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April 26, 2016

Mr. Mark Detterman, PG, CEG  
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 Mr. Detterman:

SOMA's "First Quarter 2016 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,

A handwritten signature in black ink, appearing to read "Mansour Sepehr".

Mansour Sepehr, Ph.D.,PE  
Principal Hydrogeologist

cc: Mr. Mohammad Pazdel w/report enclosure



**First Quarter 2016  
Groundwater Monitoring and  
Remediation Progress Report**

**Freedom Food and Gas  
15101 Freedom Avenue  
San Leandro, California**

**April 26, 2016**

**Project 2551/2553**

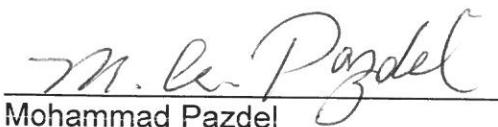
**Prepared for**

**Mr. Mohammad Pazdel  
1770 Pistacia Court  
Fairfield, California**

## PERJURY STATEMENT

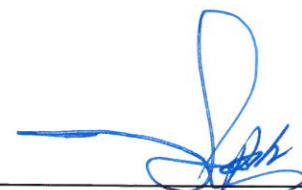
Site Location: 15101 Freedom Avenue, San Leandro, California

"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 First Quarter 2016 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 First Quarter 2016 groundwater monitoring event conducted on March 23 and 24, 2016. 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 First Quarter 2016, which includes operation of a groundwater extraction and treatment system.

### **1.1 Field Activities**

In March 2016, 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 March 23, 2016, the following wells were measured for depth to groundwater: five on-site monitoring wells (MW-1 to MW-5) and four off-site wells (MW-6, MW-7, MW-10 and MW-11) in the First water-bearing zone (WBZ); two extraction wells (EX-1 and EX-2), and two MPE wells (MPE-1 and MPE-2). On March 23 and 24, 2016, additional field measurements and groundwater samples were collected from all First WBZ monitoring and MPE wells. Grab groundwater samples were collected from extraction wells EX-1 and EX-2. Free product (FP) was not observed in any well during this monitoring event. Properties measured include pH, temperature, and electrical conductivity (EC).

Groundwater monitoring of Second WBZ was discontinued based on ACEH’s directive dated October 28, 2015. Therefore, MW-1D, MW-3D, and MW-4D were not measured for depth to water or sampled during this monitoring event.

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 First Quarter 2016 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 10.48 feet in MW-11 to 21.38 feet in MW-1. As mentioned above in Section 1.1, no FP was observed in any First WBZ well. Appendix A includes the procedure for FP measurement.

Corresponding groundwater elevations ranged from 31.47 feet in MW-6 to 33.53 feet in MW-2. Groundwater elevations at extraction wells EX-1 and EX-2 were 33.91 feet and 31.99 feet, respectively (Table 1).

Figure 3 displays the contour map of groundwater elevations. As illustrated, groundwater flows southwesterly, at a gradient of 0.008 feet/feet. No capture zone can be seen in the figure because the groundwater treatment system has been offline since March 7, 2016, based on comments received from the UST fund. 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 1.20 mg/L in MW-4 and MPE-1 to 1.45 mg/L in MW-7 and MW-10. ORP showed negative redox potentials in all tested wells except MW-6, MW-7 and MW-10. Negative redox potentials indicate that contaminants in the groundwater are conducive to anaerobic biodegradation. ORP showed positive redox potentials in MW-6, MW-7 and MW-10. 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 concentrations ranged from 57 µg/L in EX-1 to 22,000 µg/L in MW-10. Since the previous monitoring event (Fourth Quarter 2015), TPH-g slightly increased in MW-5, decreased in MW-1, MW-3, MW-4, MW-6, MW-7, MW-11, EX-1, EX-2, MPE-1, and MPE-2, and remained same in MW-2 and MW-10.

Figure 4 displays the contour map of TPH-g concentrations in groundwater. As illustrated, the highest TPH-g impact is observed offsite, to the southeast of the site in MW-10.

The following BTEX concentrations were observed:

- Benzene was below laboratory-reporting limits in MW-1, MW-2, MW-5, MW-7, MW-10, MW-11, and MPE-1. Detectable benzene concentrations ranged from 3.40 µg/L in MW-6 to 960 µg/L in MPE-2.
- Toluene was detected only in MW-3 and EX-2 at 2.0 µg/L and 0.86 µg/L, respectively and was below laboratory-reporting limits in all other wells.
- Ethylbenzene was below laboratory-reporting limits in MW-1, MW-2, MW-4, MW-5, MW-11, EX-1, and MPE-1 and was detected in concentrations ranging from 1.70 µg/L in MW-7 to 620 µg/L in MW-10.
- Total xylenes were below laboratory-reporting limits in MW-1, MW-2, MW-4, MW-5, MW-7, MW-11, and EX-1. Detectable concentrations ranged from 0.79 µg/L in MPE-1 to 1,038 µg/L in MW-10.

Figure 5 displays the contour map of benzene in groundwater. The highest benzene impact is in the northeast corner of the site in the vicinity of MPE-2. Since the previous monitoring event (Fourth Quarter 2015), detectable benzene concentrations have increased in MW-3 and MPE-2, decreased in MW-4, MW-5, MW-6, EX-1, EX-2, MPE-1, and remained below laboratory-reporting limit in the remaining wells.

MtBE was below the laboratory-reporting limit in MW-1, MW-2, MW-5, MW-6, MW-10, and MW-11, and MPE-1. Detectable MtBE ranged from 1.70 µg/L in EX-2 to 11 µg/L in MPE-2. Figure 6 displays the contour map of MtBE concentrations in groundwater. Since the previous monitoring event (Fourth Quarter 2015), MtBE has increased in MPE-2 and decreased in MW-4, EX-1, EX-2, and MPE-1, remained same in MW-7, and below laboratory-reporting limit in MW-1, MW-2, MW-5, MW-6, MW-10, and MW-11.

MW-3, MPE-1, and MPE-2 are the more impacted on-site wells where free-product has been observed in the past and MW-6 and MW-10 are the more impacted off-site wells. As shown in Table 1, since the previous monitoring event (Fourth Quarter 2015), detectable concentrations of TPH-g have decreased significantly in all MW-3, MW-6, MPE-1, and MPE-2 and remained at the same high concentration in MW-10; benzene has increased in MW-3 and MPE-2, decreased in MW-6 and MPE-1, and remained below laboratory-reporting limit in MW-10.

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-6, MW-7, MW-11, EX-1, EX-2, and MPE-1 all gasoline oxygenates and lead scavengers were below laboratory-reporting limits.
- tertiary-butyl alcohol (TBA) was detected at concentrations ranging from 14 µg/L in MW-4 to 250 µg/L in MPE-2. Figure 7 shows the contour map of TBA concentrations in First WBZ wells. Since the previous monitoring event (Fourth Quarter 2015), TBA increased in MW-5 and MPE-2 and decreased in MW-4 and EX-1.
- Methyl tertiary-amyl ether (TAME) was detected in MW-4 at 0.88 µg/L and was below laboratory-reporting limit in other wells. Figure 7 shows the map of TAME concentrations in First WBZ wells. Since the previous monitoring event (Fourth Quarter 2015), TAME decreased in MW-4, EX-1, and MPE-1.
- Ethyl tertiary-butyl ether (ETBE), 1,2-dichloroethane (1,2-DCA), 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.

### **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) polishing drum 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. The polishing unit was replaced on June 16, 2014.

Since the system began discharging, approximately 3,972,753 gallons of groundwater have been treated and discharged at the site (as of March 7, 2016). As previously mentioned in this report, since March 7, 2016, the treatment system has been shut down.

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 2014. Treated groundwater has been discharging to the OLSD sewer since December 9, 2009. Figure 8 shows the schematic diagram of the groundwater treatment system. Treatment system effluent is sampled each month of operation 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 January 12, 2016, cumulative masses of TPH-g and BTEX extracted from groundwater were approximately 40.32 pounds, 1.52 pounds, 0.37 pounds, 1.00 pounds, and 5.17 pounds, respectively. Appendix D includes laboratory analytical results.

#### **4. MULTI-PHASE EXTRACTION EVENTS**

No MPE events were performed during the First Quarter 2016. The overall estimated total mass of VOCs extracted by previous and the current MPE events is 3,582 pounds. This includes the following:

Event	Mass Removed (pounds)
November 2007 (Pilot Test)	106
October 2009	243
November 2009	72
December 2009	97
February 2010	17
March 2010	11
June 2010	30
August 2010	30
October 2010	79
April 2011	27
August 2011	94

May 2013	300
August 2013	841
October 2013	790
September 2014	565
November 2015	280

Figure 9 shows the cumulative extracted mass of VOCs during different MPE events at the site.

## 5. CONCLUSIONS AND RECOMMENDATIONS

Fourth Quarter 2015 groundwater monitoring and MPE events results are summarized below.

- No FP was observed during this monitoring event.
- Groundwater flows southwesterly across the site in First WBZ. The groundwater treatment system has been offline since March 7, 2016 based on comments received from the UST Fund.
- The highest TPH-g concentrations were observed off-site to the southeast of the site in MW-10 and highest benzene was observed in the northeast corner of the site.
- Since the previous monitoring event (Fourth Quarter 2015), detectable concentrations of TPH-g have decreased significantly in all MW-3, MW-6, MPE-1, and MPE-2 and remained at the same high concentration in MW-10; benzene has increased in MW-3 and MPE-2, decreased in MW-6 and MPE-1, and remained below laboratory-reporting limit in MW-10.
- Groundwater monitoring of Second WBZ wells was discontinued based on the October 28, 2015 directive from ACEH.
- The total mass of hydrocarbon removed by MPE operations (as of November 2015) is estimated to be 3,582 pounds.

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

- Continue quarterly groundwater monitoring of First WBZ wells to assess plume stability for on-site wells which show a dramatic improvement and meet LTCP criteria for closure.
- Discontinue measurement of bio attenuation parameters such as dissolved oxygen, oxidation-reduction potential, and turbidity. SOMA believes that sufficient data has been collected at the site and further measurement of these parameters is not required.

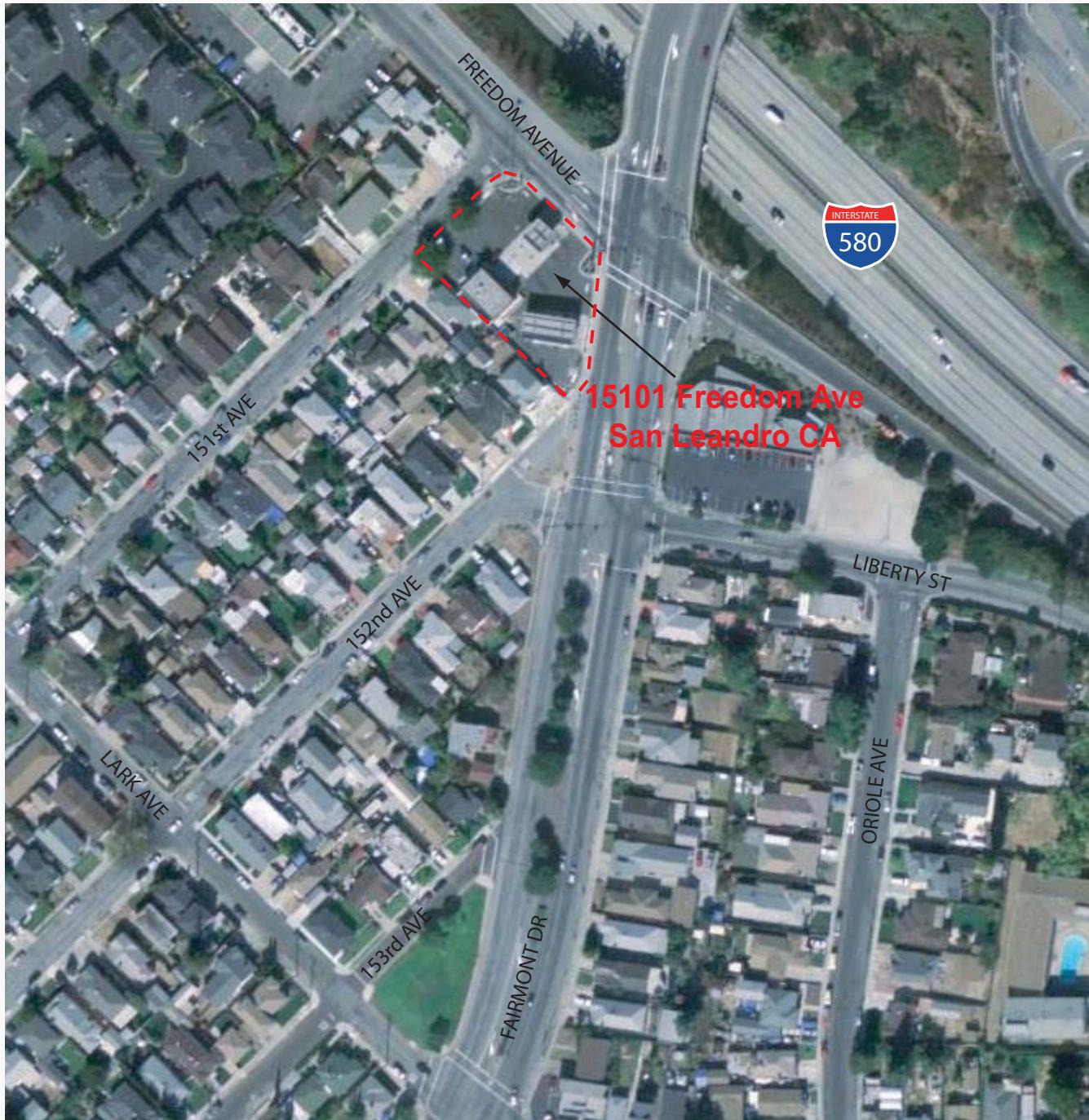
- SOMA has recently completed field work to implement the work plan for further off-site investigation. A report of results and recommendations will shortly be submitted to the ACEH.

## 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.

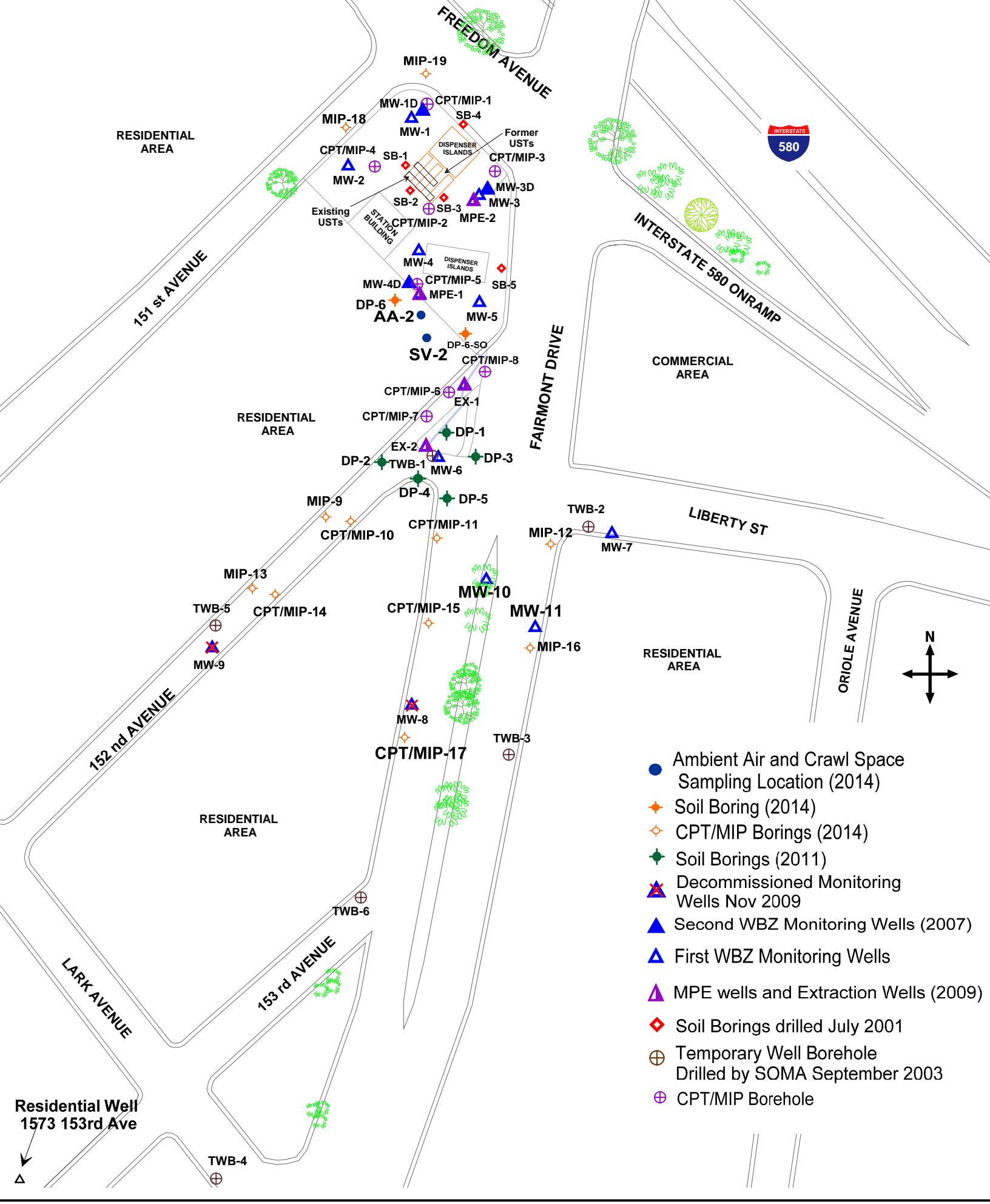
# **Figures**



approximate scale in feet

0 150 300

Figure 1: Site vicinity map.

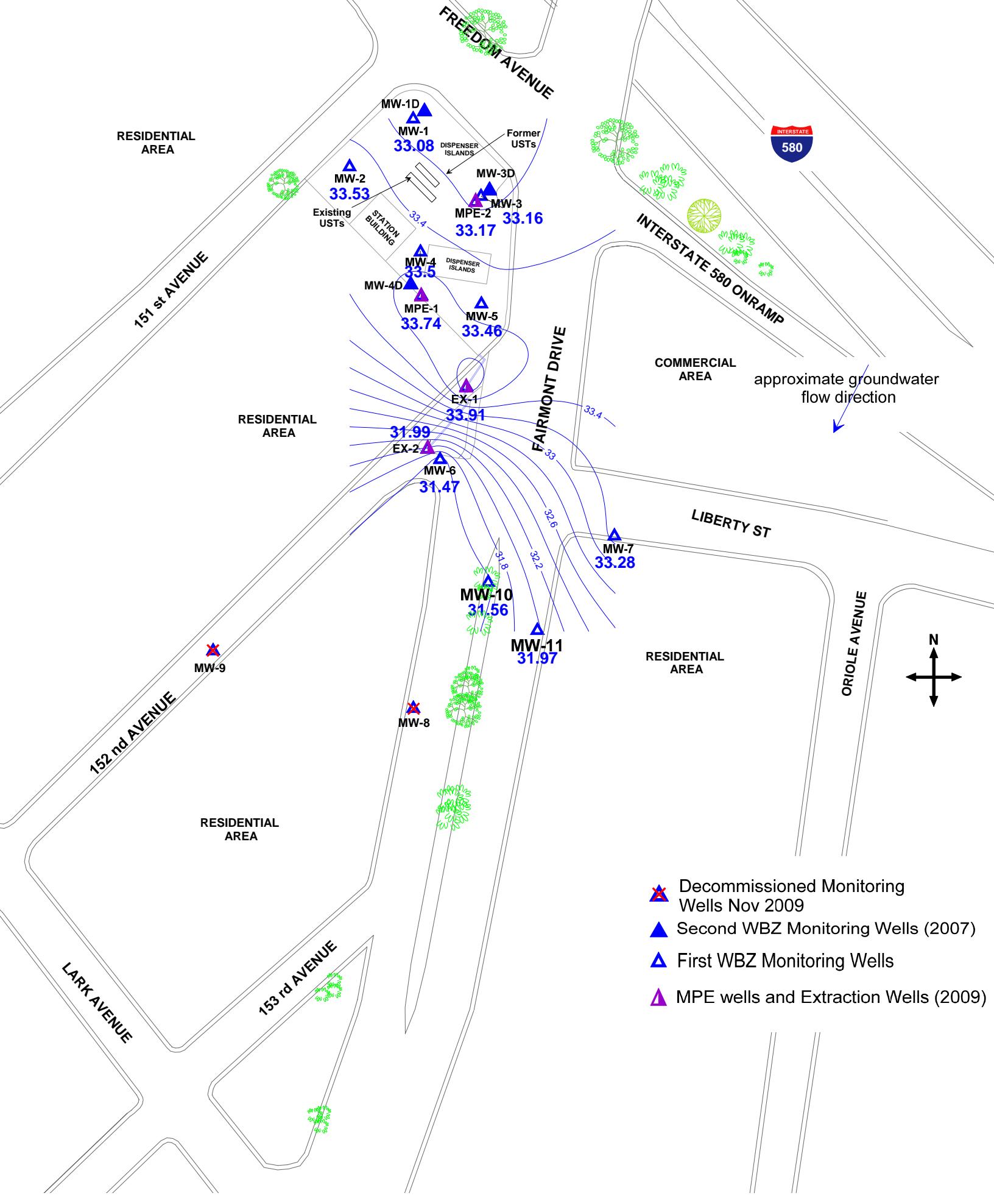


approximate scale in feet

A horizontal scale bar consisting of two segments: a solid black segment from 0 to 50, and a white segment from 50 to 100.

Figure 2: Site Map Showing Locations of USTs, Fuel Dispensers, Soil Borings, Vapor Samples, and Groundwater Monitoring Wells



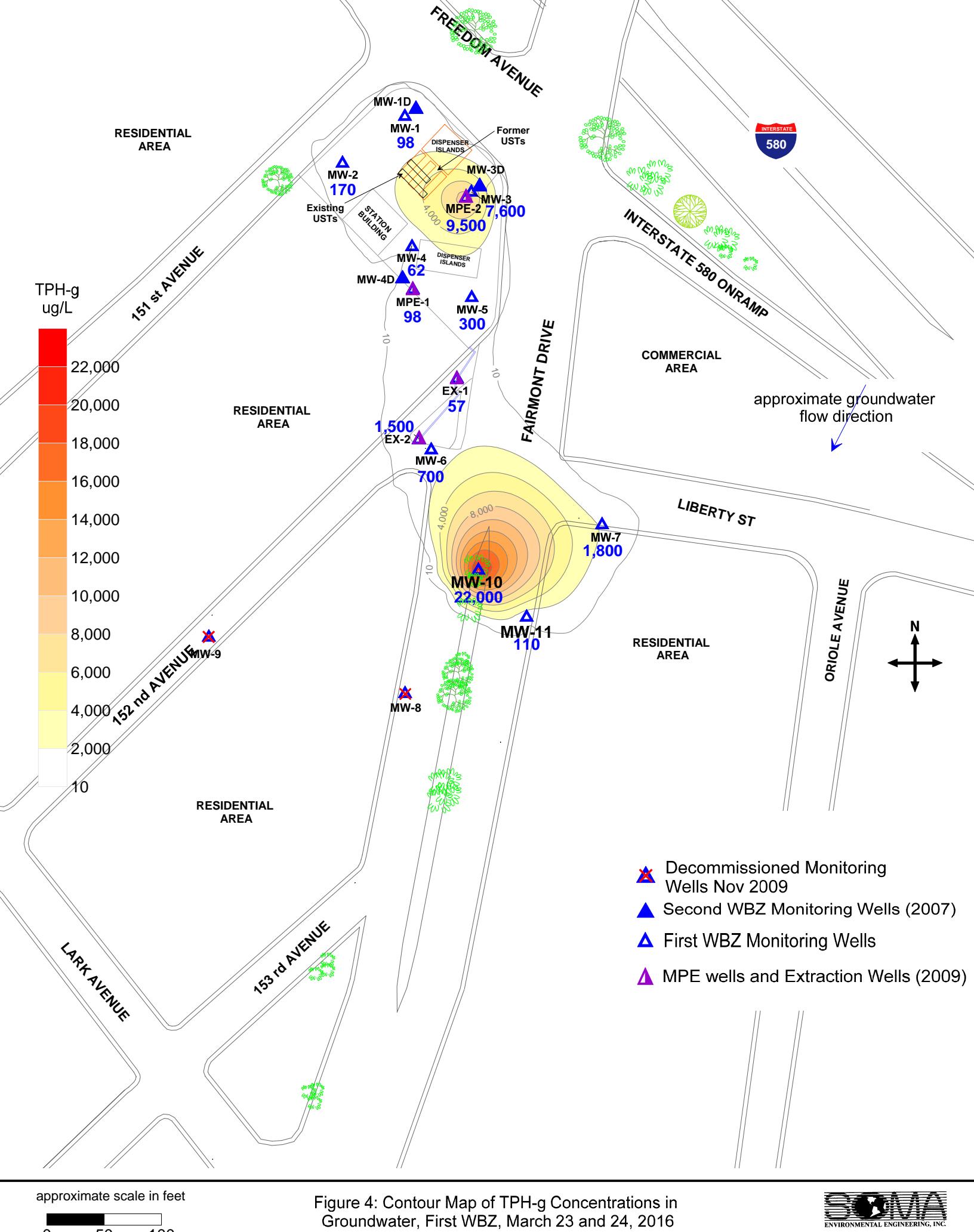


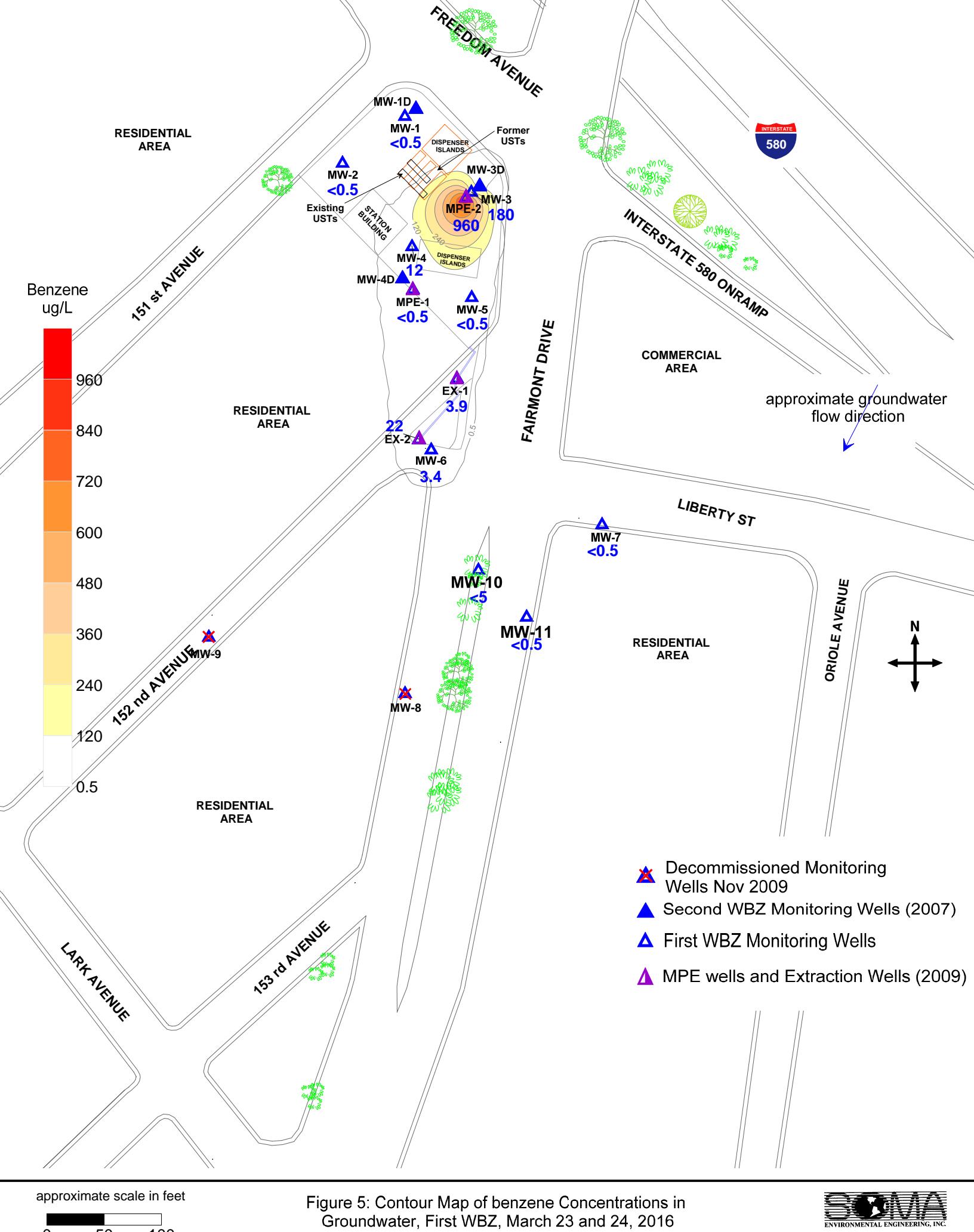
- ✖ Decommissioned Monitoring Wells Nov 2009
- ▲ Second WBZ Monitoring Wells (2007)
- △ First WBZ Monitoring Wells
- ▲ MPE wells and Extraction Wells (2009)

