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

January 14, 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 "Fourth Quarter 2015 Groundwater Monitoring and Remediation Progress Report" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

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

Sincerely,

Mansour Sepehr, Ph.D.,PE
Principal Hydrogeologist

cc: Mr. Mohammad Pazdel w/report enclosure

Fourth Quarter 2015
Groundwater Monitoring and
Remediation Progress Report

Freedom Food and Gas
15101 Freedom Avenue
San Leandro, California

January 14, 2016

Project 2551/2553/2556

Prepared for

Mr. Mohammad Pazdel
1770 Pistacia Court
Fairfield, California

SOMA ENVIRONMENTAL ENGINEERING, INC.
6620 Owens Drive Suite A Pleasanton CA 94588 Ph: 925.734.6400 F: 925.734-6401 www.somaenv.com

PERJURY STATEMENT

Site Location: 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".

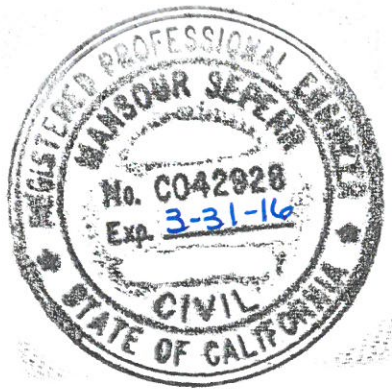
M. Le-Pazdel

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 Fourth Quarter 2015 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 Fourth Quarter 2015 groundwater monitoring event conducted on December 28 and 29, 2015. 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 Fourth Quarter 2015, which includes operation of a groundwater extraction and treatment system and results of a multi-phase extraction (MPE) event.

1.1 Field Activities

In December 2015, 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 December 28, 2015, 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 December 28 and 29, 2015, 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 Fourth Quarter 2015 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 13.07 feet in MW-11 to 24.50 feet in MW-4. 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 28.81 feet in MW-4 to 31.07 feet in MW-1. Groundwater elevations at extraction wells EX-1 and EX-2 were 24.66 feet and 25.21 feet, respectively (Table 1).

Figure 3 displays the contour map of groundwater elevations. As illustrated, groundwater flows towards the extraction wells, at a gradient of 0.018 feet/feet. An effective capture zone is being created by the extraction wells. 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 1.18 mg/L in MW-4 to 1.45 mg/L in MW-7 and MW-10. ORP showed negative redox potentials in all tested wells except 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-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 170 µg/L in MW-2 and MW-11 to 22,000 µg/L in MW-10. Since the previous monitoring event (Third Quarter 2015), TPH-g increased in MW-6, MW-7, MW-11, EX-1, and EX-2, and decreased in MW-1, MW-2, MW-3, MW-4, MW-5, MW-10, MPE-1, and MPE-2.

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. High impact is also seen in the northeast corner of the site in the vicinity of MPE-2.

The following BTEX concentrations were observed:

- Benzene was below laboratory-reporting limits in MW-1, MW-2, MW-7, MW-10, and MW-11. Detectable benzene concentrations ranged from 1.50 µg/L in MW-5 to 220 µg/L in MPE-2.
- Toluene was detected only in EX-2, MPE-1, and MPE-2 at 6.0 µg/L, 11 µg/L and 10 µg/L, respectively and was below laboratory-reporting limits in all other wells.
- Ethylbenzene was detected in concentrations ranging from 0.51 µg/L in MW-2 to 930 µg/L in MW-10.
- Total xylenes were below laboratory-reporting limits in MW-2. Detectable concentrations ranged from 0.55 µg/L in MW-1 to 1,737 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 (Third Quarter 2015), detectable benzene concentrations have increased in MW-6, EX-1, and EX-2, decreased in MW-1, MW-3, MW-4, MW-5, MPE-1, and MPE-2 and remained below laboratory-reporting limit in the remaining wells.

MtBE was below the laboratory-reporting limit in MW-1, MW-2, MW-3, MW-5, MW-6, MW-10, and MW-11, and MPE-2. Detectable MtBE ranged from 0.88 µg/L in MPE-1 to 21 µg/L in EX-1. Figure 6 displays the contour map of MtBE concentrations in groundwater. Since the previous monitoring event (Third Quarter 2015), MtBE has increased in EX-1, and EX-2, and decreased in MW-4, MW-7, MPE-1, and MPE-2 and remained below laboratory-reporting limit in MW-1, MW-2, MW-3, MW-5, MW-6, MW-10, and MW-11.

MW-3, MW-6, MPE-1, and MPE-2 are the more impacted on-site wells where free-product has been observed in the past. As shown in Table 1, since the previous monitoring event (Third Quarter 2015), detectable concentrations of TPH-g and benzene have decreased in MW-3, MPE-1 and MPE-2 and increased in MW-6.

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

The following gasoline oxygenate and lead scavenger concentrations were observed:

- In MW-1, MW-2, MW-3, MW-5, MW-6, MW-7, MW-10, MW-11, EX-2, and MPE-2 all gasoline oxygenates and lead scavengers were below laboratory-reporting limits.
- In addition, tertiary-butyl alcohol (TBA) was also below laboratory-reporting limit in MPE-1 and was detected in MW-4 and EX-1 at 32 µg/L and 38 µg/L. Figure 7 shows the map of TBA concentrations in First WBZ wells. Since the previous monitoring event (Third Quarter 2015), TBA decreased in MW-4 and increased in EX-1.
- Methyl tertiary-amyl ether (TAME) was detected in MW-4, EX-1, and MPE-1 at 1.4 µg/L, 2.4 µg/L, and 1.6 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 (Third Quarter 2015), TAME decreased in MPE-1 and increased in MW-4 and EX-1.
- Ethyl tertiary-butyl ether (ETBE) was detected at 0.7 µg/L in EX-1 and was below laboratory-reporting limits in other wells.
- 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. During this reporting period, the polishing unit was repaired in order to address a leak.

Since the system began discharging, approximately 3,852,413 gallons of groundwater have been treated and discharged at the site (as of December 23, 2015).

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 monthly to comply with OLSD discharge permit requirements. Table 3 includes analytical results and operational history of the treatment system. As shown in Table 4, as of October 27, 2015, cumulative masses of TPH-g and BTEX extracted from groundwater were approximately 40.24 pounds, 1.51 pounds, 0.37 pounds, 1.00 pounds, and 5.17 pounds, respectively. Appendix D includes laboratory analytical results.

4. MULTI-PHASE EXTRACTION EVENTS

An MPE event was performed during the Fourth Quarter 2015 from November 19, 2015 through December 18, 2015 utilizing MPE-1, MPE-2, and MW-3.

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

Physical and chemical parameters including applied vacuum, soil vapor extraction flow rates, oxidizer temperature, volume of groundwater extracted, VOC concentrations, and depth to groundwater in observation wells, were

monitored, measured and recorded. VOC concentrations in the extracted soil vapor stream were continuously monitored using a photoionization detector (PID) calibrated to hexane. MPE operational data is presented in Table 5. Extraction data is presented in Table 6. Field data sheets are presented in Appendix E.

During this event a total of 28,001 gallons of groundwater was extracted, treated and discharged into the sanitary sewer system. The estimated groundwater extraction rate for the MPE event based on gallons extracted and elapsed time (Table 5) was 1.23 gpm.

4.1 Soil Vapor Sampling and Analysis

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

Soil vapor samples (one influent and one effluent) were collected on November 19, 2014, within the first 24 hours of operation (Table 7) as required by the BAAQMD permit and again on December 4, 2015 and December 14, 2015.

4.2 Extraction Summary

The MPE event ran from 12:45 PM on November 19, 2015 to 3:00 PM on December 18, 2015. The total extraction time was 22,725 minutes or 378.75 hours.

Applied vacuum ranged from 18.4 to 25 inches of mercury, and vapor extraction flow rate ranged from 70 to 174 scfm (Tables 5 and 6). VOC concentrations in the extracted soil vapor stream ranged from 182 parts per million vapor (ppmv) as hexane to 1,111 ppmv (Table 5).

4.3 Air Injection and Crawl Space Sampling

On December 16, 2015 at 10:00AM air injection was added to the MPE operation in order to enhance recovery of VOCs from beneath the site. Air was injected into the subsurface through monitoring well MW-4. During injection, SOMA observed an increase in mass removal rate indicating effectiveness of the process. During the air injection, SOMA collected a crawl space and an ambient air vapor sample

(SV-2, AA-2) from the nearest residential property located adjacent to the site to ensure there is no risk to the residents. The results (Table 8, Appendix F) indicated that benzene concentrations in the crawl space sample (SV-2) were higher than the lowest residential Environmental Screening Levels (ESLs) established by San Francisco Regional Water Quality Control Board (RWQCB) for indoor air. Benzene and ethylbenzene concentrations in the ambient air sample (AA-2) were also higher than the ESL. All other contaminant concentration in both samples were either below the ESL or below laboratory reporting-limit.

4.4 Evaluation of Mass Removal Rate

The total number of the MPE operational days was 15.78 days. The estimated mass of volatile organic compounds (VOCs) removed from soil vapor extraction and VOC mass removal rate was 280 lbs at 17.74 lbs/day (Table 6).

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 towards the extraction wells in the First WBZ.
- 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. High TPH-g was also observed in the northeast corner of the site.
- Since the previous monitoring event (Third Quarter 2015), detectable concentrations of TPH-g and benzene have decreased in MW-3, MPE-1 and MPE-2 and increased in MW-6.
- Groundwater monitoring of Second WBZ wells was discontinued based on the October 28, 2015 directive from ACEH.
- Another crawl space (SV-2) and ambient air samples (AA-2) were obtained from the same location as during September 2014 event. Results indicate that benzene concentrations in crawl space and ambient air samples and ethylbenzene concentration in ambient air sample was greater than the lowest residential Environmental Screening Levels (ESLs) established by San Francisco Regional Water Quality Control Board (RWQCB) for ambient and indoor air.
- An MPE event was conducted at the site from November 19, 2015 to December 18, 2015. Air injection was utilized during the MPE event from December 16, 2015 to December 18, 2015. During this event approximately 280 lbs of VOCs were removed at a mass removal rate of 18 lbs/day. The total mass of hydrocarbon removed by MPE operations (as of December 2015) at the site is estimated to be 3,582 pounds. Results of the Fourth Quarter 2015 groundwater monitoring event show the effectiveness of MPE operation at the site.

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 increase understanding of seasonal variations in groundwater quality conditions.
- SOMA has recently submitted a work plan for further site investigation and off-site MPE event. The work plan will be implemented upon receipt of written approval from the ACEH.

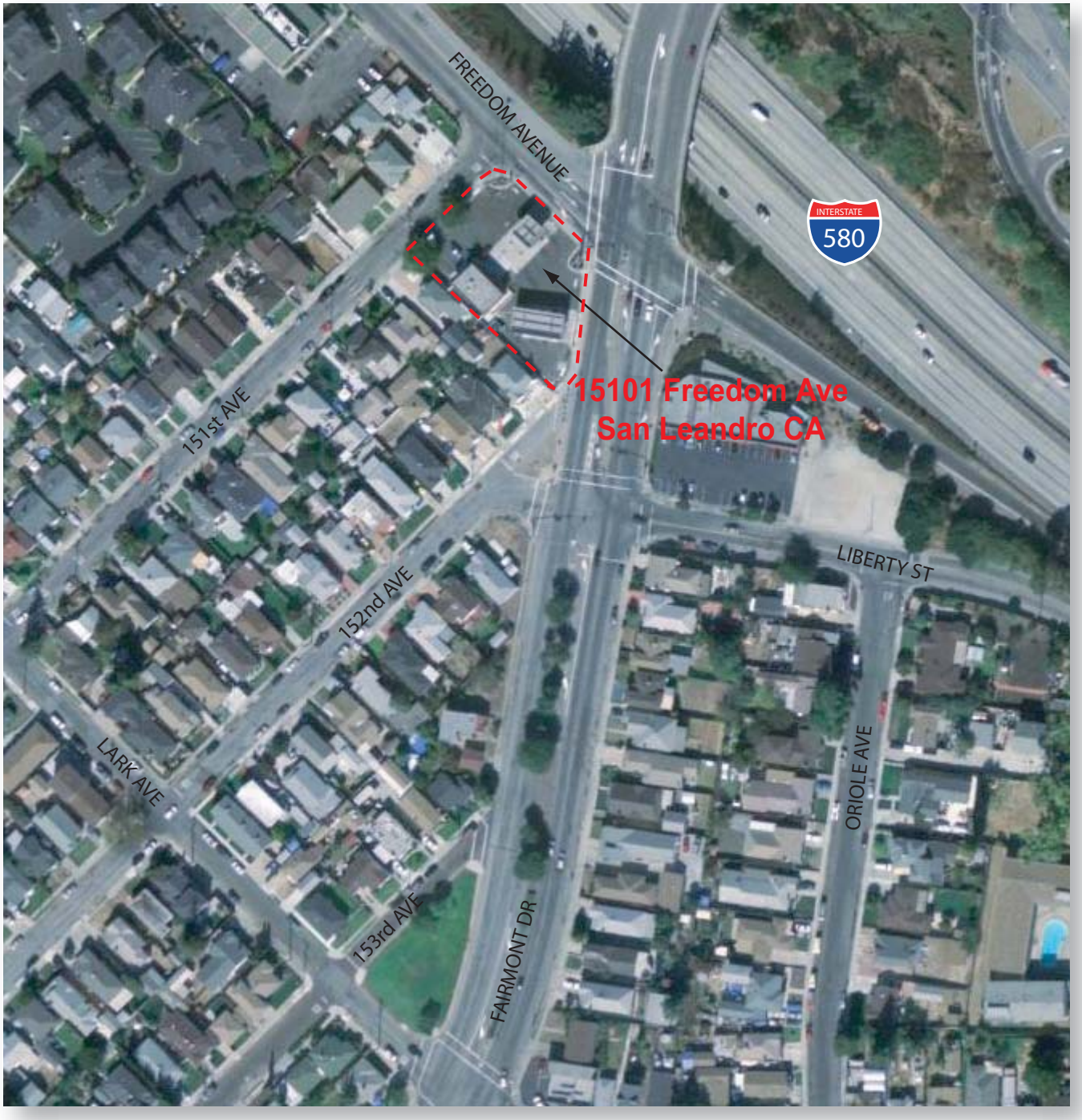
6. REPORT LIMITATIONS

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



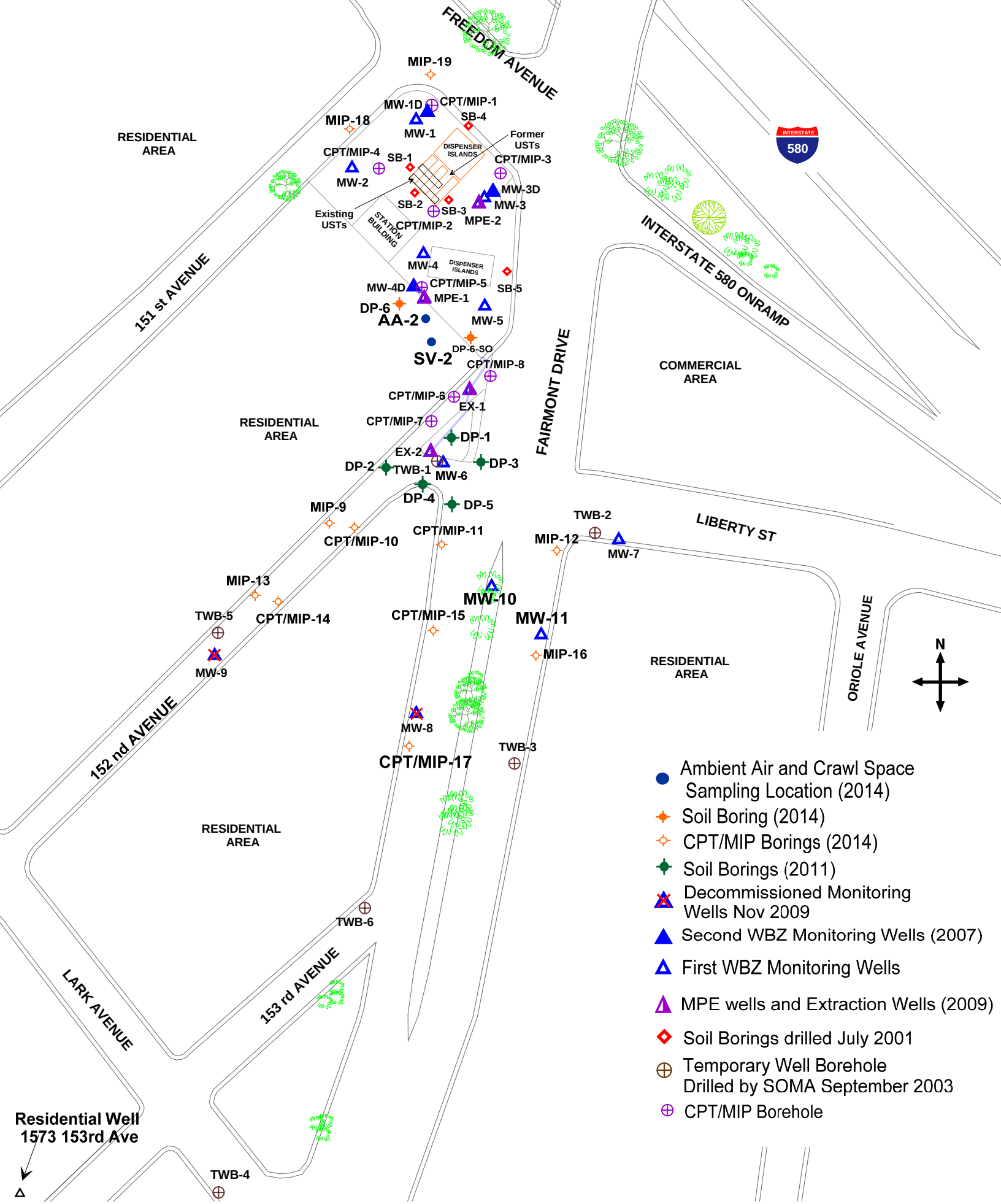
N

approximate scale in feet

0 150 300

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.



