0.50	EPA 8021B
Toluene	1.8	0.50	EPA 8021B
Ethylbenzene	22	0.50	EPA 8021B
m,p-Xylenes	26	0.50	EPA 8021B
o-Xylene	7.9	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	99	76-128	EPA 8015B
Bromofluorobenzene (PID)	114	70-136	EPA 8021B

Type: BLANK
Lab ID: QC696566
Analyzed: 07/05/13

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	91	76-128	EPA 8015B
Bromofluorobenzene (PID)	106	70-136	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	246732	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	200393
Units:	ug/L	Analyzed:	07/05/13
Diln Fac:	1.000		

Type: BS Lab ID: QC696564

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	11.48	115	80-120
Toluene	10.00	10.91	109	80-120
Ethylbenzene	10.00	10.85	109	80-120
m,p-Xylenes	10.00	10.45	104	80-120
o-Xylene	10.00	11.08	111	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	109	70-136

Type: BSD Lab ID: QC696565

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	10.93	109	80-120	5	20
Toluene	10.00	10.18	102	80-120	7	20
Ethylbenzene	10.00	10.40	104	80-120	4	20
m,p-Xylenes	10.00	9.806	98	80-120	6	20
o-Xylene	10.00	10.57	106	80-120	5	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	110	70-136

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	246732	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC696599	Batch#:	200393
Matrix:	Water	Analyzed:	07/05/13
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	973.7	97	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	76-128

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	246732	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	200393
MSS Lab ID:	246732-001	Sampled:	07/05/13
Matrix:	Water	Received:	07/05/13
Units:	ug/L	Analyzed:	07/06/13
Diln Fac:	1.000		

Type: MS Lab ID: QC696685

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<12.82	2,000	1,737	87	76-120

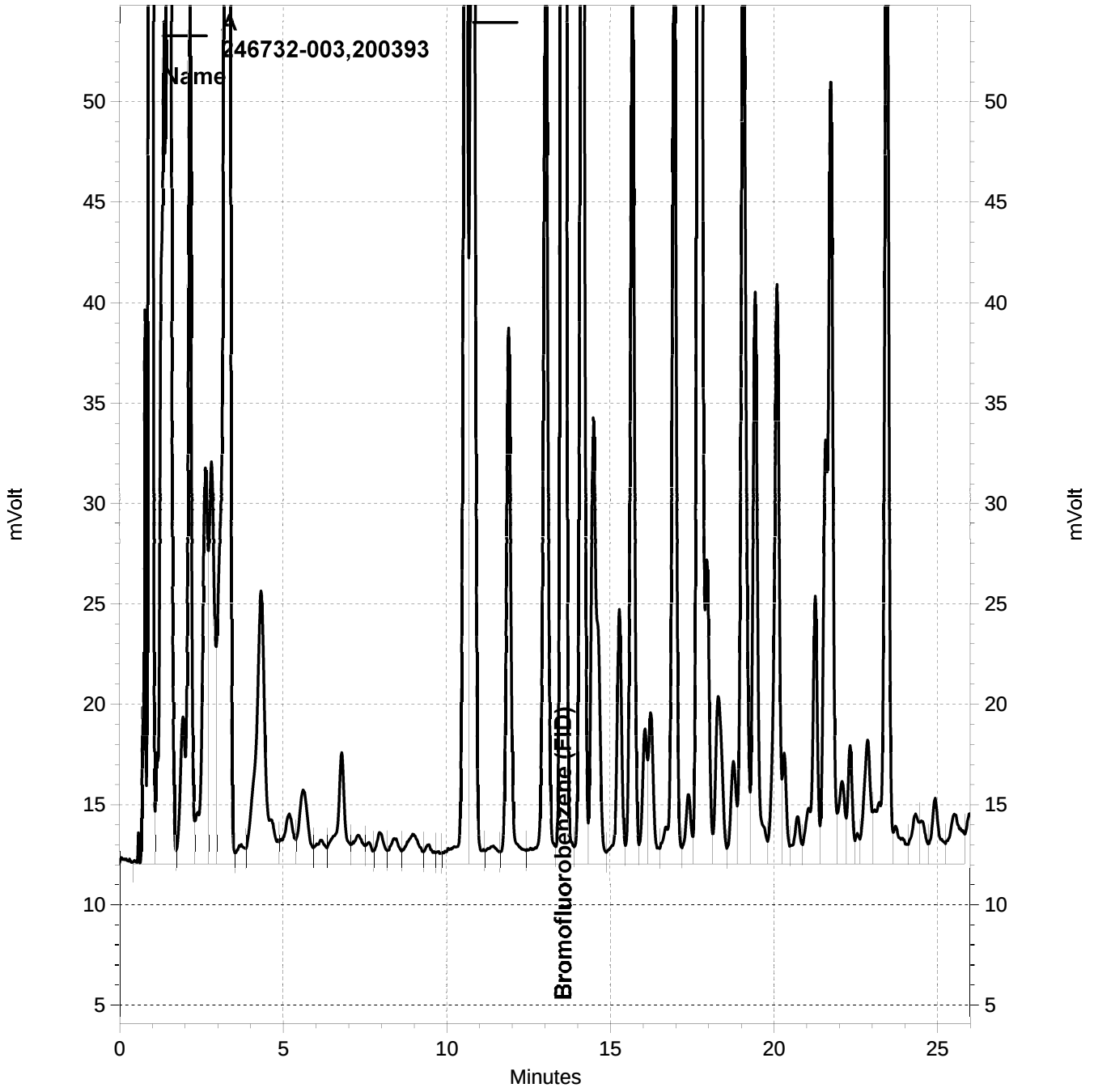
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	76-128

Type: MSD Lab ID: QC696686

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,851	93	76-120	6	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	76-128

RPD= Relative Percent Difference



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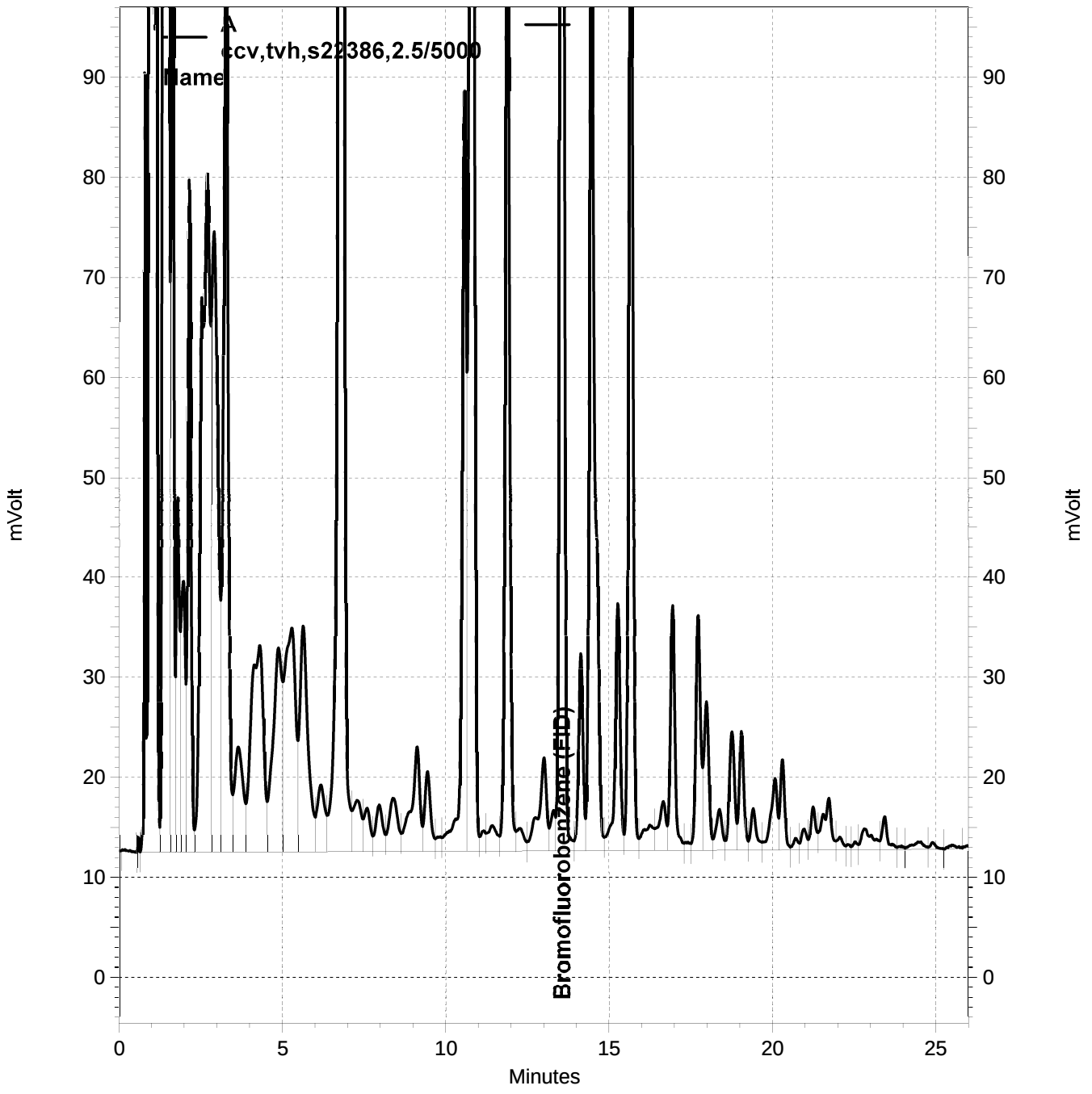