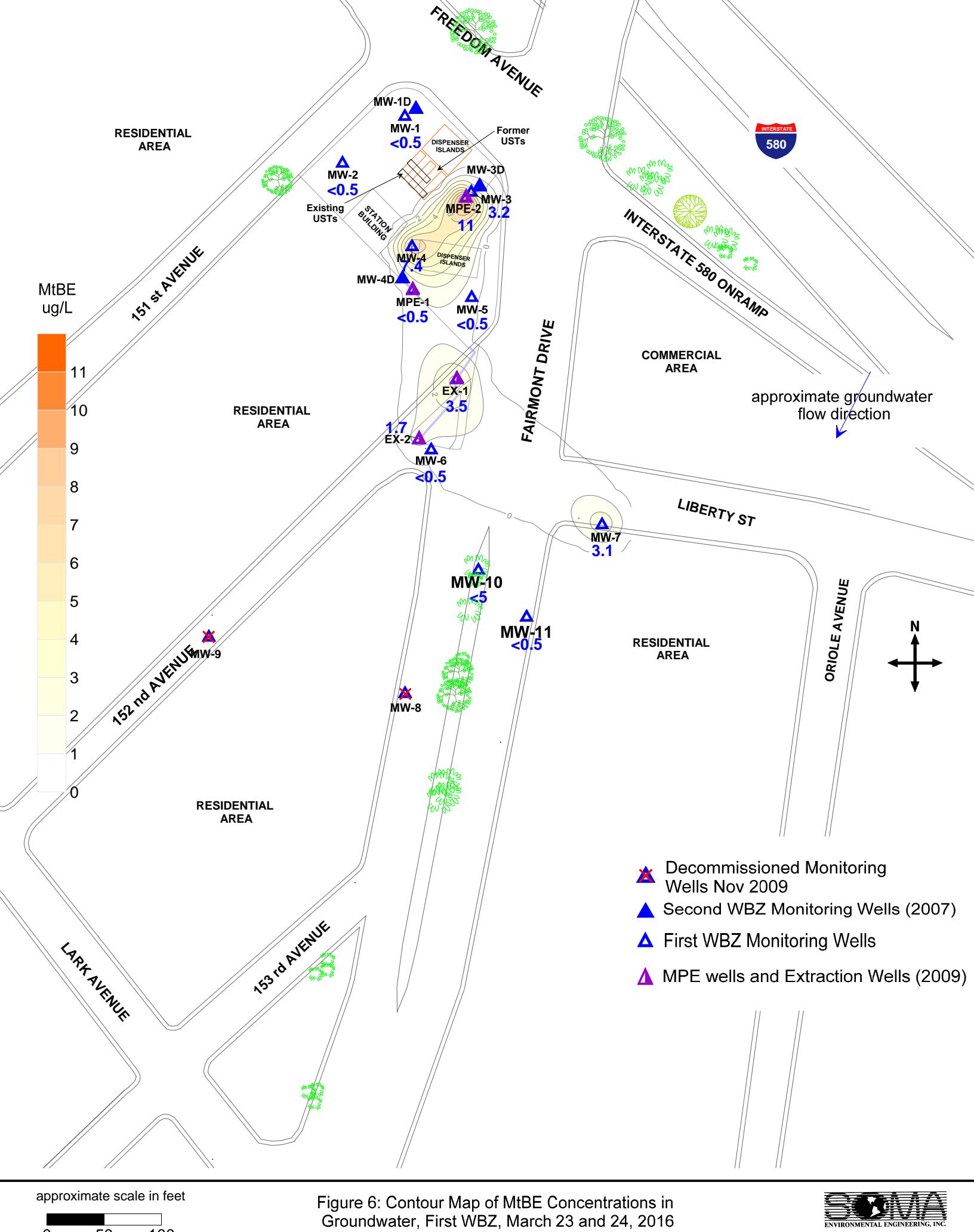
Figure 3: Groundwater Elevation Contour Map in Feet,  
First WBZ, March 23, 2016

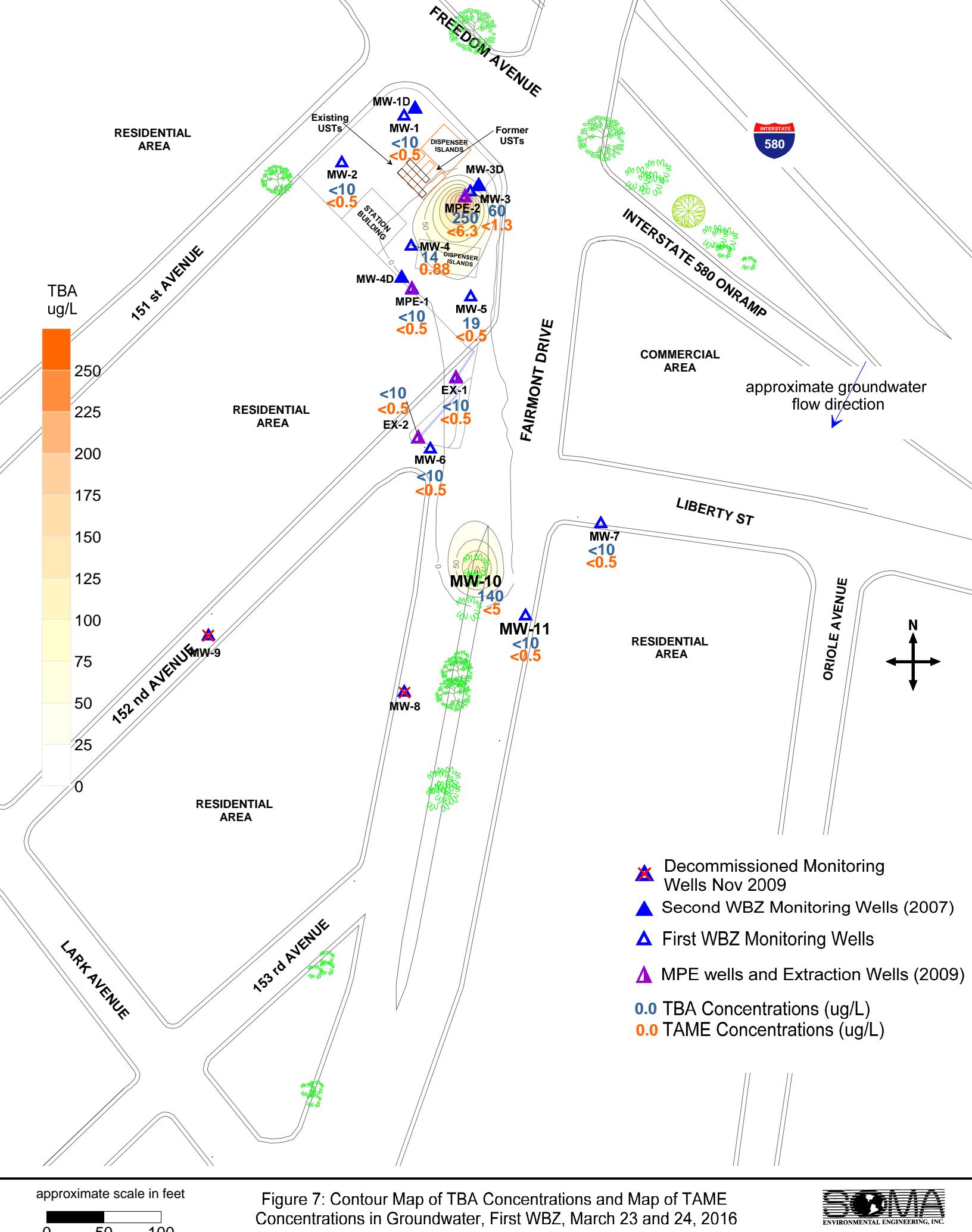
approximate scale in feet

0 50 100









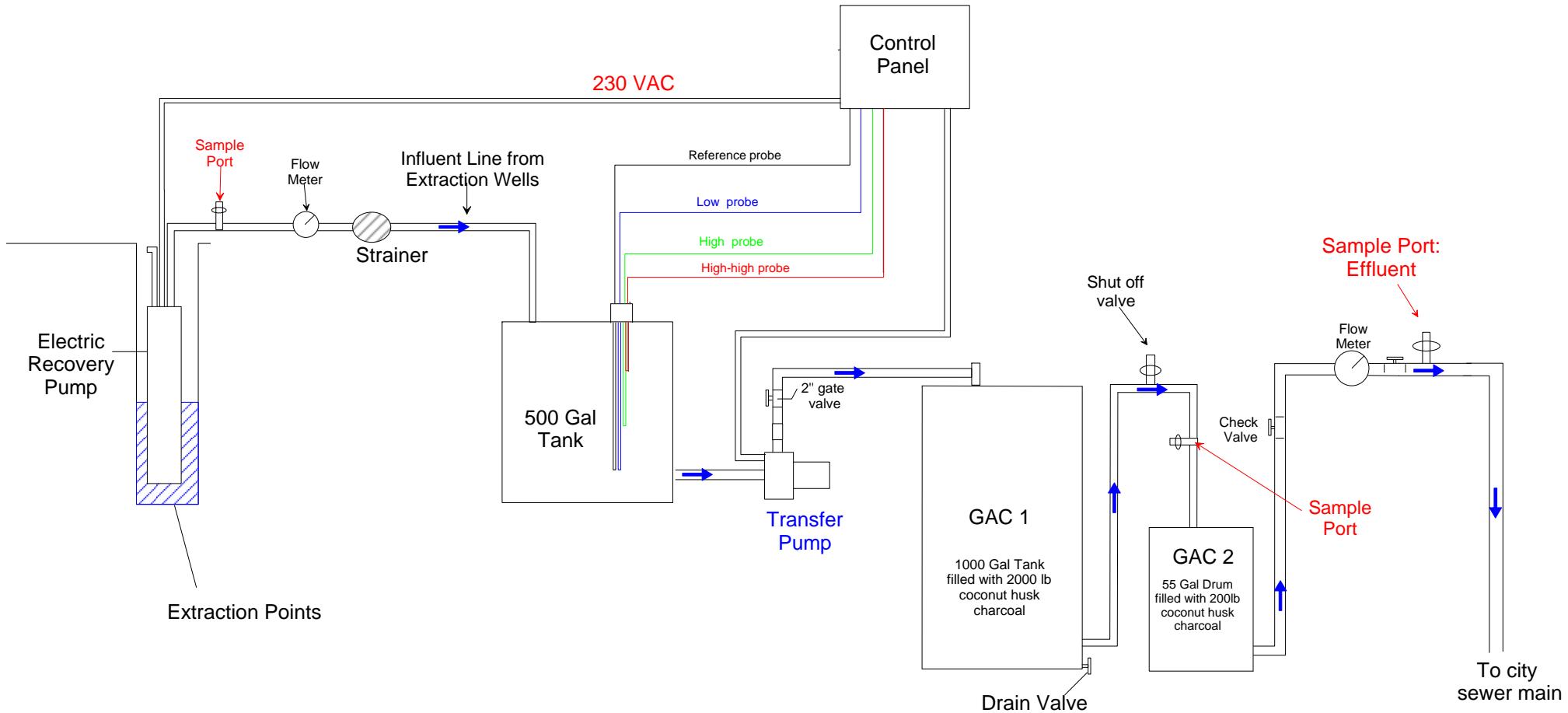
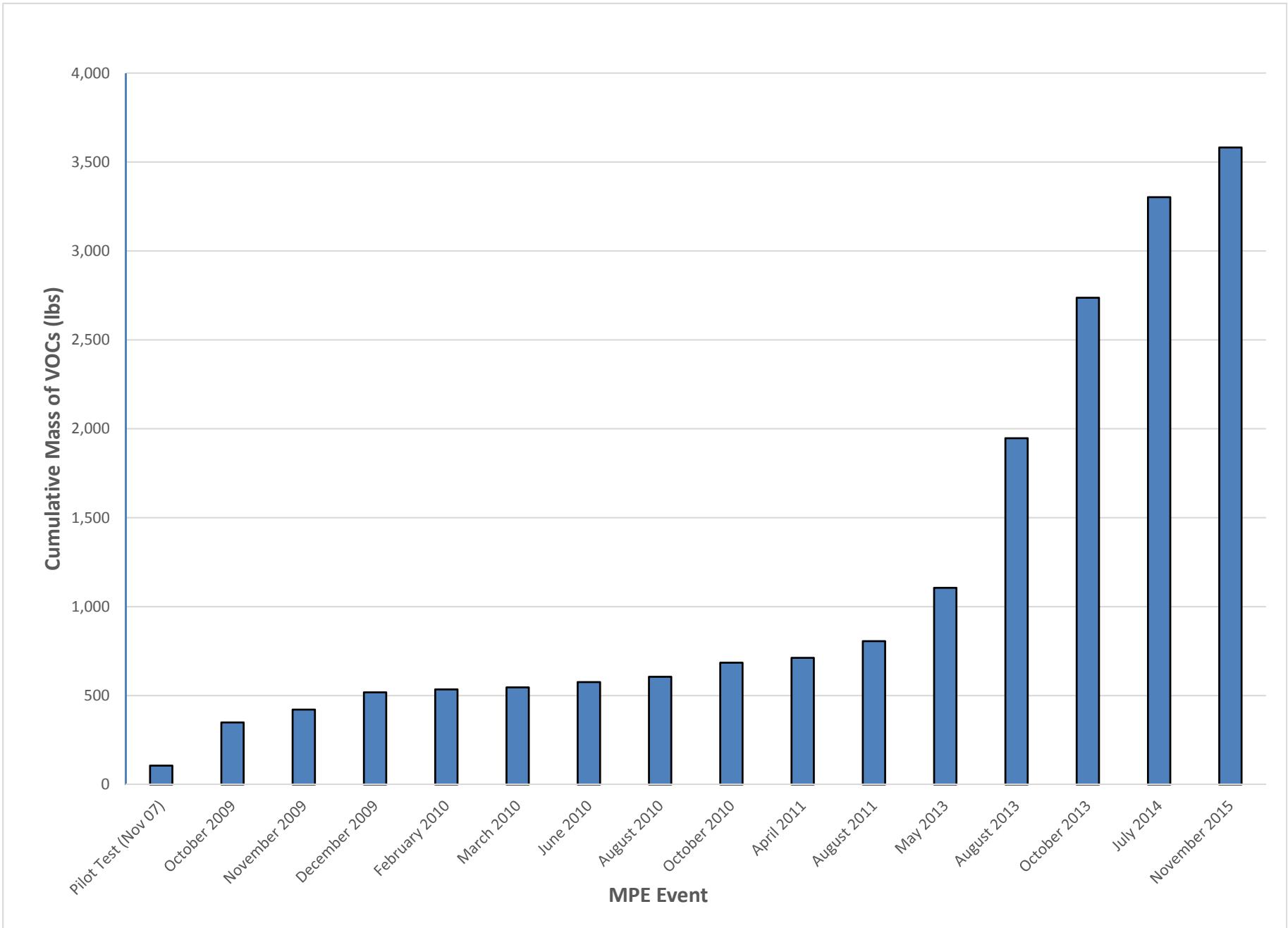


Figure 8: Schematic diagram of Groundwater Remediation System



**Figure 9: 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 <sup>1</sup> (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 <sup>2</sup> (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

**Table 1**  
**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (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 <sup>2</sup> (µg/L)
MW-1 cont.	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 <sup>Y</sup>	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 <sup>Y</sup>	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 <sup>Y</sup>	250	<2.0	110	25	2.50
	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 <sup>X</sup>	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
	12/6/2013	54.46	24.16	N	30.30	5,300	71	<1.7	240	84	<1.7

**Table 1**  
**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g}/\text{L}$ )	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl-benzene ( $\mu\text{g}/\text{L}$ )	Total Xylenes ( $\mu\text{g}/\text{L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g}/\text{L}$ )
MW-1 cont.	3/13/2014	54.46	23.47	N	30.99	2,800	16	<0.5	74	15	1.4
	6/6/2014	54.46	23.46	N	31.00	5,000	47	<0.5	240	58	0.9
	9/23/2014	54.46	24.49	N	29.97	6,700	44	<1.7	200	71	<1.7
	12/23/2014	54.46	21.52	N	32.94	730	2.2	<0.5	0.84	<0.5	<0.5
	3/20/2015	54.46	22.83	N	31.63	1,200	8.6	1.9	17	<0.5	0.59
	6/4/2015	54.46	23.22	N	31.24	5,100	23	<0.71	110	3.6	0.73
	9/11/2015	54.46	23.76	N	30.70	4,200	3.3	<1.7	18	<1.7	<1.7
	12/28/2015	54.46	23.39	N	31.07	590	<0.5	<0.5	1.4	0.55	<0.5
	3/23/2016	<b>54.46</b>	<b>21.38</b>	<b>N</b>	<b>33.08</b>	<b>98</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
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
	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

**Table 1**  
**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g/L}$ )
MW-2 cont.	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 <sup>y</sup>	<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 <sup>y</sup>	<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 <sup>y</sup>	<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 <sup>x</sup>	<2.9	<1.7	14	1.9	<3.3
	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

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**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (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 <sup>2</sup> (µg/L)
MW-2 cont.	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
	12/6/2013	52.41	22.52	N	29.89	290	1.4	<0.5	1.1	<0.5	<0.5
	3/13/2014	52.41	21.56	N	30.85	190	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2014	52.41	21.7	N	30.71	97	<0.5	<0.5	<0.5	<0.5	<0.5
	9/23/2014	52.41	22.95	N	29.46	80	<0.5	<0.5	<0.5	<0.5	<0.5
	12/23/2014	52.41	18.91	N	33.50	140	<0.5	0.7	1.8	<0.5	<0.5
	3/20/2015	52.41	20.76	N	31.65	380	<0.5	0.8	0.86	<0.5	<0.5
	6/4/2015	52.41	21.3	N	31.11	700	<0.5	<0.5	0.72	<0.5	<0.5
	9/11/2015	52.41	21.95	N	30.46	1,900	<1.0	<1.0	2.3	<1.0	<1.0
	12/28/2015	52.41	21.38	N	31.03	170	<0.5	<0.5	0.51	<0.5	<0.5
	3/23/2016	52.41	18.88	N	33.53	170	<0.5	<0.5	<0.5	<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

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**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B <sup>2</sup> (µg/L)
MW-3 cont.	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
	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 <sup>x</sup>	280	12	370	740	<1.7

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**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B <sup>2</sup> (µg/L)
MW-3 cont.	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
	12/6/2013	53.91	23.76	Y	30.15	23,000	360	26	1,700	3,330	<10
	3/12/2014	53.91	23.13	22.98	30.88	FP	FP	FP	FP	FP	FP
	6/5/2014	53.91	23.08	23.06	30.84	FP	FP	FP	FP	FP	FP
	9/23/2014	53.91	24.16	Y	29.75	41,000	230	84	1,000	4,500	<10
	12/23/20014	53.91	20.83	N	33.08	13,000	64	28	250	1,250	<3.6
	3/20/2015	53.91	22.32	Y	31.59	18,000	140	24	730	1,870	<3.6
	6/4/2015	53.91	22.77	Y	31.14	32,000	200	17	680	1,820	<6.3
	9/11/2015	53.91	23.31	Y	30.60	24,000	260	<6.3	380	1,144	<6.3
	12/29/2015	53.91	22.95	Y	30.96	13,000	74	<5.0	220	628	<5.0
	3/24/2016	53.91	20.75	Y	33.16	7,600	180	2	130	263	3.2
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
	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

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**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g/L}$ )
<b>MW-4 cont.</b>	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
	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

**Table 1**  
**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g}/\text{L}$ )	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl-benzene ( $\mu\text{g}/\text{L}$ )	Total Xylenes ( $\mu\text{g}/\text{L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g}/\text{L}$ )
<b>MW-4 cont.</b>	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 <sup>x</sup>	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
	12/6/2013	53.31	23.6	N	29.71	2,300	3,300	<10	78	199	42
	3/13/2014	53.31	22.6	N	30.71	<630	600	<6.3	7.0	21	6.8
	6/6/2014	53.31	22.97	N	30.34	<630	710	<6.3	21	<6.3	17.0
	9/23/2014	53.31	24.22	N	29.09	<630	1,100	<6.3	10	6.6	7.5
	12/23/2014	53.31	19.78	N	33.53	<50	0.95	<0.5	<0.5	<0.5	<0.5
	3/20/2015	53.31	21.75	N	31.56	56	1.8	<0.5	2.00	<0.5	8.7
	6/4/2015	53.31	22.29	N	31.02	210	35	<0.5	4.10	0.54	12
	9/11/2015	53.31	23.02	N	30.29	1,200	140	1.1	7.30	19	39
	12/29/2015	53.31	24.5	N	28.81	440	91	<0.5	0.84	0.74	17
	<b>3/23/2016</b>	<b>53.31</b>	<b>19.81</b>	<b>N</b>	<b>33.50</b>	<b>62</b>	<b>12</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>7.4</b>
<b>MW-5</b>	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

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**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g}/\text{L}$ )	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl-benzene ( $\mu\text{g}/\text{L}$ )	Total Xylenes ( $\mu\text{g}/\text{L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g}/\text{L}$ )
MW-5 cont.	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
	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 <sup>Y</sup>	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 <sup>Y</sup>	400	12	540	296	45

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Monitoring Well	Date	Casing Elevation <sup>1</sup> (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 <sup>2</sup> (µg/L)
MW-5 cont.	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
Pre-MPE	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
	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 <sup>x</sup>	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
	12/6/2013	50.53	20.86	N	29.67	3,600	35	2.1	160	241	2.5
	3/13/2014	50.53	19.91	N	30.62	2,100	23	<1.0	130	73	1.4
	6/6/2014	50.53	20.27	N	30.26	1,700	8.2	0.56	63	40.2	0.75
	9/23/2014	50.53	21.61	N	28.92	1,700	38	0.52	45	29.8	1.60
	12/23/2014	50.53	17.12	N	33.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	3/20/2015	50.53	18.91	N	31.62	130	<0.5	<0.5	4.5	3.4	<0.5
	6/4/2015	50.53	19.49	N	31.04	340	0.7	<0.5	4	3.7	<0.5
	9/11/2015	50.53	20.29	N	30.24	1,300	3.1	<0.5	13	13	<0.5
	12/29/2015	50.53	19.89	N	30.64	260	1.5	<0.5	1.1	0.89	<0.5
	3/23/2016	50.53	17.07	N	33.46	300	<0.5	<0.5	<0.5	<0.5	<0.5
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

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Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g}/\text{L}$ )	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl-benzene ( $\mu\text{g}/\text{L}$ )	Total Xylenes ( $\mu\text{g}/\text{L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g}/\text{L}$ )
MW-6 cont.	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 <sup>Y</sup>	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 <sup>Y</sup>	26	<1.3	170	312.6	2.6
	8/26/2009	45.82	17.82	-	28.00	10,000 <sup>Y</sup>	25	<2.0	130	294	2.2
	12/1/2009	45.82	17.34	-	28.48	11,000 <sup>Y</sup>	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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Monitoring Well	Date	Casing Elevation <sup>1</sup> (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 <sup>2</sup> (µg/L)
<b>MW-6 cont.</b>	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
	12/5/2013	45.82	18.75	Y	27.07	18,000	220	330	460	2,030	6.1
	3/12/2014	45.82	17	Y	28.82	8,900	42	5.4	290	760	<2.5
	6/5/2014	45.82	18.15	Y	27.67	9,600	29	<2.5	370	295	<2.5
	9/22/2014	45.82	19.33	Y	26.49	31,000	140	140	1,600	3,590	4.3
	12/22/2014	45.82	13.43	Y	32.39	2,700	20	<0.5	70	55.4	0.63
	3/19/2015	45.82	16.1	N	29.72	2,900	8.2	<0.5	48	3.6	<0.5
	6/3/2015	45.82	17.21	N	28.61	4,600	13	<0.5	53	3.4	<0.5
	9/10/2015	45.82	18.25	N	27.57	4,200	8.8	<5.0	27	<5.0	<5.0
	12/28/2015	45.82	16.64	N	29.18	4,600	27	<1.0	160	24	<1.0
	3/24/2016	45.82	14.35	N	31.47	700	3.4	<0.5	4.4	2.64	<0.5
<b>MW-7</b>	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

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Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g}/\text{L}$ )	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl-benzene ( $\mu\text{g}/\text{L}$ )	Total Xylenes ( $\mu\text{g}/\text{L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g}/\text{L}$ )
MW-7 cont.	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 <sup>Y</sup>	0.56	1.2	27	39.5	55
	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 <sup>Y</sup>	<0.5	<0.5	15	6.3	63
	8/26/2009	44.74	15.84	-	28.90	2,700 <sup>Y</sup>	<0.5	<0.5	48	53	140
	12/1/2009	44.74	15.03	-	29.71	1,800 <sup>Y</sup>	<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 <sup>X</sup>	<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

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**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g}/\text{L}$ )	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl-benzene ( $\mu\text{g}/\text{L}$ )	Total Xylenes ( $\mu\text{g}/\text{L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g}/\text{L}$ )
MW-7 cont.	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	2.7	4.1
	12/5/2013	44.74	16.21	N	28.53	1,800	<0.5	<0.5	8	3.1	5.7
	3/12/2014	44.74	14.56	N	30.18	920	<0.5	<0.5	3.7	1.5	4.6
	6/5/2014	44.74	15.18	N	29.56	1,600	<0.5	<0.5	11	3.0	5.7
	9/22/2014	44.74	16.63	N	28.11	1,900	<0.5	<0.5	9.6	3.5	5.3
	12/22/2014	44.74	11.37	N	33.37	320	<0.5	<0.5	2.2	2.3	1.7
	3/19/2015	44.74	13.82	N	30.92	1,400	<0.5	<0.5	4.6	2.0	4.7
	6/3/2015	44.74	14.53	N	30.21	2,000	<0.5	<0.5	12	5.4	4.4
	9/10/2015	44.74	15.62	N	29.12	2,200	<1.7	<1.7	9.9	1.7	4.0
	12/28/2015	44.74	14.75	N	29.99	2,500	<0.5	<0.5	5.2	4.0	3.1
	3/24/2016	44.74	11.46	N	33.28	1,800	<0.5	<0.5	1.7	<0.5	3.1
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
	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