approximate scale in feet

0 50 100

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

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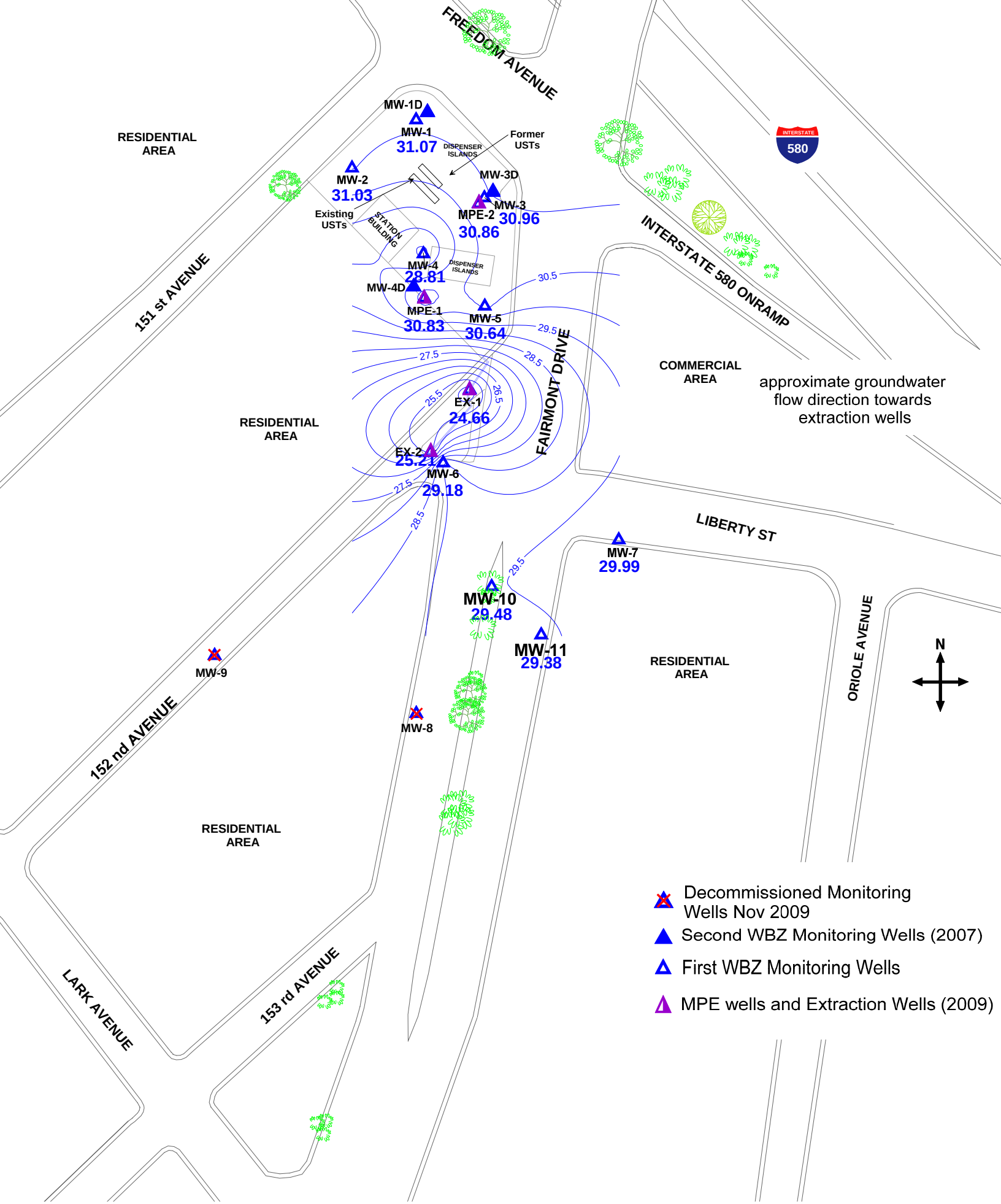

approximate scale in feet

0 50 100

Figure 3: Groundwater Elevation Contour Map in Feet, First WBZ, December 28, 2015

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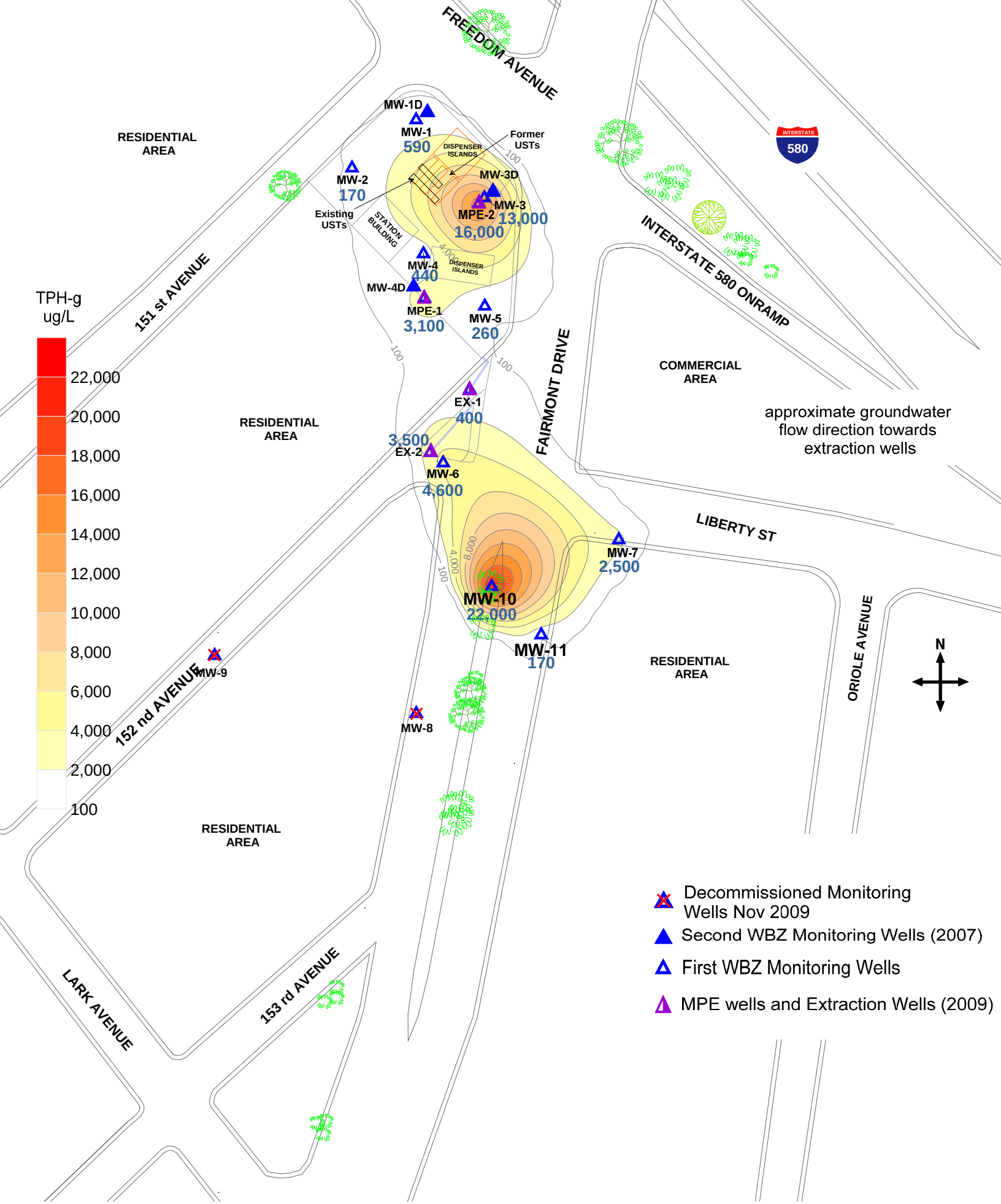

Figure 4: Contour Map of TPH-g Concentrations in Groundwater, First WBZ,December 28 and 29, 2015

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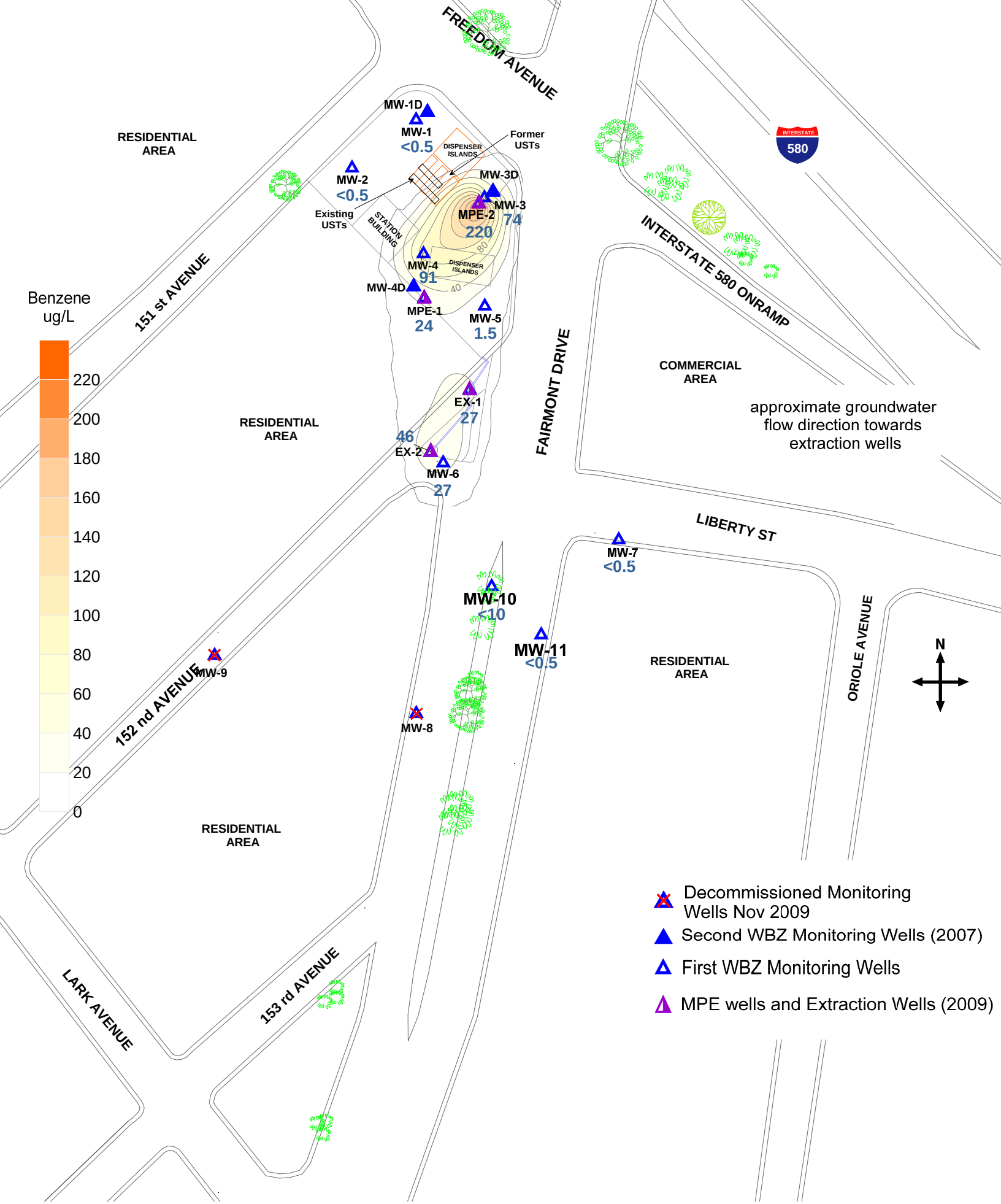

approximate scale in feet

0 50 100

Figure 5: Contour Map of benzene Concentrations in Groundwater, First WBZ, December 28 and 29, 2015

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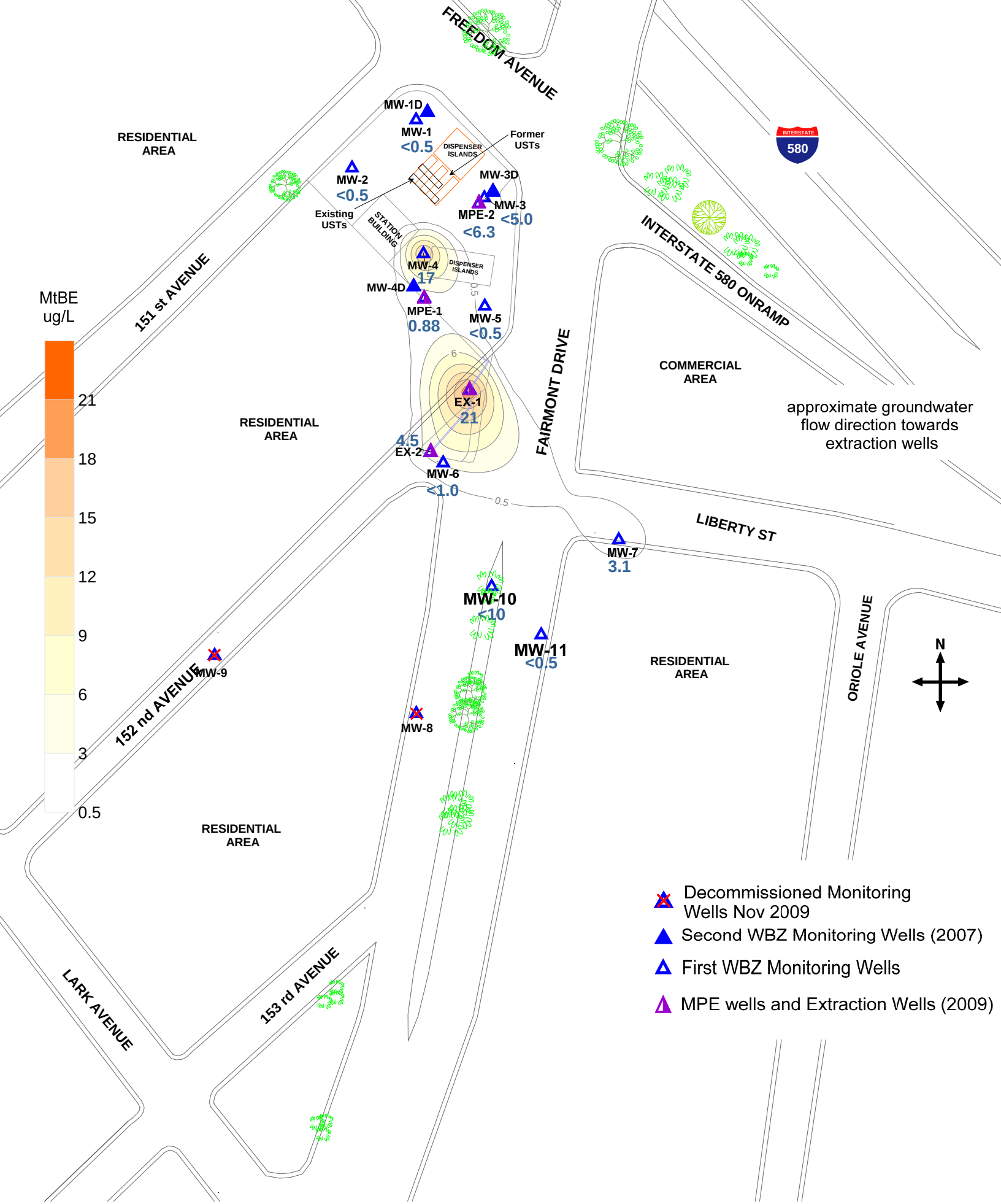

Figure 6: Contour Map of MtBE Concentrations in Groundwater, First WBZ, December 28 and 29, 2015