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	246732	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	200404
Matrix:	Water	Sampled:	07/05/13
Units:	ug/L	Received:	07/05/13
Diln Fac:	1.000	Prepared:	07/05/13

Type: SAMPLE Analyzed: 07/08/13
Lab ID: 246732-001

Analyte	Result	RL
Diesel C10-C24	ND	49
Motor Oil C24-C36	ND	290

Surrogate	%REC	Limits
o-Terphenyl	98	62-133

Type: BLANK Analyzed: 07/07/13
Lab ID: QC696613

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	100	62-133

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	246732	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	200404
Units:	ug/L	Prepared:	07/05/13
Diln Fac:	1.000	Analyzed:	07/08/13

Type: BS
Lab ID: QC696614
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,132	85	59-120

Surrogate	%REC	Limits
o-Terphenyl	104	62-133

Type: BSD
Lab ID: QC696615
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,303	92	59-120	8	46

Surrogate	%REC	Limits
o-Terphenyl	113	62-133

RPD= Relative Percent Difference

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

Laboratory Job Number 248014
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.	Project : 2553
6620 Owens Dr.	Location : 15101 Freedom Ave. San Leandro
Pleasanton, CA 94588	Level : II

Sample ID	Lab ID
EFFLUENT	248014-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 08/22/2013

Tracy Babjar
Project Manager
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**248014**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2553**
Location:	**15101 Freedom Ave. San Leandro**
Request Date:	**08/15/13**
Samples Received:	**08/15/13**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 08/15/13. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

CHAIN OF CUSTODY

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

LOGIN # 248014

Sampler: MASOUD

Project No: 2553

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave, San Leandr

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPH-g 8015	Analyses: BTEX 8020	Analyses: TPH-d, TPH-mo 8015
1	Effluent	8/15/13 – 11		*		6 VOAs	*			*	*	*	
		↕		*		2-500 mL Ambers				*			*

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:	RECEIVED BY:
8/15/13 – 11:40 DATE/TIME	8/15/13 11:40 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 248014 Date Received 8/15/13 Number of coolers 1
Client SOMA Project 15101 Freedom Ave

Date Opened 8/15/13 By (print) JH (sign)
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO (N/A)
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☑ Blue/Gel ☐ None Temp(°C)

☑ Samples Received on ice & cold without a temperature blank~~; temp. taken with IR gun~~

☑ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? (YES) NO N/A
16. Did you check preservatives for all bottles for each sample? YES NO (N/A)
17. Did you document your preservative check? YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
If YES, Who was called? By Date:

COMMENTS

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	248014	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Field ID:	EFFLUENT	Batch#:	201817
Matrix:	Water	Sampled:	08/15/13
Units:	ug/L	Received:	08/15/13
Diln Fac:	1.000	Analyzed:	08/16/13

Type: SAMPLE Lab ID: 248014-001

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	112	76-128	EPA 8015B
Bromofluorobenzene (PID)	113	70-136	EPA 8021B

Type: BLANK Lab ID: QC702382

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	110	76-128	EPA 8015B
Bromofluorobenzene (PID)	111	70-136	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	248014	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC702379	Batch#:	201817
Matrix:	Water	Analyzed:	08/16/13
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,114	111	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	111	76-128

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	248014	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	201817
MSS Lab ID:	248014-001	Sampled:	08/15/13
Matrix:	Water	Received:	08/15/13
Units:	ug/L	Analyzed:	08/16/13
Diln Fac:	1.000		

Type: MS Lab ID: QC702380

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<10.56	2,000	2,060	103	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	116	76-128

Type: MSD Lab ID: QC702381

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,007	100	76-120	3	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	115	76-128

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	248014	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	201817
Units:	ug/L	Analyzed:	08/16/13
Diln Fac:	1.000		

Type: BS Lab ID: QC702383

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	8.733	87	80-120
Toluene	10.00	9.495	95	80-120
Ethylbenzene	10.00	9.815	98	80-120
m,p-Xylenes	10.00	10.32	103	80-120
o-Xylene	10.00	10.08	101	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	112	70-136

Type: BSD Lab ID: QC702384

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	8.626	86	80-120	1	20
Toluene	10.00	9.651	97	80-120	2	20
Ethylbenzene	10.00	9.751	98	80-120	1	20
m,p-Xylenes	10.00	10.33	103	80-120	0	20
o-Xylene	10.00	10.06	101	80-120	0	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	115	70-136

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	248014	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Sampled:	08/15/13
Matrix:	Water	Received:	08/15/13
Units:	ug/L	Prepared:	08/16/13
Diln Fac:	1.000	Analyzed:	08/19/13
Batch#:	201802		

Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 248014-001

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	117	62-133

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC702314

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	96	62-133

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	248014	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC702315	Batch#:	201802
Matrix:	Water	Prepared:	08/16/13
Units:	ug/L	Analyzed:	08/18/13

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,147	86	59-120

Surrogate	%REC	Limits
o-Terphenyl	107	62-133

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	248014	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	201802
MSS Lab ID:	247926-004	Sampled:	08/13/13
Matrix:	Water	Received:	08/13/13
Units:	ug/L	Prepared:	08/16/13
Diln Fac:	1.000	Analyzed:	08/19/13

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC702316

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	<15.94	2,500	2,574	103	61-120

Surrogate	%REC	Limits
o-Terphenyl	128	62-133

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC702317

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,186	87	61-120	16	43

Surrogate	%REC	Limits
o-Terphenyl	109	62-133

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	248014	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	201802
MSS Lab ID:	247991-001	Sampled:	08/14/13
Matrix:	Water	Received:	08/14/13
Units:	ug/L	Prepared:	08/16/13
Diln Fac:	1.000	Analyzed:	08/19/13

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC702318

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	<15.94	2,500	2,234	89	61-120

Surrogate	%REC	Limits
o-Terphenyl	110	62-133

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC702319

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,046	82	61-120	9	43

Surrogate	%REC	Limits
o-Terphenyl	97	62-133

RPD= Relative Percent Difference

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

Laboratory Job Number 249301
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.	Project : 2553
6620 Owens Dr.	Location : 15101 Freedom Ave. San Leandro
Pleasanton, CA 94588	Level : II

Sample ID	Lab ID
EFFLUENT	249301-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Tracy Babjar Date: 10/01/2013

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**249301**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2553**
Location:	**15101 Freedom Ave. San Leandro**
Request Date:	**09/24/13**
Samples Received:	**09/24/13**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 09/24/13. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

CHAIN OF CUSTODY

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

LOGIN # 249301

Sampler: MASOUD - SEPEHR

Project No: 2553

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave, San Leandr

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPH-g 8015	Analyses: BTEX 8020	Analyses: TPH-d, TPH-mo 8015
1	Effluent	9,24,13 — 11		*		6 VOAs	*			*	*	*	
				*		2-500 mL Ambers				*			*

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:	RECEIVED BY:
9,24,13 - 12:30 DATE/TIME	9/24/13 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 249301 Date Received 9/24/13 Number of coolers /
Client SOMA Project 15101 FREEDOM AVE, SAN LEANDRO

Date Opened 9/24/13 By (print) TR (2553) (sign) Tina Raikar
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____
2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☒ ~~Blue/Gel~~ ☐ None Temp(°C) _____

☒ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	249301	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Field ID:	EFFLUENT	Batch#:	203278
Matrix:	Water	Sampled:	09/24/13
Units:	ug/L	Received:	09/24/13
Diln Fac:	1.000		

Type: SAMPLE Analyzed: 09/25/13
Lab ID: 249301-001

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	101	76-128	EPA 8015B
Bromofluorobenzene (PID)	97	70-136	EPA 8021B