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**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g/L}$ )
MW-8 cont.	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

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**15101 Freedom Avenue, San Leandro, CA**

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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													
MW-10	9/22/2014	44.66	17.84	N	26.82	23,000	<10	<10	1200	2,610	<10		
	12/22/2014	44.66	12.33	N	32.33	6,000	<2.5	<2.5	390	802	<2.5		
	3/19/2015	44.66	15.01	N	29.65	3,500	<1.0	<1.0	130	279	<1.0		
	6/3/2015	44.66	15.81	N	28.85	24,000	<5.0	<5.0	870	1,358	<5.0		
	9/10/2015	44.66	17.03	N	27.63	28,000	<10	<10	1,200	2,173	<10		
	12/28/2015	44.66	15.18	N	29.48	22,000	<10	<10	930	1,737	<10		
MW-11			3/24/2016	44.66	13.1	N	31.56	22,000	<5	<5	620	1,038	<5
	9/22/2014	42.45	15.52	N	26.93	2,100	<0.5	<0.5	2.7	4.5	<0.5		
	12/22/2014	42.45	10.08	N	32.37	310	<0.5	<0.5	1.8	2.7	<0.5		
	3/19/2015	42.45	12.77	N	29.68	870	<0.5	<0.5	1.4	2.2	<0.5		
	6/3/2015	42.45	13.5	N	28.95	330	<0.5	<0.5	2.0	3.1	<0.5		
	9/10/2015	42.45	14.79	N	27.66	78	<0.5	<0.5	<0.5	<0.5	<0.5		
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		
	Extraction Wells												

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EX-1 cont.	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 <sup>x</sup>	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
	12/5/2013	47.36	22.53	N	24.83	390	42	2.5	9.8	32.6	76
	3/12/2014	47.36	21.15	N	26.21	250	12	<0.5	4.7	17.2	40
	6/5/2014	47.36	21.31	N	26.05	1,700	70	11	92	208	40
	9/22/2014	47.36	21.15	N	26.21	1,500	23	1.3	73	161	51
	12/22/2014	47.36	19.74	N	27.62	530	8.6	<0.5	3.2	29.3	11
EX-2	3/19/2015	47.36	15.59	N	31.77	<50	1.2	<0.5	<0.5	1.0	<0.5
	6/3/2015	47.36	22.89	N	24.47	770	31	<0.5	8.2	17.1	22
	9/10/2015	47.36	22.57	N	24.79	<50	0.66	<0.5	<0.5	1.53	<0.5
	12/28/2015	47.36	22.7	N	24.66	400	27	<0.5	4.6	10.9	21
	3/24/2016	47.36	13.45	N	33.91	57	3.9	<0.5	<0.5	<0.5	3.5

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EX-2 cont.	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 <sup>x</sup>	630	200	690	1,760	<3.3
	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
	12/5/2013	45.96	23.28	N	22.68	3,700	160	46	110	394	7.2
	3/12/2014	45.96	22.04	N	23.92	3,700	100	9.8	220	498	5.7
	6/5/2014	45.96	23.41	N	22.55	4,400	120	37	280	590	5.4
	9/22/2014	45.96	23.20	N	22.76	2,200	63	8.8	88	240	7.1
	12/22/2014	45.96	20.22	N	25.74	1,600	42	4.2	94	148	6.0
MPE-1	3/19/2015	45.96	16.46	N	29.50	890	42	<0.5	54	10.5	<0.5
	6/3/2015	45.96	21.06	N	24.90	4,700	100	8.7	120	311	1.9
	9/10/2015	45.96	21.15	N	24.81	670	8.1	<1.0	13	27.4	<1.0
	12/28/2015	45.96	20.75	N	25.21	3,500	46	6	120	266	4.5
	3/24/2016	45.96	13.97	N	31.99	1,500	22	0.86	42	75	1.7
	<b>MPE Wells</b>										
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

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<b>MPE-1 cont.</b>	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
<b>Pre-MPE</b>	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
<b>Post-MPE</b>	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
	12/6/2013	51.96	22.41	Y	29.55	27,000	1,600	220	990	5,000	110
	3/13/2014	51.96	21.33	Y	30.63	67,000	1,800	3,500	1,800	10,100	170
	6/5/2014	51.96	21.89	21.8	30.13	FP	FP	FP	FP	FP	FP
	9/23/2014	51.96	23.12	Y	28.84	12,000	380	31	100	1,630	39
	12/23/2014	51.96	18.3	Y	33.66	3,100	23	24	23	220	<1.0
	3/20/2015	51.96	20.14	Y	31.82	9,700	58	43	77	1,000	<2.5
	6/4/2015	51.96	21.00	Y	30.96	14,000	110	49	66	620	10
	9/11/2015	51.96	21.77	Y	30.19	9,600	590	150	83	590	50
	12/29/2015	51.96	21.13	Y	30.83	3,100	24	11	8.2	237	0.88
	<b>3/24/2016</b>	<b>51.96</b>	<b>18.22</b>	<b>N</b>	<b>33.74</b>	<b>98</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>0.79</b>	<b>&lt;0.5</b>
<b>MPE-2</b>	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

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<b>MPE-2 cont.</b>	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
<b>Pre-MPE</b>	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
<b>Post-MPE</b>	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
	12/5/2013	53.72	23.73	23.61	30.07	FP	FP	FP	FP	FP	FP
	3/12/2014	53.72	22.89	22.85	30.86	FP	FP	FP	FP	FP	FP
	6/5/2014	53.72	22.96	22.94	30.77	FP	FP	FP	FP	FP	FP
	9/23/2014	53.72	24.05	Y	29.67	22,000	550	340	760	2,760	<6.3
	12/23/2014	53.72	20.65	N	33.07	12,000	430	77	420	1,670	4.6
	3/20/2015	53.72	22.16	Y	31.56	14,000	670	21	630	1,150	6.9
	6/4/2015	53.72	22.6	Y	31.12	27,000	730	6.5	930	1,343	6.9
	9/11/2015	53.72	23.15	Y	30.57	21,000	1,000	<7.1	1,200	760	9.3
	12/29/2015	53.72	22.86	Y	30.86	16,000	220	10	210	990	<6.3
	<b>3/24/2016</b>	<b>53.72</b>	<b>20.55</b>	<b>Y</b>	<b>33.17</b>	<b>9,500</b>	<b>960</b>	<b>&lt;6.3</b>	<b>180</b>	<b>370</b>	<b>11</b>
<b>2nd WBZ</b>											
<b>MW-1D</b>	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

**Table 1**  
**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g}/\text{L}$ )	Benzene ( $\mu\text{g}/\text{L}$ )	Toluene ( $\mu\text{g}/\text{L}$ )	Ethyl-benzene ( $\mu\text{g}/\text{L}$ )	Total Xylenes ( $\mu\text{g}/\text{L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g}/\text{L}$ )
MW-1D cont.	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 <sup>Y</sup>	<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
	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
	12/5/2013	54.42	24.31	N	30.11	<50	<0.5	<0.5	<0.5	1.3	<0.5
	3/12/2014	54.42	23.68	N	30.74	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/5/2014	54.42	23.68	N	30.74	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/2014	54.42	24.65	N	29.77	<50	<0.5	<0.5	<0.5	0.88	<0.5
	12/23/2014	54.42	21.84	N	32.58	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	3/19/2015	54.42	23.04	N	31.38	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2015	54.42	23.43	N	30.99	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/10/2015	54.42	23.91	N	30.51	<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 <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g/L}$ )
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
	12/5/2013	54.10	23.97	N	30.13	<50	<0.5	<0.5	<0.5	0.53	1.6
	3/13/2014	54.10	23.22	N	30.88	130	<0.5	2.9	2.5	16.6	0.97
	6/5/2014	54.10	23.33	N	30.77	<50	<0.5	<0.5	<0.5	0.77	1.5
	9/22/2014	54.10	24.40	N	29.70	<50	<0.5	<0.5	<0.5	<0.5	0.96
	12/23/2014	54.10	21.09	N	33.01	<50	<0.5	<0.5	<0.5	<0.5	1

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**Historical Groundwater Elevation Data and Analytical Results**  
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Monitoring Well	Date	Casing Elevation <sup>1</sup> (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl-benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MtBE 8260B <sup>2</sup> ( $\mu\text{g/L}$ )
MW-3D cont.	3/19/2015	54.10	22.50	N	31.60	<50	<0.5	<0.5	<0.5	<0.5	1.6
	6/3/2015	54.10	22.85	N	31.25	<50	<0.5	<0.5	<0.5	<0.5	1.6
	9/10/2015	54.10	23.53	N	30.57	<50	<0.5	<0.5	<0.5	<0.5	1.4
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 <sup>y</sup>	<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
	12/6/2013	53.12	23.43	N	29.69	<50	<0.5	<0.5	<0.5	<0.5	3.4

**Table 1**  
**Historical Groundwater Elevation Data and Analytical Results**  
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Monitoring Well	Date	Casing Elevation <sup>1</sup> (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 <sup>2</sup> (µg/L)
<b>MW-4D cont.</b>	3/13/2014	53.12	22.38	N	30.74	<50	<0.5	<0.5	<0.5	<0.5	4.0
	6/6/2014	53.12	22.78	N	30.34	<50	<0.5	<0.5	<0.5	<0.5	1.8
	9/23/2014	53.12	24.05	N	29.07	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/23/2014	53.12	19.66	N	33.46	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	3/19/2015	53.12	21.54	N	31.58	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2015	53.12	22.10	N	31.02	75	<0.5	<0.5	<0.5	<0.5	<0.5
	9/10/2015	53.12	22.89	N	30.23	<50	<0.5	<0.5	<0.5	<0.5	<0.5
<b>Equipment Blanks</b>											
<b>EB-PMP</b>	1/21/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
<b>EB-PRB</b>	1/21/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
<b>EB-PMP2</b>	1/22/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
<b>EB-PRB2</b>	1/22/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
<b>ESL (ug/L)</b>	-	-	-	-	-	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

<sup>1</sup>: 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.

<sup>2</sup>: 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.

**Table 1**  
**Historical Groundwater Elevation Data and Analytical Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	Casing Elevation <sup>1</sup> (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 <sup>2</sup> (µg/L)
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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

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°C 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
	12/6/2013	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	3/13/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/23/2014	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	12/23/2014	4.7 J	<0.5	<0.5	<0.5	<0.5	<0.5
	3/20/2015	11	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2015	14 J	<0.71	<0.71	<0.71	<0.71	<0.71
	9/11/2015	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	12/2/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/23/2016	<10	<0.5	<0.5	<0.5	<0.5	<0.5
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

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

<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (<math>\mu\text{g/L}</math>)</b>	<b>DIPE (<math>\mu\text{g/L}</math>)</b>	<b>ETBE (<math>\mu\text{g/L}</math>)</b>	<b>TAME (<math>\mu\text{g/L}</math>)</b>	<b>1,2-DCA (<math>\mu\text{g/L}</math>)</b>	<b>EDB (<math>\mu\text{g/L}</math>)</b>
<b>MW-2 cont.</b>	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
	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
	12/6/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/13/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/23/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/23/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/20/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2015	<1.7	<0.5	<0.5	<0.5	<0.5	<0.5
	9/11/2015	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	12/2/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	<b>3/23/2016</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<b>MW-3</b>	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

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**Historical Gasoline Oxygenates Results**  
**15101 Freedom Avenue, San Leandro, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (<math>\mu\text{g/L}</math>)</b>	<b>DIPE (<math>\mu\text{g/L}</math>)</b>	<b>ETBE (<math>\mu\text{g/L}</math>)</b>	<b>TAME (<math>\mu\text{g/L}</math>)</b>	<b>1,2-DCA (<math>\mu\text{g/L}</math>)</b>	<b>EDB (<math>\mu\text{g/L}</math>)</b>
<b>MW-3 cont.</b>	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
	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
	12/6/2013	<200	<10	<10	<10	<10	<10
	3/12/2014	FP	FP	FP	FP	FP	FP
	6/5/2014	FP	FP	FP	FP	FP	FP
	9/23/2014	<200	<10	<10	<10	<10	<10
	12/23/2014	<71	<3.6	<3.6	<3.6	<3.6	<3.6
	3/20/2015	29 J	<3.6	<3.6	<3.6	<3.6	<3.6
	6/4/2015	<17	<6.3	<6.3	<6.3	<6.3	<6.3
	9/11/2015	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	12/29/2015	<100	<5	<5	<5	<5	<5
	3/24/2016	60	<1.3	<1.3	<1.3	<1.3	<1.3
<b>MW-4</b>	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

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<b>MW-4 cont.</b>	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
	12/6/2013	1,500	<10	<10	<10	<10	<10
	3/13/2014	190	<6.3	<6.3	<6.3	<6.3	<6.3
	6/6/2014	360	<6.3	<6.3	<6.3	<6.3	<6.3
	9/23/2014	1,100	<6.3	6.3	<6.3	<6.3	<6.3
	12/23/2014	8.1 J	<0.5	<0.5	<0.5	<0.5	<0.5
	3/20/2015	29	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2015	62	<0.5	0.62	<0.5	<0.5	<0.5
	9/11/2015	82	<1.0	<1.0	<1.0	<1.0	<1.0
	12/29/2015	32	<0.5	<0.5	1.4	<0.5	<0.5
	3/23/2016	14	<0.5	<0.5	0.88	<0.5	<0.5
<b>MW-5</b>	8/8/2002	<250	<6.3	<6.3	510	NA	NA
	11/1/2002	66	<2.0	<2.0	560	NA	NA
	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

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**Historical Gasoline Oxygenates Results**  
**15101 Freedom Avenue, San Leandro, CA**

<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (<math>\mu\text{g/L}</math>)</b>	<b>DIPE (<math>\mu\text{g/L}</math>)</b>	<b>ETBE (<math>\mu\text{g/L}</math>)</b>	<b>TAME (<math>\mu\text{g/L}</math>)</b>	<b>1,2-DCA (<math>\mu\text{g/L}</math>)</b>	<b>EDB (<math>\mu\text{g/L}</math>)</b>
<b>MW-5 cont.</b>	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
	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
<b>Pre- MPE</b>	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
	12/6/2013	<20	<1.0	<1.0	3.9	<1.0	<1.0
	3/13/2014	<20	<1.0	<1.0	2.2	<1.0	<1.0
	6/6/2014	<10	<0.5	<0.5	0.81	<0.5	<0.5
	9/23/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
<b>MW-6</b>	12/23/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/20/2015	3.1 J	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2015	<1.3	<0.5	<0.5	<0.5	<0.5	<0.5
	9/11/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/29/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/23/2016	19	<0.5	<0.5	<0.5	<0.5	<0.5
	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
<b>MW-6</b>	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
<b>MW-6</b>	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
	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
<b>MW-6</b>	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
<b>MW-6</b>	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
	12/5/2013	270	<2.5	<2.5	<2.5	<2.5	<2.5

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

<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (<math>\mu\text{g/L}</math>)</b>	<b>DIPE (<math>\mu\text{g/L}</math>)</b>	<b>ETBE (<math>\mu\text{g/L}</math>)</b>	<b>TAME (<math>\mu\text{g/L}</math>)</b>	<b>1,2-DCA (<math>\mu\text{g/L}</math>)</b>	<b>EDB (<math>\mu\text{g/L}</math>)</b>
<b>MW-6 cont.</b>	3/12/2014	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	6/5/2014	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	9/22/2014	160	<2.5	<2.5	<2.5	<2.5	<2.5
	12/22/2014	13 J	<0.5	<0.5	<0.5	<0.5	<0.5
	3/19/2015	4.1 J	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2015	<1.3	<0.5	<0.5	<0.5	<0.5	<0.5
	9/10/2015	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	12/28/2015	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	<b>3/24/2016</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<b>MW-7</b>	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
	12/5/2013	<10	<0.5	<0.5	0.73	<0.5	<0.5
	3/12/2014	<10	<0.5	<0.5	0.64	<0.5	<0.5
	6/5/2014	<10	<0.5	<0.5	0.76	<0.5	<0.5
	9/22/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/22/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/19/2015	3.0 J	<0.5	<0.5	0.68	<0.5	<0.5
	6/3/2015	<1.3	<0.5	<0.5	<0.5	<0.5	<0.5
	9/10/2015	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	12/28/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	<b>3/24/2016</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<b>MW-8</b>	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**  
**Historical Gasoline Oxygenates Results**  
**15101 Freedom Avenue, San Leandro, CA**

Monitoring Well	Date	TBA ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )
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							
MW-10	9/22/2014	<200	<10	<10	<10	<10	<10
	12/22/2014	30 J	<2.5	<2.5	<2.5	<2.5	<2.5
	3/19/2015	85	<1.0	<1.0	<1.0	<1.0	<1.0
	6/3/2015	170 J	<5.0	<5.0	<5.0	<5.0	<5.0
	9/10/2015	<200	<10	<10	<10	<10	<10
	12/28/2015	<200	<10	<10	<10	<10	<10
MW-11	3/24/2016	140	<5	<5	<5	<5	<5
	9/22/2014	69	<0.5	<0.5	<0.5	<0.5	<0.5
	12/22/2014	15	<0.5	<0.5	<0.5	<0.5	<0.5
	3/19/2015	3.5 J	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2015	<2.1	<0.5	<0.5	<0.5	<0.5	<0.5
EX-1	9/10/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/28/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/23/2016	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	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

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<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (<math>\mu\text{g/L}</math>)</b>	<b>DIPE (<math>\mu\text{g/L}</math>)</b>	<b>ETBE (<math>\mu\text{g/L}</math>)</b>	<b>TAME (<math>\mu\text{g/L}</math>)</b>	<b>1,2-DCA (<math>\mu\text{g/L}</math>)</b>	<b>EDB (<math>\mu\text{g/L}</math>)</b>
<b>EX-1 cont.</b>	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
	12/5/2013	230	<0.5	1.7	5.5	<0.5	<0.5
	3/12/2014	48	<0.5	0.77	3.1	<0.5	<0.5
	6/5/2014	70	<0.5	1.1	3.9	0.69	<0.5
	9/22/2014	96	<0.5	0.94	5.6	<0.5	<0.5
	12/22/2014	91	<0.5	0.84	<0.5	<0.5	<0.5
	3/19/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2015	35	<0.5	1.4	<0.5	<0.5	<0.5
	9/10/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/28/2015	38	<0.5	0.7	2.4	<0.5	<0.5
	<b>3/24/2016</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<b>EX-2</b>	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
	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
	12/5/2013	30	<1.0	<1.0	<1.0	1.2	<1.0
	3/12/2014	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	6/5/2014	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	9/22/2014	<10	<0.5	<0.5	<0.5	1.1	<0.5
	12/22/2014	37	<0.5	<0.5	<0.5	0.8	<0.5
	3/19/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2015	17 J	<1.0	<1.0	<1.0	<1.0	<1.0
	9/10/2015	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	12/28/2015	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	<b>3/24/2016</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<b>MPE Wells</b>							
<b>MPE-1</b>	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
	12/6/2013	1,500	<20	<20	30	<20	<20
	3/13/2014	1,100	<20	<20	160	<20	<20
	6/5/2014	FP	FP	FP	FP	FP	FP
	9/23/2014	420	<3.6	3.7	24	<3.6	<3.6
	12/23/2014	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	3/20/2015	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	6/4/2015	<13	<5.0	<5.0	9.2	<5.0	<5.0
	9/11/2015	<100	<5.0	<5.0	85	<5.0	<5.0
	12/29/2015	<10	<0.5	<0.5	1.6	<0.5	<0.5
	<b>3/24/2016</b>	<b>&lt;10</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
<b>MPE-2</b>	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

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

Monitoring Well	Date	TBA ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )
MPE-2 cont.	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
	12/5/2013	FP	FP	FP	FP	FP	FP
	3/12/2014	FP	FP	FP	FP	FP	FP
	6/5/2014	FP	FP	FP	FP	FP	FP
	9/23/2014	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	12/23/2014	23 J	<4.2	<4.2	<4.2	<4.2	<4.2
	3/20/2015	57 J	<4.2	<4.2	5.2	<4.2	<4.2
	6/4/2015	66 J	<5.0	<5.0	<5.0	<5.0	<5.0
	9/11/2015	<140	<7.1	<7.1	<7.1	<7.1	<7.1
	12/29/2015	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	3/24/2016	250	<6.3	<6.3	<6.3	<6.3	<6.3
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
	12/5/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/12/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/5/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/23/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/19/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2015	<2.1	<0.5	<0.5	<0.5	<0.5	<0.5
	9/10/2015	<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
	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

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

<b>Monitoring Well</b>	<b>Date</b>	<b>TBA (<math>\mu\text{g/L}</math>)</b>	<b>DIPE (<math>\mu\text{g/L}</math>)</b>	<b>ETBE (<math>\mu\text{g/L}</math>)</b>	<b>TAME (<math>\mu\text{g/L}</math>)</b>	<b>1,2-DCA (<math>\mu\text{g/L}</math>)</b>	<b>EDB (<math>\mu\text{g/L}</math>)</b>
<b>MW-3D cont.</b>	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
	12/5/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/13/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/5/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/23/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/19/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2015	<2.1	<0.5	<0.5	<0.5	<0.5	<0.5
	9/10/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
<b>MW-4D</b>	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
	12/6/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/13/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/23/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/23/2014	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/19/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2015	4.8 J	<0.5	<0.5	<0.5	<0.5	<0.5
	9/10/2015	<10	<0.5	<0.5	<0.5	<0.5	<0.5
<b>1573 153 RD</b>	1/3/2008	21	<0.5	<0.5	<2.0	<0.5	<2.0
	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
<b>EB-PMP</b>	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
<b>EB-PRB</b>	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
<b>EB-PMP2</b>	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
<b>EB-PRB2</b>	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
<b>ESL</b>	12	NE	NE	NE	0.5	0.05	

**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)
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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)	Ethylben- zene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH
<b>2009</b>											
8-Oct-2009	15,351	<50	120 <sup>Y</sup>	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
<b>2010</b>											
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
<b>2011</b>											
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)	Ethyben zene (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
<b>2012</b>											
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
<b>2013</b>											
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

**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)	Ethyben zene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH
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
28-Oct-2013	2,551,538	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.71
14-Nov-2013	2,665,016	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.53
6-Dec-2013	2,770,675	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.44
<b>2014</b>											
9-Jan-2014	2,884,292	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.49
18-Feb-2014	2,953,173	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.66
14-Mar-2014	2,977,698	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.58
17-Apr-2014	3,035,679	89 Y	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.60
15-May-2014	3,054,723	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.19
16-Jun-2014	55-Gallon polishing drum replaced due to leak										
17-Jun-2014	3,070,826	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.74
21-Jul-2014	3,136,493	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.92
13-Aug-2014	3,229,086	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.50
9-Sep-2014	3,360,607	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.44
13-Oct-2014	3,431,247	<50	<49	<290	<0.5	<0.5	<0.5	<0.5	NA	NA	6.39
18-Nov-2014	3,504,809	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.51
8-Dec-2014	3,544,218	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.65
<b>2015</b>											
13-Jan-2015	3,560,504	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.44
9-Feb-2015	3,560,780	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.22
20-Mar-2015	3,560,801	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.38
15-Apr-2015	3,575,395	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.40
21-May-2015	3,577,714	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.29
4-Jun-2015	3,580,407	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.66
14-Jul-2015	3,629,420	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.34
18-Aug-2015	3,672,646	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.21
23-Sep-2015	3,708,165	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.32

**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)	Ethyben zene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH
27-Oct-2015	3,753,333	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.50
19-Nov-2015	3,782,192	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.43
14-Dec-2015	3,829,993	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.63
<b>2016</b>											
12-Jan-2016	3,863,743	<50	<51	<310	<0.5	<0.5	<0.5	<0.5	NA	NA	6.39
5-Feb-2016	3,917,264	<50	<50	<300	<0.5	<0.5	<0.5	<0.5	NA	NA	6.32
<b>7-Mar-2016</b>	<b>3,972,753</b>	<b>&lt;50</b>	<b>&lt;50</b>	<b>&lt;300</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>NA</b>	<b>NA</b>	<b>6.82</b>
<b>System shut down</b>											

Note:

NA: Not Available/Not Applicable

<: Less than Laboratory-reporting limit

Y: Sample exhibits chromatographic pattern which does not resemble standard

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 ( $\mu\text{g/L}$ )					Mass removed (pounds)					
		TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	
<b>2009</b>												
9-Dec-2009	0		Installation of GWETS, began discharging treated groundwater to site sewer main									
<b>2010</b>												
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 <sup>Y</sup>	<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	
<b>2011</b>												
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	
<b>2012</b>												
19-Jan-2012	1,715,163	110 <sup>Y</sup>	<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 <sup>Y</sup>	130	12	42	153	20.25	0.93	0.22	0.42	3.01	
<b>2013</b>												
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	
28-Oct-2013	2,551,538	4,900	88	49	150	583	34.41	1.33	0.35	0.86	4.65	
<b>2014</b>												
9-Jan-2014	2,884,292	590	17	4.1	9.1	68	36.04	1.38	0.36	0.89	4.84	
17-Apr-2014	3,035,679	650	19	0.67	16	50.1	36.86	1.40	0.36	0.91	4.91	
21-Jul-2014	3,136,493	1,000	54	1.70	35	71.1	37.70	1.45	0.36	0.94	4.97	
13-Oct-2014	3,431,247	370	6.50	0.75	6.30	41	38.61	1.46	0.36	0.95	5.07	
<b>2015</b>												
13-Jan-2015	3,560,504	550	21	<0.5	23	19	39.20	1.48	0.36	0.98	5.09	
15-Apr-2015	3,575,395	1,300	46	3.30	52	136	39.36	1.49	0.36	0.98	5.10	
14-Jul-2015	3,629,420	1,000	31	4.90	24	94	39.81	1.50	0.37	0.99	5.15	
27-Oct-2015	3,753,333	420	9.50	0.73	3	24	40.24	1.51	0.37	1.00	5.17	
<b>2016</b>												
12-Jan-2016	3,863,743	79	2.20	<0.5	<0.5	<0.5	40.32	1.52	0.37	1.00	5.17	

Notes:

< : Below laboratory-reporting limit

Y : sample exhibits chromatographic pattern which does not resemble standard

# **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.

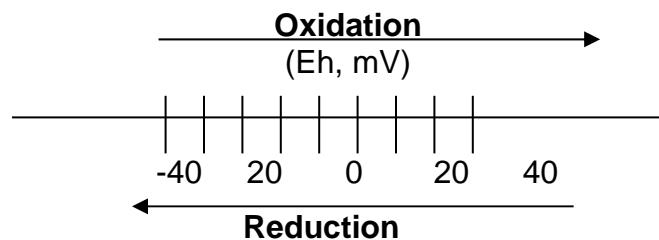
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater EC is directly related to the concentration of total dissolved solids (TDS) in solution.

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<sub>2</sub> in water is low (9 mg/L at 25 °C and 11 mg/L at 5 °C), and

because the rate of O<sub>2</sub> 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<sub>2</sub> in the groundwater is consumed; however, the oxidizing agents (i.e., the constituents that undergo reduction) now become NO<sub>3</sub><sup>-</sup>, MnO<sub>2</sub>, Fe(OH)<sub>3</sub>, SO<sub>4</sub><sup>2-</sup> 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<sup>+2</sup>), nitrate (NO<sub>3</sub><sup>-</sup>), and sulfate (SO<sub>4</sub><sup>2-</sup>) concentrations.