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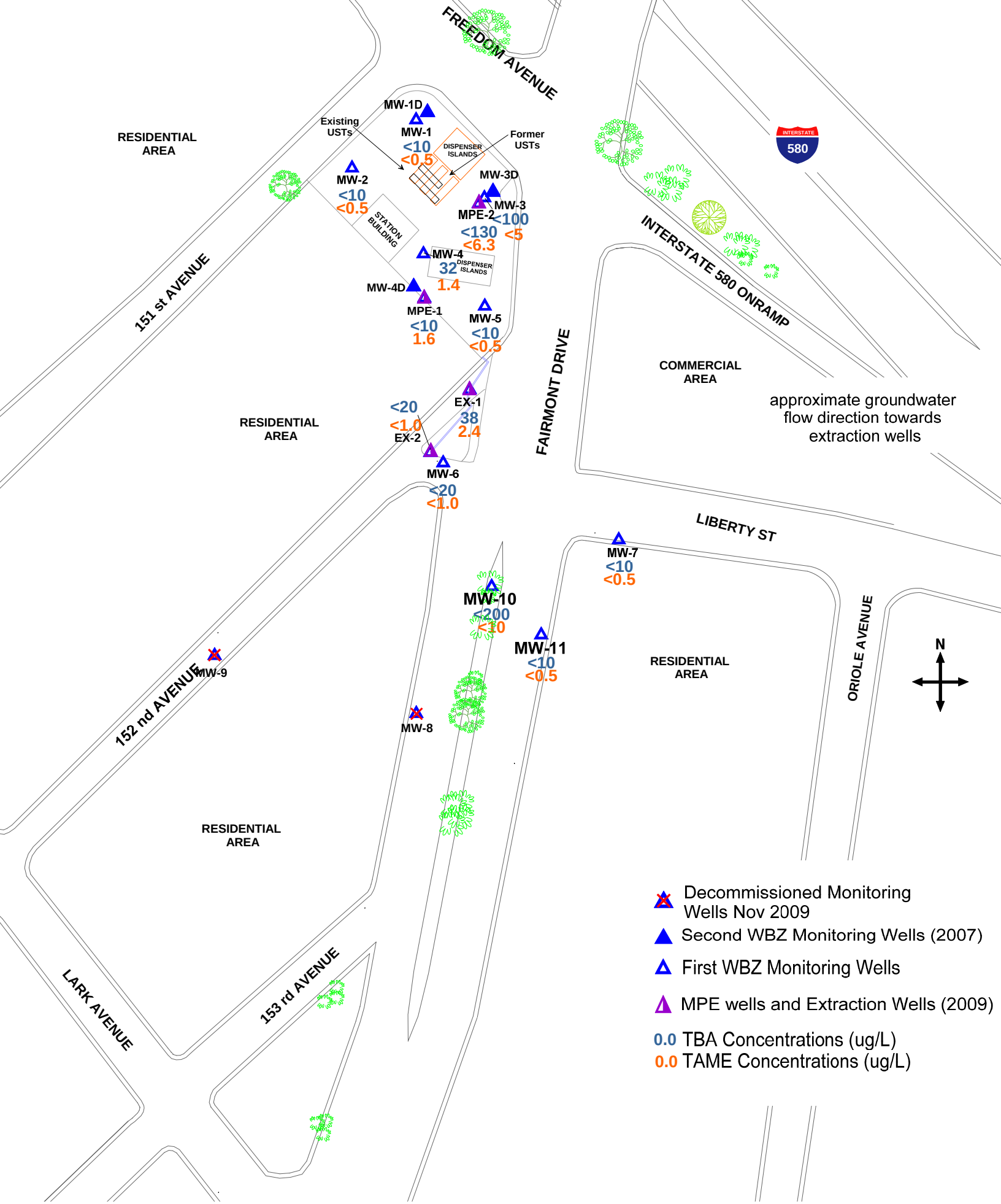

approximate scale in feet

0 50 100

Figure 7: Map of TBA and TAME Concentrations in Groundwater, First WBZ, December 28 and 29, 2015

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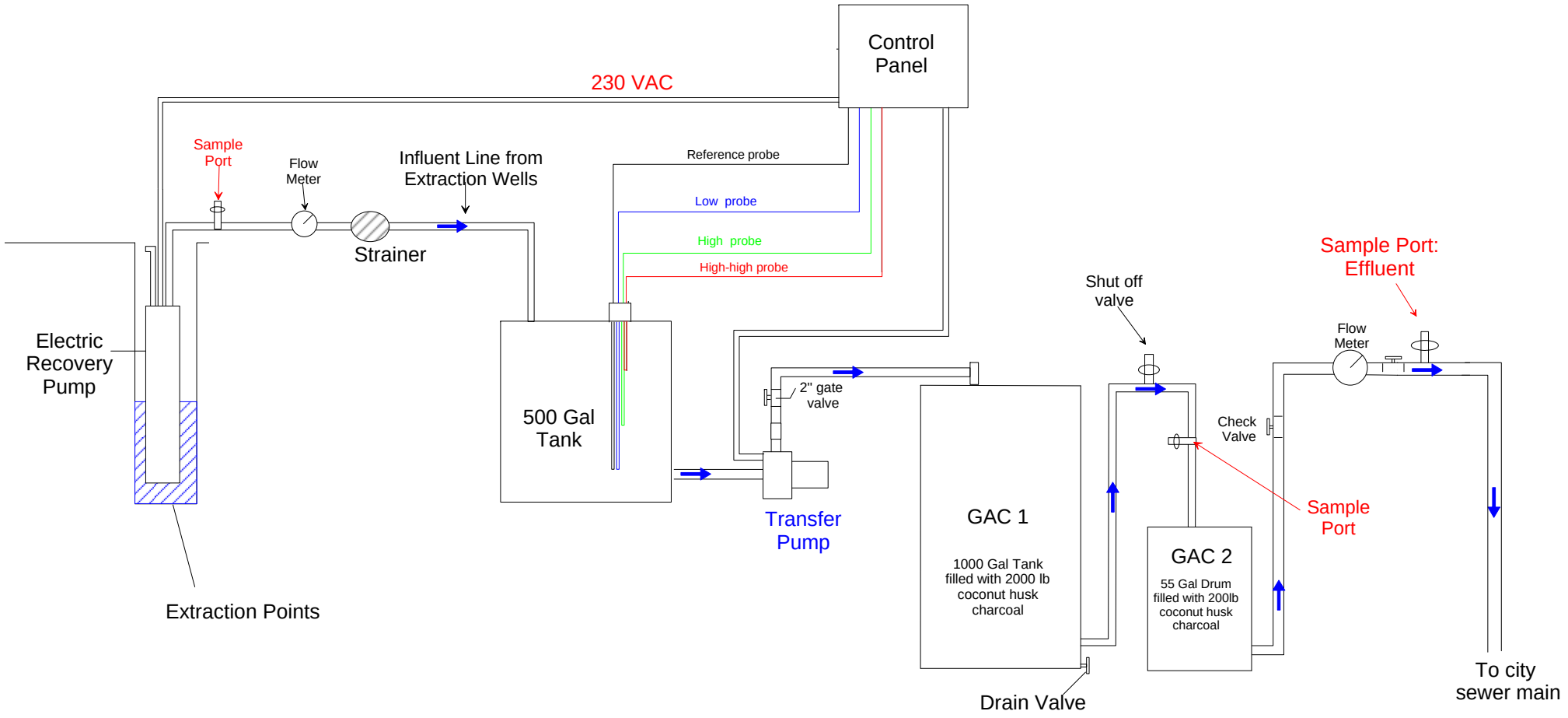

Figure 8: Schematic diagram of Groundwater Remediation System

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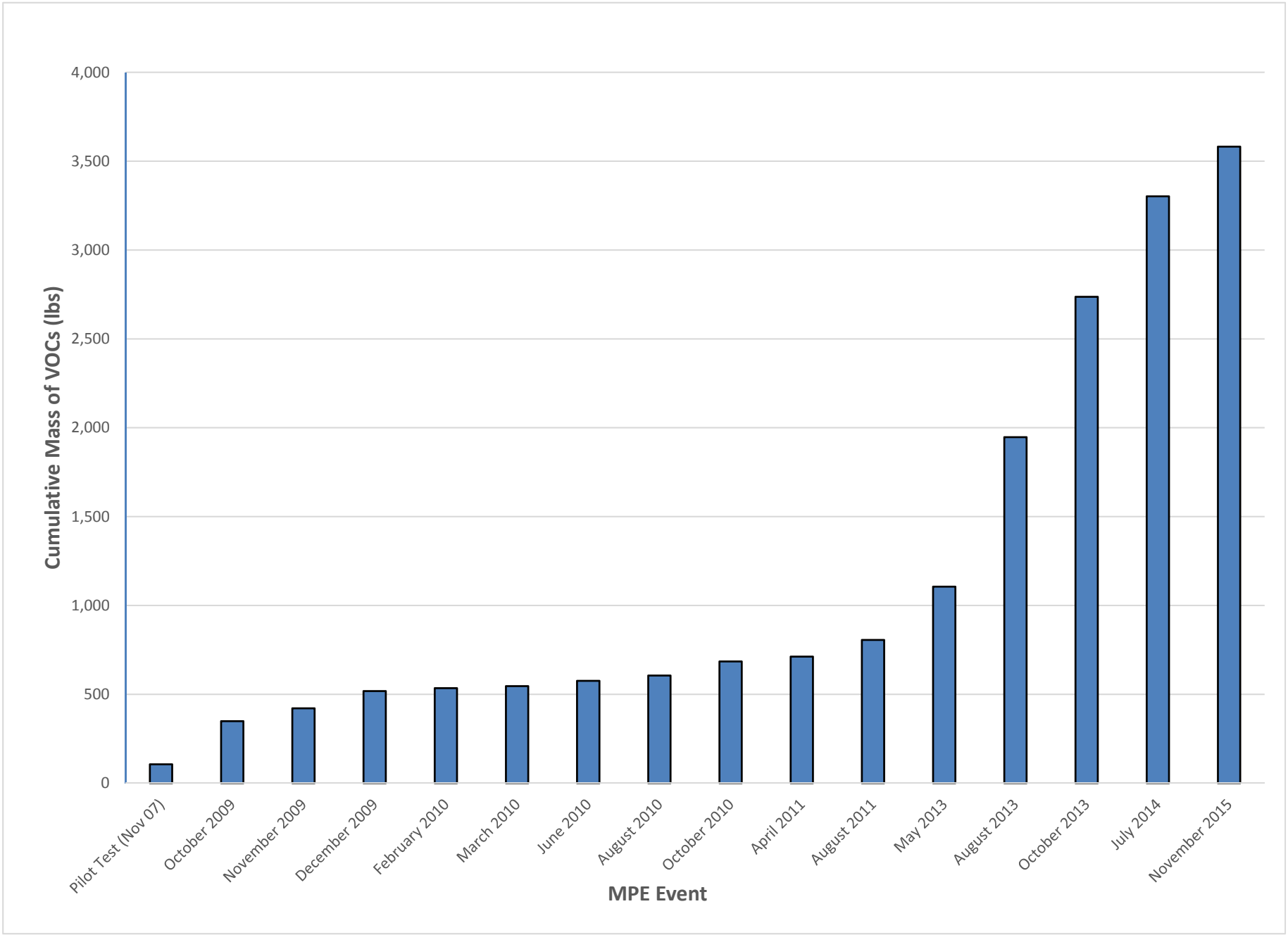

Figure 9: Cumulative Mass of VOCs Removed

Tables

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

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

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-1 cont.	1/22/2008	54.46	22.59	-	31.87	2,260	81.3	<2.0	17.5	<2.0	4.23
	4/16/2008	54.46	22.89	-	31.57	2,320	248	<2.0	54.1	37.3	<0.5
	7/3/2008	54.46	23.33	-	31.13	5,240	414	<2.0	168	94	6.56
	10/15/2008	54.46	23.76	-	30.70	4,500 [Y]	260	<1.0	150	130	3.40
	1/7/2009	54.46	23.25	-	31.21	4,800	140	<1.3	48	32	1.70
	4/14/2009	54.46	22.52	-	31.94	1,800 [Y]	78	<0.5	35	18	2.50
	8/27/2009	54.46	23.6	-	30.86	4,500	330	<2.0	97	42	4.60
	12/2/2009	54.46	23.43	-	31.03	3,800 [Y]	250	<2.0	110	25	2.50
	3/17/2010	54.46	22.32	-	32.14	1,100	33	<0.50	46	18	1.70
	6/3/2010	54.46	22.88	-	31.58	10,000	330	4.3	680	841.5	5.20
	9/2/2010	54.46	23.28	-	31.18	8,900	440	<5.0	510	310	<5.0
	12/2/2010	54.46	23.21	-	31.25	7,400	250	<3.1	390	180	<3.1
	3/4/2011	54.46	21.95	N	32.51	2,400	67	<0.5	45	8.4	2.20
	5/20/2011	54.46	22.8	N	31.66	9,500	260	6.2	970	480	<3.6
	9/9/2011	54.46	22.81	N	31.65	6,400	220	<1.3	380	160	2.30
	12/2/2011	54.46	21.97	N	32.49	4,700 [X]	96	<1.7	310	200	<3.3
	3/2/2012	54.46	22.82	N	31.64	6,800	320	<2.5	430	120	<2.5
	6/7/2012	54.46	22.92	N	31.54	5,600	130	<2.5	360	160	2.9
	9/21/2012	54.46	23.56	N	30.90	8,000	300	<2.5	410	340	2.6
	12/14/2012	54.46	22.77	N	31.69	5,900	130	<2.5	320	97	<2.5
	3/28/2013	54.46	23.15	N	31.31	5,100	230	<2.5	280	48	3.6
	6/11/2013	54.46	23.48	N	30.98	6,800	200	<2.5	300	120	<2.5
	9/17/2013	54.46	23.84	N	30.62	7,500	120	<2.5	410	260	<2.5
	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 [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-1 cont.	3/13/2014	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**
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 [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-2 cont.	1/25/2007	52.41	20.89	-	31.52	623	0.64	<2.0	42.4	4.37	0.66
	4/26/2007	52.41	20.65	-	31.76	169	<0.5	<2.0	15.2	2.3	<0.5
	7/25/2007	52.41	21.43	-	30.98	276	0.78	<2.0	22.1	4.04	<0.5
	10/23/2007	52.41	21.59	-	30.82	535	<0.5	<2.0	18	5.11	<0.5
	1/22/2008	52.31	20.45	-	31.86	132	<0.5	<2.0	12.2	<2.0	<0.5
	4/15/2008	52.41	20.89	-	31.52	852	<0.5	<2.0	27.2	4.78	<0.5
	7/2/2008	52.41	21.5	-	30.91	98.3	<0.5	<2.0	2.76	<2.0	<0.5
	10/15/2008	52.41	22.06	-	30.35	1,400 [Y]	<0.5	<0.5	60	17	<0.5
	1/7/2009	52.41	21.35	-	31.06	93	<0.5	<0.5	2.1	0.74	<0.5
	4/13/2009	52.41	20.52	-	31.89	480 [Y]	<0.5	<0.5	20	5.5	<0.5
	8/27/2009	52.41	21.85	-	30.56	130	<0.5	<0.5	2.5	0.61	<0.5
	12/1/2009	52.41	21.59	-	30.82	760 [Y]	<0.5	<0.5	14	1.5	<0.5
	3/17/2010	52.41	20.11	-	32.30	480	<0.5	<0.5	30	6.9	<0.5
	6/3/2010	52.41	21	-	31.41	690	<0.5	<0.5	14	2.6	<0.5
	9/2/2010	52.41	21.42	-	30.99	470	<0.5	<0.5	7.6	1	<0.5
	12/2/2010	52.41	21.44	-	30.97	470	<0.5	<0.5	7.6	3.3	<0.5
	3/4/2011	52.41	19.65	N	32.76	240	<0.5	<0.5	6.6	0.8	<0.5
	5/20/2011	52.41	20.75	N	31.66	310	<0.5	<0.5	4.8	<0.5	<0.5
	9/9/2011	52.41	21.05	N	31.36	1,000	<0.5	<0.5	12	0.76	<0.5
	12/2/2011	52.41	20.14	N	32.27	900 [X]	<2.9	<1.7	14	1.9	<3.3
	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

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-2 cont.	3/28/2013	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**
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