Type: BLANK Analyzed: 09/24/13
Lab ID: QC708644

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	99	76-128	EPA 8015B
Bromofluorobenzene (PID)	92	70-136	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	249301	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC708643	Batch#:	203278
Matrix:	Water	Analyzed:	09/24/13
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,066	107	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	76-128

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	249301	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	203278
MSS Lab ID:	249290-001	Sampled:	09/23/13
Matrix:	Water	Received:	09/23/13
Units:	ug/L	Analyzed:	09/24/13
Diln Fac:	1.000		

Type: MS Lab ID: QC708645

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<10.56	2,000	1,970	98	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	76-128

Type: MSD Lab ID: QC708646

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,945	97	76-120	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	76-128

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	249301	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	203278
Units:	ug/L	Analyzed:	09/24/13
Diln Fac:	1.000		

Type: BS Lab ID: QC708670

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	9.924	99	80-120
Toluene	10.00	10.19	102	80-120
Ethylbenzene	10.00	9.946	99	80-120
m,p-Xylenes	10.00	10.05	100	80-120
o-Xylene	10.00	9.886	99	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	95	70-136

Type: BSD Lab ID: QC708671

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	9.218	92	80-120	7	20
Toluene	10.00	9.347	93	80-120	9	20
Ethylbenzene	10.00	8.862	89	80-120	12	20
m,p-Xylenes	10.00	8.885	89	80-120	12	20
o-Xylene	10.00	8.723	87	80-120	13	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	88	70-136

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	249301	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	203339
Matrix:	Water	Sampled:	09/24/13
Units:	ug/L	Received:	09/24/13
Diln Fac:	1.000	Prepared:	09/25/13

Type: SAMPLE Analyzed: 09/30/13
Lab ID: 249301-001

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	111	62-133

Type: BLANK Analyzed: 09/27/13
Lab ID: QC708891

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	106	62-133

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	249301	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC708892	Batch#:	203339
Matrix:	Water	Prepared:	09/25/13
Units:	ug/L	Analyzed:	09/27/13

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,138	86	59-120

Surrogate	%REC	Limits
o-Terphenyl	100	62-133

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	249301	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	203339
MSS Lab ID:	249290-001	Sampled:	09/23/13
Matrix:	Water	Received:	09/23/13
Units:	ug/L	Prepared:	09/25/13
Diln Fac:	1.000	Analyzed:	09/27/13

Type: MS
Lab ID: QC708893
Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	<12.00	2,451	2,179	89	61-120

Surrogate	%REC	Limits
o-Terphenyl	101	62-133

Type: MSD
Lab ID: QC708894
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,451	2,085	85	61-120	4	43

Surrogate	%REC	Limits
o-Terphenyl	103	62-133

RPD= Relative Percent Difference

Appendix E

MPE Event Field Data Sheets

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave., San Leandro
PROJECT #: 2555

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
8/1/2013	1730	Extracting from MPE-1, MPE-2 and MW-5								
	1800	1499	175	14.8	20.9	135	0	135	1,039	0
	2000	1481	176	10	18.1	179	0	179		
	2100	1463	176	10	18.1	179	0	179		
8/2/2013	1000	1498	175	13.7	19.8	152	0	152	964	3,291
	1100	1501	176	13.5	19.6	155	0	155	937	
	1200	1500	177	13.2	19.5	157	0	157	915	
	1300	1502	177	13	19.5	157	0	157	902	
	1400	1501	178	12.8	19.3	160	0	160	896	
	1500	1499	178	12.7	19.5	157	0	157	887	
	1600	1502	178	12.7	19.5	157	0	157	880	
		Shut down for weekend								
8/5/2013	1000	1499	175	15.2	21.7	122	0	122	911	10,155
	1100	1498	175	15.2	21.9	119	0	119	868	
	1200	1501	175	15.2	22	117	0	117	825	
	1300	1500	175	16.5	21.9	119	0	119	780	
	1400	1503	176	16.4	21.8	120	0	120	876	
	1500	1498	176	16.3	21.9	119	0	119	810	
	1600	1499	176	16.3	21.9	119	0	119	783	
	1700	1502	176	16.5	21.9	119	0	119	735	
8/6/2013	900	1498	174	17.2	22.5	109	0	109	685	14,463
	1000	1499	174	17.2	22.4	111	0	111	651	
	1030	Extracting from MPE-2 and MW-5								
	1100	1496	173	19.3	24.4	79	0	79	1,863	
	1200	1498	175	19.4	24.4	79	0	79	1,110	
	1300	1497	176	19.4	24.4	79	0	79	933	
	1400	1499	176	19.5	24.3	81	0	81	906	
	1500	1498	176	19.5	24.3	81	0	81	876	
	1600	1500	175	19.6	24.3	81	0	81	893	
	1700	1502	175	19.6	24.3	81	0	81	927	15,603
8/7/2013	830	Extracting from MPE-2								
	900	1502	175	19.7	24.4	79	0	79	1,143	17,472
	930	Extracting from MPE-1								

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Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave., San Leandro
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MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
8/7/2013	1000	1498	174	15.3	21.8	120	0	120	1,426	
	1100	1500	174	15.3	21.8	120	0	120	774	
	1200	1503	173	15.3	21.8	120	0	120	834	
	1300	1501	175	15.5	21.8	120	0	120	810	
	1400	1499	176	15.7	21.8	120	0	120	786	
	1500	1502	178	15.8	21.7	122	0	122	735	
	1600	1498	177	15.8	21.7	122	0	122	992	
	1700	1500	177	15.8	21.7	122	0	122	1,011	
8/8/2013	800	1498	174	15.8	21.7	122	0	122	1,193	21,236
	900	1501	175	15.8	21.7	122	0	122	1,171	
	1000	1499	175	15.8	21.7	122	0	122	1,176	
	1030	Extracting from MW-5								
	1100	1504	174	16.9	21.3	128	0	128	270	
	1130	Extracting from MPE-1								
	1200	1501	174	15.3	21.3	128	0	128	1,069	
	1300	1502	176	15.3	21.2	130	0	130	1,124	
	1400	1499	178	15.2	21.1	131	0	131	1,107	
	1500	1501	177	15.2	21.1	131	0	131	1,116	
	1600	1499	178	15.2	21.1	131	0	131	1,103	
8/9/2013	900	1500	174	15.3	21.1	131	0	131	1,035	23,989
	1000	1499	174	15.3	21.1	131	0	131	1,082	
	1100	1503	174	15.2	21.1	131	0	131	1,114	
	1200	1498	173	15.2	21	133	0	133	1,135	
	1300	1502	175	15.2	21	133	0	133	1,142	
	1400	1500	175	15.1	21	133	0	133	1,130	
	1500	1498	175	15.1	21	133	0	133	1,130	
		Shut down for weekend								
8/12/2013	830	Extracting from MPE-2 and MW-5								
	900	1494	176	11.9	19	165	0	165	1,045	31,771
	1000	1500	176	11.9	19	165	0	165	1,145	
	1100	1500	176	11.9	19	165	0	165	1,177	
	1130	Extracting from MPE-2								

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MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
8/12/2013	1200	1502	176	16.2	21.9	119	0	119	870	
	1215	Extracting from MW-5								
	1230	1501	176	16.2	22	117	0	117	1,375	
	1235	Extracting from MPE-2 and MW-5								
	1240	1502	177	12.1	19.2	162	0	162	1,277	
	1300	1500	179	12.1	19.1	163	0	163	1,241	
	1400	1501	181	12.1	19	165	0	165	1,217	
	1500	1500	182	12.1	18.9	166	0	166	1,263	
	1600	1498	182	12.1	18.9	166	0	166	1,295	
	1630	Extracting from MW-5								
	1700	1499	182	15	21.3	128	0	128	1,575	35,404
8/13/2013	1130	Extracting from MPE-2 and MW-5								
	1200	1499	176	12	18.9	166	0	166	1,573	41,301
	1300	1501	178	12	18.9	166	0	166	1,681	
	1400	1500	184	11.9	18.9	166	0	166	2,304	
	1500	1502	189	11.9	18.9	166	0	166	1,726	
	1600	1501	188	11.9	18.9	166	0	166	1,722	
	1700	1499	185	11.9	18.9	166	0	166	1,748	
8/14/2013	900	1499	174	12	19.1	163	0	163	1,474	49,438
	1000	1501	174	12	19.1	163	0	163	1,519	
	1100	1500	174	12	19.1	163	0	163	1,573	
	1200	1499	174	12	19.1	163	0	163	1,621	
	1300	1502	176	11.9	19	165	0	165	1,670	
	1400	1498	175	11.9	19	165	0	165	1,809	
	1500	1500	174	11.9	19	165	0	165	1,855	
	1600	1499	178	11.9	18.9	166	0	166	1,837	
	1700	1500	176	12	18.9	166	0	166	1,818	
8/15/2013	900	1499	175	12.1	18.2	177	0	177	1,712	52,087
	1000	1501	175	12.1	18.2	177	0	177	1,738	
	1100	1498	175	12.1	18.2	177	0	177	1,711	
	1200	1499	176	12.2	19.2	162	0	162	1,670	
	1300	1501	176	12.3	19.2	162	0	162	1,563	
	1400	1498	178	12.3	19.3	160	0	160	1,534	