Fe<sup>+2</sup>, NO<sub>3</sub><sup>-</sup>, and SO<sub>4</sub><sup>2-</sup> 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

**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: 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
	37° 42' 29.1" N	122° 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
	37° 42' 28.5" N	122° 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
	37° 42' 27.7" N	122° 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 37°43'11.04190" LONG W 122°07'09.20691", 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 37°43'02.71762" LONG W 122°07'00.46339", 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 37.707459134	6092163.720 122.123062972	47.36 47.61 47.60	4" PVC NOTCH NORTH SIDE SET PUNCH NORTH SIDE RIM PAVEMENT NORTH SIDE
EX-2	2084082.018 37.707310806	6092130.224 122.123175540	45.96 47.04 47.00	4" PVC NOTCH NORTH SIDE SET PUNCH NORTH SIDE RIM CONCRETE NORTH SIDE
MPE-1	2084213.168 37.707670702	6092125.258 122.123200567	51.96 52.49 52.51	4" PVC NOTCH NORTH SIDE SET PUNCH NORTH SIDE RIM CONCRETE NORTH SIDE
MPE-2	2084293.133 37.707892479	6092171.374 122.123045970	53.72 54.29 54.27	4" PVC NOTCH NORTH SIDE SET PUNCH NORTH SIDE RIM 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



DATE: 9/27/2014

JOB#

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

SOMA ENVIRONMENTAL ENGINEERING  
15101 FREEDOM AVENUE  
SAN LEANDRO, CA 94579

#### HORIZONTAL AND VERTICAL CONTROL

SURVEY BASED ON PREVIOUS SURVEY BY EDGIS LAND SURVEYING DATED: 12/11/2009

COORDINATE VALUES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 3, NAD83.  
ELEVATIONS ARE NAVD 88 DATUM

## **EX-1. PUNCH**

NORTHING 2,084.135.63. EASTING 6,092.163.63. ELEVATION 47.61

EX-2 PUNCH

NORTHING 2 084 082 EASTING 6 092 129 99 ELEVATION 47.04

**EQUIPMENT USED: TRIMBLE S6**



*ATG*  
9/27/14

**EDGIS LAND SURVEYING**  
Land Surveying and mapping  
**2519 W. Shaw Avenue, Ste. 111**  
Fresno, CA 93711  
ne (559) 803-2679 Fax (559) 823-  
email: [edgis@aol.com](mailto:edgis@aol.com)



## ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-1 Project No.: 2551  
Casing Diameter: 4 inches Address: 15101 Freedom Ave.  
Depth of Well: 29.90 feet San Leandro, CA  
Top of Casing Elevation: 54.46 feet Date: March 23, 2016  
Depth to Groundwater: 21.38 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 33.08 feet Davoud Bazrash  
Water Column Height: 8.52 feet  
Purged Volume: 8 gallons

Purging Method: Bailer  Pump   
Sampling Method: Bailer  Pump

Color: Yes  No  Describe: \_\_\_\_\_  
Sheen: Yes  No  Describe: \_\_\_\_\_  
Odor: Yes  No  Describe: minor odor

## Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
2:14 PM	Started Purging						
2:28 PM	2	1.51	7.08	20.95	1265	31.8	-30
2:42 PM	4	1.35	6.97	20.85	1250	36.2	-28
2:55 PM	6	1.40	6.92	20.92	1240	45.1	-25
3:00 PM	8	1.22	6.95	20.98	1260	48.4	-29
	Sampled						

1

**ENVIRONMENTAL ENGINEERING, INC**

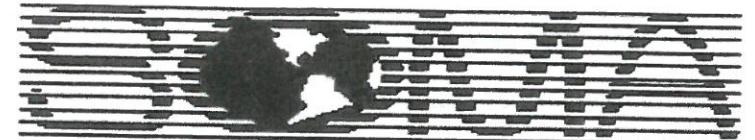
Well No.: MW-2 Project No.: 2551  
Casing Diameter: 4 inches Address: 15101 Freedom Ave.  
Depth of Well: 30.15 feet San Leandro, CA  
Top of Casing Elevation: 52.41 feet Date: March 23, 2016  
Depth to Groundwater: 18.88 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 33.53 feet Davoud Bazrash  
Water Column Height: 11.27 feet  
Purged Volume: 10 gallons

Purging Method: Bailer  Pump   
Sampling Method: Bailer  Pump

Color: Yes  No  Describe: \_\_\_\_\_  
Sheen: Yes  No  Describe: Slight Petro odor  
Odor: Yes  No  Describe: \_\_\_\_\_

**Field Measurements:**

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
9:56 am	Standard Purging			21.2	1300	22.5	-5
10:10 am	2	1.47	6.5	21.4	1210	30.6	-32
10:25 am	4	1.35	6.5	21.5	1150	40.2	-42
10:40 am	6	1.30	6.8	21.5	1000	50.3	-45
10:56 am	8	1.30	6.9	21.5	950	58.5	-45
11:10 am	10	1.30	6.9	21.5	950	61.5	-47
	Sampled.						



## ENVIRONMENTAL ENGINEERING, INC

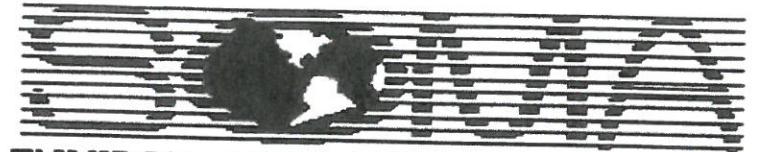
Well No.: MW-3 Project No.: 2551  
Casing Diameter: 4 inches Address: 15101 Freedom Ave.  
Depth of Well: 29.90 feet San Leandro, CA  
Top of Casing Elevation: 53.91 feet Date: March 24, 2016  
Depth to Groundwater: 20.75 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 33.16 feet Davoud Bazrpash  
Water Column Height: 9.15 feet  
Purged Volume: 8 gallons

Purging Method: Bailer  Pump   
Sampling Method: Bailer  Pump

Color: Yes  No  Describe: \_\_\_\_\_  
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
2:28	2	1.20	7.0	23.1	1220	13.0	-40
2:41	4	1.25	7.11	23.2	1225	18.0	-45
2:52	6	1.28	7.12	23.2	1225	25.2	-45
3:00	8	1.30	7.10	23.3	1230	25.6	-45
3:10	Sampled						



## ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-4  
Casing Diameter: 4 inches  
Depth of Well: 30.20 feet  
Top of Casing Elevation: 53.31 feet  
Depth to Groundwater: 19.81 feet  
Groundwater Elevation: 33.5 feet  
Water Column Height: 10.39 feet  
Purged Volume: 10 gallons

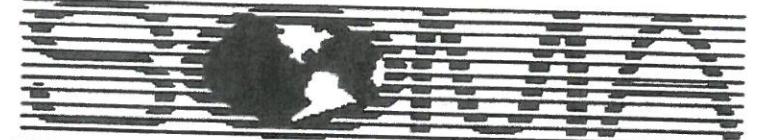
Project No.: 2551  
Address: 15101 Freedom Ave.  
San Leandro, CA  
Date: March 23, 2016  
Sampler: Mansour Sepehr  
Davoud Bazrash

Purging Method: Bailer  Pump   
Sampling Method: Bailer  Pump

Color: Yes  No  Describe: Cloudy  
Sheen: Yes  No  Describe: \_\_\_\_\_  
Odor: Yes  No  Describe: minor odor

## Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
12:00	Standard Purging	3.3					
12:10	2	1.5	7.24	21.4	1500	14.5	-35
12:25	4	1.3	7.30	21.6	1450	22.3	-38
12:38	6	1.1	7.20	21.3	1460	24.5	-35
12:50	8	1.2	7.20	21.6	1480	18.2	-33
1:05	10	1.2	7.3	21.6	1480	22	-33
	Sampled.						



## ENVIRONMENTAL ENGINEERING, INC

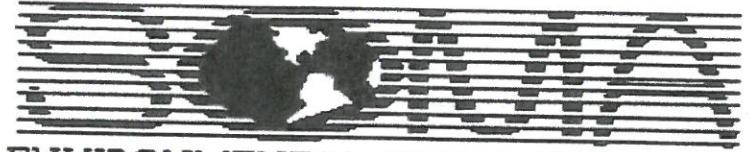
Well No.: MW-5 Project No.: 2551  
Casing Diameter: 4 inches Address: 15101 Freedom Ave.  
Depth of Well: 29.80 feet San Leandro, CA  
Top of Casing Elevation: 50.53 feet Date: March 23, 2016  
Depth to Groundwater: 17.07 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 33.46 feet Davoud Bazrpash  
Water Column Height: 12.73 feet  
Purged Volume: \_\_\_\_\_ gallons

Purging Method: Bailer  Pump   
Sampling Method: Bailer  Pump

Color: Yes  No  Describe: \_\_\_\_\_  
Sheen: Yes  No  Describe: \_\_\_\_\_  
Odor: Yes  No  Describe: Slight odor

## Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
11:41	Started Purging	22.1	7.2	22.2	1160	20	-51
11:51	2	1.2	7.4	22.1	1152	25	-52
12:00	4	1.3	7.4	22.3	1148	26	-60
12:10	6	1.3	7.5	22.4	1146	27	-65
12:20	8	1.4	7.5	22.5	1148	29	-68
12:30	10	1.4	7.5				
	Sampled						



## ENVIRONMENTAL ENGINEERING, INC

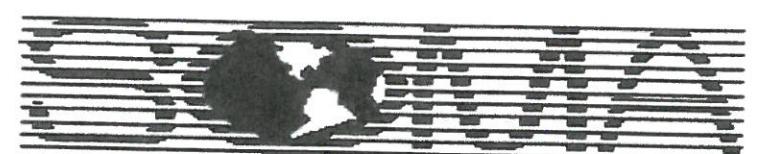
Well No.: MW-6 Project No.: 2551  
Casing Diameter: 4 inches Address: 15101 Freedom Ave.  
Depth of Well: 27.30 feet San Leandro, CA  
Top of Casing Elevation: 45.82 feet Date: March 24, 2016  
Depth to Groundwater: 14.35 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 31.92 feet Davoud Bazrpash  
Water Column Height: 12.95 feet  
Purged Volume: 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
10:29	2	1.0	6.9	22.80	1350	36.7	7
10:41	4	1.2	6.85	22.9	1360	45.1	6
10:52	6	1.3	6.85	22.9	1360	50.2	4
11:06	8	1.28	6.80	23.1	1370	50.1	1
11:15	10	1.24	6.80	23.2	1400	62.0	2
11:20	Sampled						



## ENVIRONMENTAL ENGINEERING, INC

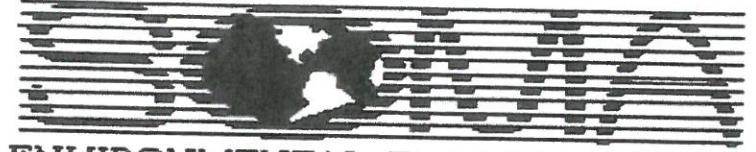
Well No.: MW-7 Project No.: 2551  
Casing Diameter: 2 inches Address: 15101 Freedom Ave.  
Depth of Well: 21.00 feet San Leandro, CA  
Top of Casing Elevation: 44.74 feet Date: March 24, 2016  
Depth to Groundwater: 11.46 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 33.28 feet Davoud Bazrpash  
Water Column Height: 11.46 feet  
Purged Volume: 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
10:40	2	1.48	6.9	22.9	1450	152	+9
10:53	4	1.50	6.8	22.8	1460	135	11
11:04	5	1.52	6.7	22.8	1460	110	12
11:12	6	1.45	6.7	22.9	1480	90	12
11:20	Sampled						

**ENVIRONMENTAL ENGINEERING, INC**

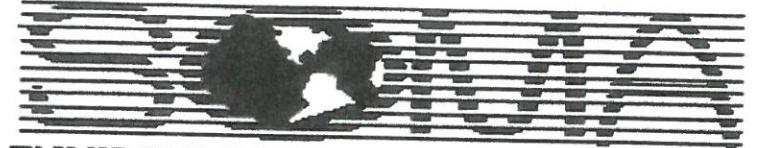
Well No.: MW-10 Project No.: 2551  
Casing Diameter: 2 inches Address: 15101 Freedom Ave.  
Depth of Well: 28.50 feet San Leandro, CA  
Top of Casing Elevation: 44.66 feet Date: March 24, 2016  
Depth to Groundwater: 13.10 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 31.56 feet Davoud Bazrash  
Water Column Height: 15.4 feet  
Purged Volume: \_\_\_\_\_ gallons

Purging Method: Bailer  Pump   
Sampling Method: Bailer  Pump

Color: Yes  No  Describe: \_\_\_\_\_  
Sheen: Yes  No  Describe: Cloudy.  
Odor: Yes  No  Describe: \_\_\_\_\_

**Field Measurements:**

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. µS/cm	Turb. NTU	ORP
2:00	2	1.7	6.5	22.1	1300	702	+73
2:13	4	1.6	6.4	22.2	1310	650	+68
2:20	5	1.52	6.3	22.1	1350	600	+42
2:26	6	1.45	6.7	22.1	1350	300	+40
2:30	Sampled						

**ENVIRONMENTAL ENGINEERING, INC**

Well No.: MW-11 Project No.: 2551  
Casing Diameter: 2 inches Address: 15101 Freedom Ave.  
Depth of Well: 28.57 feet San Leandro, CA  
Top of Casing Elevation: 42.45 feet Date: March 23, 2016  
Depth to Groundwater: 10.48 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 31.97 feet Davoud Bazrpash  
Water Column Height: 18.09 feet  
Purged Volume: \_\_\_\_\_ gallons

Purging Method: Bailer  Pump

Sampling Method: Bailer  Pump

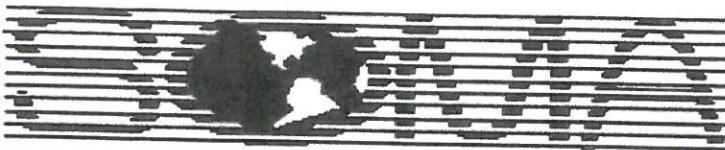
Color: Yes  No  Describe: cloudy

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
1:29	2	1.3	6.7	21.8	1300	350	+24
1:37	3	1.43	6.7	21.9	1290	210	+22
1:46	4	1.42	6.8	21.9	1280	715	+21
1:59	6	1.41	6.72	21.8	1300	70.2	-15
2:00	Sampled						



## ENVIRONMENTAL ENGINEERING, INC.

Well No.:	<u>EX-1</u>
Casing Diameter:	<u>4</u> inches
Depth of Well:	<u>-</u> feet
Top of Casing Elevation:	<u>47.36</u> feet
Depth to Groundwater:	<u>13.45</u> feet
Groundwater Elevation:	<u>33.91</u> feet
Water Column Height:	<u>NC</u> feet
Purged Volume:	<u> </u> gallons

**Project No.:** 2551  
**Address:** 15101 Freedom Ave.  
San Leandro, CA  
**Date:** March 24, 2016  
**Sampler:** Mansour Sepehr  
Davoud Bazrpash

Purging Method: Bailer □ Pump □

**Sampling Method:** Bailer  Pump

Color: Yes  No  Describe:

**Sheen:** Yes  No  **Describe:**

Odor: Yes  No  Describe:

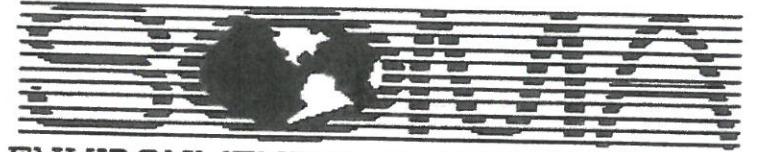
#### **Field Measurements:**



**ENVIRONMENTAL ENGINEERING, INC.**

Well No.:	<u><i>EX-2</i></u>		Project No.:	2551	
Casing Diameter:	<u><i>4</i></u>	inches	Address:	15101 Freedom Ave.	
Depth of Well:	<u><i>—</i></u>	feet		San Leandro, CA	
Top of Casing Elevation:	<u><i>45.96</i></u>	feet	Date:	March <u><i>24</i></u> , 2016	
Depth to Groundwater:	<u><i>13.97</i></u>	feet	Sampler:	Mansour Sepehr	
Groundwater Elevation:	<u><i>31.99</i></u>	feet		Davoud Bazrash	
Water Column Height:	<u><i>NC</i></u>	feet			
Purged Volume:	<u><i>—</i></u>	gallons			
Purging Method:	Bailer	<input type="checkbox"/>	Pump	<input type="checkbox"/>	
Sampling Method:	Bailer	<input type="checkbox"/>	Pump	<input type="checkbox"/>	
Color:	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Describe: _____
Sheen:	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Describe: _____
Odor:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Describe: <u><i>Slightly Petro</i></u>

#### **Field Measurements:**



## ENVIRONMENTAL ENGINEERING, INC

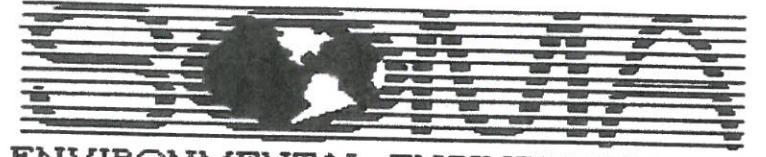
Well No.: MPE-1 Project No.: 2551  
Casing Diameter: 4 inches Address: 15101 Freedom Ave.  
Depth of Well: 30. feet San Leandro, CA  
Top of Casing Elevation: 51.96 feet Date: March 24, 2016  
Depth to Groundwater: 18.22 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 33.74 feet Davoud Bazrpash  
Water Column Height: 11.78 feet  
Purged Volume: \_\_\_\_\_ 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
<u>11:29</u>	<u>2</u>	<u>1.5</u>	<u>7.3</u>	<u>23.1</u>	<u>1150</u>	<u>30</u>	<u>-45</u>
<u>11:40</u>	<u>4</u>	<u>1.40</u>	<u>7.4</u>	<u>23.2</u>	<u>1150</u>	<u>17</u>	<u>-40</u>
<u>11:51</u>	<u>6</u>	<u>1.28</u>	<u>7.5</u>	<u>23.3</u>	<u>1155</u>	<u>15</u>	<u>-47</u>
<u>12:03</u>	<u>8</u>	<u>1.25</u>	<u>7.5</u>	<u>23.2</u>	<u>1155</u>	<u>13</u>	<u>-45</u>
<u>12:17</u>	<u>10</u>	<u>1.2</u>	<u>7.6</u>	<u>23.2</u>	<u>1156</u>	<u>10</u>	<u>-51</u>
<u>12:27</u>	<u>Sampled</u>						



## ENVIRONMENTAL ENGINEERING, INC

Well No.: MPE-2 Project No.: 2551  
Casing Diameter: 4 inches Address: 15101 Freedom Ave.  
Depth of Well: 3000 feet San Leandro, CA  
Top of Casing Elevation: 53.72 feet Date: March 24, 2016  
Depth to Groundwater: 20.55 feet Sampler: Mansour Sepehr  
Groundwater Elevation: 33.17 feet Davoud Bazrpash  
Water Column Height: 9.45 feet  
Purged Volume: \_\_\_\_\_ 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
12:00	2	1.5	7.35	23.2	1100	134	-65
12:11	4	1.40	7.32	23.1	1110	100	-60
12:21	6	1.25	7.35	23.2	1120	80	-52
12:34	8	1.30	7.45	23.1	1125	80	-78
12:45	10	1.40	7.48	23.4	1125	76	-78
12:50	Sampled						



## 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

$$a x_1 + b y_1 + c = h_1$$

$$a x_2 + b y_2 + c = h_2$$

$$a x_3 + b y_3 + c = h_3$$

...

$$a x_{30} + b y_{30} + c = h_{30}$$

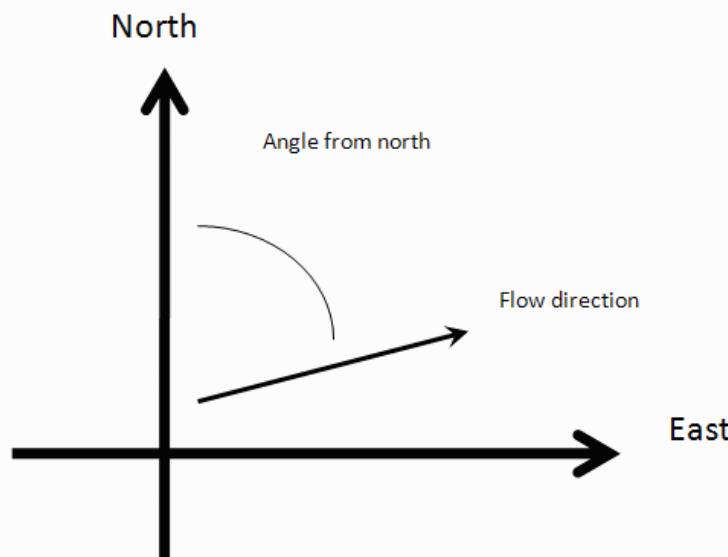
where  $(x_i, y_i)$  are the coordinates of the well and

$h_i$  is the head

$i = 1, 2, 3, \dots, 30$

The coefficients  $a$ ,  $b$ , and  $c$  are calculated by a least-squares fitting of 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

<input type="button" value="Example Data Set 1"/>	<input type="button" value="Example Data Set 2"/>	<input type="button" value="Calculate"/>	<input type="button" value="Clear"/>
<input type="button" value="Save Data"/>	<input type="button" value="Recall Data"/>	<input type="button" value="Go Back"/>	
Site Name	15101 Freedom Ave, San L		
Date	March 23, 2016 <input type="button" value="Current Date"/>		
Calculation basis	<input type="button" value="Head"/>		
Coordinates	<input type="button" value="ft"/>		
I.D.	x-coordinate	y-coordinate	head <input type="button" value="ft"/>
1) MW-1	6092119.016	2084364.691	33.08
2) MW-2	6092063.978	2084323.224	33.53
3) MW-3	6092176.317	2084298.343	33.16
4) MW-4	6092124.294	2084251.598	33.5
5) MW-5	6092177.071	2084206.361	33.46
6) MW-6	6092140.881	2084072.911	31.47
7) MW-7	6092290.918	2084008.071	33.28
8) MW-10	6092182.374	2083967.53	31.56
9) MW-11	6092224.568	2083926.493	31.97
10) EX-1	6092163.5	2084133.982	33.91
11) EX-2	6092131.08	2084082.713	31.99

12)	MPE-1	6092125.048	2084212.393	33.74
13)	MPE-2	6092171.793	2084292.312	33.17
14)				
15)				
16)				
17)				
18)				
19)				
20)				
21)				
22)				
23)				
24)				
25)				
26)				
27)				
28)				
29)				
30)				

**Results**

Number of Points Used in Calculation	13
Max. Difference Between Head Values	0.7437
Gradient Magnitude (i)	0.008104
Flow direction as degrees from North (positive y axis)	229.8
Coefficient of Determination ( $R^2$ )	0.497

WCMS

Last updated on 2/21/2016

# **Appendix C**

**Laboratory Reports and Chain of Custody Forms  
for the First Quarter 2016 Monitoring Event**



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

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

**Laboratory Job Number 275494  
ANALYTICAL REPORT**

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

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

<u>Sample ID</u>	<u>Lab ID</u>
MW-1	275494-001
MW-2	275494-002
MW-3	275494-003
MW-4	275494-004
MW-5	275494-005
MW-6	275494-006
MW-7	275494-007
MW-10	275494-008
MW-11	275494-009
EX-1	275494-010
EX-2	275494-011
MPE-1	275494-012
MPE-2	275494-013

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: 04/06/2016

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

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE**

Laboratory number: **275494**  
Client: **SOMA Environmental Engineering Inc.**  
Project: **2551**  
Location: **15101 Freedom Avenue San Leandro**  
Request Date: **03/29/16**  
Samples Received: **03/28/16**

This data package contains sample and QC results for thirteen water samples, requested for the above referenced project on 03/29/16. The samples were received cold and intact.

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

Low response was observed for tert-butyl alcohol (TBA) in the CCV analyzed 03/31/16 10:02; this analyte met minimum response criteria, and affected data was qualified with "b". Low responses were observed for isopropyl ether (DIPE) and tert-butyl alcohol (TBA) in the CCV analyzed 04/02/16 14:34; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for gasoline C7-C12 in the CCV analyzed 04/02/16 16:34; affected data was qualified with "b". High recovery was observed for gasoline C7-C12 in the BS for batch 233682; the associated RPD was within limits, and the high recovery was not associated with any reported results. Low surrogate recoveries were observed for dibromofluoromethane in the method blank/BSD for batch 233764. EX-1 (lab # 275494-010) and MPE-2 (lab # 275494-013) had pH greater than 2. 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

Page \_\_\_\_\_ of \_\_\_\_\_

## Analyses

C&T LOGIN # 275494

Sampler: Davoud Bazrash

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	Sampling Time	Water SO <sub>4</sub> <sup>2-</sup>	# of Containers	Preservative			
						HCl	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICP
1 MW-1		3-23-16	3:00pm	*	3-VOAS	*	*	*	*
2 MW-2		3-23-16	11:10	*	3-VOAS	*	*	*	*
3 MW-3		3-24-16	3:10	*	3-VOAS	*	*	*	*
4 MW-4		3-23-16	1:05	*	3-VOAS	*	*	*	*
5 MW-5		3-23-16	12:30	*	3-VOAS	*	*	*	*
6 MW-6		3-24-16	11:20	*	3-VOAS	*	*	*	*
7 MW-7		3-24-16	11:45	*	3-VOAS	*	*	*	*
8 MW-10		3-24-16	2:30	*	3-VOAS	*	*	*	*
9 MW-11		3-23-16	2:00	*	3-VOAS	*	*	*	*
10 EX-1		3-24-16	10:05	*	3-VOAS	*	*	*	*
11 EX-2		3-24-16	11:05	*	3-VOAS	*	*	*	*
12 MPE-1		3-24-16	12:27	*	3-VOAS	*	*	*	*
13 MPE-2		3-24-16	12:50	*	3-VOAS	*	*	*	*

Notes: EDF OUTPUT REQUIRED

Ethanol

RELINQUISHED BY:

DB 2/20

02/08

RECEIVED BY:

JM 2/25/08

02/25/08

DATE/TIME

DATE/TIME

DATE/TIME

## COOLER RECEIPT CHECKLIST



Curtis &amp; Tompkins, Ltd.

Login # 275494 Date Received 3/25/16 Number of coolers 1  
 Client SOMA Project 2551

Date Opened 3/25/16 By (print) J. Babka (sign) [Signature]  
 Date Logged in 3/28/16 By (print) J. Babka (sign) V. D.

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) 6.0

Temperature blank(s) included?  Thermometer# \_\_\_\_\_  IR Gun# A

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? (pH strip lot# \_\_\_\_\_) YES  NO  N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES  NO  N/A

19. Did you change the hold time in LIMS for preserved terracores? YES  NO  N/A

20. Are bubbles > 6mm absent in VOA samples? YES  NO  N/A

21. Was the client contacted concerning this sample delivery? YES  NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

20.) 3 of 3 for Sample 6 have air bubbles >6mm

### Detections Summary for 275494

Results for any subcontracted analyses are not included in this summary.