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-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 [x]	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 [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-3 cont.	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**
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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Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-4 cont.	3/11/2005	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 [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-4 cont.	3/3/2011	53.31	20.64	N	32.67	2,400	28	<0.71	28	17	3
	5/19/2011	53.31	21.84	N	31.47	1,800	27	<0.5	29	11.2	4.8
	9/8/2011	53.31	22.11	N	31.20	3,600	300	2.6	270	68.5	59
	12/1/2011	53.31	21.38	N	31.93	1,400 [x]	370	<0.84	110	30.6	110
	3/2/2012	53.31	22.02	N	31.29	3,100	780	<2.0	150	59.6	50
	6/7/2012	53.31	22.24	N	31.07	2,000	290	<2.5	66	23	29
	9/21/2012	53.31	22.87	N	30.44	2,900	820	<2.5	75	17	72
	12/14/2012	53.31	21.84	N	31.47	840	48	<0.5	14	4.5	2.5
	3/28/2013	53.31	22.24	N	31.07	790	650	<5.0	26	<5.0	15
	6/11/2013	53.31	22.71	N	30.60	1,100	860	<5.0	64	<5.0	35
	9/17/2013	53.31	23.23	N	30.08	<1,000	1,300	<10	22	<10	44
	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**
MW-5	5/10/2002	47.79	19.02	-	28.77	25,000	1,000	1200	1,100	3,060	1,800
	8/8/2002	47.79	19.80	-	27.99	18,000	1,000	660	950	1,720	1,500
	11/8/2002	47.79	20.14	-	27.65	16,000	1,300	380	930	1,550	1,200
	2/21/2003	47.79	18.70	-	29.09	12,000	390	71	770	1,100	860
	5/28/2003	47.79	18.52	-	29.27	9,100	210	31	560	790	600
	8/12/2003	47.79	19.54	-	28.25	12,000	660	75	660	1,110	1,000
	10/9/2003	47.79	20.06	-	27.73	15,000	1,000	130	1,000	1,430	1,700

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-5 cont.	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 [Y]	200	11	390	198	44
	8/27/2009	50.53	21.30	-	29.23	7,400	610	15	320	185	66
	12/2/2009	50.53	20.00	-	30.53	8,400 [Y]	400	12	540	296	45

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-5 cont.	3/17/2010	50.53	18.73	-	31.80	4,800	120	8.7	120	107	14
	6/4/2010	50.53	19.60	-	30.93	7,200	160	5.7	190	149.2	24
	9/2/2010	50.53	19.82	-	30.71	9,200	110	12	270	318	35
	12/2/2010	50.53	20.10	-	30.43	9,100	170	6.7	350	442	23
	3/4/2011	50.53	18.00	N	32.53	2,600	18	0.62	54	18.1	3
	5/20/2011	50.53	19.18	N	31.35	4,000	91	8.5	110	106	33
Pre-MPE	8/4/2011	50.53	NM	-	NC	3,000	23	0.95	92	43.7	5.4
	9/9/2011	50.53	19.41	N	31.12	4,200	120	2.8	140	61.1	22
	12/2/2011	50.53	18.59	N	31.94	6,900 [x]	96	12	220	104	32
	3/2/2012	50.53	19.30	N	31.23	5,400	43	1.8	110	85	7
	6/7/2012	50.53	19.45	N	31.08	3,700	32	<1.0	100	59	4.4
	9/21/2012	50.53	20.17	N	30.36	3,900	68	1.5	140	88.5	9.8
	12/14/2012	50.53	19.12	N	31.41	3,100	48	6.7	100	62.3	5.2
	3/28/2013	50.53	19.47	N	31.06	1,900	30	<1.0	59	48.4	4.5
	6/11/2013	50.53	20.03	N	30.50	2,900	22	3.9	110	131	3.0
	9/17/2013	50.53	20.54	N	29.99	4,200	55	7.9	180	229	5.2
	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**
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

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-6 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 [Y]	42	1.4	320	673	1.7
	1/7/2009	45.82	17.08	-	28.74	13,000	47	<3.1	210	425	<3.1
	4/13/2009	45.82	15.52	-	30.30	7,200 [Y]	26	<1.3	170	312.6	2.6
	8/26/2009	45.82	17.82	-	28.00	10,000 [Y]	25	<2.0	130	294	2.2
	12/1/2009	45.82	17.34	-	28.48	11,000 [Y]	31	6.1	220	539	<2.0
	3/16/2010	45.82	14.81	-	31.01	31,000	63	140	970	4,200	64
	6/3/2010	45.82	15.72	-	30.10	27,000	22	67	840	3,100	32
	9/1/2010	45.82	16.86	-	28.96	33,000	24	34	1,100	3,780	12
	12/2/2010	45.82	16.98	-	28.84	70,000	32	55	1,700	5,670	18

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-6 cont.	3/3/2011	45.82	14.35	Y	31.47	7,000	18	<2.5	97	237	11
	5/20/2011	45.82	14.95	Y	30.87	14,000	14	<2.5	300	823	7.2
	9/8/2011	45.82	16.14	Y	29.68	23,000	28	<2.5	360	812	3.4
	12/1/2011	45.82	16.17	16.15	29.66	FP	FP	FP	FP	FP	FP
	3/2/2012	45.82	16.11	Y	29.71	14,000	23	<4.2	400	694.4	<4.2
	6/6/2012	45.82	16.31	Y	29.51	9,200	12	<1.7	210	320	<1.7
	9/20/2012*	45.82	17.36	17.32	28.49	FP	FP	FP	FP	FP	FP
	12/13/2012	45.82	15.46	Y	30.36	13,000	22	<0.71	83	62.8	5.1
	3/27/2013	45.82	16.3	Y	29.52	7,400	27	<1.3	190	221.8	<1.3
	6/10/2013	45.82	17.37	Y	28.45	12,000	20	<2.5	280	230	<2.5
	9/16/2013	45.82	18.11	18.06	27.74	FP	FP	FP	FP	FP	FP
	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**
MW-7	9/21/2004	44.74	15.21	-	29.53	2,900	<0.5	<0.5	52	61	8.1
	12/14/2004	44.74	13.90	-	30.84	<50	1.6	<0.5	29	58	6.0
	3/11/2005	44.74	11.46	-	33.28	2,230	<2.5	<2.5	39.4	51.4	12.4
	6/15/2005	44.74	12.97	-	31.77	2,940	0.85	<2.0	50.6	31.9	13.7
	8/26/2005	44.74	14.10	-	30.64	2,310	<0.50	<2.0	55.7	29.6	4.01
	11/11/2005	44.74	14.59	-	30.15	3,030	<0.5	<2.0	66.5	42.3	9.76

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Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-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 [Y]	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 [Y]	<0.5	<0.5	15	6.3	63
	8/26/2009	44.74	15.84	-	28.90	2,700 [Y]	<0.5	<0.5	48	53	140
	12/1/2009	44.74	15.03	-	29.71	1,800 [Y]	<0.5	<0.5	22	15	120
	3/16/2010	44.74	12.56	-	32.18	1,100	<0.5	<0.5	3.2	1.4	65
	6/3/2010	44.74	13.80	-	30.94	740	<0.5	<0.5	1.8	0.62	28
	9/1/2010	44.74	14.84	-	29.90	1,200	<0.5	<0.5	10	3.2	29
	12/2/2010	44.74	14.74	-	30.00	1,400	<0.5	<0.5	8	0.74	21
	3/3/2011	44.74	13.31	N	31.43	1,000	<0.5	<0.5	1.8	<0.5	16
	5/19/2011	44.74	13.43	N	31.31	810	<0.5	<0.5	2.2	0.79	7.8
	9/8/2011	44.74	14.38	N	30.36	1,000	<0.5	<0.5	8.3	2.9	5.4
	12/1/2011	44.74	13.57	N	31.17	1,500 [X]	<0.33	<0.19	12	5.7	13
	3/2/2012	44.74	14.16	N	30.58	1,000	<0.5	<0.5	4	1.1	5.1
	6/6/2012	44.74	14.00	N	30.74	780	<0.5	<0.5	2.9	1.0	2.6
	9/20/2012	44.74	15.26	N	29.48	1,200	<0.5	<0.5	4.3	0.92	2.7
	12/13/2012	44.74	13.34	N	31.40	1,100	<0.5	<0.5	0.99	<0.5	3.4

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-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**
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

Table 1

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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-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

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-9 cont.	1/7/2009	40.26	11.75	-	28.51	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	40.26	10.89	-	29.37	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	40.26	12.50	-	27.76	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Well Decommissioned 11/13/2009										
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	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
	12/28/2015	**42.45**	**13.07**	**N**	**29.38**	**170**	**<0.5**	**<0.5**	**3.0**	**4.2**	**<0.5**
Extraction Wells											
EX-1	12/2/2009	47.36	17.02	-	30.34	2,900	120	4	64	410	25
	3/16/2010	47.36	19.08	-	28.28	2,200	150	18	94	326	210
	6/3/2010	47.36	17.02	-	30.34	3,600	180	6.3	150	428	83
	9/1/2010	47.36	16.88	-	30.48	550	6.5	0.5	6.9	31.7	38
	12/2/2010	47.36	19.84	-	27.52	<200	3.1	<2.0	<2.0	<2.0	210
	3/3/2011	47.36	14.96	N	32.4	530	51	0.94	15	31.3	110
	5/19/2011	47.36	16.12	N	31.24	370	42	<0.71	7.6	17.2	110
	9/8/2011	47.36	16.47	N	30.89	110	5	<0.5	2.2	6.4	12
	12/1/2011	47.36	16.1	N	31.26	780 [x]	91	3	29	85	150

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EX-1 cont.	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
	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**
EX-2	12/2/2009	45.96	17.56	-	28.4	7,100 [Y]	9.3	3.2	440	770	<3.1
	3/16/2010	45.96	19.65	-	26.31	13,000	600	360	770	2,250	15
	6/3/2010	45.96	17.10	-	28.86	16,000	590	400	700	2,500	9.5
	9/1/2010	45.96	16.99	-	28.97	6,100	230	74	200	890	11
	12/2/2010	45.96	20.87	-	25.09	14,000	510	270	640	2,170	15
	3/3/2011	45.96	14.61	N	31.35	8,600	340	52	460	1,350	13
	5/19/2011	45.96	15.08	N	30.88	7,500	260	65	390	1,080	11
	9/8/2011	45.96	16.34	N	29.62	3,400	190	28	160	451	5.4
	12/1/2011	45.96	22.60	N	23.36	9,900 [X]	630	200	690	1,760	<3.3
	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

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EX-2 cont.	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
	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**
MPE Wells											
MPE-1	12/1/2009	51.96	21.41	-	30.55	NA	NA	NA	NA	NA	NA
	3/16/2010	51.96	20.22	-	31.74	NA	NA	NA	NA	NA	NA
	6/3/2010	51.96	21.18	-	30.78	NA	NA	NA	NA	NA	NA
	9/1/2010	51.96	21.25	-	30.71	NA	NA	NA	NA	NA	NA
	12/2/2010	51.96	21.64	-	30.32	NA	NA	NA	NA	NA	NA
	3/3/2011	51.96	19.33	-	32.63	NA	NA	NA	NA	NA	NA
	5/19/2011	51.96	20.6	-	31.36	NA	NA	NA	NA	NA	NA
Pre-MPE	8/4/2011	51.96	NM	-	NC	49,000	210	100	840	7,070	45
	9/8/2011	51.96	20.83	-	31.13	NA	NA	NA	NA	NA	NA
Post-MPE	9/26/2011	51.96	20.94	Y	31.02	62,000	6,300	3,700	1,800	9,400	1,200
	12/2/2011	51.96	20.14	Y	31.82	56,000	9,000	7,700	2,200	10,800	2,600
	3/2/2012	51.96	20.73	Y	31.23	97,000	11,000	11,000	2,600	12,600	2,700
	6/6/2012	51.96	20.96	Y	31.00	78,000	4,500	4,900	2,300	10,700	750
	9/20/2012	51.96	21.58	Y	30.38	89,000	8,600	9,200	3,400	14,800	1,900
	12/14/2012	51.96	20.57	Y	31.39	98,000	7,400	9,600	2,900	13,300	1,300

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MPE-1 cont.	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**
MPE-2	12/1/2009	53.72	22.87	-	30.85	NA	NA	NA	NA	NA	NA
	3/16/2010	53.72	21.7	-	32.02	NA	NA	NA	NA	NA	NA
	6/3/2010	53.72	22.35	-	31.37	NA	NA	NA	NA	NA	NA
	9/1/2010	53.72	23.7	-	30.02	NA	NA	NA	NA	NA	NA
	12/2/2010	53.72	22.7	-	31.02	NA	NA	NA	NA	NA	NA
	3/3/2011	53.72	21.25	-	32.47	NA	NA	NA	NA	NA	NA
	5/19/2011	53.72	22.19	-	31.53	NA	NA	NA	NA	NA	NA
Pre-MPE	8/4/2011	53.72	NM	-	NC	46,000	2,100	80	1,900	5,300	75
	9/8/2011	53.72	22.31	-	31.41	NA	NA	NA	NA	NA	NA
Post-MPE	9/26/2011	53.72	22.38	N	31.34	37,000	1,800	33	1,700	2,760	<17
	12/2/2011	53.72	21.44	N	32.28	26,000	1,600	43	1,800	3,370	<17
	3/2/2012	53.72	22.24	N	31.48	36,000	1,100	19	1,700	2,970	<17
	6/7/2012	53.72	22.35	N	31.37	33,000	1,800	27	1,600	2,700	29
	9/21/2012	53.72	23.03	N	30.69	31,000	1,700	13	1,900	2,747	14
	12/14/2012	53.72	22.17	N	31.55	31,000	1,700	20	1,800	2,490	16

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MPE-2 cont.	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**
2nd WBZ											
MW-1D	1/3/2008	54.42		-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	54.42	22.85	-	31.57	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	4/16/2008	54.42	23.10	-	31.32	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/3/2008	54.42	23.44	-	30.98	75.9	<0.5	<2.0	0.54	<2.0	<0.5
	10/15/2008	54.42	23.82	-	30.60	120	1.6	<0.5	2.8	3.6	<0.5
	1/8/2009	54.42	23.44	-	30.98	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	54.42	23.06	-	31.36	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	54.42	23.73	-	30.69	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	54.42	23.59	-	30.83	330 [Y]	<0.5	<0.5	1.3	2.2	<0.5
	3/16/2010	54.42	22.60	-	31.82	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	54.42	23.10	-	31.32	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	54.42	23.51	-	30.91	<50	<0.5	<0.5	0.52	1.8	<0.5
	12/3/2010	54.42	23.41	-	31.01	61	<0.5	<0.5	1.0	3.73	<0.5
	3/3/2011	54.42	22.27	N	32.15	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	54.42	22.89	N	31.53	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	54.42	23.08	N	31.34	220	<0.5	<0.5	0.6	1.4	<0.5
	12/1/2011	54.42	22.26	N	32.16	<22	<0.33	<0.19	<0.15	<0.20	<0.38

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-1D cont.	3/2/2012	54.42	23.01	N	31.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	54.42	23.18	N	31.24	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	54.42	23.76	N	30.66	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	54.42	23.04	N	31.38	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	54.42	23.34	N	31.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	54.42	23.69	N	30.73	110	<0.5	<0.5	0.55	<0.5	<0.5
	9/16/2013	54.42	24.02	N	30.40	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	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
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

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-3D cont.	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
	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 [Y]	<0.5	<0.5	1.4	2.3	2.3

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-4D cont.	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
	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
1573 153 RD	1/3/2008	NS	NM	-	NC	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/2/2008	NS	NM	-	NC	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/16/2008	NS	NM	-	NC	<50	<0.5	<0.5	<0.5	<0.5	<0.5

Table 1

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

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

Notes:

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

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

NC: Not Calculated

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

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

<: Not detected above the laboratory reporting limit.

Y: Sample exhibits chromatographic pattern which does not resemble standard

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

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

H: Heavier hydrocarbons contributed to the quantitation.