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ADDRESS: 15101 Freedom Ave., San Leandro
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MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
8/15/2013	1500	1501	182	12.3	19.3	160	0	160	1,507	
	1600	1499	181	12.3	19.2	162	0	162	1,429	
	1700	1501	179	12.2	19	165	0	165	1,416	
8/16/2013	900	1501	175	12.5	19.5	157	0	157	1,380	53,566
	1000	1499	176	12.5	19.4	158	0	158	1,408	
	1100	1500	176	12.5	19.4	158	0	158	1,371	
		Shut down for weekend								
8/19/2013	830	Extracting from MPE-2 and MW-5								
	900	1501	177	12	18.9	166	0	166	851	53,906
	930	Extracting from MPE-2								
	1000	1500	178	19.5	24.1	84	0	84	795	
	1015	Extracting from MW-5								
	1030	1501	179	17.5	22.6	108	0	108	851	
	1045	Extracting from MPE-1					0	0		
	1100	1499	183	17.1	22.6	108	0	108	243	
	1130	Extracting from MPE-2 and MW-5								
	1200	1500	185	12.7	19.5	157	0	157	775	
	1300	1501	188	12.8	19.5	157	0	157	812	
	1400	1498	187	12.7	19.4	158	0	158	784	
	1500	1500	187	13	19.5	157	0	157	772	
	1600	1499	183	13	19.5	157	0	157	749	
	1700	1500	182	13	19.6	155	0	155	730	
8/20/2013	830	Extracting from MPE-1 and MW-5								
	900	1500	176	12.1	19.1	163	0	163	587	55,537
	1000	1502	176	12.2	19.2	162	0	162	653	
	1100	1501	176	12.3	19.3	160	0	160	637	
	1200	1502	179	12.3	19.3	160	0	160	642	
	1300	1501	180	12.3	19.3	160	0	160	625	
	1400	1499	182	12.2	19.3	160	0	160	634	
	1500	1501	182	12.2	19.3	160	0	160	626	
	1600	1499	181	12.2	19.3	160	0	160	639	
	1700	1500	179	12.2	19.3	160	0	160	648	

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MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
8/21/2013	830	Extracting from MPE-2 and MW-5								
	900	1501	174	12.2	19.1	163	0	163	735	57,771
	1000	1500	175	12.2	19.2	162	0	162	789	
	1100	1502	175	12.2	19.2	162	0	162	813	
	1200	1501	175	12.2	19.2	162	0	162	843	
	1300	1500	177	12.3	19.2	162	0	162	785	
	1400	1499	179	12.2	19.1	163	0	163	810	
	1500	1500	179	12.2	19.1	163	0	163	874	
	1600	1500	179	12.3	19.2	162	0	162	921	
	1700	1499	179	12.3	19.2	162	0	162	909	
8/22/2013	900	1500	173	12.4	19.3	160	0	160	930	59,380
	1000	1501	174	12.3	19.3	160	0	160	674	
	1100	1501	174	12.3	19.3	160	0	160	652	
	1200	1499	175	12.4	19.4	158	0	158	644	
	1300	1500	175	12.4	19.4	158	0	158	639	
	1400	1501	177	12.4	19.3	160	0	160	647	
	1500	1500	178	12.4	19.3	160	0	160	655	
	1600	1499	178	12.3	19.2	162	0	162	641	
	1700	1501	179	12.3	19.2	162	0	162	633	
8/23/2013	900	1501	173	12.2	19.2	162	0	162	591	61,022
	1000	1498	173	12.2	19.2	162	0	162	673	
	110	1500	174	12.2	19.2	162	0	162	634	
	1200	1501	173	12.3	19.3	160	0	160	602	
	1300	1500	174	12.4	19.3	160	0	160	598	
	1400	1501	175	12.4	19.3	160	0	160	593	
	1500	1500	176	12.3	19.3	160	0	160	585	
	1600	1499	175	12.2	19.2	162	0	162	578	
		Shut down for weekend								
8/26/2013	900	1499	175	12.2	19.5	157	0	157	517	62,296
	1000	1501	175	12.3	19.4	158	0	158	531	
	1100	1500	175	12.3	19.4	158	0	158	521	
	1200	1498	174	12.3	19.3	160	0	160	528	

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ADDRESS: 15101 Freedom Ave., San Leandro
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MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
8/26/2013	1300	1502	175	12.3	19.3	160	0	160	525	
	1400	1500	175	12.3	19.3	160	0	160	543	
	1500	1501	177	12.3	19.3	160	0	160	534	
	1600	1499	176	12.3	19.3	160	0	160	532	
	1700	1501	177	12.3	19.3	160	0	160	541	
8/27/2013	900	1499	175	12.4	19.3	160	0	160	479	64,261
	1000	1501	175	12.4	19.3	160	0	160	485	
	1100	1500	174	12.5	19.4	158	0	158	491	
	1200	1501	175	12.4	19.4	158	0	158	511	
	1300	1499	177	12.3	19.3	160	0	160	514	
	1400	1500	179	12.3	19.3	160	0	160	534	
	1500	1502	181	12.3	19.3	160	0	160	553	
	1600	1499	180	12.3	19.3	160	0	160	564	
	1700	1500	180	12.3	19.3	160	0	160	593	
8/28/2013	900	1499	174	12.4	19.4	158	0	158	491	68,130
	1000	1501	174	12.4	19.4	158	0	158	498	
	1100	1500	174	12.3	19.3	160	0	160	804	
	1200	1499	174	12.3	19.3	160	0	160	765	
	1300	1498	178	12.2	19.3	160	0	160	786	
	1400	1500	181	12.2	19.3	160	0	160	821	
	1500	1499	183	12.2	19.3	160	0	160	849	
	1600	1501	184	12.2	19.2	162	0	162	813	
	1700	1502	182	12.2	19.2	162	0	162	829	
8/29/2013	900	1500	175	12.3	19.3	160	0	160	701	70,885
	1000	1498	174	12.3	19.3	160	0	160	846	
	1100	1499	175	12.3	19.3	160	0	160	909	
	1200	1498	176	12.3	19.3	160	0	160	1,027	
	1300	1499	177	12.3	19.3	160	0	160	1,005	
	1400	1501	177	12.2	19.3	160	0	160	973	
	1500	1498	179	12.2	19.3	160	0	160	940	
	1600	1500	181	12.2	19.3	160	0	160	902	
	1700	1498	182	12.1	19.2	162	0	162	868	

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MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
8/30/2013	900	1500	176	12.3	19.5	157	0	157	781	71,972
	1000	1498	176	12.3	19.5	157	0	157	703	
	1100	1501	177	12.3	19.4	158	0	158	645	
	1200	1499	179	12.3	19.3	160	0	160	612	72,911

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Golden Gate
Remediation Technology

SITE ADDRESS: 15101 Freedom Ave, San Leandro
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MTS MONITORING POINT DATA