Client : SOMA Environmental Engineering Inc.  
 Project : 2551  
 Location : 15101 Freedom Avenue San Leandro

Client Sample ID : MW-1                          Laboratory Sample ID : 275494-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	98		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-2                          Laboratory Sample ID : 275494-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	170		100	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-3                          Laboratory Sample ID : 275494-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	7,600		630	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
tert-Butyl Alcohol (TBA)	60		25	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
MTBE	3.2		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
Benzene	180		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
Toluene	2.0		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
Ethylbenzene	130		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
m,p-Xylenes	240		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B
o-Xylene	23		1.3	ug/L	As Recd	2.500	EPA 8260B	EPA 5030B

Client Sample ID : MW-4                          Laboratory Sample ID : 275494-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	62		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
tert-Butyl Alcohol (TBA)	14		10	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Methyl tert-Amyl Ether (TAME)	0.88		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	7.4		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	12		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-5                          Laboratory Sample ID : 275494-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	300		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
tert-Butyl Alcohol (TBA)	19		10	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-6

Laboratory Sample ID :

275494-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	700		250	ug/L	As Recd	5.000	EPA 8260B	EPA 5030B
Benzene	3.4		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	4.4		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	2.1		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
o-Xylene	0.54		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-7

Laboratory Sample ID :

275494-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1,800		170	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
MTBE	3.1		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	1.7		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-10

Laboratory Sample ID :

275494-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	22,000		1,000	ug/L	As Recd	20.00	EPA 8260B	EPA 5030B
tert-Butyl Alcohol (TBA)	140		100	ug/L	As Recd	10.00	EPA 8260B	EPA 5030B
Ethylbenzene	620		5.0	ug/L	As Recd	10.00	EPA 8260B	EPA 5030B
m,p-Xylenes	1,000		5.0	ug/L	As Recd	10.00	EPA 8260B	EPA 5030B
o-Xylene	38		5.0	ug/L	As Recd	10.00	EPA 8260B	EPA 5030B

Client Sample ID : MW-11

Laboratory Sample ID :

275494-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	110		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : EX-1

Laboratory Sample ID :

275494-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	57		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	3.5		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	3.9		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : EX-2

Laboratory Sample ID :

275494-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1,500		170	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
MTBE	1.7		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	22		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.86		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	42		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	61		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
o-Xylene	14		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MPE-1

Laboratory Sample ID :

275494-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	98		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
o-Xylene	0.79		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MPE-2

Laboratory Sample ID :

275494-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	9,500		630	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
tert-Butyl Alcohol (TBA)	250		130	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
MTBE	11		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
Benzene	960		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
Ethylbenzene	180		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
m,p-Xylenes	230		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
o-Xylene	140		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B

### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-1	Diln Fac:	1.000
Lab ID:	275494-001	Sampled:	03/23/16
Matrix:	Water	Received:	03/28/16
Units:	ug/L	Analyzed:	04/02/16

Analyte	Result	RL	Batch#
Gasoline C7-C12	98	50	233681
tert-Butyl Alcohol (TBA)	ND	10	233682
Isopropyl Ether (DIPE)	ND	0.50	233682
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	233682
Methyl tert-Amyl Ether (TAME)	ND	0.50	233682
Ethanol	ND	1,000	233682
MTBE	ND	0.50	233682
1,2-Dichloroethane	ND	0.50	233682
Benzene	ND	0.50	233682
Toluene	ND	0.50	233682
1,2-Dibromoethane	ND	0.50	233682
Ethylbenzene	ND	0.50	233682
m,p-Xylenes	ND	0.50	233682
o-Xylene	ND	0.50	233682

Surrogate	%REC	Limits	Batch#
Dibromofluoromethane	103	80-128	233682
1,2-Dichloroethane-d4	107	75-139	233682
Toluene-d8	96	80-120	233682
Bromofluorobenzene	106	80-120	233682

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

### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-2	Units:	ug/L
Lab ID:	275494-002	Sampled:	03/23/16
Matrix:	Water	Received:	03/28/16

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	170	100	2.000	233598	03/31/16
tert-Butyl Alcohol (TBA)	ND	10	1.000	233663	04/01/16
Isopropyl Ether (DIPE)	ND	0.50	1.000	233663	04/01/16
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	233663	04/01/16
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	233663	04/01/16
Ethanol	ND	1,000	1.000	233663	04/01/16
MTBE	ND	0.50	1.000	233663	04/01/16
1,2-Dichloroethane	ND	0.50	1.000	233663	04/01/16
Benzene	ND	0.50	1.000	233663	04/01/16
Toluene	ND	0.50	1.000	233663	04/01/16
1,2-Dibromoethane	ND	0.50	1.000	233663	04/01/16
Ethylbenzene	ND	0.50	1.000	233663	04/01/16
m,p-Xylenes	ND	0.50	1.000	233663	04/01/16
o-Xylene	ND	0.50	1.000	233663	04/01/16

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	105	80-128	1.000	233663	04/01/16
1,2-Dichloroethane-d4	99	75-139	1.000	233663	04/01/16
Toluene-d8	99	80-120	1.000	233663	04/01/16
Bromofluorobenzene	103	80-120	1.000	233663	04/01/16

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-3	Units:	ug/L
Lab ID:	275494-003	Sampled:	03/24/16
Matrix:	Water	Received:	03/28/16

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	7,600	630	12.50	233598	03/31/16
tert-Butyl Alcohol (TBA)	60	25	2.500	233663	04/02/16
Isopropyl Ether (DIPE)	ND	1.3	2.500	233663	04/02/16
Ethyl tert-Butyl Ether (ETBE)	ND	1.3	2.500	233663	04/02/16
Methyl tert-Amyl Ether (TAME)	ND	1.3	2.500	233663	04/02/16
Ethanol	ND	2,500	2.500	233663	04/02/16
MTBE	3.2	1.3	2.500	233663	04/02/16
1,2-Dichloroethane	ND	1.3	2.500	233663	04/02/16
Benzene	180	1.3	2.500	233663	04/02/16
Toluene	2.0	1.3	2.500	233663	04/02/16
1,2-Dibromoethane	ND	1.3	2.500	233663	04/02/16
Ethylbenzene	130	1.3	2.500	233663	04/02/16
m,p-Xylenes	240	1.3	2.500	233663	04/02/16
o-Xylene	23	1.3	2.500	233663	04/02/16

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	106	80-128	2.500	233663	04/02/16
1,2-Dichloroethane-d4	98	75-139	2.500	233663	04/02/16
Toluene-d8	99	80-120	2.500	233663	04/02/16
Bromofluorobenzene	97	80-120	2.500	233663	04/02/16

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-4	Diln Fac:	1.000
Lab ID:	275494-004	Sampled:	03/23/16
Matrix:	Water	Received:	03/28/16
Units:	ug/L	Analyzed:	04/05/16

Analyte	Result	RL	Batch#
Gasoline C7-C12	62	50	233764
tert-Butyl Alcohol (TBA)	14	10	233748
Isopropyl Ether (DIPE)	ND	0.50	233748
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	233748
Methyl tert-Amyl Ether (TAME)	0.88	0.50	233748
Ethanol	ND	1,000	233748
MTBE	7.4	0.50	233748
1,2-Dichloroethane	ND	0.50	233748
Benzene	12	0.50	233748
Toluene	ND	0.50	233748
1,2-Dibromoethane	ND	0.50	233748
Ethylbenzene	ND	0.50	233748
m,p-Xylenes	ND	0.50	233748
o-Xylene	ND	0.50	233748

Surrogate	%REC	Limits	Batch#
Dibromofluoromethane	100	80-128	233748
1,2-Dichloroethane-d4	97	75-139	233748
Toluene-d8	97	80-120	233748
Bromofluorobenzene	101	80-120	233748

ND= Not Detected  
 RL= Reporting Limit  
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### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-5	Diln Fac:	1.000
Lab ID:	275494-005	Sampled:	03/23/16
Matrix:	Water	Received:	03/28/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	300	50	233681	04/02/16
tert-Butyl Alcohol (TBA)	19	10	233748	04/05/16
Isopropyl Ether (DIPE)	ND	0.50	233748	04/05/16
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	233748	04/05/16
Methyl tert-Amyl Ether (TAME)	ND	0.50	233748	04/05/16
Ethanol	ND	1,000	233748	04/05/16
MTBE	ND	0.50	233748	04/05/16
1,2-Dichloroethane	ND	0.50	233748	04/05/16
Benzene	ND	0.50	233748	04/05/16
Toluene	ND	0.50	233748	04/05/16
1,2-Dibromoethane	ND	0.50	233748	04/05/16
Ethylbenzene	ND	0.50	233748	04/05/16
m,p-Xylenes	ND	0.50	233748	04/05/16
o-Xylene	ND	0.50	233748	04/05/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	103	80-128	233748	04/05/16
1,2-Dichloroethane-d4	100	75-139	233748	04/05/16
Toluene-d8	98	80-120	233748	04/05/16
Bromofluorobenzene	102	80-120	233748	04/05/16

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-6	Units:	ug/L
Lab ID:	275494-006	Sampled:	03/24/16
Matrix:	Water	Received:	03/28/16

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	700	250	5.000	233681	04/02/16
tert-Butyl Alcohol (TBA)	ND	10	1.000	233748	04/05/16
Isopropyl Ether (DIPE)	ND	0.50	1.000	233748	04/05/16
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	233748	04/05/16
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	233748	04/05/16
Ethanol	ND	1,000	1.000	233748	04/05/16
MTBE	ND	0.50	1.000	233748	04/05/16
1,2-Dichloroethane	ND	0.50	1.000	233748	04/05/16
Benzene	3.4	0.50	1.000	233748	04/05/16
Toluene	ND	0.50	1.000	233748	04/05/16
1,2-Dibromoethane	ND	0.50	1.000	233748	04/05/16
Ethylbenzene	4.4	0.50	1.000	233748	04/05/16
m,p-Xylenes	2.1	0.50	1.000	233748	04/05/16
o-Xylene	0.54	0.50	1.000	233748	04/05/16

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	102	80-128	1.000	233748	04/05/16
1,2-Dichloroethane-d4	99	75-139	1.000	233748	04/05/16
Toluene-d8	97	80-120	1.000	233748	04/05/16
Bromofluorobenzene	100	80-120	1.000	233748	04/05/16

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-7	Units:	ug/L
Lab ID:	275494-007	Sampled:	03/24/16
Matrix:	Water	Received:	03/28/16

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	1,800	170	3.333	233681	04/03/16
tert-Butyl Alcohol (TBA)	ND	10	1.000	233748	04/05/16
Isopropyl Ether (DIPE)	ND	0.50	1.000	233748	04/05/16
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	233748	04/05/16
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	233748	04/05/16
Ethanol	ND	1,000	1.000	233748	04/05/16
MTBE	3.1	0.50	1.000	233748	04/05/16
1,2-Dichloroethane	ND	0.50	1.000	233748	04/05/16
Benzene	ND	0.50	1.000	233748	04/05/16
Toluene	ND	0.50	1.000	233748	04/05/16
1,2-Dibromoethane	ND	0.50	1.000	233748	04/05/16
Ethylbenzene	1.7	0.50	1.000	233748	04/05/16
m,p-Xylenes	ND	0.50	1.000	233748	04/05/16
o-Xylene	ND	0.50	1.000	233748	04/05/16

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	102	80-128	1.000	233748	04/05/16
1,2-Dichloroethane-d4	101	75-139	1.000	233748	04/05/16
Toluene-d8	98	80-120	1.000	233748	04/05/16
Bromofluorobenzene	102	80-120	1.000	233748	04/05/16

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-10	Units:	ug/L
Lab ID:	275494-008	Sampled:	03/24/16
Matrix:	Water	Received:	03/28/16

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	22,000	1,000	20.00	233681	04/03/16
tert-Butyl Alcohol (TBA)	140	100	10.00	233748	04/05/16
Isopropyl Ether (DIPE)	ND	5.0	10.00	233748	04/05/16
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	10.00	233748	04/05/16
Methyl tert-Amyl Ether (TAME)	ND	5.0	10.00	233748	04/05/16
Ethanol	ND	10,000	10.00	233748	04/05/16
MTBE	ND	5.0	10.00	233748	04/05/16
1,2-Dichloroethane	ND	5.0	10.00	233748	04/05/16
Benzene	ND	5.0	10.00	233748	04/05/16
Toluene	ND	5.0	10.00	233748	04/05/16
1,2-Dibromoethane	ND	5.0	10.00	233748	04/05/16
Ethylbenzene	620	5.0	10.00	233748	04/05/16
m,p-Xylenes	1,000	5.0	10.00	233748	04/05/16
o-Xylene	38	5.0	10.00	233748	04/05/16

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	102	80-128	10.00	233748	04/05/16
1,2-Dichloroethane-d4	99	75-139	10.00	233748	04/05/16
Toluene-d8	97	80-120	10.00	233748	04/05/16
Bromofluorobenzene	103	80-120	10.00	233748	04/05/16

ND= Not Detected

RL= Reporting Limit

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### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-11	Diln Fac:	1.000
Lab ID:	275494-009	Sampled:	03/23/16
Matrix:	Water	Received:	03/28/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	110	50	233681	04/02/16
tert-Butyl Alcohol (TBA)	ND	10	233748	04/05/16
Isopropyl Ether (DIPE)	ND	0.50	233748	04/05/16
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	233748	04/05/16
Methyl tert-Amyl Ether (TAME)	ND	0.50	233748	04/05/16
Ethanol	ND	1,000	233748	04/05/16
MTBE	ND	0.50	233748	04/05/16
1,2-Dichloroethane	ND	0.50	233748	04/05/16
Benzene	ND	0.50	233748	04/05/16
Toluene	ND	0.50	233748	04/05/16
1,2-Dibromoethane	ND	0.50	233748	04/05/16
Ethylbenzene	ND	0.50	233748	04/05/16
m,p-Xylenes	ND	0.50	233748	04/05/16
o-Xylene	ND	0.50	233748	04/05/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	103	80-128	233748	04/05/16
1,2-Dichloroethane-d4	98	75-139	233748	04/05/16
Toluene-d8	98	80-120	233748	04/05/16
Bromofluorobenzene	102	80-120	233748	04/05/16

ND= Not Detected  
 RL= Reporting Limit  
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### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	EX-1	Diln Fac:	1.000
Lab ID:	275494-010	Sampled:	03/24/16
Matrix:	Water	Received:	03/28/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	57	50	233681	04/02/16
tert-Butyl Alcohol (TBA)	ND	10	233748	04/05/16
Isopropyl Ether (DIPE)	ND	0.50	233748	04/05/16
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	233748	04/05/16
Methyl tert-Amyl Ether (TAME)	ND	0.50	233748	04/05/16
Ethanol	ND	1,000	233748	04/05/16
MTBE	3.5	0.50	233748	04/05/16
1,2-Dichloroethane	ND	0.50	233748	04/05/16
Benzene	3.9	0.50	233748	04/05/16
Toluene	ND	0.50	233748	04/05/16
1,2-Dibromoethane	ND	0.50	233748	04/05/16
Ethylbenzene	ND	0.50	233748	04/05/16
m,p-Xylenes	ND	0.50	233748	04/05/16
o-Xylene	ND	0.50	233748	04/05/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	105	80-128	233748	04/05/16
1,2-Dichloroethane-d4	99	75-139	233748	04/05/16
Toluene-d8	97	80-120	233748	04/05/16
Bromofluorobenzene	102	80-120	233748	04/05/16

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	275494	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:	275494-011	Sampled:	03/24/16
Matrix:	Water	Received:	03/28/16

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	1,500	170	3.333	233681	04/03/16
tert-Butyl Alcohol (TBA)	ND	10	1.000	233748	04/05/16
Isopropyl Ether (DIPE)	ND	0.50	1.000	233748	04/05/16
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	233748	04/05/16
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	233748	04/05/16
Ethanol	ND	1,000	1.000	233748	04/05/16
MTBE	1.7	0.50	1.000	233748	04/05/16
1,2-Dichloroethane	ND	0.50	1.000	233748	04/05/16
Benzene	22	0.50	1.000	233748	04/05/16
Toluene	0.86	0.50	1.000	233748	04/05/16
1,2-Dibromoethane	ND	0.50	1.000	233748	04/05/16
Ethylbenzene	42	0.50	1.000	233748	04/05/16
m,p-Xylenes	61	0.50	1.000	233748	04/05/16
o-Xylene	14	0.50	1.000	233748	04/05/16

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	101	80-128	1.000	233748	04/05/16
1,2-Dichloroethane-d4	99	75-139	1.000	233748	04/05/16
Toluene-d8	97	80-120	1.000	233748	04/05/16
Bromofluorobenzene	104	80-120	1.000	233748	04/05/16

ND= Not Detected

RL= Reporting Limit

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### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MPE-1	Diln Fac:	1.000
Lab ID:	275494-012	Sampled:	03/24/16
Matrix:	Water	Received:	03/28/16
Units:	ug/L	Analyzed:	04/05/16

Analyte	Result	RL	Batch#
Gasoline C7-C12	98	50	233764
tert-Butyl Alcohol (TBA)	ND	10	233748
Isopropyl Ether (DIPE)	ND	0.50	233748
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	233748
Methyl tert-Amyl Ether (TAME)	ND	0.50	233748
Ethanol	ND	1,000	233748
MTBE	ND	0.50	233748
1,2-Dichloroethane	ND	0.50	233748
Benzene	ND	0.50	233748
Toluene	ND	0.50	233748
1,2-Dibromoethane	ND	0.50	233748
Ethylbenzene	ND	0.50	233748
m,p-Xylenes	ND	0.50	233748
o-Xylene	0.79	0.50	233748

Surrogate	%REC	Limits	Batch#
Dibromofluoromethane	105	80-128	233748
1,2-Dichloroethane-d4	98	75-139	233748
Toluene-d8	97	80-120	233748
Bromofluorobenzene	101	80-120	233748

ND= Not Detected  
 RL= Reporting Limit  
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### Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MPE-2	Diln Fac:	12.50
Lab ID:	275494-013	Sampled:	03/24/16
Matrix:	Water	Received:	03/28/16
Units:	ug/L	Analyzed:	04/05/16

Analyte	Result	RL	Batch#
Gasoline C7-C12	9,500	630	233764
tert-Butyl Alcohol (TBA)	250	130	233748
Isopropyl Ether (DIPE)	ND	6.3	233748
Ethyl tert-Butyl Ether (ETBE)	ND	6.3	233748
Methyl tert-Amyl Ether (TAME)	ND	6.3	233748
Ethanol	ND	13,000	233748
MTBE	11	6.3	233748
1,2-Dichloroethane	ND	6.3	233748
Benzene	960	6.3	233748
Toluene	ND	6.3	233748
1,2-Dibromoethane	ND	6.3	233748
Ethylbenzene	180	6.3	233748
m,p-Xylenes	230	6.3	233748
o-Xylene	140	6.3	233748

Surrogate	%REC	Limits	Batch#
Dibromofluoromethane	104	80-128	233748
1,2-Dichloroethane-d4	100	75-139	233748
Toluene-d8	97	80-120	233748
Bromofluorobenzene	102	80-120	233748

ND= Not Detected

RL= Reporting Limit

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## Batch QC Report

## Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	233598
Units:	ug/L	Analyzed:	03/31/16
Diln Fac:	1.000		

Type: BS Lab ID: QC829503

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	39.28 b	63	32-155
Isopropyl Ether (DIPE)	12.50	10.18	81	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	10.67	85	62-120
Methyl tert-Amyl Ether (TAME)	12.50	12.09	97	69-120
MTBE	12.50	10.39	83	65-120
1,2-Dichloroethane	12.50	14.47	116	74-133
Benzene	12.50	12.68	101	80-123
Toluene	12.50	12.22	98	80-121
1,2-Dibromoethane	12.50	12.02	96	80-120
Ethylbenzene	12.50	13.35	107	80-123
m,p-Xylenes	25.00	26.10	104	80-126
o-Xylene	12.50	12.46	100	80-126

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-128
1,2-Dichloroethane-d4	112	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	90	80-120

Type: BSD Lab ID: QC829504

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	43.37 b	69	32-155	10	33
Isopropyl Ether (DIPE)	12.50	11.10	89	57-128	9	20
Ethyl tert-Butyl Ether (ETBE)	12.50	11.01	88	62-120	3	20
Methyl tert-Amyl Ether (TAME)	12.50	12.67	101	69-120	5	20
MTBE	12.50	10.91	87	65-120	5	22
1,2-Dichloroethane	12.50	14.33	115	74-133	1	20
Benzene	12.50	13.38	107	80-123	5	20
Toluene	12.50	13.43	107	80-121	9	20
1,2-Dibromoethane	12.50	12.48	100	80-120	4	20
Ethylbenzene	12.50	13.74	110	80-123	3	21
m,p-Xylenes	25.00	27.84	111	80-126	6	21
o-Xylene	12.50	13.62	109	80-126	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-128
1,2-Dichloroethane-d4	110	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-120

b= See narrative

RPD= Relative Percent Difference

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## Batch QC Report

**Purgeable Organics by GC/MS**

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	233598
Units:	ug/L	Analyzed:	03/31/16
Diln Fac:	1.000		

Type: BS Lab ID: QC829505

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,096	110	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	94	80-120

Type: BSD Lab ID: QC829506

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	1,000	992.6	99	76-120	10 20

Surrogate	%REC	Limits
Dibromofluoromethane	86	80-128
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	93	80-120

RPD= Relative Percent Difference

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**Batch QC Report**
**Purgeable Organics by GC/MS**

Lab #:	275494	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:	QC829507	Batch#:	233598
Matrix:	Water	Analyzed:	03/31/16
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	88	80-128
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected

RL= Reporting Limit

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## Batch QC Report

## Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC829784	Batch#:	233663
Matrix:	Water	Analyzed:	04/01/16
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	58.11	93	32-155
Isopropyl Ether (DIPE)	12.50	11.50	92	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	11.53	92	62-120
Methyl tert-Amyl Ether (TAME)	12.50	10.94	87	69-120
MTBE	12.50	11.00	88	65-120
1,2-Dichloroethane	12.50	11.27	90	74-133
Benzene	12.50	11.32	91	80-123
Toluene	12.50	11.15	89	80-121
1,2-Dibromoethane	12.50	11.21	90	80-120
Ethylbenzene	12.50	11.02	88	80-123
m,p-Xylenes	25.00	22.22	89	80-126
o-Xylene	12.50	11.08	89	80-126

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-120

**Batch QC Report**
**Purgeable Organics by GC/MS**

Lab #:	275494	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:	QC829786	Batch#:	233663
Matrix:	Water	Analyzed:	04/01/16
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	108	80-128
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	103	80-120

NA= Not Analyzed

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

## Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	233663
MSS Lab ID:	275303-001	Sampled:	03/21/16
Matrix:	Water	Received:	03/21/16
Units:	ug/L	Analyzed:	04/04/16
Diln Fac:	1.000		

Type: MS Lab ID: QC829837

Analyte	MSS	Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)		<1.701	125.0	124.1	99	49-155
Isopropyl Ether (DIPE)		<0.1000	25.00	25.86	103	65-122
Ethyl tert-Butyl Ether (ETBE)		<0.1000	25.00	25.87	103	69-120
Methyl tert-Amyl Ether (TAME)		<0.1000	25.00	24.75	99	74-120
MTBE		<0.1000	25.00	24.50	98	71-120
1,2-Dichloroethane		0.1134	25.00	23.89	95	80-130
Benzene		<0.1000	25.00	24.60	98	80-120
Toluene		<0.1000	25.00	24.04	96	80-120
1,2-Dibromoethane		<0.1252	25.00	23.94	96	80-120
Ethylbenzene		<0.1000	25.00	24.37	97	80-120
m,p-Xylenes		<0.1309	50.00	49.46	99	80-121
o-Xylene		<0.1000	25.00	24.74	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

Type: MSD Lab ID: QC829838

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	146.8	117	49-155	17	33
Isopropyl Ether (DIPE)	25.00	25.79	103	65-122	0	22
Ethyl tert-Butyl Ether (ETBE)	25.00	26.09	104	69-120	1	20
Methyl tert-Amyl Ether (TAME)	25.00	25.27	101	74-120	2	20
MTBE	25.00	25.38	102	71-120	4	20
1,2-Dichloroethane	25.00	24.04	96	80-130	1	20
Benzene	25.00	24.08	96	80-120	2	20
Toluene	25.00	23.82	95	80-120	1	21
1,2-Dibromoethane	25.00	25.07	100	80-120	5	20
Ethylbenzene	25.00	23.92	96	80-120	2	25
m,p-Xylenes	50.00	48.36	97	80-121	2	23
o-Xylene	25.00	24.03	96	80-120	3	25

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-120

RPD= Relative Percent Difference

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**Batch QC Report**
**Purgeable Organics by GC/MS**

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	233681
Units:	ug/L	Analyzed:	04/02/16
Diln Fac:	1.000		

Type: BS Lab ID: QC829860

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	41.82 b	67	32-155
Isopropyl Ether (DIPE)	12.50	8.686 b	69	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	8.788	70	62-120
Methyl tert-Amyl Ether (TAME)	12.50	10.55	84	69-120
MTBE	12.50	9.259	74	65-120
1,2-Dichloroethane	12.50	15.34	123	74-133
Benzene	12.50	12.43	99	80-123
Toluene	12.50	11.92	95	80-121
1,2-Dibromoethane	12.50	12.26	98	80-120
Ethylbenzene	12.50	13.64	109	80-123
m,p-Xylenes	25.00	26.05	104	80-126
o-Xylene	12.50	13.20	106	80-126

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-128
1,2-Dichloroethane-d4	118	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC829861

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	36.70 b	59	32-155	13	33
Isopropyl Ether (DIPE)	12.50	7.308 b	58	57-128	17	20
Ethyl tert-Butyl Ether (ETBE)	12.50	8.205	66	62-120	7	20
Methyl tert-Amyl Ether (TAME)	12.50	9.081	73	69-120	15	20
MTBE	12.50	8.191	66	65-120	12	22
1,2-Dichloroethane	12.50	13.87	111	74-133	10	20
Benzene	12.50	11.27	90	80-123	10	20
Toluene	12.50	11.77	94	80-121	1	20
1,2-Dibromoethane	12.50	12.51	100	80-120	2	20
Ethylbenzene	12.50	13.07	105	80-123	4	21
m,p-Xylenes	25.00	26.11	104	80-126	0	21
o-Xylene	12.50	12.35	99	80-126	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-128
1,2-Dichloroethane-d4	110	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-120

b= See narrative

RPD= Relative Percent Difference

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22.0

**Batch QC Report**
**Purgeable Organics by GC/MS**

Lab #:	275494	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:	QC829862	Batch#:	233681
Matrix:	Water	Analyzed:	04/02/16
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	84	80-128
1,2-Dichloroethane-d4	112	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected

RL= Reporting Limit

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23.0

## Batch QC Report

## Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	233681
Units:	ug/L	Analyzed:	04/02/16
Diln Fac:	1.000		

Type: BS Lab ID: QC829863

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,069	107	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-128
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	97	80-120

Type: BSD Lab ID: QC829864

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	1,000	1,109	111	76-120	4 20

Surrogate	%REC	Limits
Dibromofluoromethane	84	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	92	80-120

RPD= Relative Percent Difference

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24.0

## Batch QC Report

## Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	233682
Units:	ug/L	Analyzed:	04/02/16
Diln Fac:	1.000		

Type: BS Lab ID: QC829865

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	71.22	114	32-155
Isopropyl Ether (DIPE)	12.50	13.64	109	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	12.89	103	62-120
Methyl tert-Amyl Ether (TAME)	12.50	12.05	96	69-120
MTBE	12.50	12.23	98	65-120
1,2-Dichloroethane	12.50	12.75	102	74-133
Benzene	12.50	11.89	95	80-123
Toluene	12.50	11.45	92	80-121
1,2-Dibromoethane	12.50	11.50	92	80-120
Ethylbenzene	12.50	12.07	97	80-123
m,p-Xylenes	25.00	23.12	92	80-126
o-Xylene	12.50	11.43	91	80-126

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC829866

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	71.41	114	32-155	0	33
Isopropyl Ether (DIPE)	12.50	13.27	106	57-128	3	20
Ethyl tert-Butyl Ether (ETBE)	12.50	12.78	102	62-120	1	20
Methyl tert-Amyl Ether (TAME)	12.50	12.22	98	69-120	1	20
MTBE	12.50	12.69	102	65-120	4	22
1,2-Dichloroethane	12.50	11.97	96	74-133	6	20
Benzene	12.50	11.17	89	80-123	6	20
Toluene	12.50	11.39	91	80-121	1	20
1,2-Dibromoethane	12.50	11.30	90	80-120	2	20
Ethylbenzene	12.50	11.28	90	80-123	7	21
m,p-Xylenes	25.00	22.65	91	80-126	2	21
o-Xylene	12.50	10.97	88	80-126	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	106	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	96	80-120