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

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

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

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

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

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

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

ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008); Table F-1a,Groundwater Screening Levels (groundwater is a current or potential drinking water resource)

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

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

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^{o}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**
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

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-2 cont.	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**
MW-3	8/8/2002	<330	<8.3	<8.3	330	NA	NA
	11/1/2002	85	< 1.3	<1.3	220	NA	NA
	2/21/2003	140	<5.0	<5.0	320	NA	NA
	5/28/2003	520	<10	<10	530	NA	NA
	8/12/2003	180	<4.2	<4.2	270	NA	NA
	10/9/2003	<170	<8.3	<8.3	200	NA	NA
	1/15/2004	<100	<5.0	<5.0	150	NA	NA
	5/25/2004	<100	<5.0	<5.0	270	NA	NA
	9/21/2004	<140	<7.1	<7.1	110	NA	NA
	12/14/2004	<100	<20	<20	154	NA	NA
	3/11/2005	<215	<43	<43	256	NA	NA
	6/15/2005	<215	<10.8	<10.8	374	NA	NA
	8/26/2005	699	<21.5	<21.5	277	NA	NA
	11/11/2005	<430	<21.5	<21.5	171	NA	NA

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

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-3 cont.	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**
MW-4	8/8/2002	1500	<17	<17	18	NA	NA
	11/1/2002	580	< 5.0	6	13	NA	NA
	2/21/2003	1600	<20	22	<20	NA	NA
	5/28/2003	690	<8.3	<8.3	17	NA	NA
	8/12/2003	550	<7.1	7.3	18	NA	NA
	10/9/2003	1400	<31	50	<31	NA	NA
	1/15/2004	1,300	<20	25	21	NA	NA
	5/25/2004	560	<8.3	<8.3	24	NA	NA
	9/21/2004	1,300	<50	<50	<50	NA	NA
	12/14/2004	826	<10.75	21	49	NA	NA
	3/11/2005	1,110	<10.8	12.1	<43	NA	NA
	6/15/2005	<110	<5.5	<5.5	22.9	NA	NA
	8/26/2005	902	<5.50	<5.50	37.4	NA	NA
	11/11/2005	884	<10.8	<10.8	<43	NA	NA
	2/9/2006	769	<10.8	16.4	45.6	NA	NA
	5/9/2006	405	<2.15	2.95	31.3	<2.15	<2.15
	8/10/2006	306	<2.15	<2.15	35.3	<2.15	<2.15
	10/26/2006	3430	<10.8	13.8	<43	<10.8	<10.8
	1/25/2007	822	<2.15	2.4	28	2.25	<2.15
	4/26/2007	556	<2.15	2.28	29.2	<2.15	<2.15
	7/25/2007	1,860	<2.15	9.94	24	<2.15	<2.15
	10/23/2007	3,400	<2.15	18.4	25.9	<2.15	<2.15

Table 2
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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-4 cont.	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**
MW-5	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

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

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-5 cont.	3/17/2010	570	<1.0	<1.0	<1.0	<1.0	<1.0
	6/4/2010	340	<1.0	<1.0	<1.0	<1.0	<1.0
	9/2/2010	320	<2.5	<2.5	13	<2.5	<2.5
	12/2/2010	200	<3.1	<3.1	<3.1	<3.1	<3.1
	3/4/2011	180	<0.5	<0.5	<0.5	<0.5	<0.5
	5/20/2011	480	<1.0	<1.0	<1.0	<1.0	<1.0
Pre- MPE	8/4/2011	110	<0.71	<0.71	2.6	<0.71	<0.71
	9/9/2011	260	<1.0	<1.0	11	<1.0	<1.0
	12/2/2011	95	<3.2	<3.5	14	<2.4	<1.7
	3/2/2012	59	<1.0	<1.0	4.1	<1.0	<1.0
	6/7/2012	22	<1.0	<1.0	2.8	<1.0	<1.0
	9/21/2012	66	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2012	<20	<1.0	<1.0	4.2	<1.0	<1.0
	3/28/2013	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	6/11/2013	<20	<1.0	<1.0	2.5	<1.0	<1.0
	9/17/2013	20	<1.0	<1.0	5.7	<1.0	<1.0
	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
	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**
MW-6	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<5.5	<5.5	<5.5	<22	NA	NA
	3/11/2005	2.54	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<20	<1.0	<1.0	<4.0	NA	NA
	8/26/2005	<43	<2.15	<2.15	<8.6	NA	NA
	11/11/2005	<43	<2.15	<2.15	<8.6	NA	NA
	2/9/2006	<43	<2.15	<2.15	<8.6	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	7.21	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	5.66	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	6.68	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	13.9	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	6.78	1.49
	7/2/2008	4.54	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<63	<3.1	<3.1	<3.1	<3.1	<3.1
	4/13/2009	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	8/26/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	12/1/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	3/16/2010	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	6/3/2010	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	9/1/2010	<200	<10	<10	<10	<10	<10
	12/2/2010	<330	<17	<17	<17	<17	<17
	3/3/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	5/20/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	9/8/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	12/1/2011	NA	NA	NA	NA	NA	NA
	3/2/2012	<83	<4.2	<4.2	<4.2	<4.2	<4.2
	6/6/2012	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	9/20/2012	NA	NA	NA	NA	NA	NA
	12/13/2012	29	<0.71	<0.71	<0.71	<0.71	<0.71
	3/27/2013	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	6/10/2013	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	9/16/2013	FP	FP	FP	FP	FP	FP
	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

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-6 cont.	3/12/2014	<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**
MW-7	9/21/2004	<10	<0.5	<0.5	1.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	<12.5	<2.5	<2.5	<10	NA	NA
	6/15/2005	<10	<0.5	<0.5	2.23	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	NA	NA	NA	NA	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	6.49	<0.5	<0.5	2.58	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	6.01	<0.5	<0.5
	4/15/2008	8.8	<0.5	<0.5	<2.0	<0.5	1.26
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	14	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	11	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	16	<0.5	<0.5
	8/26/2009	<33	<0.5	<0.5	33	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	30	<0.5	<0.5
	3/16/2010	11	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	20	<0.5	<0.5	7.1	<0.5	<0.5
	9/1/2010	47	<0.5	<0.5	7.2	<0.5	<0.5
	12/2/2010	22	<0.5	<0.5	4.9	<0.5	<0.5
	3/4/2011	14	<0.5	<0.5	4.0	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	2.1	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	1.6	<0.5	<0.5
	12/1/2011	15	<0.36	<0.40	2.4	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	0.82	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/16/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	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**
MW-8	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	NA	NA	NA	NA	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5

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

Table 2
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EX-1 cont.	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**
EX-2	12/2/2009	<63	<3.1	<3.1	<3.1	<3.1	<3.1
	3/16/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	6/3/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	9/1/2010	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	12/2/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	3/3/2011	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	5/19/2011	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	9/8/2011	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	12/1/2011	74	<3.2	<3.5	<2.8	<2.4	<1.7
	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**
MPE Wells							
MPE-1	8/4/2011	<500	<25	<25	<25	<25	<25
	9/26/2011	<500	<25	<25	600	<25	<25
	12/2/2011	830	<32	<35	750	<24	<17
	3/2/2012	<710	<36	<36	1,200	<36	<36
	6/6/2012	<630	<31	<31	430	<31	<31
	9/20/2012	<1,300	<63	<63	1,200	<63	<63
	12/14/2012	<1,300	<63	<63	940	<63	<63
	3/27/2013	<710	<36	<36	890	<36	<36
	6/10/2013	660	<13	<13	380	<13	<13
	9/17/2013	1,400	<13	<13	<13	<13	<13
	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**
MPE-2	8/4/2011	<330	<17	<17	<17	<17	<17
	9/26/2011	<330	<17	<17	<17	<17	<17
	12/2/2011	<66	<16	<17	<14	<12	<8.6
	3/2/2012	<330	<17	<17	<17	<17	<17
	6/7/2012	<250	<13	<13	<13	<13	<13
	9/21/2012	<250	<13	<13	<13	<13	<13
	12/14/2012	<250	<13	<13	<13	<13	<13

Table 2
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MPE-2 cont.	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**
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

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-3D cont.	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
MW-4D	1/4/2008	25	<0.5	<0.5	<2.0	NA	NA
	1/22/2008	124	<0.5	4.9	3.32	<0.5	<0.5
	4/15/2008	25.7	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	3.38	<0.5	<0.5	<2.0	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/16/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2011	<1.5	<0.36	<0.40	<0.32	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/16/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	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
1573 153 RD	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
EB-PMP	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PMP2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
ESL		**12**	**NE**	**NE**	**NE**	**0.5**	**0.05**

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)

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

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

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

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

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

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

Date	Volume (gallons)	TPH-g (µg/L)	TPH-d (µg/L)	TPH-mo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	COD (mg/L)	TSS (mg/L)	pH
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
2014											
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
2015											
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)	Ethylbenzene (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**

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	Influent Concentration (µg/L)					Mass removed (pounds)				
	(gallons)	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	Benzene	Toluene	Ethyl-benzene	Total Xylenes
2009											
9-Dec-2009	0	Installation of GWETS, began discharging treated groundwater to site sewer main									
2010											
18-Jan-2010	215,453	1,900	79	32.00	2.4	260	3.41	0.14	0.06	0.00	0.47
19-Apr-2010	621,180	2,100	75	28	56	332	10.50	0.40	0.15	0.19	1.59
19-Jul-2010	910,652	56 Y	<0.5	<0.5	<0.5	<0.5	10.64	0.40	0.15	0.19	1.59
26-Oct-2010	1,013,700	2,600	200	25	68	405	12.87	0.57	0.17	0.25	1.94
2011											
11-Jan-2011	1,179,075	1,700	80	19	50	295	15.21	0.68	0.20	0.32	2.34
11-Apr-2011	1,364,272	1,200	41	3.3	23	185	17.06	0.75	0.20	0.36	2.63
28-Jul-2011	1,573,295	540	21	2.8	5.4	49	18.00	0.78	0.21	0.37	2.71
27-Oct-2011	1,642,277	<50	1.50	<0.5	<0.5	2.9	18.00	0.78	0.21	0.37	2.71
2012											
19-Jan-2012	1,715,163	110 Y	<0.5	<0.5	<0.5	<0.5	18.07	0.78	0.21	0.37	2.71
17-Apr-2012	1,876,439	1,100	60	6.8	24	161	19.54	0.87	0.22	0.40	2.93
12-Jul-2012	1,943,456	320	30	1.6	15	34	19.72	0.88	0.22	0.41	2.95
23-Oct-2012	1,989,022	1,400 Y	130	12	42	153	20.25	0.93	0.22	0.42	3.01
2013											
7-Jan-2013	2,099,002	1,500	66	9.8	37	228	21.63	0.99	0.23	0.46	3.22
12-Apr-2013	2,198,793	1,600	110	3.8	64	131	22.96	1.08	0.24	0.51	3.32
5-Jul-2013	2,282,444	680	71	1.8	22	33.9	23.43	1.13	0.24	0.52	3.35
28-Oct-2013	2,551,538	4,900	88	49	150	583	34.41	1.33	0.35	0.86	4.65
2014											
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
2015											
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**

Notes:

< : Below laboratory-reporting limit

Y : sample exhibits chromatographic pattern which does not resmeble standard

Table 5

MPE Operational Data November 2015

15101 Freedom Ave,

San Leandro, California

DATE	TIME	PID (ppmv)	OXIDIZER TEMPERATURE (^{0}F)	TOTAL VACUUM (In of Hg)	STINGER VACUUM (In of Hg)	VAPOR FLOW RATE (scfm)	VAPOR DILUTION (scfm)	WELL FLOW (scfm)	GROUND WATER TOTALIZER (gallons)	COMMENTS
11/19/2015	1245								0	
	1300	741	1,402	25.0	21.1	70	10	60		begin extraction from MPE-1 & MPE-2
	1400	754	1,400	25.0	21.1	70	10	60	146	Effluent = 2
	1500	776	1,401	25.0	21.2	70	10	60		
	1600	757	1,400	25.0	21.2	70	10	60	204	
	1645	810	1,401	25.0	21.0	70	10	60		
11/20/2015	815	831	1,403	24.9	19.9	71	10	61	920	
	900	844	1,401	24.9	19.9	71	10	61		
	1000	875	1,403	25.0	21.0	70	10	60		
	1100	917	1,402	25.0	21.0	70	10	60		
	1200	892	1,402	25.0	21.0	70	10	60		
	1300	871	1,403	25.0	21.0	70	10	60		
	1400	907	1,401	24.8	20.9	73	0	73		extraction from MPE-1, MPE-2, & MW-3
	1500	884	1,400	24.9	20.9	71	0	71		
	1600	877	1,401	24.9	20.9	71	0	71	1,205	
11/23/2015	1000	960	1,400	24.6	19.8	76	0	76		
	1100	864	1,400	24.6	19.8	76	0	76		
	1200	771	1,403	24.6	19.7	76	0	76		
	1300	787	1,401	24.7	19.8	74	0	74		
	1400	800	1,400	24.9	20.8	71	0	71		
	1500	805	1,402	25.0	20.9	70	0	70		
	1600	797	1,400	25.0	20.9	70	0	70		
	1700	795	1,401	25.0	21.0	70	0	70	1,604	
11/24/2015	900	761	1,400	25.0	20.9	70	0	70	2,393	
	1000	755	1,400	25.0	20.9	70	0	70		
	1100	757	1,401	25.0	20.9	70	0	70		
	1200	758	1,400	25.0	20.9	70	0	70		
	1300	758	1,400	25.0	20.9	70	0	70		
	1400	755	1,401	25.0	20.9	70	0	70		
	1500	750	1,400	25.0	20.9	70	0	70		
	1600	746	1,400	25.0	20.9	70	0	70		
	1700	741	1,400	25.0	20.9	70	0	70		

Table 5

MPE Operational Data November 2015

15101 Freedom Ave,

San Leandro, California

DATE	TIME	PID (ppmv)	OXIDIZER TEMPERATURE (^{0}F)	TOTAL VACUUM (In of Hg)	STINGER VACUUM (In of Hg)	VAPOR FLOW RATE (scfm)	VAPOR DILUTION (scfm)	WELL FLOW (scfm)	GROUND WATER TOTALIZER (gallons)	COMMENTS
11/25/2015	900	747	1,402	24.9	20.9	71	0	71	2,976	
	1000	742	1,400	24.9	21.0	71	0	71		
	1100	738	1,401	24.8	21.0	73	0	73		
	1200	733	1,400	24.8	21.1	73	0	73		
	1300	737	1,402	24.8	21.1	73	0	73		
	1400	744	1,400	24.8	21.1	73	0	73		
	1500	735	1,403	24.8	21.1	73	0	73		
	1600	731	1,401	24.8	21.1	73	0	73		Shut down for the long weekend
11/30/2015	1000	810	1,410	24.3	19.6	81	0	81	3,268	Restart
	1100	905	1,405	24.3	19.6	81	0	81		
	1200	1,068	1,400	24.0	19.2	85	0	85		
	1300	1,111	1,400	23.8	18.9	89	0	89		
	1400	1,067	1,401	23.8	18.7	89	0	89		
	1500	897	1,403	22.8	18.5	104	0	104		
	1600	850	1,400	22.7	18.5	106	0	106		
	1700	1,015	1,402	23.7	18.5	90	0	90	4,671	
12/1/2015	900	867	1,402	24.2	18.3	82	0	82	7,649	
	1000	910	1,400	23.5	18.3	93	0	93		
	1100	860	1,400	23.5	18.2	93	0	93		
	1200	922	1,400	23.4	18.3	95	0	95		
	1300	1,067	1,400	23.4	18.2	95	0	95		
	1400	1,017	1,400	23.3	18.2	96	0	96		
	1500	968	1,402	23.2	18.2	98	0	98		
	1600	935	1,400	23.2	18.1	98	0	98		
	1700	921	1,401	23.2	18.1	98	0	98		
12/2/2015	1000	657	1,405	22.8	17.2	104	0	104	10,466	
	1100	697	1,400	23.2	17.7	98	0	98		
	1200	810	1,401	23.1	17.5	100	0	100		
	1300	776	1,400	23.0	17.5	101	0	101		
	1400	729	1,402	22.8	17.4	104	0	104		
	1500	747	1,400	22.8	17.3	104	0	104		
	1600	715	1,401	22.8	17.3	104	0	104		

Table 5

MPE Operational Data November 2015

15101 Freedom Ave,

San Leandro, California

DATE	TIME	PID (ppmv)	OXIDIZER TEMPERATURE (^{0}F)	TOTAL VACUUM (In of Hg)	STINGER VACUUM (In of Hg)	VAPOR FLOW RATE (scfm)	VAPOR DILUTION (scfm)	WELL FLOW (scfm)	GROUND WATER TOTALIZER (gallons)	COMMENTS
12/3/2015	900	633	1,400	22.1	17.9	116	0	116	13,609	
	1000	604	1,402	22.1	17.0	116	0	116		
	1100	612	1,400	22.1	17.0	116	0	116		
	1200	610	1,400	22.1	17.0	116	0	116		
	1300	549	1,406	22.1	17.0	116	0	116		
	1400	532	1,402	22.1	17.0	116	0	116		
	1500	645	1,401	22.2	17.0	114	0	114		
	1600	631	1,400	22.2	17.0	114	0	114		
	1700	647	1,400	22.2	17.0	114	0	114		
12/4/2015	1100	505	1,403	23.7	17.6	90	0	90	15,147	
	1200	397	1,401	23.2	17.6	98	0	98		
	1300	478	1,404	23.0	17.4	101	0	101		
	1400	500	1,400	22.8	17.2	104	0	104		
	1500	482	1,401	22.7	17.1	106	0	106		
	1600	456	1,403	22.5	17.1	109	0	109		Shut down for the weekend
12/7/2015	1100	457	1,402	23.4	18.0	95	0	95	15,740	Restart
	1200	489	1,400	23.0	17.6	101	0	101		
	1300	462	1,400	22.8	17.1	104	0	104		
	1400	487	1,401	22.7	17.0	106	0	106		
	1500	461	1,400	22.6	17.0	108	0	108		
	1600	459	1,403	22.5	17.0	109	0	109		
12/8/2015	900	496	1,401	22.0	16.6	117	0	117	18,770	
	1000	517	1,400	21.9	16.6	119	0	119		
	1100	529	1,400	21.9	16.6	119	0	119		
	1200	491	1,400	21.9	16.1	119	0	119		
	1300	472	1,400	21.8	16.1	120	0	120		
	1400	449	1,400	21.8	16.0	120	0	120		
	1500	407	1,405	21.7	16.0	122	0	122		
	1600	384	1,401	21.6	16.0	123	0	123		
	1700	367	1,403	21.7	16.0	122	0	122		
12/9/2015	900	310	1,400	22.0	17.6	117	0	117	20,227	
	1000	357	1,400	22.6	17.1	108	0	108		
	1100	428	1,404	22.0	16.8	117	0	117		