DATE	TIME	WELL ID MPE-1		WELL ID MPE-2		WELL ID MW-1		WELL ID MW-1D		WELL ID MW-2		WELL ID MW-3		WELL ID MW-3D		WELL ID MW-4		WELL ID MW-5	
		GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)	GW ELEVATION (FEET BELOW TOC)	VACCUM (IN WATER)
8/6/2013	9:00	**EXTRACTION WELL**		**EXTRACTION WELL**		23.98				22.53		23.8		24.05		24.27		**EXTRACTION WELL**	
8/7/2013	9:30	**EXTRACTION WELL**		23.1		24.05		24.73		22.57		23.75		24.1		24.3			
8/8/2013	9:00			23.6		24.1		24.3		22.7		23.85		24.17		24.63			
8/9/2013	9:00			23.45		24.1		24.35		22.65		23.85		24.15		24.3			
				EXTRACTION WELL														**EXTRACTION WELL**	
8/12/2013	9:00			23		23.95		24.2		21.3		23.65		23.95		24.05			
				EXTRACTION WELL														**EXTRACTION WELL**	
8/13/2013	12:00			23.6		24.15		24.35		22.8		24.07		24.32		24.85			
8/14/2013	12:00			23.4		24.22		24.4		22.9		24		24.35		24.78			
8/15/2013	12:00			23.62		24.2		24.4		22.7		24		24.25		24.28			
8/16/2013	8:30			23.4		24.22		24.4		22.8		23.9		24.2		24.37			
8/19/2013	8:30			23.57		23.95		24.25		22.3		23.54		23.8		23.52			
		EXTRACTION WELL																**EXTRACTION WELL**	
8/20/2013	8:30			23.05		24		24.22		22.5		23.73		23.97		24.05			
				EXTRACTION WELL														**EXTRACTION WELL**	
8/21/2013	8:30			23.7		24.22		24.37		22.8		23.97		24.27		24.4			
8/22/2013	8:30			23.4		24.18		24.4		22.7		23.92		24.15		24.25			
8/23/2013	8:30			23.4		24.2		24.4		22.65		23.78		24.15		24.17			
8/26/2013	8:30			23.2		24.05		24.25		22.33		23.65		23.93		23.97			
8/27/2013	8:30					24.05		24.28		22.4		23.75		24.02		23.82			
8/28/2013	8:30			23.95		24.25		24.37		22.78		23.98		24.3		24.58			
8/29/2013	8:30			23.7		24.27		24.43		22.82		24.08		24.37		24.36			
8/30/2013	8:30			23.72		24.24		24.4		22.72		25.95		24.25		24.3			

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Appendix F

Laboratory Report and Chain of Custody
Form for the MPE Event

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

Laboratory Job Number 247514
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.	Project : 2555
6620 Owens Dr.	Location : 15101 Freedom Ave. San Leandro
Pleasanton, CA 94588	Level : II

Sample ID	Lab ID
EFF MPE	247514-001
INF MPE	247514-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Isabelle Choy Date: 08/09/2013

Isabelle Choy
Project Manager
(510) 486-0900

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**247514**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2555**
Location:	**15101 Freedom Ave. San Leandro**
Request Date:	**08/02/13**
Samples Received:	**08/02/13**

This data package contains sample and QC results for two air samples, requested for the above referenced project on 08/02/13. The samples were received intact at ambient temperature.

Volatile Organics in Air by MS (EPA TO-15):
EFF MPE (lab # 247514-001) was diluted due to high non-target analytes. No other analytical problems were encountered.

Volatile Organics in Air GC (EPA TO-3):
Gasoline range organics C6-C12 was detected between the MDL and the RL in the method blank for batch 201329. No other analytical problems were encountered.

CHAIN OF CUSTODY

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

C&T LOGIN # 247514

Sampler: Masoud Sepehr

Project No: 2555

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave.,San Leandro

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	Air	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	NONE	Analyses: TO-15	TO-3 (Modified)
1	EFF MPE	8,2,13 – 10				*	Tedlar bag					*	*	*
2	INF MPE	↕				*	Tedlar bag					*	*	*

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:	RECEIVED BY:
8,2,13 – 11 DATE/TIME	8/2/13 1155 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 247514 Date Received 8/2/13 Number of coolers 0
Client SOMA Project 15101 Freedom Ave

Date Opened 8/2/13 By (print) AM (sign)
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☑ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ___ YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☑ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☐ Blue/Gel ☑ None Temp(°C) _____

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 10, 11/11

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Field ID:	EFF MPE	Diln Fac:	3.000
Lab ID:	247514-001	Batch#:	201261
Matrix:	Air	Sampled:	08/02/13
Units (V):	ppbv	Received:	08/02/13
Units (M):	ug/m3	Analyzed:	08/02/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	1.5	ND	7.4
Freon 114	ND	1.5	ND	10
Chloromethane	ND	1.5	ND	3.1
Vinyl Chloride	ND	1.5	ND	3.8
1,3-Butadiene	ND	1.5	ND	3.3
Bromomethane	ND	1.5	ND	5.8
Chloroethane	ND	1.5	ND	4.0
Trichlorofluoromethane	ND	1.5	ND	8.4
Acrolein	ND	6.0	ND	14
1,1-Dichloroethene	ND	1.5	ND	5.9
Freon 113	ND	1.5	ND	11
Acetone	7.3	6.0	17	14
Carbon Disulfide	ND	1.5	ND	4.7
Methylene Chloride	ND	1.5	ND	5.2
trans-1,2-Dichloroethene	ND	1.5	ND	5.9
MTBE	ND	1.5	ND	5.4
n-Hexane	ND	1.5	ND	5.3
1,1-Dichloroethane	ND	1.5	ND	6.1
Vinyl Acetate	ND	1.5	ND	5.3
cis-1,2-Dichloroethene	ND	1.5	ND	5.9
2-Butanone	ND	1.5	ND	4.4
Ethyl Acetate	ND	1.5	ND	5.4
Tetrahydrofuran	ND	1.5	ND	4.4
Chloroform	ND	1.5	ND	7.3
1,1,1-Trichloroethane	ND	1.5	ND	8.2
Cyclohexane	ND	1.5	ND	5.2
Carbon Tetrachloride	ND	1.5	ND	9.4
Benzene	ND	1.5	ND	4.8
1,2-Dichloroethane	ND	1.5	ND	6.1
n-Heptane	ND	1.5	ND	6.1
Trichloroethene	ND	1.5	ND	8.1
1,2-Dichloropropane	ND	1.5	ND	6.9
Bromodichloromethane	ND	1.5	ND	10
cis-1,3-Dichloropropene	ND	1.5	ND	6.8
4-Methyl-2-Pentanone	ND	1.5	ND	6.1

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Field ID:	EFF MPE	Diln Fac:	3.000
Lab ID:	247514-001	Batch#:	201261
Matrix:	Air	Sampled:	08/02/13
Units (V):	ppbv	Received:	08/02/13
Units (M):	ug/m3	Analyzed:	08/02/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	1.5	ND	5.7
trans-1,3-Dichloropropene	ND	1.5	ND	6.8
1,1,2-Trichloroethane	ND	1.5	ND	8.2
Tetrachloroethene	ND	1.5	ND	10
2-Hexanone	ND	1.5	ND	6.1
Dibromochloromethane	ND	1.5	ND	13
1,2-Dibromoethane	ND	1.5	ND	12
Chlorobenzene	ND	1.5	ND	6.9
Ethylbenzene	ND	1.5	ND	6.5
m,p-Xylenes	ND	1.5	ND	6.5
o-Xylene	ND	1.5	ND	6.5
Styrene	ND	1.5	ND	6.4
Bromoform	ND	1.5	ND	16
1,1,2,2-Tetrachloroethane	ND	1.5	ND	10
4-Ethyltoluene	ND	1.5	ND	7.4
1,3,5-Trimethylbenzene	ND	1.5	ND	7.4
1,2,4-Trimethylbenzene	ND	1.5	ND	7.4
1,3-Dichlorobenzene	ND	1.5	ND	9.0
1,4-Dichlorobenzene	ND	1.5	ND	9.0
Benzyl chloride	ND	1.5	ND	7.8
1,2-Dichlorobenzene	ND	1.5	ND	9.0
1,2,4-Trichlorobenzene	ND	1.5	ND	11
Hexachlorobutadiene	ND	1.5	ND	16
Naphthalene	ND	6.0	ND	31

Surrogate	%REC	Limits
Bromofluorobenzene	88	70-130

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Field ID:	INF MPE	Units (M):	ug/m3
Lab ID:	247514-002	Batch#:	201261
Matrix:	Air	Sampled:	08/02/13
Units (V):	ppbv	Received:	08/02/13