RPD= Relative Percent Difference

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25.0

**Batch QC Report**
**Purgeable Organics by GC/MS**

Lab #:	275494	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:	QC829867	Batch#:	233682
Matrix:	Water	Analyzed:	04/02/16
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND b	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	103	80-128
1,2-Dichloroethane-d4	114	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-120

b= See narrative

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

## Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	233682
Units:	ug/L	Analyzed:	04/02/16
Diln Fac:	1.000		

Type: BS Lab ID: QC829868

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,221 b	122 *	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	109	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC829869

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	1,000	1,168 b	117	76-120	4 20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-120

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

**Batch QC Report**
**Purgeable Organics by GC/MS**

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	233748
Units:	ug/L	Analyzed:	04/05/16
Diln Fac:	1.000		

Type: BS Lab ID: QC830150

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	57.56	92	32-155
Isopropyl Ether (DIPE)	12.50	12.40	99	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	12.39	99	62-120
Methyl tert-Amyl Ether (TAME)	12.50	11.75	94	69-120
MTBE	12.50	11.66	93	65-120
1,2-Dichloroethane	12.50	12.02	96	74-133
Benzene	12.50	12.49	100	80-123
Toluene	12.50	12.20	98	80-121
1,2-Dibromoethane	12.50	12.02	96	80-120
Ethylbenzene	12.50	12.05	96	80-123
m,p-Xylenes	25.00	24.44	98	80-126
o-Xylene	12.50	12.14	97	80-126

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC830151

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	60.30	96	32-155	5	33
Isopropyl Ether (DIPE)	12.50	12.43	99	57-128	0	20
Ethyl tert-Butyl Ether (ETBE)	12.50	12.44	100	62-120	0	20
Methyl tert-Amyl Ether (TAME)	12.50	11.85	95	69-120	1	20
MTBE	12.50	11.93	95	65-120	2	22
1,2-Dichloroethane	12.50	12.06	96	74-133	0	20
Benzene	12.50	12.23	98	80-123	2	20
Toluene	12.50	11.88	95	80-121	3	20
1,2-Dibromoethane	12.50	12.28	98	80-120	2	20
Ethylbenzene	12.50	11.74	94	80-123	3	21
m,p-Xylenes	25.00	24.10	96	80-126	1	21
o-Xylene	12.50	11.95	96	80-126	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	104	80-120

RPD= Relative Percent Difference

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28.0

**Batch QC Report**
**Purgeable Organics by GC/MS**

Lab #:	275494	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:	QC830152	Batch#:	233748
Matrix:	Water	Analyzed:	04/05/16
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	105	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	103	80-120

NA= Not Analyzed

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

## Purgeable Organics by GC/MS

Lab #:	275494	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	233764
Units:	ug/L	Analyzed:	04/05/16
Diln Fac:	1.000		

Type: BS Lab ID: QC830216

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,037	104	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	82	80-128
1,2-Dichloroethane-d4	116	75-139
Toluene-d8	92	80-120
Bromofluorobenzene	89	80-120

Type: BSD Lab ID: QC830217

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	1,000	1,047	105	76-120	1 20

Surrogate	%REC	Limits
Dibromofluoromethane	74 *	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	89	80-120

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

## Batch QC Report

## Purgeable Organics by GC/MS

Lab #:	275494	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:	QC830218	Batch#:	233764
Matrix:	Water	Analyzed:	04/05/16
Units:	ug/L		

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

Surrogate	%REC	Limits
Dibromofluoromethane	76 *	80-128
1,2-Dichloroethane-d4	110	75-139
Toluene-d8	90	80-120
Bromofluorobenzene	92	80-120

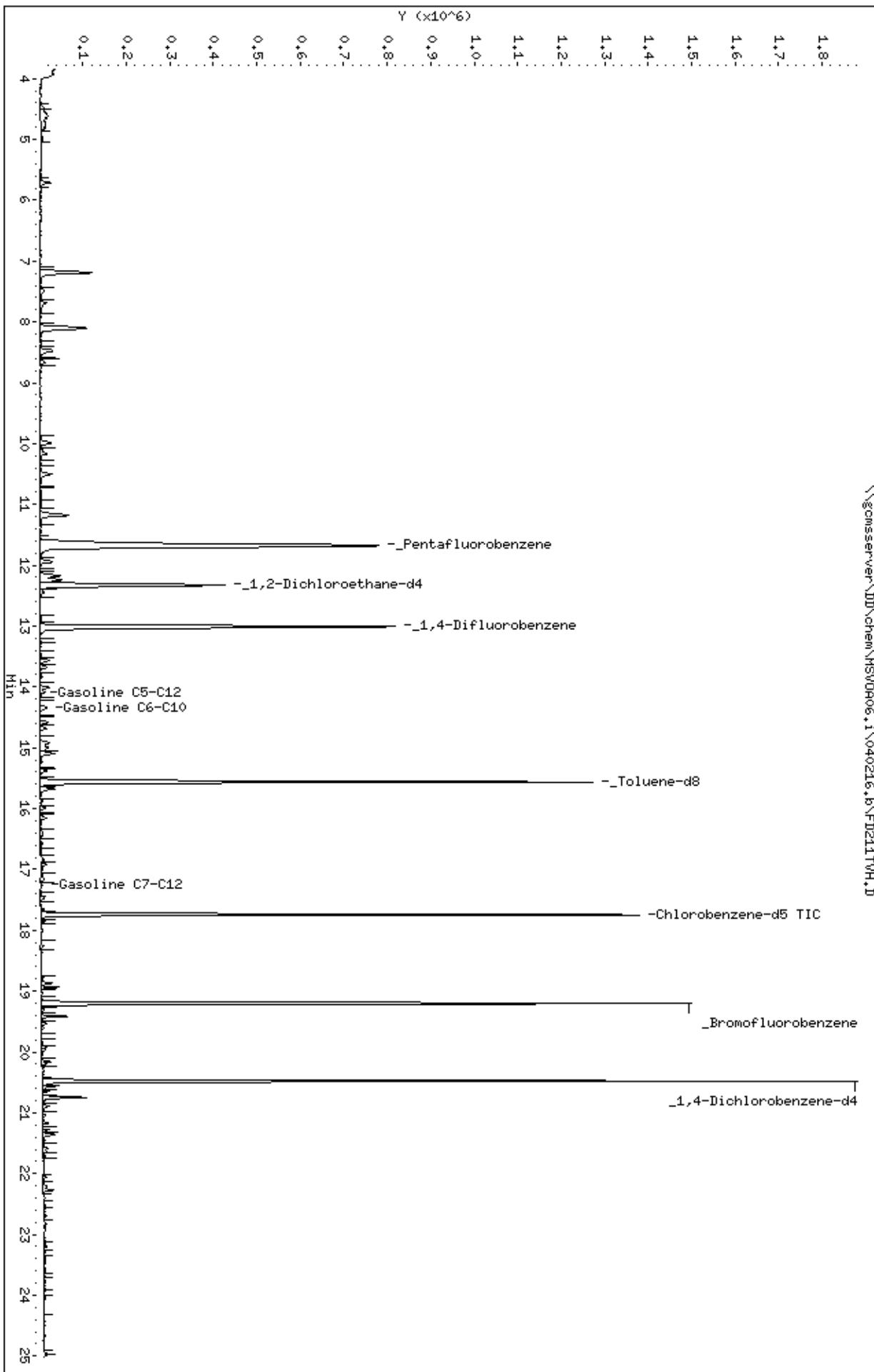
\*= Value outside of QC limits; see narrative

NA= Not Analyzed

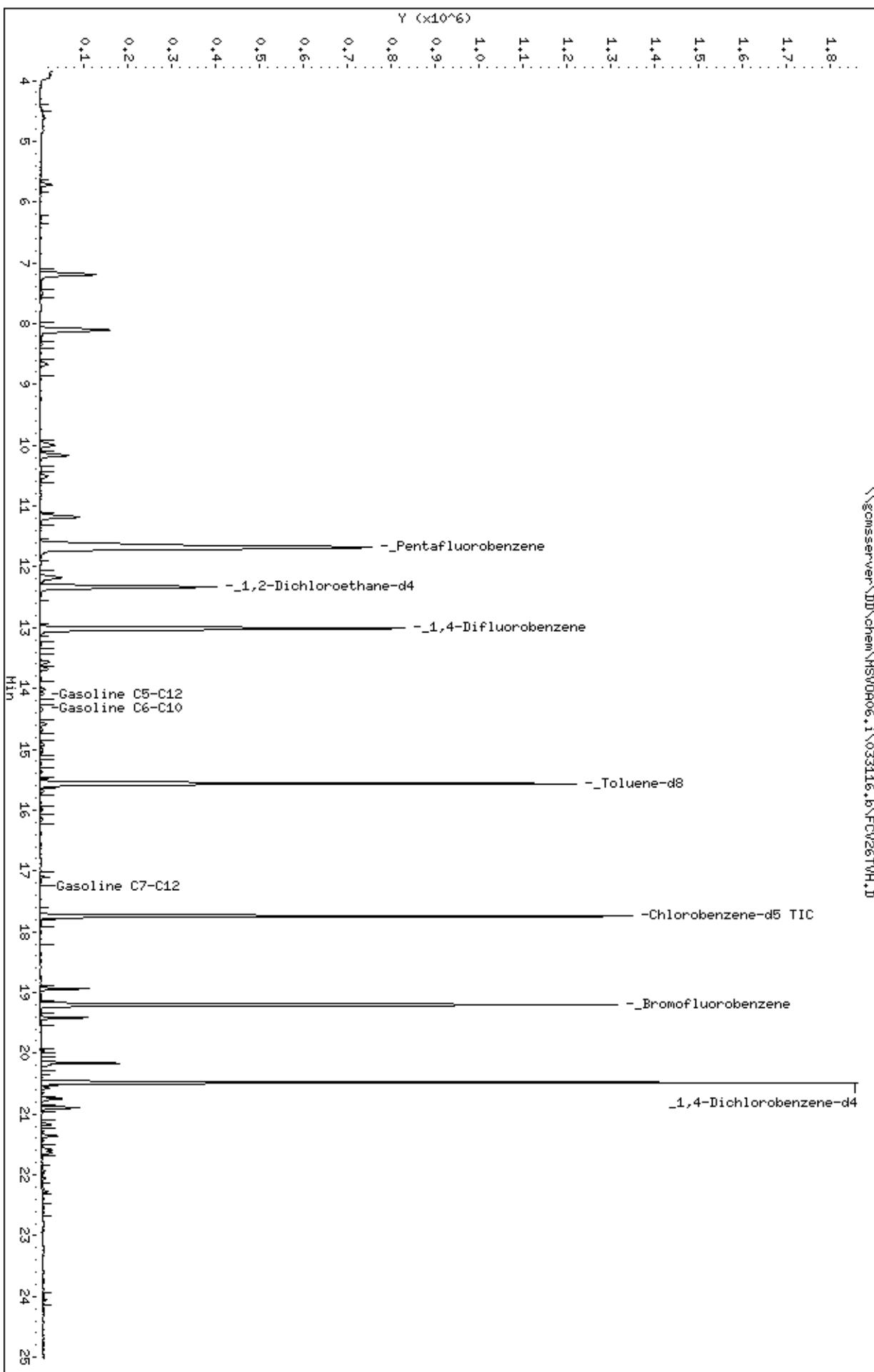
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RL= Reporting Limit