Table 5

MPE Operational Data November 2015

15101 Freedom Ave,

San Leandro, California

DATE	TIME	PID (ppmv)	OXIDIZER TEMPERATURE (^{0}F)	TOTAL VACUUM (In of Hg)	STINGER VACUUM (In of Hg)	VAPOR FLOW RATE (scfm)	VAPOR DILUTION (scfm)	WELL FLOW (scfm)	GROUND WATER TOTALIZER (gallons)	COMMENTS
	1200	454	1,400	21.9	16.5	119	0	119		
	1300	471	1,402	21.7	16.4	122	0	122		
	1400	485	1,401	21.7	16.3	122	0	122		
	1500	497	1,400	21.7	16.2	122	0	122		
	1600	519	1,403	21.6	16.1	123	0	123		
	1700	487	1,400	21.5	16.1	125	0	125		
12/10/2015	1000	371	1,400	22.6	18.0	108	0	108	23,039	
	1100	364	1,405	22.7	18.1	106	0	106		
	1200	352	1,404	22.6	18.1	108	0	108		
	1300	345	1,400	22.7	18.1	106	0	106		
	1400	349	1,404	22.8	18.1	104	0	104		
	1500	357	1,400	22.8	18.1	104	0	104		
	1600	398	1,400	21.9	16.7	119	0	119		
	1700	387	1,400	21.9	16.7	119	0	119		
12/11/2015	1000	357	1,400	22.5	17.0	109	0	109	24,070	
	1100	419	1,401	22.7	17.2	106	0	106		
	1200	357	1,404	22.6	17.2	108	0	108		
	1300	388	1,400	22.4	17.0	111	0	111		
	1400	416	1,403	22.4	17.0	111	0	111		
	1500	429	1,400	22.3	17.0	112	0	112		
	1600	414	1,400	22.3	17.0	112	0	112		Shut down for the weekend
12/14/2015	1100	314	1,400	19.4	13.2	158	0	158	24,939	Restart
	1200	324	1,402	19.2	12.4	162	0	162		
	1300	316	1,403	19.2	12.4	162	0	162		
	1400	305	1,400	19.2	12.4	162	0	162		
	1500	295	1,400	19.2	12.4	162	0	162		
	1600	293	1,400	19.2	12.4	162	0	162		
	1700	287	1,400	19.2	12.4	162	0	162		
12/15/2015	1200	297	1,400	19.2	12.4	162	0	162	25,931	
	1300	309	1,400	19.2	12.4	162	0	162		
	1400	306	1,401	19.1	12.4	163	0	163		
	1500	302	1,400	19.1	12.3	163	0	163		
	1600	299	1,402	19.0	12.3	165	0	165		
	1700	305	1,404	19.0	12.3	165	0	165		

Table 5

MPE Operational Data November 2015

15101 Freedom Ave,

San Leandro, California

DATE	TIME	PID (ppmv)	OXIDIZER TEMPERATURE (^{0}F)	TOTAL VACUUM (In of Hg)	STINGER VACUUM (In of Hg)	VAPOR FLOW RATE (scfm)	VAPOR DILUTION (scfm)	WELL FLOW (scfm)	GROUND WATER TOTALIZER (gallons)	COMMENTS
12/16/2015	1000	182	1,403	18.8	12.0	168	0	168	26,749	Air compressor on
	1100	229	1,400	18.9	12.3	166	0	166		
	1200	306	1,400	18.8	12.0	168	0	168		
	1300	437	1,401	18.6	12.0	171	0	171		
	1400	485	1,404	18.5	12.0	173	0	173		
	1500	477	1,400	18.5	11.9	173	0	173		
	1600	455	1,400	18.5	11.9	173	0	173		
12/17/2015	1200	406	1,430	19.2	12.4	162	0	162	27,420	
	1300	334	1,405	18.6	11.8	171	0	171		
	1400	347	1,400	18.6	11.7	171	0	171		
	1500	339	1,400	18.5	11.7	173	0	173		
	1600	245	1,402	18.5	11.7	173	0	173		
	1700	241	1,400	18.4	11.8	174	0	174		
12/18/2015	900	186	1,400	18.4	11.9	174	0	174	28,001	
	1000	191	1,405	18.4	11.8	174	0	174		
	1100	199	1,400	18.5	11.8	173	0	173		
	1200	217	1,400	18.5	11.8	173	0	173		
	1300	233	1,402	18.4	11.8	174	0	174		
	1400	245	1,400	18.4	11.8	174	0	174		
	1500	254	1,401	18.4	11.7	174	0	174		End Extraction

Groundwater extracted = 28,001 gallons = 1.23 gpm

Time of extraction = 22,725 minutes = 378.75 hours = 15.78 days

Notes

ppmv	parts per million vapor
In of Hg	inches of mercury
^{0}F	degrees Fahrenhei
scfm	standard cubic feet per minute
PID	photo-ionization detector (onboard gas analyzer)

Table 6

MPE Extraction Data and VOC Mass Removal Rate
November 2015

15101 Freedom Ave,
San Leandro, California

WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Air Flow Rate, Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
MPE-1 & MPE-2	**START**	11/19/2015	1245	0	0								
			1300	15	15	70	1,043	2.751	741	0.0007	0.176	0.012	17
			1400	60	75	70	4,170	11.003	754	0.0008	0.715	0.012	17
			1500	60	135	70	4,170	11.003	776	0.0008	0.736	0.012	18
			1600	60	195	70	4,170	11.003	757	0.0008	0.718	0.012	17
			1645	45	240	70	3,128	8.252	810	0.0008	0.576	0.013	18
		11/20/2015	815	930	1,170	71	66,111	174.435	831	0.0008	12.495	0.013	19
			900	45	1,215	71	3,199	8.440	844	0.0008	0.614	0.014	20
			1000	60	1,275	70	4,170	11.003	875	0.0009	0.830	0.014	20
			1100	60	1,335	70	4,170	11.003	917	0.0009	0.870	0.014	21
			1200	60	1,395	70	4,170	11.003	892	0.0009	0.846	0.014	20
			1300	60	1,455	70	4,170	11.003	871	0.0009	0.826	0.014	20
MPE-1, MPE-2, MW-3			1400	60	1,515	73	4,360	11.505	907	0.0009	0.900	0.015	22
			1500	60	1,575	71	4,265	11.254	884	0.0009	0.858	0.014	21
	PAUSE		1600	60	1,635	71	4,265	11.254	877	0.0009	0.851	0.014	20
MPE-1, MPE-2, MW-3	**START**	11/23/2015	1000	30	1,665	76	2,275	6.004	960	0.0010	0.497	0.017	24
			1100	60	1,725	76	4,551	12.007	864	0.0009	0.894	0.015	21
			1200	60	1,785	76	4,551	12.007	771	0.0008	0.798	0.013	19
			1300	60	1,845	74	4,456	11.756	787	0.0008	0.798	0.013	19
			1400	60	1,905	71	4,265	11.254	800	0.0008	0.776	0.013	19
			1500	60	1,965	70	4,170	11.003	805	0.0008	0.763	0.013	18
			1600	60	2,025	70	4,170	11.003	797	0.0008	0.756	0.013	18
			1700	60	2,085	70	4,170	11.003	795	0.0008	0.754	0.013	18
		11/24/2015	900	960	3,045	70	66,720	176.042	761	0.0008	11.548	0.012	17
			1000	60	3,105	70	4,170	11.003	755	0.0008	0.716	0.012	17
			1100	60	3,165	70	4,170	11.003	757	0.0008	0.718	0.012	17
			1200	60	3,225	70	4,170	11.003	758	0.0008	0.719	0.012	17
			1300	60	3,285	70	4,170	11.003	758	0.0008	0.719	0.012	17
			1400	60	3,345	70	4,170	11.003	755	0.0008	0.716	0.012	17
			1500	60	3,405	70	4,170	11.003	750	0.0008	0.711	0.012	17
			1600	60	3,465	70	4,170	11.003	746	0.0007	0.708	0.012	17
			1700	60	3,525	70	4,170	11.003	741	0.0007	0.703	0.012	17

Table 6

MPE Extraction Data and VOC Mass Removal Rate
November 2015

15101 Freedom Ave,
San Leandro, California

WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Air Flow Rate, Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
MPE-1, MPE-2, MW-3		11/25/2015	900	960	4,485	71	68,243	180.062	747	0.0007	11.594	0.012	17
			1000	60	4,545	71	4,265	11.254	742	0.0007	0.720	0.012	17
			1100	60	4,605	73	4,360	11.505	738	0.0007	0.732	0.012	18
			1200	60	4,665	73	4,360	11.505	733	0.0007	0.727	0.012	17
			1300	60	4,725	73	4,360	11.505	737	0.0007	0.731	0.012	18
			1400	60	4,785	73	4,360	11.505	744	0.0007	0.738	0.012	18
			1500	60	4,845	73	4,360	11.505	735	0.0007	0.729	0.012	17
	PAUSE		1600	60	4,905	73	4,360	11.505	731	0.0007	0.725	0.012	17
	START	11/30/2015	1000	15	4,920	81	1,209	3.190	810	0.0008	0.223	0.015	21
			1100	60	4,980	81	4,836	12.761	905	0.0009	0.996	0.017	24
			1200	60	5,040	85	5,122	13.515	1,068	0.0011	1.244	0.021	30
			1300	60	5,100	89	5,312	14.017	1,111	0.0011	1.342	0.022	32
			1400	60	5,160	89	5,312	14.017	1,067	0.0011	1.289	0.021	31
			1500	60	5,220	104	6,265	16.529	897	0.0009	1.278	0.021	31
			1600	60	5,280	106	6,360	16.780	850	0.0009	1.230	0.020	30
			1700	60	5,340	90	5,408	14.268	1,015	0.0010	1.248	0.021	30
		12/1/2015	900	960	6,300	82	78,907	208.197	867	0.0009	15.560	0.016	23
			1000	60	6,360	93	5,598	14.771	910	0.0009	1.159	0.019	28
			1100	60	6,420	93	5,598	14.771	860	0.0009	1.095	0.018	26
			1200	60	6,480	95	5,693	15.022	922	0.0009	1.194	0.020	29
			1300	60	6,540	95	5,693	15.022	1,067	0.0011	1.382	0.023	33
			1400	60	6,600	96	5,789	15.273	1,017	0.0010	1.339	0.022	32
			1500	60	6,660	98	5,884	15.524	968	0.0010	1.295	0.022	31
			1600	60	6,720	98	5,884	15.524	935	0.0009	1.251	0.021	30
			1700	60	6,780	98	5,884	15.524	921	0.0009	1.232	0.021	30
		12/2/2015	1000	1020	7,800	104	106,498	280.997	657	0.0007	15.914	0.016	22
			1100	60	7,860	98	5,884	15.524	697	0.0007	0.933	0.016	22
			1200	60	7,920	100	5,979	15.776	810	0.0008	1.101	0.018	26
			1300	60	7,980	101	6,074	16.027	776	0.0008	1.072	0.018	26
			1400	60	8,040	104	6,265	16.529	729	0.0007	1.039	0.017	25
			1500	60	8,100	104	6,265	16.529	747	0.0007	1.064	0.018	26
			1600	60	8,160	104	6,265	16.529	715	0.0007	1.019	0.017	24

Table 6

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WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Air Flow Rate, Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
MPE-1, MPE-2, MW-3		12/3/2015	900	1020	9,180	116	117,828	310.891	633	0.0006	16.964	0.017	24
			1000	60	9,240	116	6,931	18.288	604	0.0006	0.952	0.016	23
			1100	60	9,300	116	6,931	18.288	612	0.0006	0.965	0.016	23
			1200	60	9,360	116	6,931	18.288	610	0.0006	0.962	0.016	23
			1300	60	9,420	116	6,931	18.288	549	0.0005	0.865	0.014	21
			1400	60	9,480	116	6,931	18.288	532	0.0005	0.839	0.014	20
			1500	60	9,540	114	6,836	18.036	645	0.0006	1.003	0.017	24
			1600	60	9,600	114	6,836	18.036	631	0.0006	0.981	0.016	24
			1700	60	9,660	114	6,836	18.036	647	0.0006	1.006	0.017	24
		12/4/2015	1100	960	10,620	90	86,523	228.294	505	0.0005	9.938	0.010	15
			1200	60	10,680	98	5,884	15.524	397	0.0004	0.531	0.009	13
			1300	60	10,740	101	6,074	16.027	478	0.0005	0.660	0.011	16
			1400	60	10,800	104	6,265	16.529	500	0.0005	0.712	0.012	17
			1500	60	10,860	106	6,360	16.780	482	0.0005	0.697	0.012	17
	PAUSE		1600	60	10,920	109	6,550	17.283	456	0.0005	0.679	0.011	16
	START	12/7/2015	1100	30	10,950	95	2,847	7.511	457	0.0005	0.296	0.010	14
			1200	60	11,010	101	6,074	16.027	489	0.0005	0.676	0.011	16
			1300	60	11,070	104	6,265	16.529	462	0.0005	0.658	0.011	16
			1400	60	11,130	106	6,360	16.780	487	0.0005	0.704	0.012	17
			1500	60	11,190	108	6,455	17.032	461	0.0005	0.677	0.011	16
			1600	60	11,250	109	6,550	17.283	459	0.0005	0.684	0.011	16
		12/8/2015	900	1020	12,270	117	119,446	315.161	496	0.0005	13.475	0.013	19
			1000	60	12,330	119	7,121	18.790	517	0.0005	0.837	0.014	20
			1100	60	12,390	119	7,121	18.790	529	0.0005	0.857	0.014	21
			1200	60	12,450	119	7,121	18.790	491	0.0005	0.795	0.013	19
			1300	60	12,510	120	7,217	19.041	472	0.0005	0.775	0.013	19
			1400	60	12,570	120	7,217	19.041	449	0.0004	0.737	0.012	18
			1500	60	12,630	122	7,312	19.293	407	0.0004	0.677	0.011	16
			1600	60	12,690	123	7,407	19.544	384	0.0004	0.647	0.011	16
			1700	60	12,750	122	7,312	19.293	367	0.0004	0.610	0.010	15

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WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Air Flow Rate, Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
MPE-1, MPE-2, MW-3		12/9/2015	900	900	13,650	117	105,394	278.083	310	0.0003	7.431	0.008	12
			1000	60	13,710	108	6,455	17.032	357	0.0004	0.524	0.009	13
			1100	60	13,770	117	7,026	18.539	428	0.0004	0.684	0.011	16
			1200	60	13,830	119	7,121	18.790	454	0.0005	0.735	0.012	18
			1300	60	13,890	122	7,312	19.293	471	0.0005	0.783	0.013	19
			1400	60	13,950	122	7,312	19.293	485	0.0005	0.807	0.013	19
			1500	60	14,010	122	7,312	19.293	497	0.0005	0.827	0.014	20
			1600	60	14,070	123	7,407	19.544	519	0.0005	0.874	0.015	21
			1700	60	14,130	125	7,502	19.795	487	0.0005	0.831	0.014	20
		12/10/2015	1000	1020	15,150	108	109,735	289.538	371	0.0004	9.259	0.009	13
			1100	60	15,210	106	6,360	16.780	364	0.0004	0.527	0.009	13
			1200	60	15,270	108	6,455	17.032	352	0.0004	0.517	0.009	12
			1300	60	15,330	106	6,360	16.780	345	0.0003	0.499	0.008	12
			1400	60	15,390	104	6,265	16.529	349	0.0003	0.497	0.008	12
			1500	60	15,450	104	6,265	16.529	357	0.0004	0.509	0.008	12
			1600	60	15,510	119	7,121	18.790	398	0.0004	0.645	0.011	15
			1700	60	15,570	119	7,121	18.790	387	0.0004	0.627	0.010	15
		12/11/2015	1000	960	16,530	109	104,803	276.526	357	0.0004	8.510	0.009	13
			1100	60	16,590	106	6,360	16.780	419	0.0004	0.606	0.010	15
			1200	60	16,650	108	6,455	17.032	357	0.0004	0.524	0.009	13
			1300	60	16,710	111	6,645	17.534	388	0.0004	0.586	0.010	14
			1400	60	16,770	111	6,645	17.534	416	0.0004	0.629	0.010	15
			1500	60	16,830	112	6,741	17.785	429	0.0004	0.658	0.011	16
	PAUSE		1600	60	16,890	112	6,741	17.785	414	0.0004	0.635	0.011	15
	START	12/14/2015	1100	15	16,905	158	2,375	6.268	314	0.0003	0.170	0.011	16
			1200	60	16,965	162	9,692	25.573	324	0.0003	0.714	0.012	17
			1300	60	17,025	162	9,692	25.573	316	0.0003	0.697	0.012	17
			1400	60	17,085	162	9,692	25.573	305	0.0003	0.672	0.011	16
			1500	60	17,145	162	9,692	25.573	295	0.0003	0.650	0.011	16
			1600	60	17,205	162	9,692	25.573	293	0.0003	0.646	0.011	16
			1700	60	17,265	162	9,692	25.573	287	0.0003	0.633	0.011	15