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
Freon 12	ND	300	ND	1,500	600.0	08/02/13
Freon 114	ND	300	ND	2,100	600.0	08/02/13
Chloromethane	ND	300	ND	620	600.0	08/02/13
Vinyl Chloride	ND	300	ND	770	600.0	08/02/13
1,3-Butadiene	ND	300	ND	660	600.0	08/02/13
Bromomethane	ND	300	ND	1,200	600.0	08/02/13
Chloroethane	ND	300	ND	790	600.0	08/02/13
Trichlorofluoromethane	ND	300	ND	1,700	600.0	08/02/13
Acrolein	ND	1,200	ND	2,800	600.0	08/02/13
1,1-Dichloroethene	ND	300	ND	1,200	600.0	08/02/13
Freon 113	ND	300	ND	2,300	600.0	08/02/13
Acetone	ND	1,200	ND	2,900	600.0	08/02/13
Carbon Disulfide	ND	300	ND	930	600.0	08/02/13
Methylene Chloride	ND	300	ND	1,000	600.0	08/02/13
trans-1,2-Dichloroethene	ND	300	ND	1,200	600.0	08/02/13
MTBE	ND	300	ND	1,100	600.0	08/02/13
n-Hexane	75,000	500	270,000	1,800	1,000	08/03/13
1,1-Dichloroethane	ND	300	ND	1,200	600.0	08/02/13
Vinyl Acetate	ND	300	ND	1,100	600.0	08/02/13
cis-1,2-Dichloroethene	ND	300	ND	1,200	600.0	08/02/13
2-Butanone	ND	300	ND	880	600.0	08/02/13
Ethyl Acetate	ND	300	ND	1,100	600.0	08/02/13
Tetrahydrofuran	ND	300	ND	880	600.0	08/02/13
Chloroform	ND	300	ND	1,500	600.0	08/02/13
1,1,1-Trichloroethane	ND	300	ND	1,600	600.0	08/02/13
Cyclohexane	23,000	300	78,000	1,000	600.0	08/02/13
Carbon Tetrachloride	ND	300	ND	1,900	600.0	08/02/13
Benzene	1,600	300	5,100	960	600.0	08/02/13
1,2-Dichloroethane	ND	300	ND	1,200	600.0	08/02/13
n-Heptane	31,000	300	130,000	1,200	600.0	08/02/13
Trichloroethene	ND	300	ND	1,600	600.0	08/02/13
1,2-Dichloropropane	ND	300	ND	1,400	600.0	08/02/13
Bromodichloromethane	ND	300	ND	2,000	600.0	08/02/13
cis-1,3-Dichloropropene	ND	300	ND	1,400	600.0	08/02/13
4-Methyl-2-Pentanone	ND	300	ND	1,200	600.0	08/02/13
Toluene	1,900	300	7,100	1,100	600.0	08/02/13

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Field ID:	INF MPE	Units (M):	ug/m3
Lab ID:	247514-002	Batch#:	201261
Matrix:	Air	Sampled:	08/02/13
Units (V):	ppbv	Received:	08/02/13

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
trans-1,3-Dichloropropene	ND	300	ND	1,400	600.0	08/02/13
1,1,2-Trichloroethane	ND	300	ND	1,600	600.0	08/02/13
Tetrachloroethene	ND	300	ND	2,000	600.0	08/02/13
2-Hexanone	ND	300	ND	1,200	600.0	08/02/13
Dibromochloromethane	ND	300	ND	2,600	600.0	08/02/13
1,2-Dibromoethane	ND	300	ND	2,300	600.0	08/02/13
Chlorobenzene	ND	300	ND	1,400	600.0	08/02/13
Ethylbenzene	1,500	300	6,600	1,300	600.0	08/02/13
m,p-Xylenes	8,400	300	36,000	1,300	600.0	08/02/13
o-Xylene	1,800	300	7,800	1,300	600.0	08/02/13
Styrene	ND	300	ND	1,300	600.0	08/02/13
Bromoform	ND	300	ND	3,100	600.0	08/02/13
1,1,2,2-Tetrachloroethane	ND	300	ND	2,100	600.0	08/02/13
4-Ethyltoluene	770	300	3,800	1,500	600.0	08/02/13
1,3,5-Trimethylbenzene	810	300	4,000	1,500	600.0	08/02/13
1,2,4-Trimethylbenzene	1,300	300	6,300	1,500	600.0	08/02/13
1,3-Dichlorobenzene	ND	300	ND	1,800	600.0	08/02/13
1,4-Dichlorobenzene	ND	300	ND	1,800	600.0	08/02/13
Benzyl chloride	ND	300	ND	1,600	600.0	08/02/13
1,2-Dichlorobenzene	ND	300	ND	1,800	600.0	08/02/13
1,2,4-Trichlorobenzene	ND	300	ND	2,200	600.0	08/02/13
Hexachlorobutadiene	ND	300	ND	3,200	600.0	08/02/13
Naphthalene	ND	1,200	ND	6,300	600.0	08/02/13

Surrogate	%REC	Limits	Diln Fac	Analyzed
Bromofluorobenzene	111	70-130	600.0	08/02/13

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	201261
Units (V):	ppbv	Analyzed:	08/02/13
Diln Fac:	1.000		

Type: BS Lab ID: QC700058

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	12.16	122	70-130
Freon 114	10.00	11.54	115	70-130
Chloromethane	10.00	12.48	125	70-130
Vinyl Chloride	10.00	10.49	105	70-130
1,3-Butadiene	10.00	10.24	102	70-130
Bromomethane	10.00	11.44	114	70-130
Chloroethane	10.00	10.10	101	70-130
Trichlorofluoromethane	10.00	11.68	117	70-130
Acrolein	10.00	10.15	102	61-130
1,1-Dichloroethene	10.00	10.28	103	70-130
Freon 113	10.00	10.76	108	70-130
Acetone	10.00	9.088	91	70-130
Carbon Disulfide	10.00	9.577	96	70-130
Methylene Chloride	10.00	9.826	98	70-130
trans-1,2-Dichloroethene	10.00	10.79	108	70-130
MTBE	10.00	11.40	114	70-130
n-Hexane	10.00	10.06	101	70-130
1,1-Dichloroethane	10.00	10.65	107	70-130
Vinyl Acetate	10.00	11.72	117	70-130
cis-1,2-Dichloroethene	10.00	10.03	100	70-130
2-Butanone	10.00	10.70	107	70-130
Ethyl Acetate	10.00	10.44	104	70-130
Tetrahydrofuran	10.00	10.04	100	70-130
Chloroform	10.00	10.44	104	70-130
1,1,1-Trichloroethane	10.00	10.74	107	70-130
Cyclohexane	10.00	10.69	107	70-130
Carbon Tetrachloride	10.00	10.70	107	70-130
Benzene	10.00	10.81	108	70-130
1,2-Dichloroethane	10.00	10.08	101	70-130
n-Heptane	10.00	10.29	103	70-130
Trichloroethene	10.00	10.38	104	70-130
1,2-Dichloropropane	10.00	10.83	108	70-130
Bromodichloromethane	10.00	10.33	103	70-130
cis-1,3-Dichloropropene	10.00	11.18	112	70-130

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	201261
Units (V):	ppbv	Analyzed:	08/02/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
4-Methyl-2-Pentanone	10.00	12.17	122	70-130
Toluene	10.00	10.73	107	70-130
trans-1,3-Dichloropropene	10.00	10.80	108	70-130
1,1,2-Trichloroethane	10.00	11.20	112	70-130
Tetrachloroethene	10.00	10.27	103	70-130
2-Hexanone	10.00	11.77	118	70-130
Dibromochloromethane	10.00	10.64	106	70-130
1,2-Dibromoethane	10.00	10.89	109	70-130
Chlorobenzene	10.00	9.719	97	70-130
Ethylbenzene	10.00	10.22	102	70-130
m,p-Xylenes	20.00	21.33	107	70-130
o-Xylene	10.00	10.73	107	70-130
Styrene	10.00	10.67	107	70-130
Bromoform	10.00	9.871	99	70-130
1,1,2,2-Tetrachloroethane	10.00	10.64	106	70-130
4-Ethyltoluene	10.00	11.49	115	70-130
1,3,5-Trimethylbenzene	10.00	10.62	106	70-130
1,2,4-Trimethylbenzene	10.00	10.53	105	70-130
1,3-Dichlorobenzene	10.00	10.41	104	70-130
1,4-Dichlorobenzene	10.00	10.27	103	70-130
Benzyl chloride	10.00	10.29	103	70-130
1,2-Dichlorobenzene	10.00	10.51	105	70-130
1,2,4-Trichlorobenzene	10.00	8.591	86	70-130
Hexachlorobutadiene	10.00	9.141	91	70-130
Naphthalene	10.00	9.709	97	67-130

Surrogate	%REC	Limits
Bromofluorobenzene	103	70-130

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	201261
Units (V):	ppbv	Analyzed:	08/02/13
Diln Fac:	1.000		