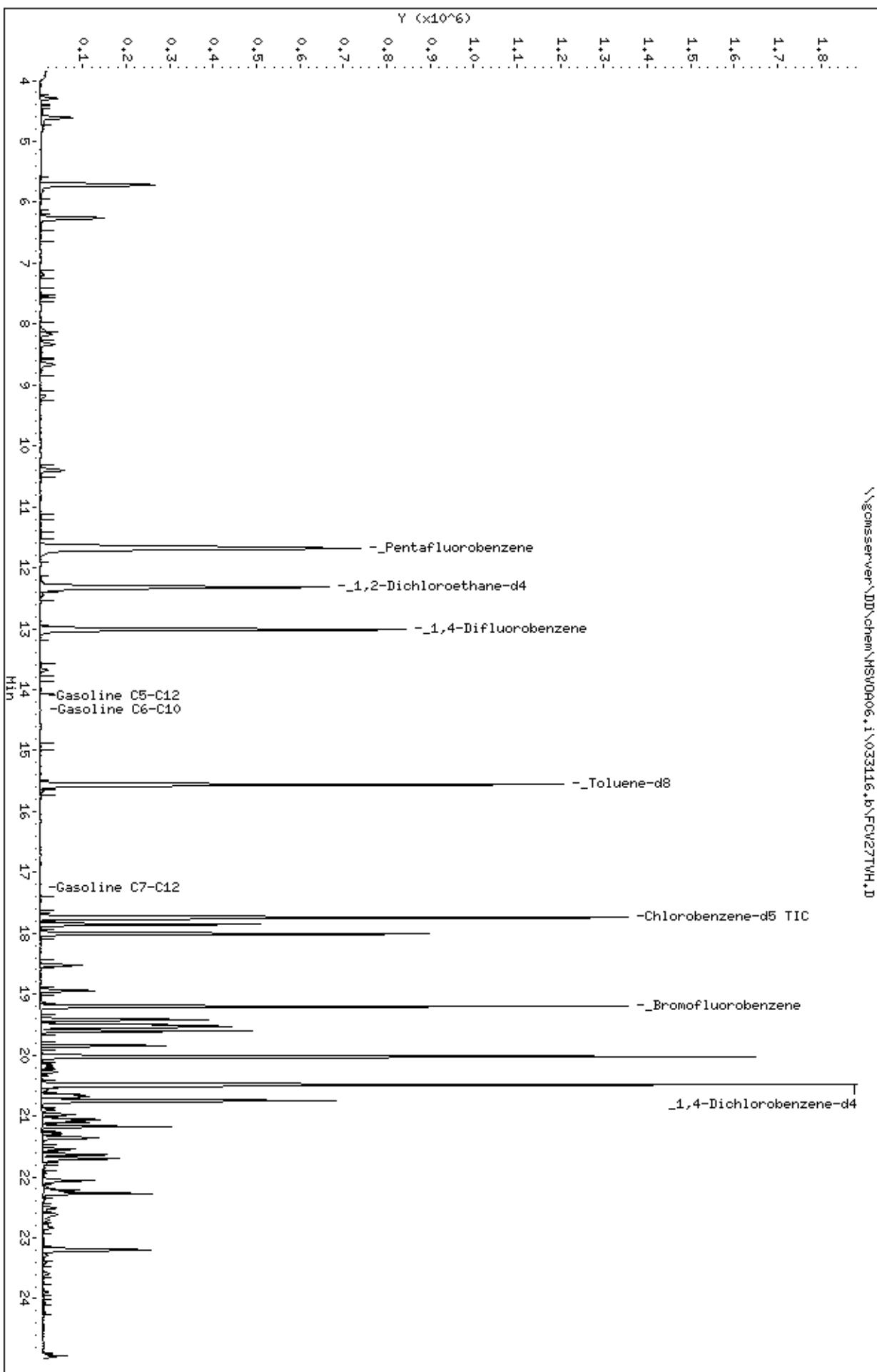
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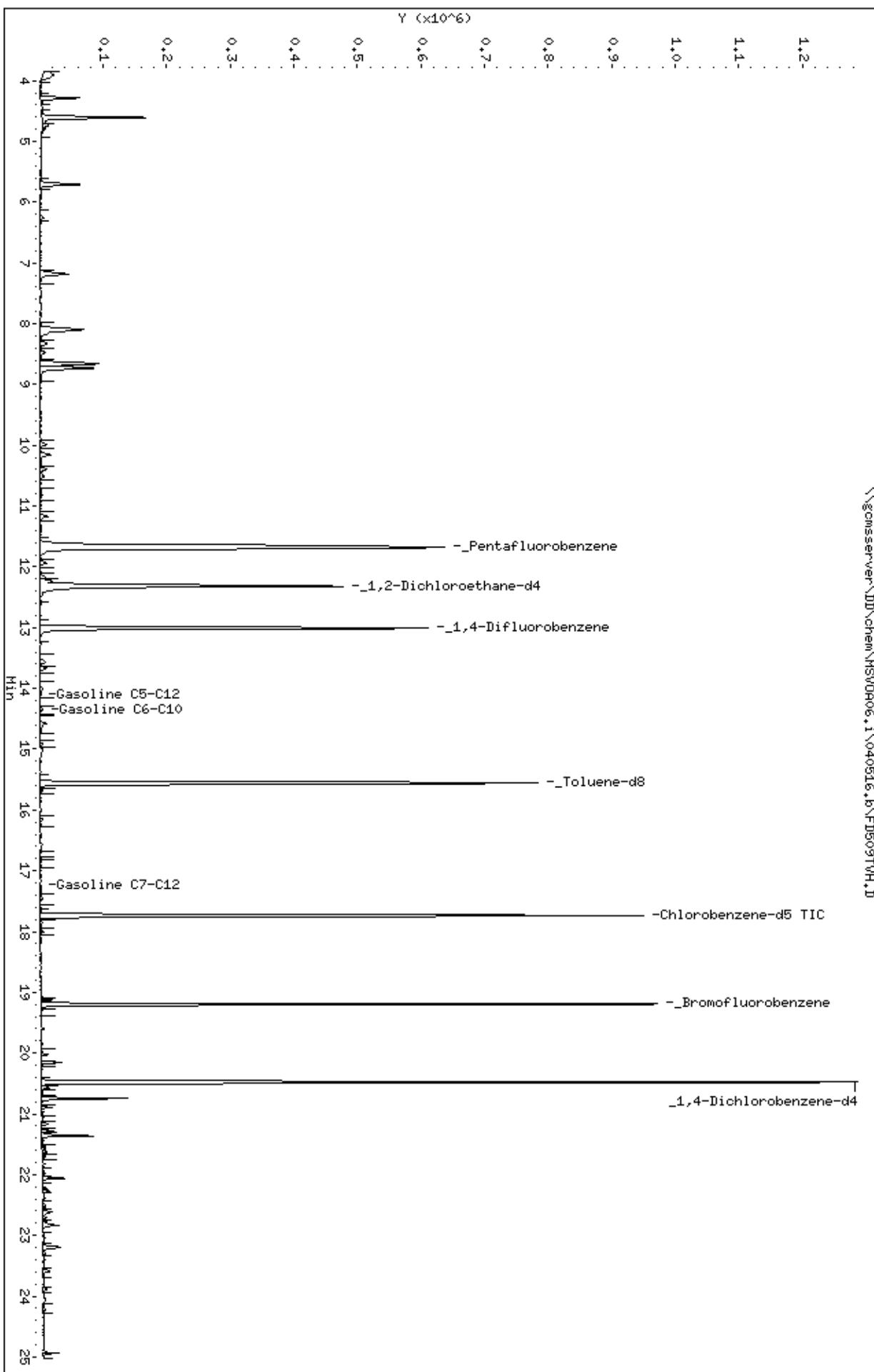
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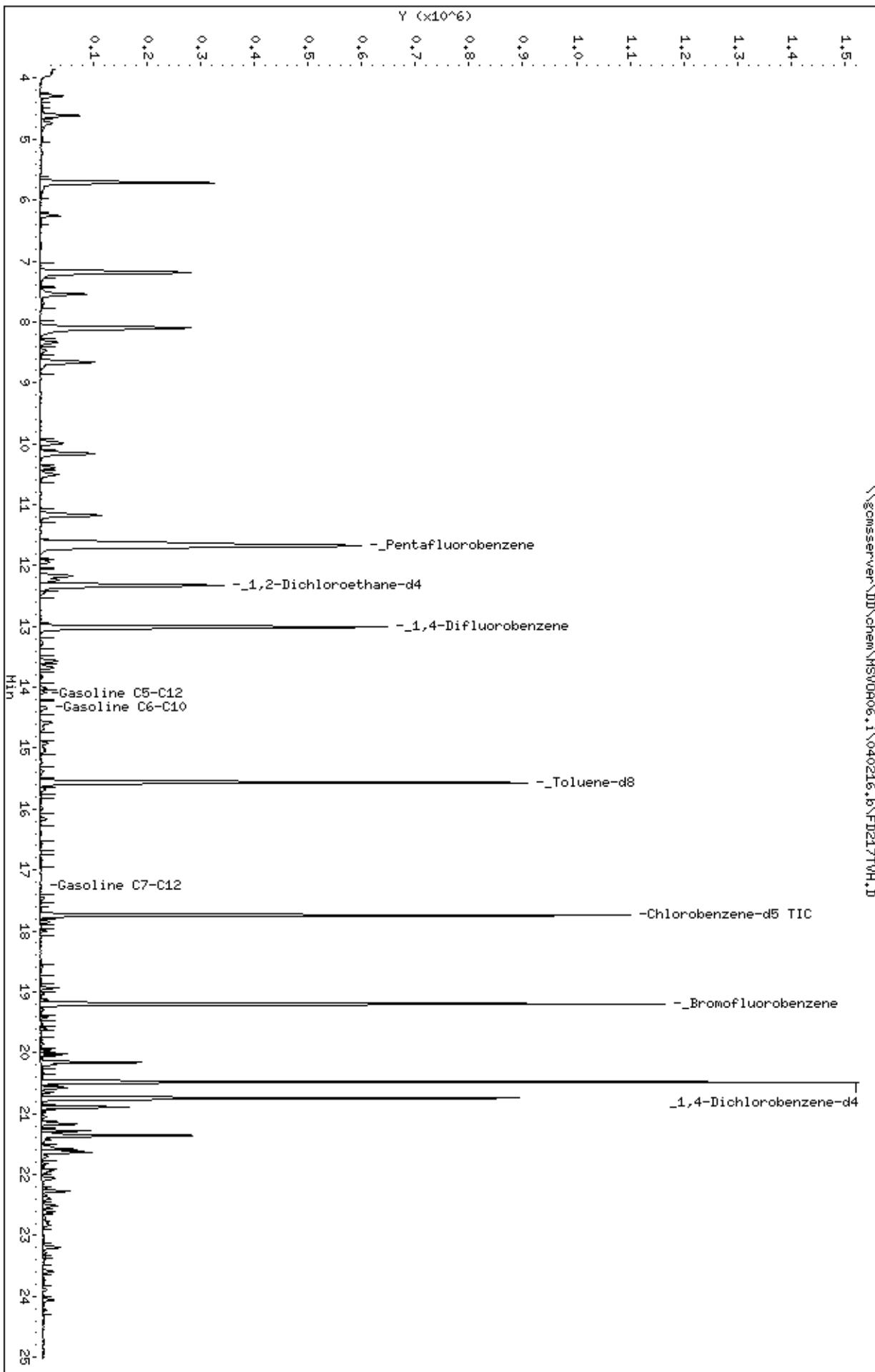
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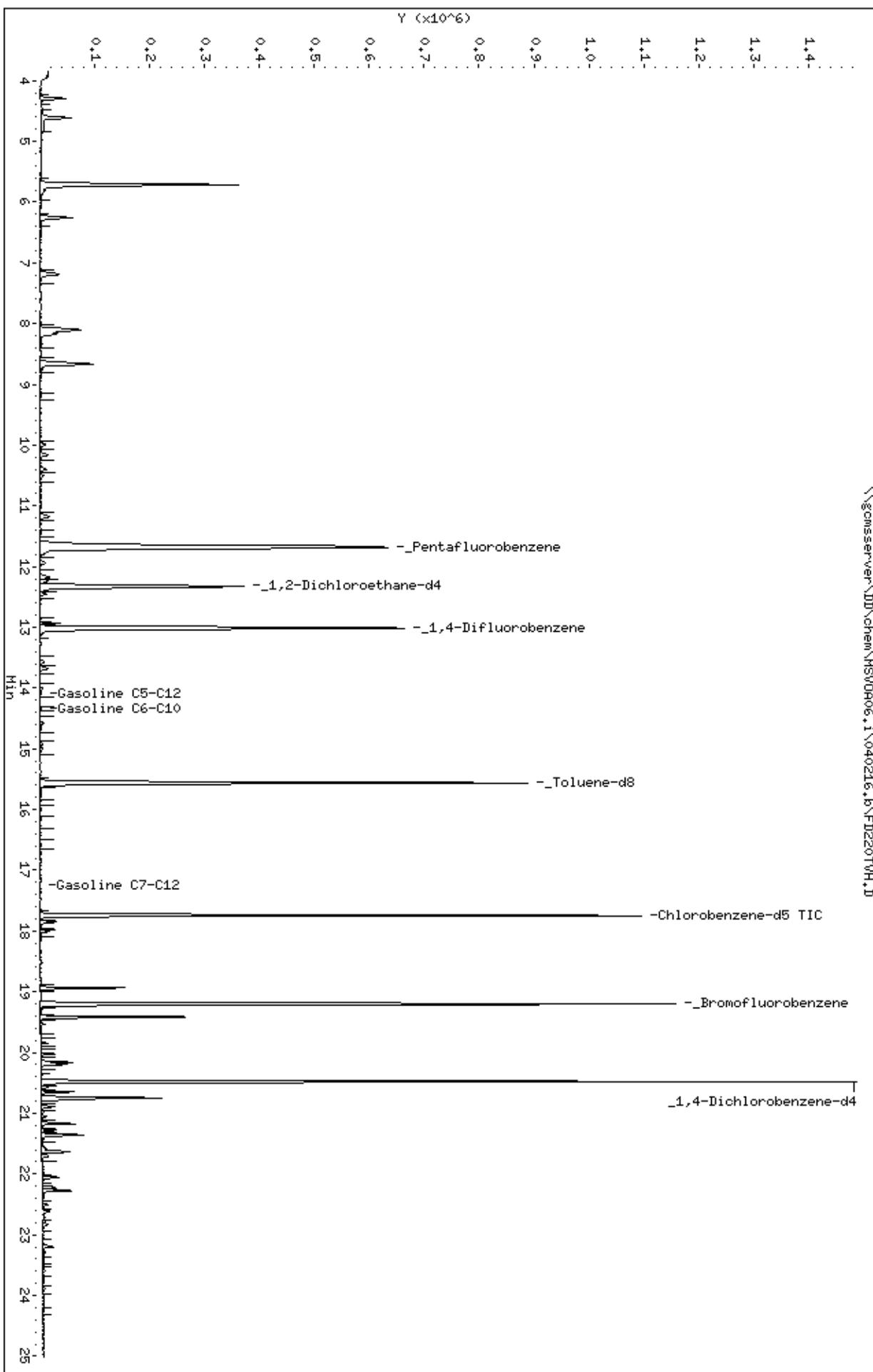
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Instrument: MSWD06.i  
Operator: VOC  
Column diameter: 2.00  
Column phase:  
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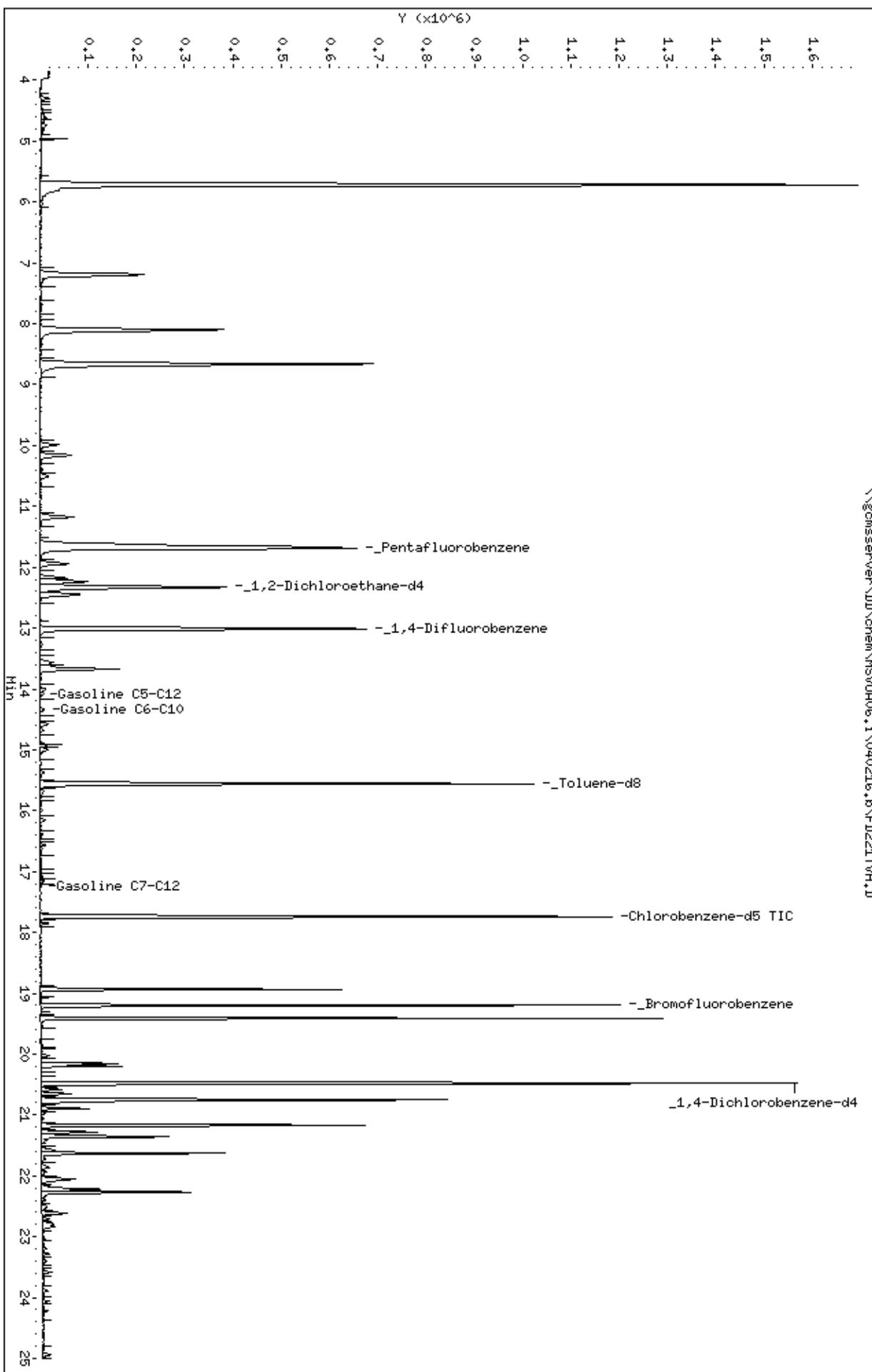
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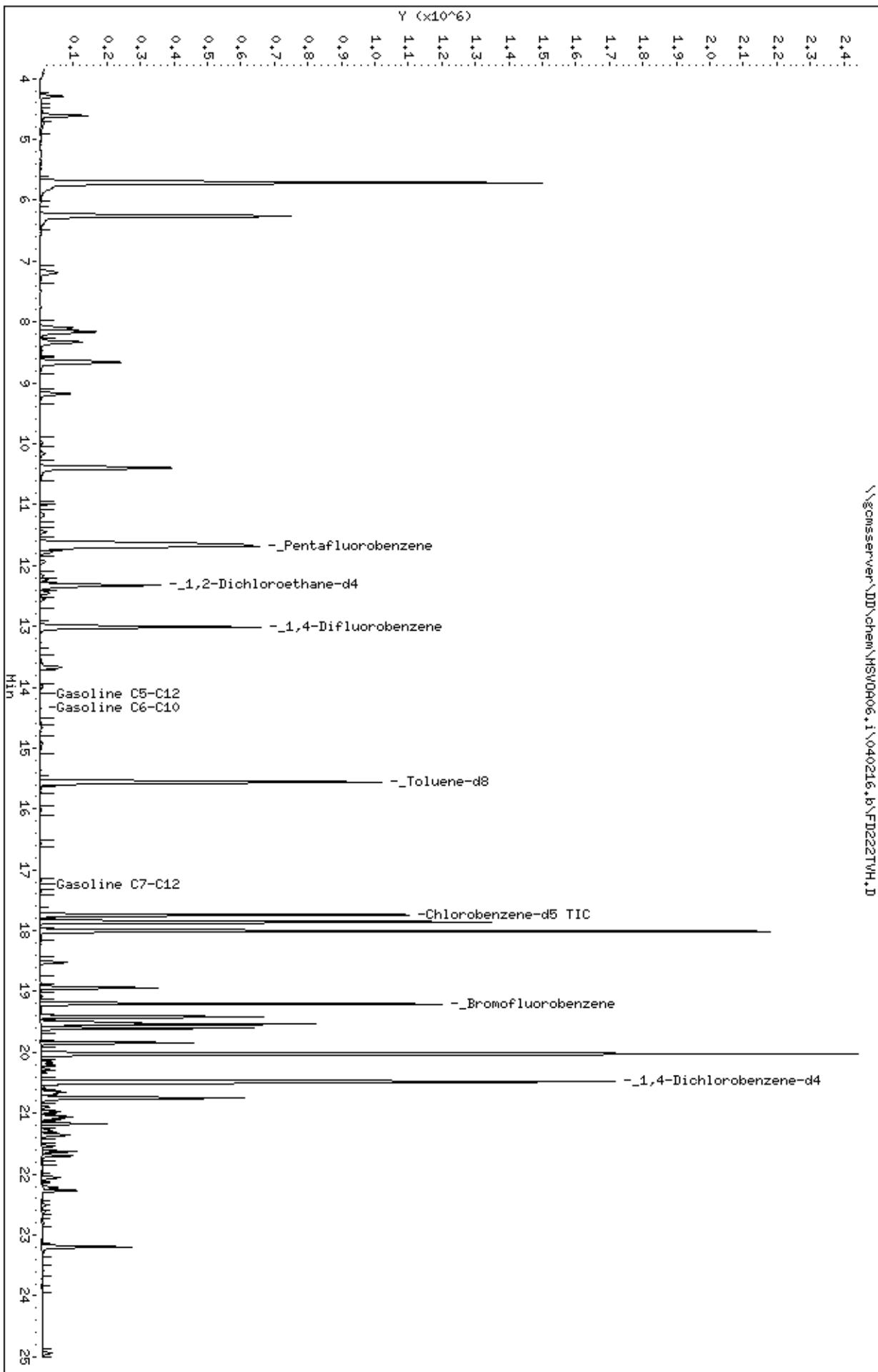
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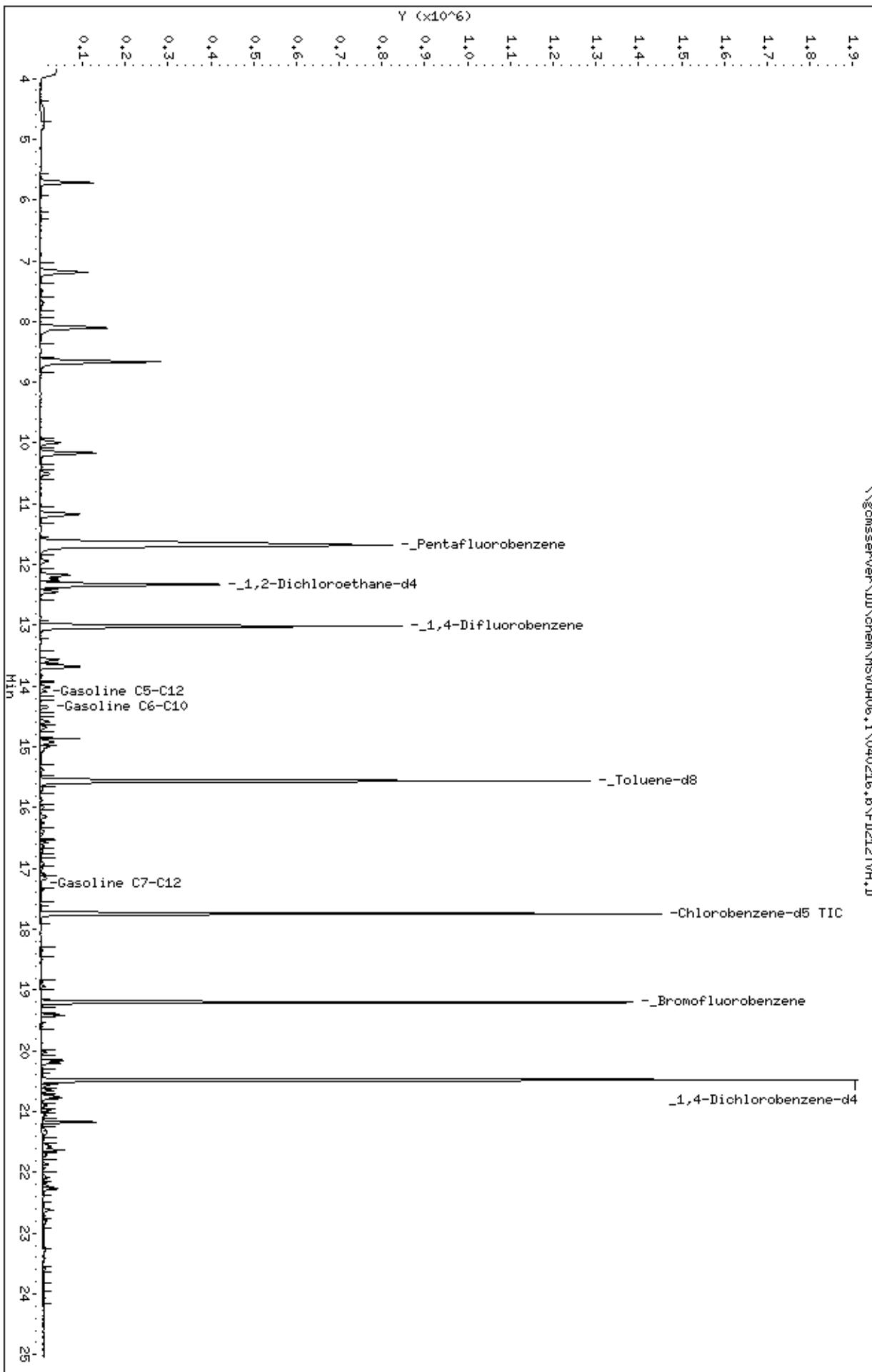
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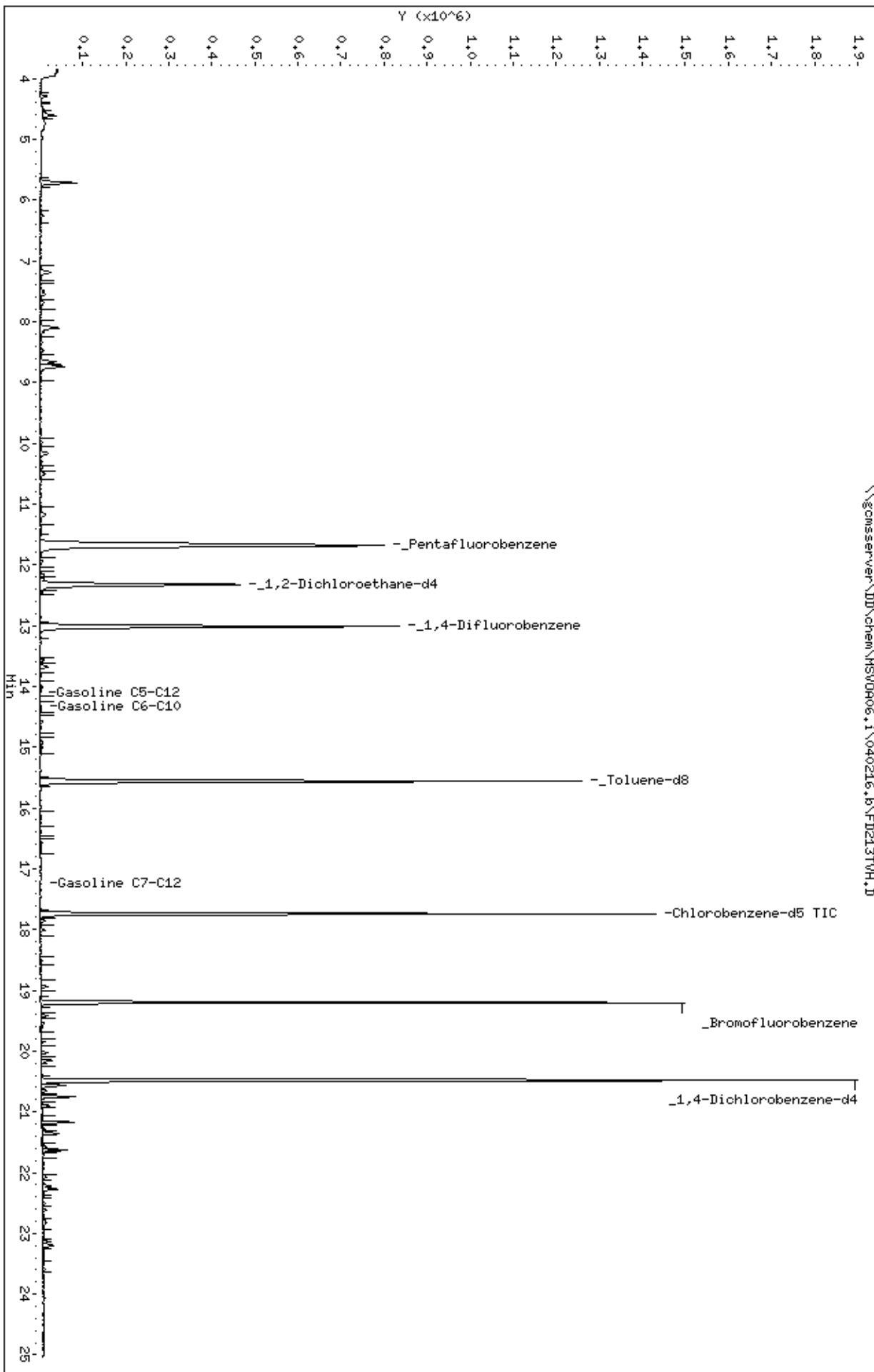
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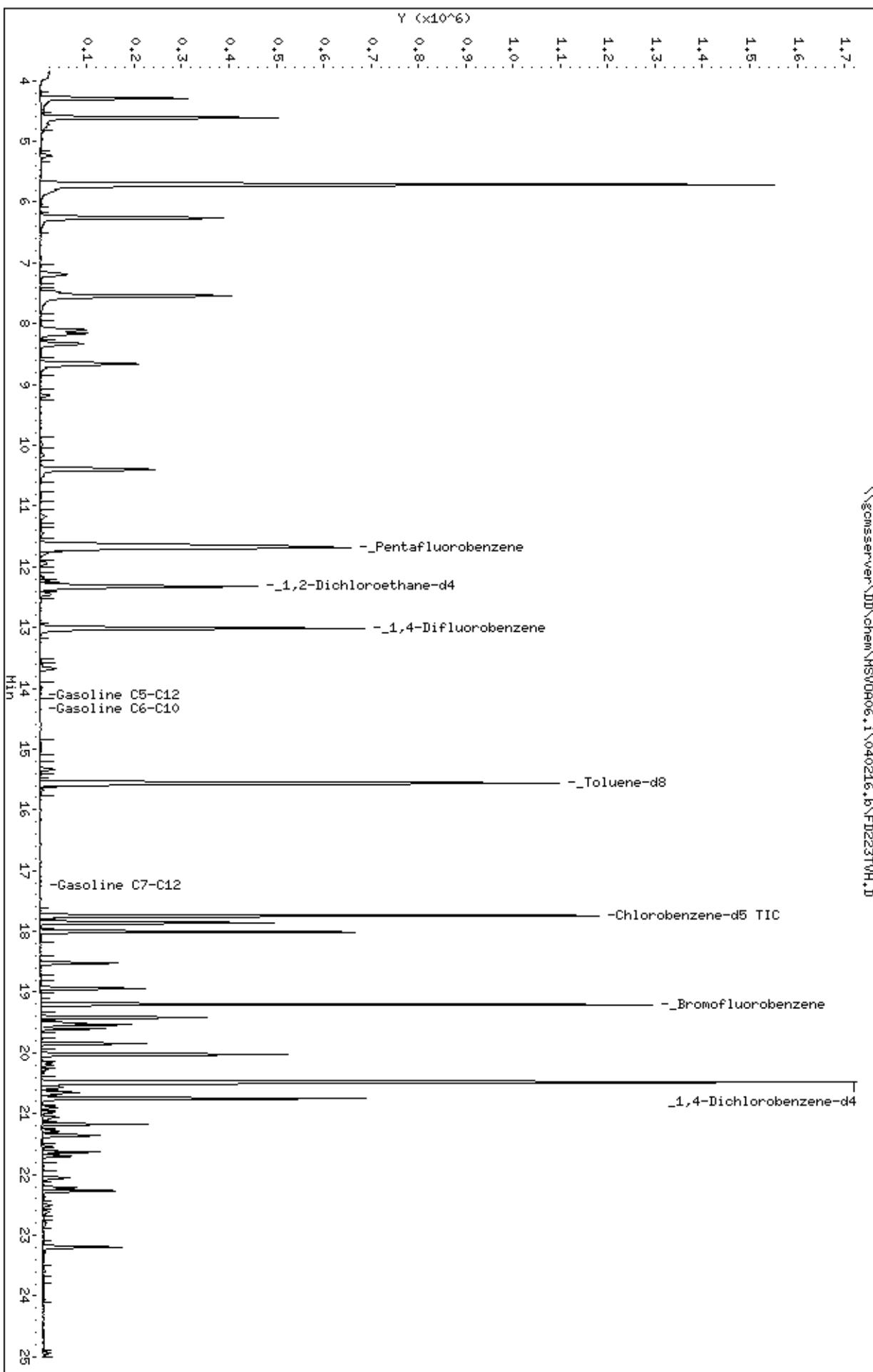
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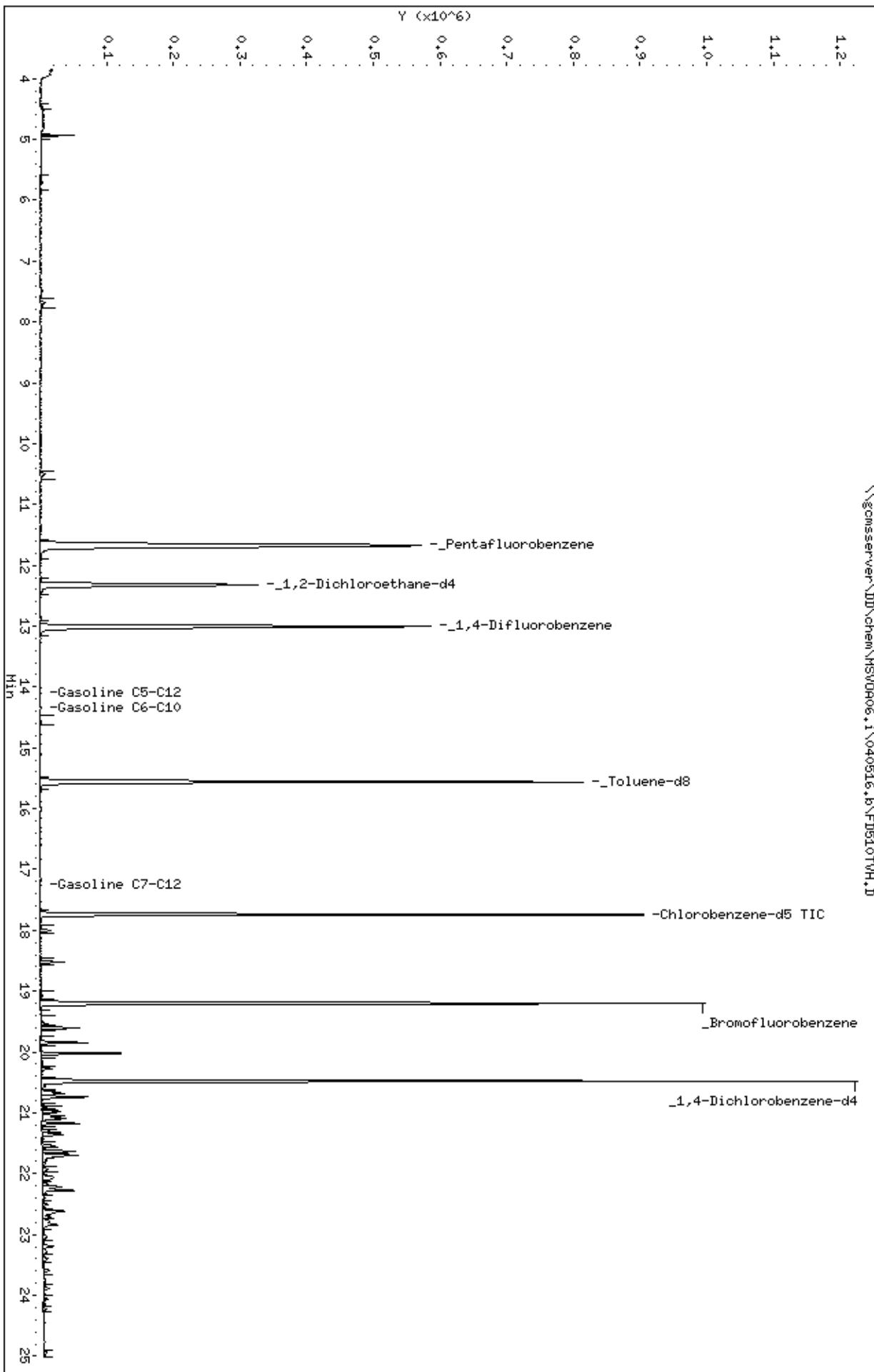
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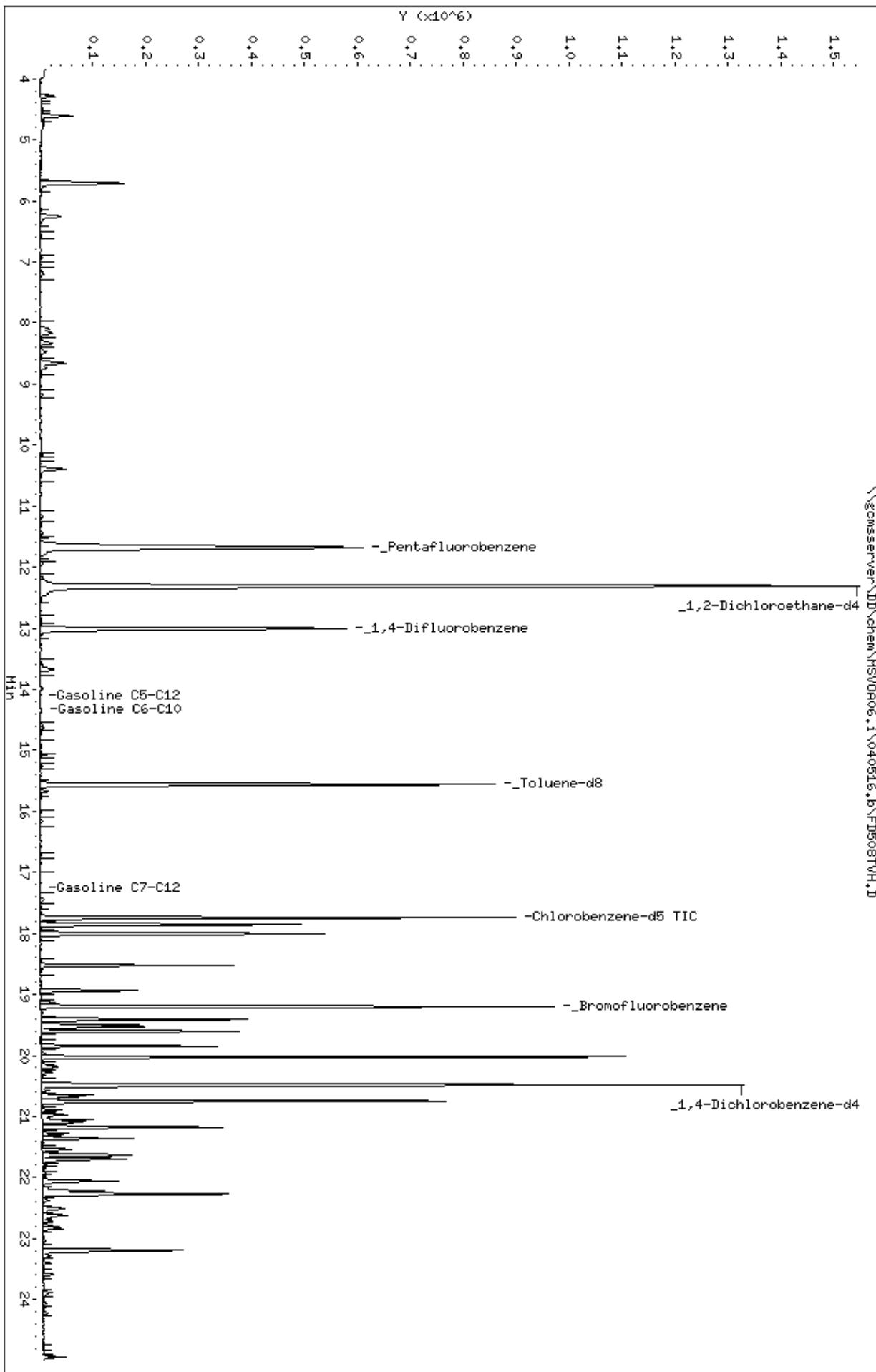
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Sample Info: S,275494-013

Page 2

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Operator: VOC  
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Column phase:  
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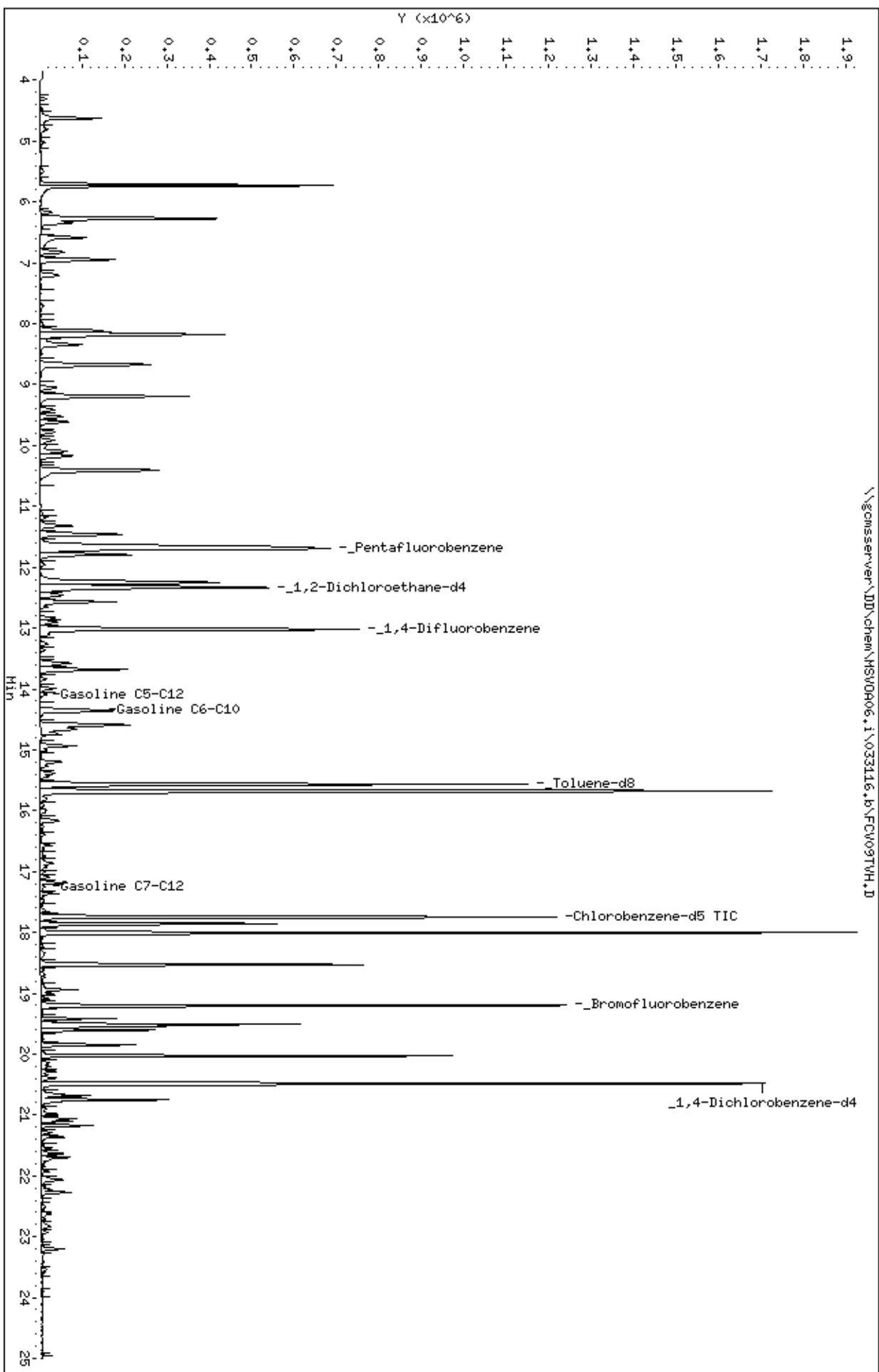


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Sample Info: CCW/BS, QC829505, 233598, S28894, .01/100

Column phase:

Instrument: MSWD06.i  
Operator: VOC  
Column diameter: 2.00

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# **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 273068  
ANALYTICAL REPORT**

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

Project : 2553  
Location : 15101 Freedom Ave. San Leandro  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
EFFLUENT	273068-001
GAC-1	273068-002
INFLUENT	273068-003

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: 

Date: 01/18/2016

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

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE**

Laboratory number: 273068  
Client: SOMA Environmental Engineering Inc.  
Project: 2553  
Location: 15101 Freedom Ave. San Leandro  
Request Date: 01/12/16  
Samples Received: 01/12/16

This data package contains sample and QC results for three water samples, requested for the above referenced project on 01/12/16. 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):**

High recoveries were observed for diesel C10-C24 in the MS/MSD for batch 231149; the parent sample was not a project sample, the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample. No other analytical problems were encountered.