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WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Air Flow Rate, Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day
Air compressor		12/15/2015	1200	1080	18,345	162	174,457	460.309	297	0.0003	11.785	0.011	16
			1300	60	18,405	162	9,692	25.573	309	0.0003	0.681	0.011	16
			1400	60	18,465	163	9,787	25.824	306	0.0003	0.681	0.011	16
			1500	60	18,525	163	9,787	25.824	302	0.0003	0.672	0.011	16
			1600	60	18,585	165	9,882	26.075	299	0.0003	0.672	0.011	16
			1700	60	18,645	165	9,882	26.075	305	0.0003	0.686	0.011	16
		12/16/2015	1000	1020	19,665	168	171,239	451.819	182	0.0002	7.088	0.007	10
			1100	60	19,725	166	9,978	26.326	229	0.0002	0.520	0.009	12
			1200	60	19,785	168	10,073	26.578	306	0.0003	0.701	0.012	17
			1300	60	19,845	171	10,263	27.080	437	0.0004	1.020	0.017	24
			1400	60	19,905	173	10,359	27.331	485	0.0005	1.143	0.019	27
			1500	60	19,965	173	10,359	27.331	477	0.0005	1.124	0.019	27
			1600	60	20,025	173	10,359	27.331	455	0.0005	1.072	0.018	26
		12/17/2015	1200	1080	21,105	162	174,457	460.309	406	0.0004	16.110	0.015	21
			1300	60	21,165	171	10,263	27.080	334	0.0003	0.780	0.013	19
			1400	60	21,225	171	10,263	27.080	347	0.0003	0.810	0.014	19
			1500	60	21,285	173	10,359	27.331	339	0.0003	0.799	0.013	19
			1600	60	21,345	173	10,359	27.331	245	0.0002	0.577	0.010	14
			1700	60	21,405	174	10,454	27.582	241	0.0002	0.573	0.010	14
		12/18/2015	900	960	22,365	174	167,260	441.318	186	0.0002	7.076	0.007	11
			1000	60	22,425	174	10,454	27.582	191	0.0002	0.454	0.008	11
			1100	60	22,485	173	10,359	27.331	199	0.0002	0.469	0.008	11
			1200	60	22,545	173	10,359	27.331	217	0.0002	0.511	0.009	12
			1300	60	22,605	174	10,454	27.582	233	0.0002	0.554	0.009	13
			1400	60	22,665	174	10,454	27.582	245	0.0002	0.583	0.010	14
			1500	60	22,725	174	10,454	27.582	254	0.0003	0.604	0.010	14
	TOTAL MEDIAN				**22,725**	**106**	**2,592,877**	**6,841**	**511**	**0.0005**	**280.00**	**0.012**	**17.74**

Notes

Q volumetric flow rate
SCFM standard cubic feet per minute

DERIVATION OF MASS REMOVAL RATE

ppmv as hexane/1,000,000 = VOC mole %

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WELL	COMMENT	DATE	CLOCK TIME	INCREMENTAL TIME	ELAPSED TIME	Air Flow Rate, Q			PID		MASS REMOVAL		
				minutes	minutes	SCFM	ft^3 of extracted air	Moles of extracted air	ppmv as hexane	VOC mole %	lb VOC mass removal as hexane	lbs/min	lbs/day

ft^3 cubic feet per minute
VOC volatile organic compounds
PID photo-ionization detector
ppmv parts per million vapor

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

Table 7

SVE Abatement and System Emissions
November- December 2015 MPE Event

15101 Freedom Ave,
San Leandro, California

Extraction Well	Vapor Sample ID	Onboard Analyzer		Collection Date/Time	USEPA TO-3 MODIFIED	USEPA TO-15 MODIFIED				Q (SCFM)	Average Emission Rate (lbs/day) (TPHg/B/T/X)	Total Test time (minutes/ days)	Total Emissions (lbs) (TPHg/B/T/X)
		Date/Time	Reading (measured as hexane)		TPHg (ug/m^3)	Benzene (ug/m^3)	Toluene (ug/m^3)	Ethyl benzene (ug/m^3)	Total Xylenes (ug/m^3)				
MPE-1, MPE-2	Effluent	11/19/15 @ 1400	2	11/19/15 @ 1338	2,300	12.6	7.26	<0.99	4.30	70	0.033/ 0.00008/ 0.00006/ 0.00001	22,725/ 15.78	0.523/ 0.001/ 0.001/ 0.0001
	Influent		754	11/19/15 @ 1348	150,000	2,520	6,330	1,120	9,990				
				REMOVAL EFFICIENCIES	98.5%	99.5%	99.9%	100.0%	100.0%				
MPE-1, MPE-2, MW-3	Effluent	12/4/15 @ 1200	0	12/4/15 @ 1225	3,500	<0.69	3.76	<0.99	<1.6	98			
	Influent		397	12/4/15 @ 1230	400,000	4,930	2,450	1,960	12,200				
				REMOVAL EFFICIENCIES	99.1%	100.0%	99.8%	100.0%	100.0%				
MPE-1, MPE-2, MW-3	Effluent	12/4/15 @ 1200	0	12/14/15 @ 1155	3,700	11.7	6.23	<0.99	<1.6	162			
	Influent		324	12/14/15 @ 1200	230,000	728	1,200	131	2,036				
				REMOVAL EFFICIENCIES	98.4%	99.9%	99.5%	99.6%	100.0%				
											TOTAL EMISSIONS (LBS)		**0.525**

Notes

SCFM	standard cubic feet per minute
lbs/day	pounds per day
ug/m^3	micrograms per cubic meter
<	not detected at or above laboratory detection limit

DERIVATION OF MASS REMOVAL RATE

(ug/m^3) [(1mg/1000ug) ($1m^3$/1000 L)] = **mg/L**
(**mg/L**) (28.32 L/1 ft^3) ([Q] ft^3/min) = **mg/min**
(**mg/min**)(1g/1000mg)(1kg/1000g)(60min/1hr)(24hr/1day) = **kg/day**
(**kg/day**)(2.2lbs/1kg) = **lbs/day**

DERIVATION OF TOTAL MASS REMOVED

Total time of test = **days**
(mass removal rate [**lbs/day**])(total time of test [**days**]) = Total Removed (**lbs**)

DERIVATION OF REMOVAL EFFICIENCIES

1-[STACK sample concentration (lab)/Influent sample concentration(lab)]

Table 8
Crawl Space and Ambient Air Sampling Results
15101 Freedom Ave
San Leandro, California

Sample ID	Date	TPH-g µg/m^3	Benzene µg/m^3	Toluene µg/m^3	Ethylbenzene µg/m^3	Total Xylenes µg/m^3	Naphthalene µg/m^3	Oxygen %	Carbon dioxide %	Nitrogen %	Methane %
2014											
SV-1	**1/22/2014**	90 J	**2.7**	7.6	<3.6	5.3	<18	19	<0.17	69	-
SV-1a	**9/26/2014**	<42	**0.74 J**	<3.4	<0.79	<4.0	<0.96	15	<0.18	-	<0.18
AA-1	**9/26/2014**	<40	**0.76 J**	<3.3	<0.76	<3.8	**1.4 J**	15	<0.17	-	<0.17
2015											
SV-2	**12/18/2015**	<42	**1.3**	3.9	0.87	<4.0	<0.42	18	<0.18	-	<0.18
AA-2	**12/18/2015**	<290	**1.5**	<24	**1.00**	<28	<2.90	14	<1.3	-	<1.3
ESL (Indoor Air)		**590**	**0.084**	**310**	**0.97**	**100**	**0.072**	-	-	-	-

Note

ESLs Environmental Screening Levels per CRWQCB SFBay Region, Interim Final December 2013, Table E-3 (Ambient and Indoor Air Screening Levels)

Intrusion Concerns

J Estimated Value

Nitrogen was not reported in September 2014 samples due to technical issues with the laboratory instruments

Appendix A

Standard Operating Procedures for
Conducting Groundwater Monitoring Activities

Standard Operating Procedures for Conducting Groundwater Monitoring Activities

Water Level and Free-Product Measurements

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

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

Purging and Field Measurements

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

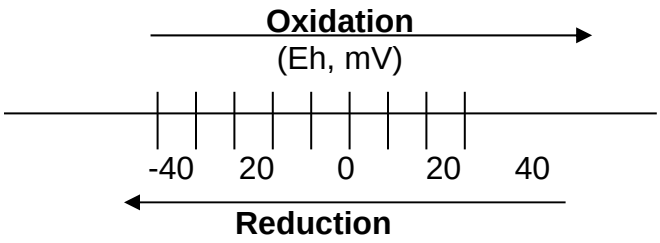
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater EC is directly related to the concentration of total dissolved solids (TDS) in solution.

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

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

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

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



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

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

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

Sampling

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

Appendix B

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

Harrington Surveys Inc.

Land Surveying & Mapping

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

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

Oct. 14, 2004

Attn: Elena Manzo
Job # 2445

Ref: 15101 Freedom Ave, San Leandro, Ca.

HORZONTAL CONTROL, NAD 88:

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

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

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

VERTICAL CONTROL, NAVD 88:

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

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

EPOCH DATE 1998.5

OBSERVATION: EPOCH=180.

FIELD SURVEY: OCT. 11, 2004.

Ben Harrington
PLS 5132

SURVEY REPORT
15101 FREEDOM AVE
SAN LEANDRO, CA.

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

JOB NO. 2445
DATE: OCT. 12, 2004

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

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

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

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

BENCH MARK: NGS BENCH MARK NO. HT1871

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

ELEVATION = 58.50 NAVD 88 DATUM

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

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

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

DATE: 12/11/2009

JOB# 09039

TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS

SOMA ENVIRONMENTAL ENGINEERING
15101 FREEDOM AVENUE
SAN LEANDRO, CA 94579

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

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

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

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

EQUIPMENT USED: TRIMBLE S6

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

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

DATE: 9/27/2014
JOB#

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
MW-10	2083967.378	6092174.688	44.66	2" PVC NOTCH NORTH SIDE
	37.706998127N	122.123014988W	45.08	PUNCH NORTH SIDE RIM
			44.98	GROUNDNORTH SIDE
MW-11	2083923.210	6092215.039	42.45	2" PVC NOTCH NORTH SIDE
	37.706878766N	122.122872877W	42.83	PUNCH NORTH SIDE RIM
			42.84	PAVEMENT NORTH SIDE

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

9/27/14

EDGIS LAND SURVEYING
Land Surveying and mapping
2519 W. Shaw Avenue, Ste. 111
Fresno, CA 93711
Phone (559) 803-2679 Fax (559) 823-9037
email: 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:**	December 28, 2015
Depth to Groundwater:	23.39 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	31.07 feet		Conor Goulding
Water Column Height:	6.51 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:** Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
15:21	Started purging						
15:22	2	1.47	7.03	20.61	1260	31.4	-30
15:23	4	1.35	6.97	20.69	1230	36.2	-24
15:24	6	1.30	6.92	20.76	1230	45.1	-25
15:25	8	1.26	6.96	20.83	1260	48.4	-27
15:30	Sampled						

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:**	December 28, 2015
Depth to Groundwater:	21.38 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	31.03 feet		Conor Goulding
Water Column Height:	8.77 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:** Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
14:57	Started purging well						
14:58	2	1.78	7.01	20.07	1510	17.8	-3
14:59	4	1.40	7.15	20.63	1240	37.3	-31
15:00	6	1.33	7.12	20.73	960	51.0	-42
15:01	8	1.26	7.08	20.81	871	59.7	-46
15:06	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:**	December 29, 2015
Depth to Groundwater:	22.95 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.96 feet		Conor Goulding
Water Column Height:	6.95 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
10:00	Started purging well						
10:01	2	1.73	7.23	20.72	1210	13.2	-41
10:02	4	1.43	7.06	21.07	1210	19.6	-38
10:03	6	1.34	7.04	21.24	1210	26.1	-40
10:04	8	1.27	7.06	21.28	1200	25.7	-58
10:09	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MW-4	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	30.20 feet		San Leandro, CA
Top of Casing Elevation:	53.31 feet	**Date:**	December 29, 2015
Depth to Groundwater:	24.50 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	28.81 feet		Conor Goulding
Water Column Height:	5.70 feet		
Purged Volume:	8 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

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

Sheen: Yes ☐ No ☑ **Describe:**

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

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
10:23	Started purging well						
10:24	2	1.96	7.24	20.07	1500	142	-33
10:25	4	1.33	7.22	20.17	1480	25.6	-36
10:26	6	1.23	7.19	20.22	1460	11.4	-35
10:27	8	1.18	7.20	20.23	1470	20.1	-33
10:32	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:**	December 29, 2015
Depth to Groundwater:	19.89 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.64 feet		Conor Goulding
Water Column Height:	9.91 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:** Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
10:53	Started purging well						
10:54	2	1.43	7.50	21.69	1180	18.1	-56
10:55	4	1.29	7.53	21.88	1160	27.0	-63
10:56	6	1.21	7.56	21.98	1120	28.0	-71
10:57	8	1.20	7.54	22.01	1110	28.0	-70
11:02	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:**	December 28, 2015
Depth to Groundwater:	16.64 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	29.18 feet		Conor Goulding
Water Column Height:	10.66 feet		
Purged Volume:	10 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
13:59	Started purging well						
14:00	2	1.50	6.99	21.27	1330	36.4	+7
14:01	4	1.42	6.86	21.60	1330	45.5	+6
14:02	6	1.30	6.78	21.65	1330	51.3	+4
14:03	8	1.26	6.76	21.68	1330	63.9	+1
14:04	10	1.23	6.75	21.69	1340	64.3	-2
14:09	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:**	December 28, 2015
Depth to Groundwater:	14.75 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	29.99 feet		Conor Goulding
Water Column Height:	6.25 feet		
Purged Volume:	6 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
13:36	Started purging well						
13:37	2	1.89	6.94	19.92	1510	148	+9
13:38	4	1.59	6.86	20.23	1500	96.1	+11
13:39	6	1.45	6.82	20.32	1500	73.8	+12
13:44	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:**	December 28, 2015
Depth to Groundwater:	15.18 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	29.48 feet		Conor Goulding
Water Column Height:	13.32 feet		
Purged Volume:	6 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
12:29	Started purging well						
12:33	2	1.80	6.66	19.62	1300	809	+73
12:35	4	1.62	6.55	19.84	1300	512	+53
12:39	6	1.45	6.45	19.74	1320	265	+41
12:44	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:**	December 28 , 2015
Depth to Groundwater:	13.07 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	29.38 feet		Conor Goulding
Water Column Height:	15.50 feet		
Purged Volume:	8 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
13:05	Started purging well						
13:06	2	2.13	6.70	19.42	1300	425	+24
13:07	4	1.53	6.67	19.57	1290	213	+22
13:08	6	1.44	6.69	19.66	1300	125	+23
13:09	8	1.41	6.72	19.68	1300	76.1	-15
13:14	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	EX-1	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	— feet		San Leandro, CA
Top of Casing Elevation:	47.36 feet	**Date:**	December 28, 2015
Depth to Groundwater:	22.70 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	24.66 feet		Conor Goulding
Water Column Height:	NC feet		
Purged Volume:	_____ gallons		
	Not purged		

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

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

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

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

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

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
14:35	Grab Sample						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	EX-2	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	— feet		San Leandro, CA
Top of Casing Elevation:	45.96 feet	**Date:**	December 28, 2015
Depth to Groundwater:	20.75 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	25.21 feet		Conor Goulding
Water Column Height:	NC feet		
Purged Volume:	— gallons		
	Not purged		

Purging Method: Bailer ☐ Pump ☐

Sampling Method: Bailer ☑ Pump ☐

Color:	Yes ☐	No ☑	**Describe:**	
Sheen:	Yes ☐	No ☑	**Describe:**	
Odor:	Yes ☑	No ☐	**Describe:**	Very Slight Petro

Field Measurements:

Time	Volume (gallons)	D.O. mg/L	pH	Temp °C	E.C. (µS/cm)	Turb. NTU	ORP
14:28	Grab	Sample					

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MPE-1	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	30.00 feet		San Leandro, CA
Top of Casing Elevation:	51.96 feet	**Date:**	December 29 , 2015
Depth to Groundwater:	21.13 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.83 feet		Conor Goulding
Water Column Height:	8.87 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
11:18	Started purging well						
11:19	2	1.60	7.45	20.03	1140	30.6	-34
11:20	4	1.37	7.50	20.38	1130	17.4	-40
11:21	6	1.28	7.52	20.51	1130	13.7	-47
11:22	8	1.24	7.56	20.57	1120	11.6	-51
11:27	Sampled						