Type: BSD Lab ID: QC700059

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	11.36	114	70-130	7	20
Freon 114	10.00	10.87	109	70-130	6	20
Chloromethane	10.00	11.87	119	70-130	5	24
Vinyl Chloride	10.00	9.955	100	70-130	5	24
1,3-Butadiene	10.00	10.07	101	70-130	2	22
Bromomethane	10.00	10.85	109	70-130	5	20
Chloroethane	10.00	9.721	97	70-130	4	20
Trichlorofluoromethane	10.00	11.27	113	70-130	4	21
Acrolein	10.00	10.14	101	61-130	0	36
1,1-Dichloroethene	10.00	10.09	101	70-130	2	20
Freon 113	10.00	10.57	106	70-130	2	24
Acetone	10.00	8.985	90	70-130	1	21
Carbon Disulfide	10.00	9.597	96	70-130	0	21
Methylene Chloride	10.00	9.494	95	70-130	3	24
trans-1,2-Dichloroethene	10.00	10.76	108	70-130	0	20
MTBE	10.00	10.92	109	70-130	4	20
n-Hexane	10.00	10.05	100	70-130	0	20
1,1-Dichloroethane	10.00	10.31	103	70-130	3	20
Vinyl Acetate	10.00	11.60	116	70-130	1	21
cis-1,2-Dichloroethene	10.00	10.08	101	70-130	1	20
2-Butanone	10.00	10.70	107	70-130	0	20
Ethyl Acetate	10.00	10.29	103	70-130	1	22
Tetrahydrofuran	10.00	10.01	100	70-130	0	20
Chloroform	10.00	10.19	102	70-130	2	21
1,1,1-Trichloroethane	10.00	10.84	108	70-130	1	21
Cyclohexane	10.00	10.67	107	70-130	0	20
Carbon Tetrachloride	10.00	10.76	108	70-130	1	20
Benzene	10.00	10.77	108	70-130	0	20
1,2-Dichloroethane	10.00	10.09	101	70-130	0	20
n-Heptane	10.00	10.66	107	70-130	4	20
Trichloroethene	10.00	10.77	108	70-130	4	20
1,2-Dichloropropane	10.00	11.10	111	70-130	3	20
Bromodichloromethane	10.00	10.48	105	70-130	1	20
cis-1,3-Dichloropropene	10.00	11.24	112	70-130	1	20

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	201261
Units (V):	ppbv	Analyzed:	08/02/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
4-Methyl-2-Pentanone	10.00	12.54	125	70-130	3	20
Toluene	10.00	10.34	103	70-130	4	23
trans-1,3-Dichloropropene	10.00	11.16	112	70-130	3	20
1,1,2-Trichloroethane	10.00	10.91	109	70-130	3	20
Tetrachloroethene	10.00	9.986	100	70-130	3	20
2-Hexanone	10.00	11.92	119	70-130	1	20
Dibromochloromethane	10.00	9.935	99	70-130	7	20
1,2-Dibromoethane	10.00	10.51	105	70-130	4	20
Chlorobenzene	10.00	9.739	97	70-130	0	21
Ethylbenzene	10.00	10.04	100	70-130	2	20
m,p-Xylenes	20.00	20.08	100	70-130	6	20
o-Xylene	10.00	9.999	100	70-130	7	20
Styrene	10.00	10.04	100	70-130	6	22
Bromoform	10.00	9.517	95	70-130	4	20
1,1,2,2-Tetrachloroethane	10.00	10.15	101	70-130	5	24
4-Ethyltoluene	10.00	10.46	105	70-130	9	22
1,3,5-Trimethylbenzene	10.00	9.791	98	70-130	8	22
1,2,4-Trimethylbenzene	10.00	9.878	99	70-130	6	23
1,3-Dichlorobenzene	10.00	9.846	98	70-130	6	21
1,4-Dichlorobenzene	10.00	9.815	98	70-130	4	22
Benzyl chloride	10.00	9.915	99	70-130	4	21
1,2-Dichlorobenzene	10.00	9.543	95	70-130	10	22
1,2,4-Trichlorobenzene	10.00	8.215	82	70-130	4	24
Hexachlorobutadiene	10.00	8.706	87	70-130	5	25
Naphthalene	10.00	8.924	89	67-130	8	24

Surrogate	%REC	Limits
Bromofluorobenzene	97	70-130

RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC700060	Diln Fac:	1.000
Matrix:	Air	Batch#:	201261
Units (V):	ppbv	Analyzed:	08/02/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3
4-Methyl-2-Pentanone	ND	0.50	ND	2.0

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC700060	Diln Fac:	1.000
Matrix:	Air	Batch#:	201261
Units (V):	ppbv	Analyzed:	08/02/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	95	70-130

ND= Not Detected
RL= Reporting Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Aromatic / Petroleum Hydrocarbons in Air

Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-3
Analyte:	Gasoline Range Organics C6-C12	Batch#:	201329
Matrix:	Air	Sampled:	08/02/13
Units (V):	ppbv	Received:	08/02/13
Units (M):	ug/m3	Analyzed:	08/05/13

Field ID	Type	Lab ID	Result (V)	RL	MDL	Result (M)	RL	MDL	Diln Fac
EFF MPE	SAMPLE	247514-001	83	25	5.6	340	100	23	1.000
INF MPE	SAMPLE	247514-002	500,000	1,300	280	2,100,000	5,100	1,100	50.00
	BLANK	QC700336	16 J	25	5.6	64 J	100	23	1.000

J= Estimated value
RL= Reporting Limit
MDL= Method Detection Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Aromatic / Petroleum Hydrocarbons in Air

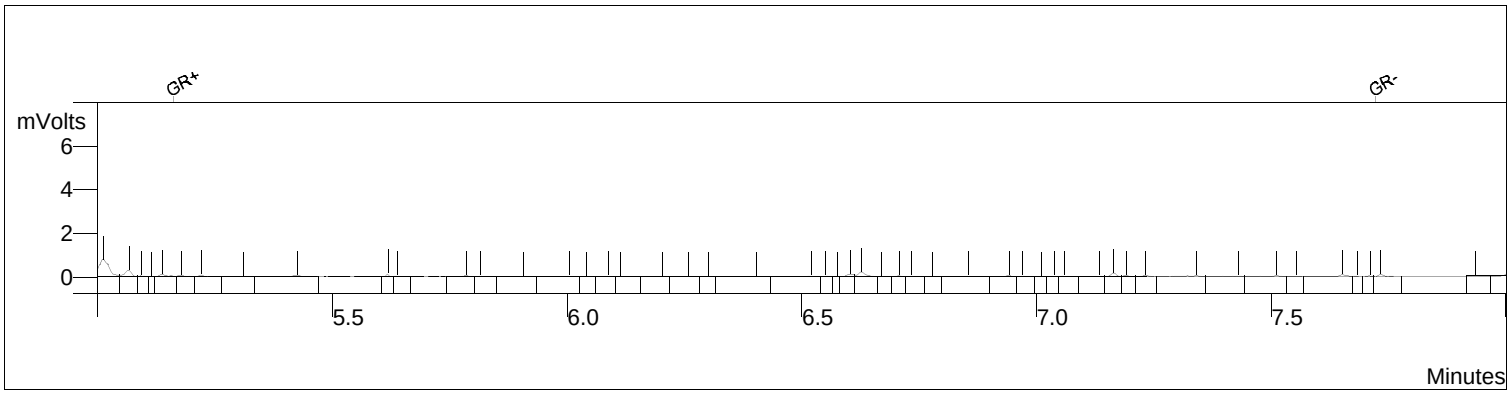
Lab #:	247514	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2555	Analysis:	EPA TO-3
Analyte:	Gasoline Range Organics C6-C12	Diln Fac:	1.000
Matrix:	Air	Batch#:	201329
Units (V):	ppbv	Analyzed:	08/05/13

Type	Lab ID	Spiked	Result (V)	%REC	Limits	RPD	Lim
BS	QC700334	2,100	2,033	97	70-130		
BSD	QC700335	2,100	2,100	100	70-130	3	25

RPD= Relative Percent Difference
Result V= Result in volume units

GRO by TO-3

Sample ID:	247514-001		
Data File:	c:\varianws\data\080513\217_005.run		
Sample List:	c:\varianws\080513.smp		
Method:	c:\varianws\to3_081811.mth		
Acquisition Date:	08/05/2013 11:46:27		
Calculation Date:	08/05/2013 11:58:29		
Instrument ID:	MSAIR03	Operator:	TO-3
Injection Notes:	201329,1x		
Multiplier:	1.000	Divisor:	1.000