# CHAIN OF CUSTODY

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

Page \_1\_of \_1\_

## Analyses

LOGIN # 273068

Sampler: Davoud Bazrash

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	# of Containers	Preservative					
				Water	Soil	HCl	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICP
1	EFFLUENT	1/21/16 10:18AM	*		6 VOAs	*	*	*	*
			*		2-500 mL Amber	*			*
									*
2	GAC-1	1/21/16 10:30 AM	*		6 VOAs	*			*
3	INFLUENT	1/21/16 10:50AM	*		6 VOAs	*			*
									*
									*

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:

RECEIVED BY:

1/21/16	01/21/16 11:34	6/12/16 11:34
DATE/TIME	DATE/TIME	DATE/TIME
		DATE/TIME
		DATE/TIME
		DATE/TIME

## COOLER RECEIPT CHECKLIST



Curtis &amp; Tompkins, Ltd.

Login # 273068 Date Received 01/12/16 Number of coolers 6  
 Client SOMA Environmental, Project 15101 Freedom Ave. San Leandro

Date Opened 01/12 By (print) SC (sign) JLH  
 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) 6.8

Temperature blank(s) included?  Thermometer# \_\_\_\_\_  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? (pH strip lot# \_\_\_\_\_) YES  NO  N/A
  18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES  NO  N/A
  19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES  NO  N/A
  20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES  NO N/A
  21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO
- If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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## Detections Summary for 273068

Results for any subcontracted analyses are not included in this summary.

Client : SOMA Environmental Engineering Inc.  
Project : 2553  
Location : 15101 Freedom Ave. San Leandro

Client Sample ID : EFFLUENT                          Laboratory Sample ID : 273068-001

No Detections

Client Sample ID : GAC-1                          Laboratory Sample ID : 273068-002

No Detections

Client Sample ID : INFLUENT                          Laboratory Sample ID : 273068-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	79	Y	50	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Benzene	2.2		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B

Y = Sample exhibits chromatographic pattern which does not resemble standard

### **Curtis & Tompkins Laboratories Analytical Report**

Lab #:	273068	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Matrix:	Water	Sampled:	01/12/16
Units:	ug/L	Received:	01/12/16
Diln Fac:	1.000	Analyzed:	01/13/16
Batch#:	231118		

Field ID: **EFFLUENT** Lab ID: **273068-001**  
 Type: **SAMPLE**

<b>Analyte</b>	<b>Result</b>	<b>RL</b>	<b>Analysis</b>
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

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>	<b>Analysis</b>
Bromofluorobenzene (FID)	97	80-132	EPA 8015B
Bromofluorobenzene (PID)	104	71-141	EPA 8021B

Field ID: **GAC-1** Lab ID: **273068-002**  
 Type: **SAMPLE**

<b>Analyte</b>	<b>Result</b>	<b>RL</b>	<b>Analysis</b>
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

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>	<b>Analysis</b>
Bromofluorobenzene (FID)	95	80-132	EPA 8015B
Bromofluorobenzene (PID)	102	71-141	EPA 8021B

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	273068	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Matrix:	Water	Sampled:	01/12/16
Units:	ug/L	Received:	01/12/16
Diln Fac:	1.000	Analyzed:	01/13/16
Batch#:	231118		

Field ID: INFLUENT                          Lab ID: 273068-003  
 Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	79 Y	50	EPA 8015B
Benzene	2.2	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)	89	80-132	EPA 8015B
Bromofluorobenzene (PID)	103	71-141	EPA 8021B

Type: BLANK                          Lab ID: QC819522

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)	93	80-132	EPA 8015B
Bromofluorobenzene (PID)	101	71-141	EPA 8021B

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	273068	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:	QC819521	Batch#:	231118
Matrix:	Water	Analyzed:	01/13/16
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	913.9	91	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	80-132



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	273068	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	231118
MSS Lab ID:	273068-001	Sampled:	01/12/16
Matrix:	Water	Received:	01/12/16
Units:	ug/L	Analyzed:	01/13/16
Diln Fac:	1.000		

Type: MS Lab ID: QC819523

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	49.67	2,000	1,712	83	76-120
Surrogate	%REC	Limits			
Bromofluorobenzene (FID)	96	80-132			

Type: MSD Lab ID: QC819524

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,828	89	76-120	7	20
Surrogate	%REC	Limits				
Bromofluorobenzene (FID)	102	80-132				

RPD= Relative Percent Difference

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	273068	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	231118
Units:	ug/L	Analyzed:	01/13/16
Diln Fac:	1.000		

Type: BS Lab ID: QC819525

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	10.70	107	80-120
Toluene	10.00	10.63	106	80-120
Ethylbenzene	10.00	10.55	106	80-120
m,p-Xylenes	10.00	10.76	108	80-120
o-Xylene	10.00	9.791	98	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	101	71-141

Type: BSD Lab ID: QC819526

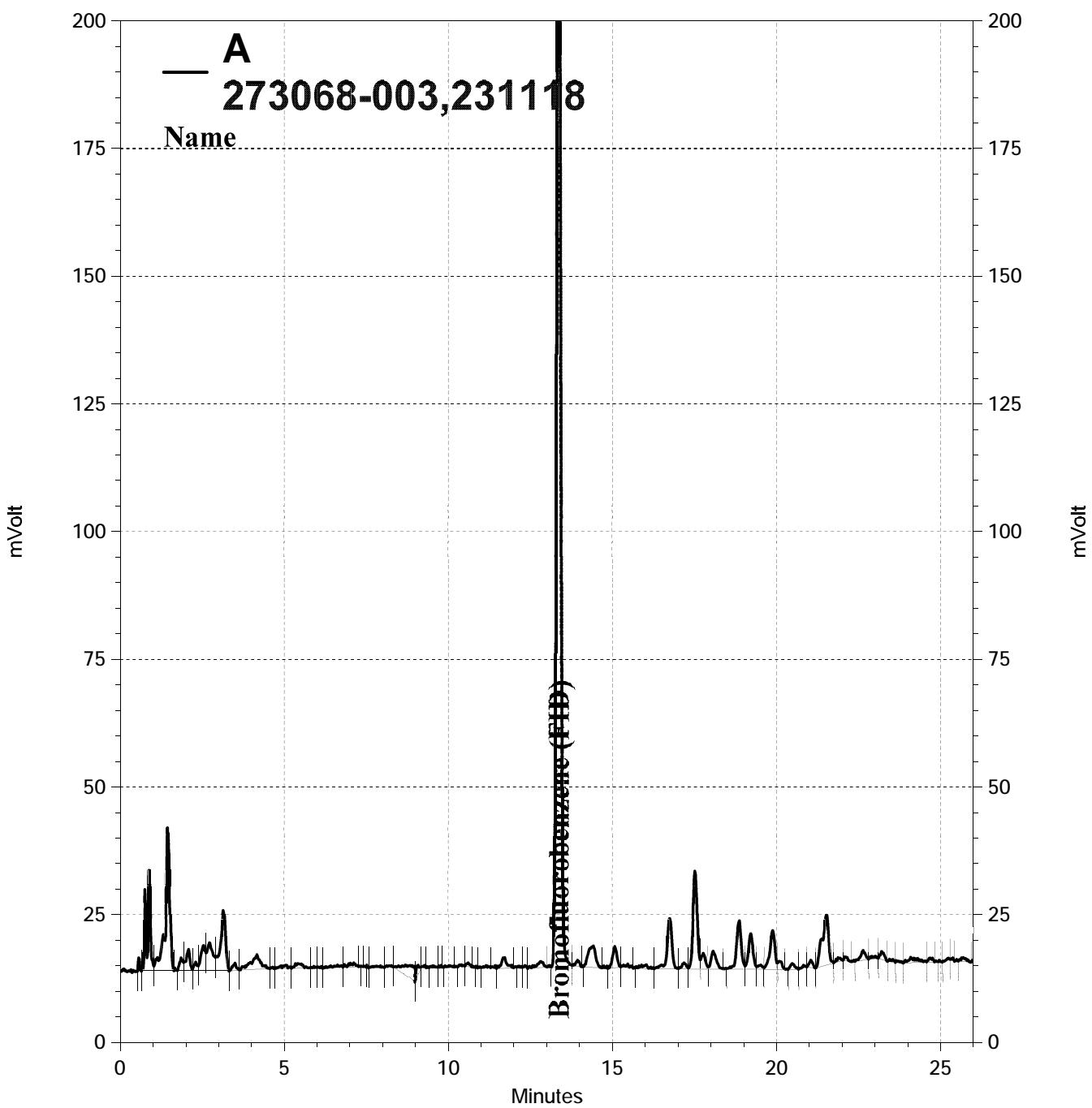
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	10.40	104	80-120	3	20
Toluene	10.00	10.38	104	80-120	2	20
Ethylbenzene	10.00	10.29	103	80-120	3	20
m,p-Xylenes	10.00	10.35	103	80-120	4	20
o-Xylene	10.00	9.747	97	80-120	0	20

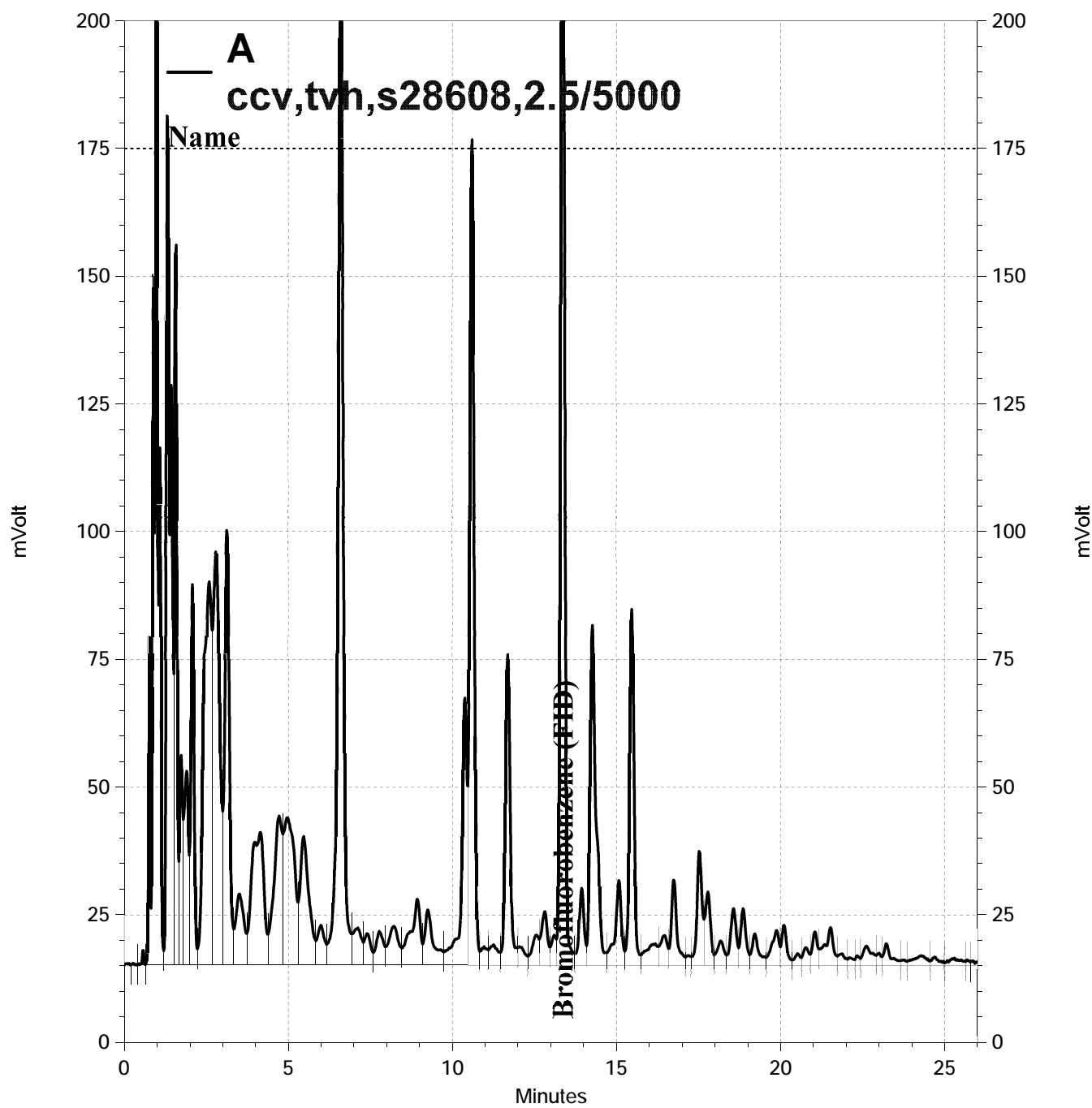
Surrogate	%REC	Limits
Bromofluorobenzene (PID)	95	71-141

RPD= Relative Percent Difference

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### Total Extractable Hydrocarbons

Lab #:	273068	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Sampled:	01/12/16
Matrix:	Water	Received:	01/12/16
Units:	ug/L	Prepared:	01/13/16
Diln Fac:	1.000	Analyzed:	01/14/16
Batch#:	231149		

Type: SAMPLE Lab ID: 273068-001

Analyte	Result	RL
Diesel C10-C24	ND	51
Motor Oil C24-C36	ND	310

Surrogate	%REC	Limits
o-Terphenyl	101	67-136

Type: BLANK Lab ID: QC819649

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

Surrogate	%REC	Limits
o-Terphenyl	97	67-136

ND= Not Detected

RL= Reporting Limit

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## Batch QC Report

**Total Extractable Hydrocarbons**

Lab #:	273068	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:	QC819650	Batch#:	231149
Matrix:	Water	Prepared:	01/13/16
Units:	ug/L	Analyzed:	01/14/16

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,345	94	60-121

Surrogate	%REC	Limits
o-Terphenyl	96	67-136



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## Batch QC Report

## Total Extractable Hydrocarbons

Lab #:	273068	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZ	Batch#:	231149
MSS Lab ID:	273098-005	Sampled:	01/11/16
Matrix:	Water	Received:	01/11/16
Units:	ug/L	Prepared:	01/13/16
Diln Fac:	1.000	Analyzed:	01/14/16

Type: MS Lab ID: QC819651

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	6,053	2,336	13,530	320 *	55-122
Surrogate	%REC	Limits			
o-Terphenyl	96	67-136			

Type: MSD Lab ID: QC819652

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,336	11,320	225 *	55-122	18	53
<b>Surrogate</b>		%REC	<b>Limits</b>			
o-Terphenyl	79	67-136				

\* = Value outside of QC limits; see narrative

RPD= Relative Percent Difference



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

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

**Laboratory Job Number 273893  
ANALYTICAL REPORT**

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

Project : 2553  
Location : 15101 Freedom Ave. San Leandro  
Level : II

Sample ID  
EFFLUENT

Lab ID  
273893-001

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: 02/11/2016

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

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE**

Laboratory number: **273893**  
Client: **SOMA Environmental Engineering Inc.**  
Project: **2553**  
Location: **15101 Freedom Ave. San Leandro**  
Request Date: **02/05/16**  
Samples Received: **02/05/16**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 02/05/16. 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 # 273893

**Sampler:** Lizzie Lighttower

Project No: 2553

**Project Name:** 15101 Freedom Ave. San Leandro Company : SOMA Environmental

## Turnaround Time: Standard

Report To: Joyce Bobek

Teléfono: 925-734-6400

Ex: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	# of Containers						
Waste	Soil	Water	Waste	HCl	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICP		
Effluent	2/5/16 09:48	↓	*	*	6 VOAs	*	*	*	*
		↓	*						
					2-500 mL Ambers				

**Notes: ENE QUITPIT BEQIIIBED**

REI INQUIISHED BY:

RECEIVED BY:

	2/5/14 10:15		8/16 10:15	DATE/TIME
				DATE/TIME
				DATE/TIME

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## Analyses

## COOLER RECEIPT CHECKLIST



Curtis &amp; Tompkins, Ltd.

Login # 273893 Date Received 02/05/16 Number of coolers 1  
 Client SOMA Environmental Project 2553

Date Opened 02/05 By (print) SL (sign) JM JHS  
 Date Logged in 4 By (print) CWN (sign) CKWMM

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) \_\_\_\_\_

Temperature blank(s) included?  Thermometer# \_\_\_\_\_  IR Gun# \_\_\_\_\_

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

8. Were Method 5035 sampling containers present? YES   
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? (pH strip lot# \_\_\_\_\_) YES  NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? YES  NO N/A
19. Did you change the hold time in LIMS for preserved terracores? YES  NO N/A
20. Are bubbles > 6mm absent in VOA samples? YES  NO N/A
21. Was the client contacted concerning this sample delivery? YES  NO  
If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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## Detections Summary for 273893

Results for any subcontracted analyses are not included in this summary.

Client : SOMA Environmental Engineering Inc.  
Project : 2553  
Location : 15101 Freedom Ave. San Leandro

Client Sample ID : EFFLUENT                      Laboratory Sample ID : 273893-001

No Detections

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	273893	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Field ID:	EFFLUENT	Batch#:	231819
Matrix:	Water	Sampled:	02/05/16
Units:	ug/L	Received:	02/05/16
Diln Fac:	1.000	Analyzed:	02/08/16

Type: SAMPLE Lab ID: 273893-001

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)	115	80-132	EPA 8015B
Bromofluorobenzene (PID)	121	71-141	EPA 8021B

Type: BLANK Lab ID: QC822319

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)	95	80-132	EPA 8015B
Bromofluorobenzene (PID)	108	71-141	EPA 8021B

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	273893	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:	QC822318	Batch#:	231819
Matrix:	Water	Analyzed:	02/08/16
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,099	110	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	110	80-132

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	273893	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	231819
MSS Lab ID:	273893-001	Sampled:	02/05/16
Matrix:	Water	Received:	02/05/16
Units:	ug/L	Analyzed:	02/08/16
Diln Fac:	1.000		

Type: MS    Lab ID: QC822320

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	28.55	2,000	1,976	97	76-120
<b>Surrogate</b>					
Bromofluorobenzene (FID)	111	80-132			

Type: MSD    Lab ID: QC822321

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	2,000	2,029	100	76-120	3 20
<b>Surrogate</b>					
Bromofluorobenzene (FID)	113	80-132			

RPD= Relative Percent Difference

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	273893	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	231819
Units:	ug/L	Analyzed:	02/08/16
Diln Fac:	1.000		

Type: BS Lab ID: QC822322

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	9.860	99	80-120
Toluene	10.00	9.751	98	80-120
Ethylbenzene	10.00	10.05	101	80-120
m,p-Xylenes	10.00	10.46	105	80-120
o-Xylene	10.00	10.34	103	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	113	71-141

Type: BSD Lab ID: QC822323

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	10.24	102	80-120	4	20
Toluene	10.00	10.08	101	80-120	3	20
Ethylbenzene	10.00	10.33	103	80-120	3	20
m,p-Xylenes	10.00	10.62	106	80-120	1	20
o-Xylene	10.00	10.58	106	80-120	2	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	111	71-141

RPD= Relative Percent Difference

### Total Extractable Hydrocarbons

Lab #:	273893	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Sampled:	02/05/16
Matrix:	Water	Received:	02/05/16
Units:	ug/L	Prepared:	02/05/16
Diln Fac:	1.000	Analyzed:	02/08/16
Batch#:	231786		

Type: SAMPLE Lab ID: 273893-001

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	84	67-136

Type: BLANK Lab ID: QC822204

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	87	67-136

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

**Total Extractable Hydrocarbons**

Lab #:	273893	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	231786
Units:	ug/L	Prepared:	02/05/16
Diln Fac:	1.000	Analyzed:	02/08/16

Type: BS Lab ID: QC822205

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,459	98	60-121

Surrogate	%REC	Limits
o-Terphenyl	95	67-136

Type: BSD Lab ID: QC822206

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,188	88	60-121	12	32

Surrogate	%REC	Limits
o-Terphenyl	87	67-136

RPD= Relative Percent Difference

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

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

**Laboratory Job Number 274878  
ANALYTICAL REPORT**

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

Project : 2553  
Location : 15101 Freedom Ave. San Leandro  
Level : II

Sample ID  
EFFLUENT

Lab ID  
274878-001

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: 03/14/2016

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

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE**

Laboratory number: **274878**  
Client: **SOMA Environmental Engineering Inc.**  
Project: **2553**  
Location: **15101 Freedom Ave. San Leandro**  
Request Date: **03/07/16**  
Samples Received: **03/07/16**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 03/07/16. 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 # 274878

Sampler: Davoud Bazrpassh

Project No: 2553

**Project Name:** 15101 Freedom Ave. San Leandro Company: SOMA Environmental

## Turnaround Time: Standard

03E 731 6101  
Fax:

Matrix

Preservative									
Matrix			HCl	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICP			
		# of Containers							
Soil									
Water			*						
Waste									
HCl			*						
H <sub>2</sub> SO <sub>4</sub>				*					
HNO <sub>3</sub>					*				
Effluent	Sample ID.	Sampling Date Time	3/7/16 10:58 AM	*	6 VOAs	*			
			3/7/16 11:10 AM	*	2-500 mL Ambers				

**Notes: FDE QUITPLIT BEQIIBED**

BEI INNOSTRAN B.V.

RECEIVED BY

RECEIVED BY: 3/7/16 11:48 DATE/TIME  
3/7/16 11:48 DATE/TIME

DATE/TIME \_\_\_\_\_ DATE/TIME \_\_\_\_\_

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## Analyses

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## COOLER RECEIPT CHECKLIST



Login # \_\_\_\_\_ Date Received 3/7/16 Number of coolers 0  
 Client SOMA Project 2553

Date Opened 3/7 By (print) CJN (sign) CJN/CJN  
 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 CJN
  21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO  N/A
- If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

### COMMENTS

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### Detections Summary for 274878

Results for any subcontracted analyses are not included in this summary.

Client : SOMA Environmental Engineering Inc.  
Project : 2553  
Location : 15101 Freedom Ave. San Leandro

Client Sample ID : EFFLUENT                      Laboratory Sample ID : 274878-001

No Detections

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	274878	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Field ID:	EFFLUENT	Batch#:	232820
Matrix:	Water	Sampled:	03/07/16
Units:	ug/L	Received:	03/07/16
Diln Fac:	1.000	Analyzed:	03/08/16

Type: SAMPLE Lab ID: 274878-001

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)	110	80-132	EPA 8015B
Bromofluorobenzene (PID)	114	71-141	EPA 8021B

Type: BLANK Lab ID: QC826408

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	80-132	EPA 8015B
Bromofluorobenzene (PID)	109	71-141	EPA 8021B

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	274878	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:	QC826407	Batch#:	232820
Matrix:	Water	Analyzed:	03/08/16
Units:	ug/L		

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
Gasoline C7-C12	1,000	1,152	115	80-120

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Bromofluorobenzene (FID)	113	80-132



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	274878	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	232820
MSS Lab ID:	274837-004	Sampled:	03/04/16
Matrix:	Water	Received:	03/04/16
Units:	ug/L	Analyzed:	03/08/16
Diln Fac:	1.000		

Type: MS Lab ID: QC826409

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	15.72	2,000	2,152	107	76-120
Surrogate	%REC	Limits			
Bromofluorobenzene (FID)	117	80-132			

Type: MSD Lab ID: QC826410

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,139	106	76-120	1	20
Surrogate	%REC	Limits				
Bromofluorobenzene (FID)	119	80-132				

RPD= Relative Percent Difference

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	274878	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	232820
Units:	ug/L	Analyzed:	03/08/16
Diln Fac:	1.000		

Type: BS Lab ID: QC826580

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	9.486	95	80-120
Toluene	10.00	9.366	94	80-120
Ethylbenzene	10.00	9.392	94	80-120
m,p-Xylenes	10.00	10.75	108	80-120
o-Xylene	10.00	10.49	105	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	112	71-141

Type: BSD Lab ID: QC826581

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	10.70	107	80-120	12	20
Toluene	10.00	10.32	103	80-120	10	20
Ethylbenzene	10.00	10.23	102	80-120	9	20
m,p-Xylenes	10.00	11.39	114	80-120	6	20
o-Xylene	10.00	11.07	111	80-120	5	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	114	71-141

RPD= Relative Percent Difference

### Total Extractable Hydrocarbons

Lab #:	274878	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Sampled:	03/07/16
Matrix:	Water	Received:	03/07/16
Units:	ug/L	Prepared:	03/09/16
Diln Fac:	1.000	Analyzed:	03/10/16
Batch#:	232886		

Type: SAMPLE Lab ID: 274878-001

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

Surrogate	%REC	Limits
o-Terphenyl	93	67-136

Type: BLANK Lab ID: QC826662

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

Surrogate	%REC	Limits
o-Terphenyl	85	67-136

ND= Not Detected

RL= Reporting Limit

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## Batch QC Report

**Total Extractable Hydrocarbons**

Lab #:	274878	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	232886
Units:	ug/L	Prepared:	03/09/16
Diln Fac:	1.000	Analyzed:	03/10/16

Type: BS Lab ID: QC826663

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,523	101	60-121

Surrogate	%REC	Limits
o-Terphenyl	103	67-136

Type: BSD Lab ID: QC826664

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,812	112	60-121	11	32

Surrogate	%REC	Limits
o-Terphenyl	111	67-136

RPD= Relative Percent Difference

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