Channel: Front = FID RESULTS

#	RT (min)	Peak Name	Area	Result (ppbv)
1	6.443	GRO:6-12	3100	83.312
		Totals	**3100**	**83.312**

Integration Parameters

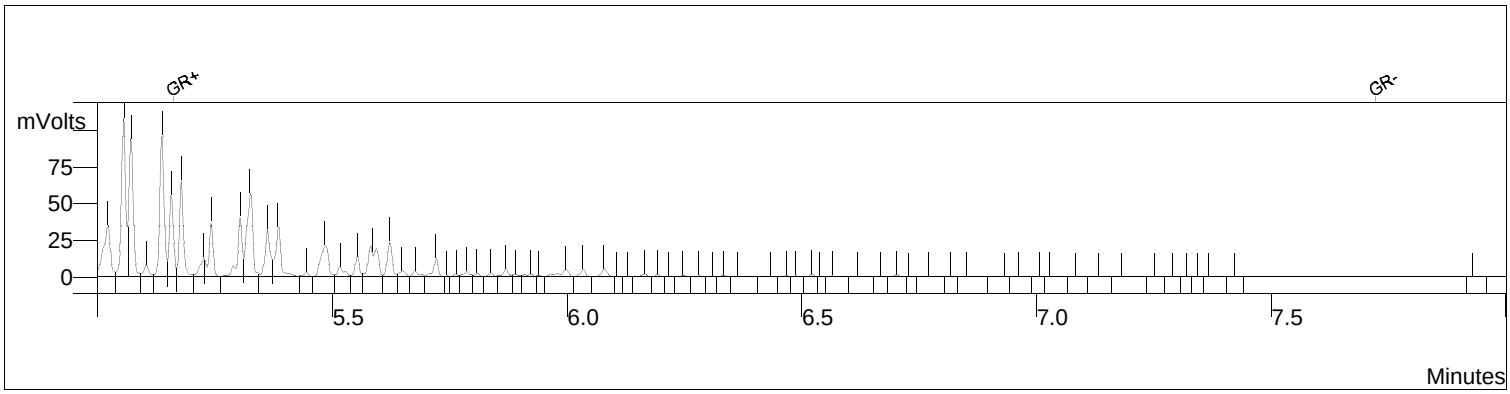
Initial Tangent %:	0
Initial Peak Width (sec):	4
Initial Peak Reject Value:	50.000
Initial S/N Ratio:	3

Data Handling Time Events

Time (min)	Event
0.009	II on
4.801	II off
5.163	GR on
7.723	GR off

GRO by TO-3

Sample ID:	247514-002,		
Data File:	c:\varianws\data\080513\217_007.run		
Sample List:	c:\varianws\080513.smp		
Method:	c:\varianws\to3_081811.mth		
Acquisition Date:	08/05/2013 12:31:11		
Calculation Date:	08/05/2013 12:43:13		
Instrument ID:	MSAIR03	Operator:	TO-3
Injection Notes:	201329,50x,c00270		
Multiplier:	1.000	Divisor:	1.000



Channel: **Front = FID** **RESULTS**

#	RT (min)	Peak Name	Area	Result (ppbv)
1	6.443	GRO:6-12	374417	10064.021
		Totals	**374417**	**10064.021**

Integration Parameters

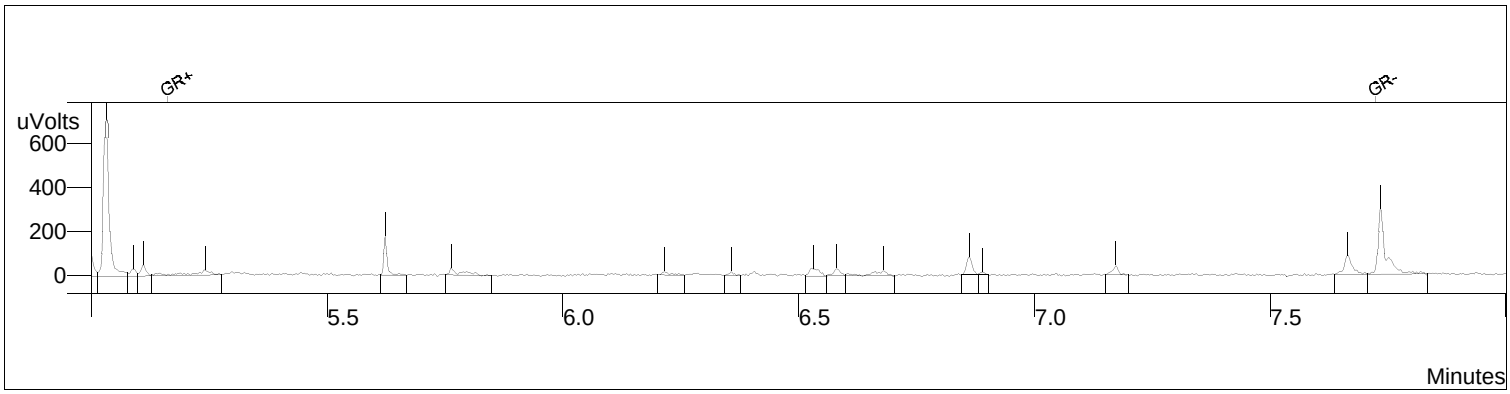
Initial Tangent %:	0
Initial Peak Width (sec):	4
Initial Peak Reject Value:	50.000
Initial S/N Ratio:	3

Data Handling Time Events

Time (min)	Event
0.009	II on
4.801	II off
5.163	GR on
7.723	GR off

GRO by TO-3

Sample ID:	mb,qc700336		
Data File:	c:\varianws\data\080513\217_004.run		
Sample List:	c:\varianws\080513.smp		
Method:	c:\varianws\to3_081811.mth		
Acquisition Date:	08/05/2013 11:30:25		
Calculation Date:	08/05/2013 11:42:27		
Instrument ID:	MSAIR03	Operator:	TO-3
Injection Notes:	201329,1x		
Multiplier:	1.000	Divisor:	1.000



Channel: Front = FID RESULTS

#	RT (min)	Peak Name	Area	Result (ppbv)
1	6.443	GRO:6-12	581	15.610
		Totals	**581**	**15.610**

Integration Parameters

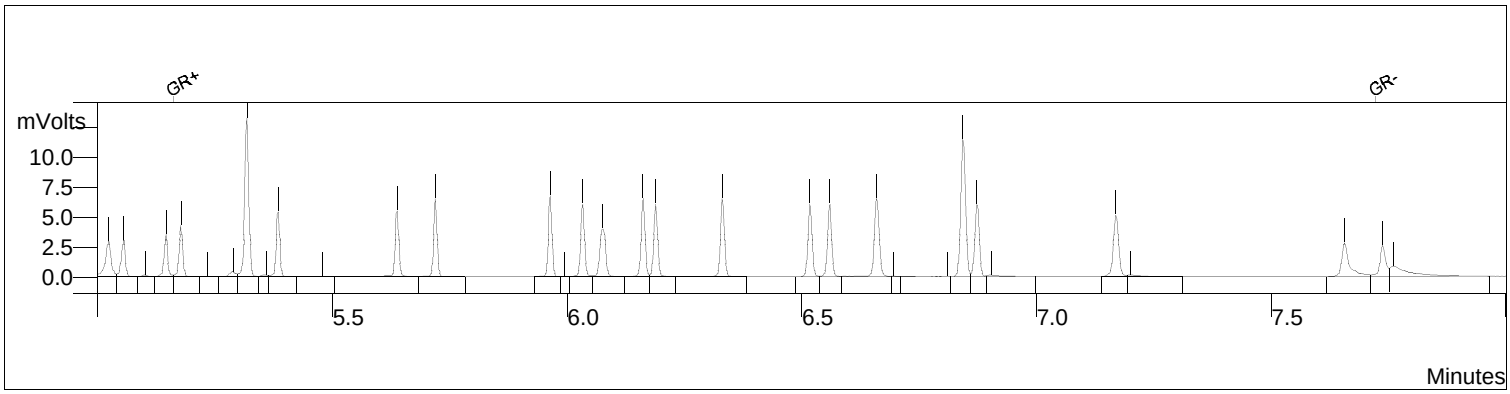
Initial Tangent %:	0
Initial Peak Width (sec):	4
Initial Peak Reject Value:	50.000
Initial S/N Ratio:	3

Data Handling Time Events

Time (min)	Event
0.009	II on
4.801	II off
5.163	GR on
7.723	GR off

GRO by TO-3

Sample ID:	ccv/bs,qc700334		
Data File:	c:\varianws\data\080513\217_002.run		
Sample List:	c:\varianws\080513.smp		
Method:	c:\varianws\to3_081811.mth		
Acquisition Date:	08/05/2013 10:59:41		
Calculation Date:	08/05/2013 11:11:43		
Instrument ID:	MSAIR03	Operator:	TO-3
Injection Notes:	201329,s22953,1x		
Multiplier:	1.000	Divisor:	1.000



Channel: **Front = FID** **RESULTS**

#	RT (min)	Peak Name	Area	Result (ppbv)
1	6.443	GRO:6-12	75621	2032.635
		Totals	**75621**	**2032.635**

Integration Parameters

Initial Tangent %:	0
Initial Peak Width (sec):	4
Initial Peak Reject Value:	50.000
Initial S/N Ratio:	3

Data Handling Time Events

Time (min)	Event
0.009	II on
4.801	II off
5.163	GR on
7.723	GR off