ENVIRONMENTAL ENGINEERING, INC

Well No.:	MPE-2	**Project No.:**	2551
Casing Diameter:	4 inches	**Address:**	15101 Freedom Ave.
Depth of Well:	30.00 feet		San Leandro, CA
Top of Casing Elevation:	53.72 feet	**Date:**	December 29 , 2015
Depth to Groundwater:	22.86 feet	**Sampler:**	Lizzie Hightower
Groundwater Elevation:	30.86 feet		Conor Goulding
Water Column Height:	7.14 feet		
Purged Volume:	8 gallons		

Purging Method: Bailer ☐ Pump ☑

Sampling Method: Bailer ☑ Pump ☐

Color: Yes ☐ No ☑ **Describe:** _____

Sheen: Yes ☑ No ☐ **Describe:** Slight 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
09:42	Started purging well						
09:43	2	1.42	7.35	21.16	1180	134	-63
09:44	4	1.40	7.32	21.33	1170	109	-70
09:45	6	1.40	7.34	21.38	1170	79.6	-75
09:46	8	1.35	7.35	21.44	1170	88.7	-78
09:51	Sampled						

EPA United States Environmental Protection Agency

EPA On-line Tools for Site Assessment Calculation

Hydraulic Gradient -- Magnitude and Direction

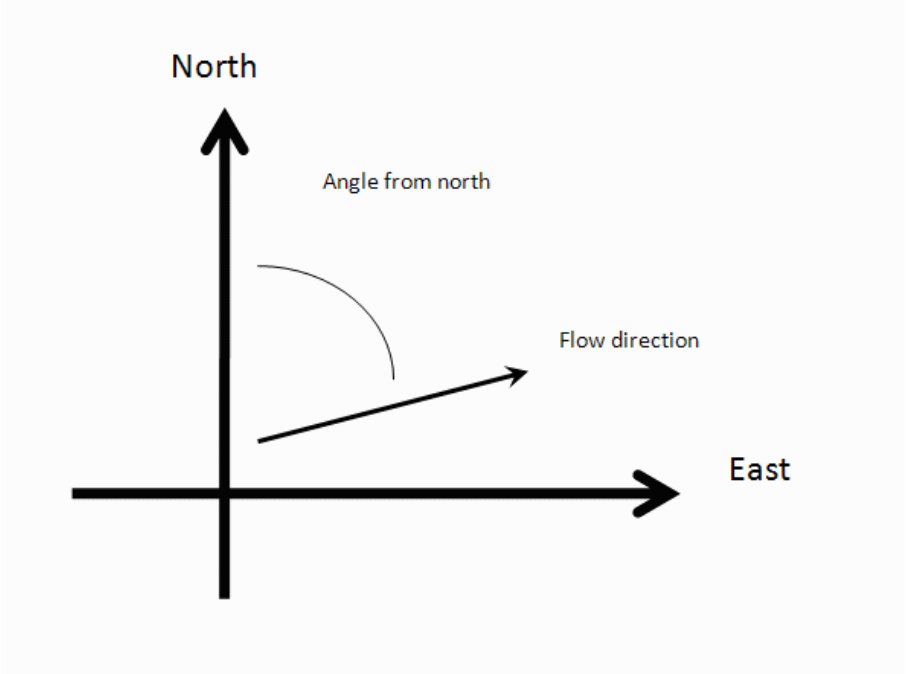
Gradient Calculation from fitting a plane to as many as thirty points

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

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

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

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



Inputs

Example Data Set 1 | Example Data Set 2 | Calculate | Clear
Save Data | Recall Data | Go Back
Site Name: 15101 Freedom Ave, San L
Date: December 28, 2015 | Current Date
Calculation basis: Head
Coordinates: ft

I.D.		x-coordinate	y-coordinate	head ft
1)	MW-1	6092119.016	2084364.691	31.07
2)	MW-2	6092063.978	2084323.224	31.03
3)	MW-3	6092176.317	2084298.343	30.96
4)	MW-4	6092124.294	2084251.598	28.81
5)	MW-5	6092177.071	2084206.361	30.64
6)	MW-6	6092140.881	2084072.911	29.18
7)	MW-7	6092290.918	2084008.071	29.99
8)	MW-10	6092182.374	2083967.53	29.48
9)	MW-11	6092224.568	2083926.493	29.38
10)	EX-1	6092163.5	2084133.982	24.66
11)	EX-2	6092131.08	2084082.713	25.21

12)	MPE-1	6092125.048	2084212.393	30.83
13)	MPE-2	6092171.793	2084292.312	30.86
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	1.954
Gradient Magnitude (i)	0.01841
Flow direction as degrees from North (positive y axis)	238.1
Coefficient of Determination (R^2)	0.260

WCMS

Last updated on 9/2/2015

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

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity µS/cm	Turbidity NTU	ORP
			1st WBZ				
MW-1	8/27/2009	0.38	6.32	20.8	1357	4.69	-95.7
	12/2/2009	0.15	6.4	20.82	1261	6.19	-136.4
	3/17/2010	0.58	5.68	20.97	1186	7.00	-155.9
	6/3/2010	0.91	6.11	20.81	1285	2.49	-131.6
	9/2/2010	0.92	6.04	20.66	1361	2.46	-86.4
	12/2/2010	0.97	5.96	20.74	1309	4.32	-119.7
	3/4/2011	1.4	6.69	20.96	1169	1.98	-101.2
	5/20/2011	1.51	6.22	20.68	1305	1.85	-164.5
	9/9/2011	1.73	6.02	20.53	1320	4.63	-179.2
	3/2/2012	1.39	6.53	20.84	1309	12.00	-204.4
	6/7/2012	0.89	6.51	20.00	1234	3.92	-20.0
	9/21/2012	0.55	6.12	19.96	1313	5.98	-31.4
	12/14/2012	0.63	6.6	19.71	1314	6.56	-99.2
	3/28/2013	1.07	6.4	20.67	1307	5.93	-70.5
	6/11/2013	0.71	6.52	20.43	1284	11.10	-49.4
	9/17/2013	1.56	6.44	20.47	1225	16.90	2.5
	12/6/2013	0.71	6.56	19.38	1153	15.60	-45.2
	3/13/2014	0.27	6.84	20.69	1105	17.50	-52.0
	9/23/2014	0.95	6.61	20.60	1168	8.42	-92.6
	12/23/2014	1.00	6.63	21.19	1078	22.00	-19.2
	3/20/2015	0.78	6.68	20.79	786	4.15	-85.3
	6/4/2015	0.89	6.77	20.73	920	4.14	-90.3
	9/11/2015	1.40	6.67	21.17	1080	2.05	-46.7
	12/28/2015	**1.26**	**6.96**	**20.83**	**1260**	**48.40**	**-27.0**
MW-2	8/27/2009	0.43	6.57	20.72	1530	2.59	-168.1
	12/1/2009	0.48	6.75	21.12	1297	5.01	-191.3
	3/17/2010	0.51	5.78	21.08	1025	5.65	-108
	6/3/2010	0.62	6.28	20.84	930	2.66	-150.2
	9/2/2010	0.66	6.29	20.73	1269	2.67	-174.2
	12/2/2010	0.63	6.06	20.94	1439	2062	-162.4
	3/4/2011	1.55	6.84	20.91	815	3.34	-87.8
	5/20/2011	1.22	6.39	20.59	981	2.58	-185.9
	9/9/2011	1.67	5.89	20.48	1303	6.19	-157.7
	3/2/2012	1.98	6.37	20.83	1014	11.8	-204.5
	6/7/2012	0.93	6.53	19.87	877	4.64	-22.9
	9/21/2012	0.63	5.97	20.01	1359	7.56	-55.0
	12/14/2012	1.06	6.67	19.91	1067	7.75	-82.3
	3/28/2013	1.35	6.46	20.59	1107	5.98	-88.0
	6/11/2013	0.5	6.61	20.44	1118	20.9	-42.7
	9/16/2013	1.04	6.68	20.82	1276	17.1	-51.3
	12/6/2013	0.74	6.64	19.63	1025	18	-77.5
	3/13/2014	0.25	6.35	20.74	1078	34.9	-41.0
	9/23/2014	1.14	6.77	20.6	1372	5.92	-123.8
	12/23/2014	1.2	6.43	21.45	1057	13.8	-36.6
	3/20/2015	0.7	6.63	20.71	674	3.66	-87.5
	6/4/2015	1.45	6.5	20.48	801	11.1	-128.7
	9/11/2015	2.78	6.44	20.84	1303	2.83	-73.5
	12/28/2015	**1.26**	**7.08**	**20.81**	**871**	**59.7**	**-46.0**
MW-3	8/27/2009	1.90	6.36	20.82	1318	5.57	-119.3
	12/2/2009	1.80	6.52	20.94	1239	5.88	-206.6
	3/17/2010	1.60	5.78	21.28	1080	5.37	-166.4
	6/3/2010	1.05	6.24	21.16	1130	2.03	-134.8
	9/2/2010	1.17	6.18	21.04	1256	2.86	-131.2
	12/2/2010	1.27	6.06	21.03	1152	1.83	-171.9
	3/4/2011	1.26	6.77	21.18	1074	3.57	-109.8
	5/20/2011	1.04	6.4	20.9	1180	2.72	-220.1
	9/9/2011	1.05	6.13	20.74	1272	3.23	-179.4
	3/2/2012	1.72	6.58	20.87	1120	12.00	-162.7
	6/7/2012	0.54	6.66	20.13	1057	3.11	-20.9
	9/21/2012	0.60	6.08	20.04	1229	8.61	-74.9
	12/14/2012	0.53	6.66	19.81	1017	7.42	-59.3
	3/28/2013	0.90	6.49	20.71	1188	7.83	-56.8
	6/11/2013	0.38	6.64	20.67	1280	96.3	-39.6
	9/17/2013	0.94	6.64	20.93	1203	108	-44.7
	12/6/2013	0.61	6.68	20.2	1131	62.6	-58.7
	3/12/2014	FP	FP	FP	FP	FP	FP
	9/23/2014	0.61	6.73	21.5	1135	12.8	-169.7
	12/23/2014	1.15	6.66	21.69	1071	15.2	-122.8

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

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity µS/cm	Turbidity NTU	ORP
MW-3 cont.	3/20/2015	0.86	6.6	21.4	975	10.2	-74.4
	6/4/2015	1.04	6.72	21.16	1243	8.76	-126.6
	9/11/2015	1.04	6.77	21.37	1242	8.32	-76.8
	12/29/2015	**1.27**	**7.06**	**21.28**	**1200**	**25.70**	**-58**
MW-4	8/27/2009	2.90	6.26	20.11	1649	2.78	-115.5
	12/2/2009	0.87	6.4	20.12	1578	5.06	-173.2
	3/17/2010	2.30	5.63	20.39	1506	4.01	-119.4
	6/3/2010	1.90	6.14	20.45	1418	1.56	-131.8
	9/2/2010	1.80	6.06	20.21	1305	1.45	-101.5
	12/2/2010	1.63	5.89	20.28	1465	102	-180
	3/3/2011	1.89	6.66	20.47	1278	0.97	-90.5
	5/19/2011	1.78	6.42	20.51	1251	1.5	-168.3
	9/8/2011	1.77	6.27	20.32	1430	3.82	-157.4
	3/2/2012	1.55	6.39	20.21	1486	8.00	-165.9
	6/7/2012	0.58	6.58	19.53	1315	2.62	-0.3
	9/21/2012	0.48	6.08	19.49	1425	5.12	-82.6
	12/14/2012	0.62	6.58	19.12	1216	5.42	-46
	3/28/2013	0.94	6.54	19.99	1350	5.03	-35.1
	6/11/2013	0.81	6.47	20.06	1372	16.20	-3
	9/17/2013	1.18	6.5	20.01	1353	11.70	3.8
	12/6/2013	1.09	6.57	19.01	1335	42.40	-11.8
	3/13/2014	0.30	6.6	20.49	1333	22.60	-52
	9/23/2014	0.81	6.59	20.4	1251	20.70	-69
	12/23/2014	1.75	6.66	20.46	972	19.80	-23.6
	3/20/2015	1.34	6.67	20.16	1098	3.66	-28.7
	6/4/2015	1.40	6.55	20.12	1232	28.20	-85.1
	9/11/2015	1.35	6.58	20.45	1311	170	-59.7
	12/29/2015	**1.18**	**7.2**	**20.23**	**1470**	**20.1**	**-33**
MW-5	8/27/2009	1.00	6.38	20.8	1321	6.63	-91.9
	12/2/2009	1.50	6.47	21.03	1227	5.66	-109.1
	3/17/2010	1.10	5.82	21.28	1150	75.3	-60.7
	6/4/2010	1.10	5.99	20.87	1128	3.84	-33.8
	9/2/2010	1.03	6.16	21.22	1178	13.0	-168.4
	12/2/2010	1.05	6.02	21.46	1112	12.3	-167.7
	3/4/2011	1.11	6.89	21.46	1078	4.59	-106.9
	5/20/2011	1.18	6.47	21.02	1106	26.5	-222.5
	9/9/2011	1.14	6.2	21.07	1194	5.83	-215.4
	3/2/2012	1.70	6.72	21.34	1187	11.7	-228.6
	6/7/2012	0.40	6.68	20.29	1200	5.35	-50.7
	9/21/2012	0.44	6.24	20.73	1164	9.74	33.0
	12/14/2012	0.52	6.76	20.7	1173	17	-126.5
	3/28/2013	1.01	6.59	21.24	1068	6.39	-141.5
	6/11/2013	0.50	6.69	20.94	1016	17	-44.8
	9/17/2013	0.65	6.85	21.44	1165	20.9	-64.7
	12/6/2013	0.60	7.01	20.82	747	16.7	-110.6
	3/13/2014	0.22	6.89	21.92	1184	17.1	-79.0
	9/23/2014	0.56	7.02	21.6	1031	9.32	-192.6
	12/23/2014	0.66	7.38	22.89	978	13.7	-98.9
	3/20/2015	0.62	7.28	21.81	977	2.55	-76.4
	6/4/2015	0.80	7.02	21.52	1094	7.93	-199.0
	9/11/2015	1.00	6.87	21.88	1309	6.08	-131.4
	12/29/2015	**1.20**	**7.54**	**22.01**	**1110**	**28**	**-70.0**
MW-6	8/26/2009	0.42	6.47	20.93	1201	6.53	-172.3
	12/1/2009	0.26	6.89	21.64	1171	6.83	-207.9
	3/16/2010	0.63	5.91	21.26	1544	6.72	-168.2
	6/3/2010	0.58	6.38	20.74	1346	2.61	-116.4
	9/1/2010	0.41	6.44	20.86	1419	2.77	-120.3
	12/2/2010	0.37	6.24	21.17	1362	4.5	-148
	3/3/2011	1.54	6.81	21	1262	1.87	-98.3
	5/20/2011	1.23	6.62	20.51	1312	2.53	-221.1
	9/8/2011	1.07	6.2	20.84	1292	5.17	-167.9
	3/2/2012	1.10	6.55	21.03	1197	13.2	-166.4
	6/6/2012	1.18	6.78	19.82	1091	3.46	-32.8
	9/20/2012	FP	FP	FP	FP	FP	FP
	12/13/2012	1.47	6.72	21.05	1231	9.99	-46.2
	3/27/2013	1.53	6.58	20.81	1179	6.82	-54.9
	6/10/2013	0.70	6.64	20.55	1209	13	-13.9
	9/16/2013	FP	FP	FP	FP	FP	FP
	12/5/2013	0.90	6.66	20.26	1342	21.4	-73.5

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

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity µS/cm	Turbidity NTU	ORP
MW-6 cont.	3/12/2014	0.33	6.56	21.62	2500	78.3	-163
	9/22/2014	1.06	6.67	21.4	1361	8.19	-147
	12/22/2014	1.25	6.72	22.96	1787	13.7	-94.2
	3/19/2015	0.74	6.78	21.55	929	3.88	-131.8
	6/3/2015	0.79	6.77	21.2	1176	5.00	-177.9
	9/10/2015	1.22	6.74	21.83	1174	2.07	-76.1
	12/28/2015	**1.23**	**6.75**	**21.69**	**1340**	**64.3**	**-2**
MW-7	8/26/2009	0.98	6.36	19.24	1375	145	-128.3
	12/1/2009	1.05	6.83	19.51	1340	997	-4.3
	3/16/2010	0.83	5.88	18.37	1266	382	-37.9
	6/3/2010	0.77	6.46	18.67	1199	873	-30.4
	9/1/2010	0.98	6.4	19.83	1271	999	-60
	12/2/2010	1.01	6.23	19.17	1253	999	-85.6
	3/4/2011	3.66	6.68	18.33	1098	609	-49.5
	5/19/2011	1.35	6.42	17.71	1192	879	-53.7
	9/8/2011	2.01	6.07	18.91	1198	748	-17.8
	3/2/2012	1.82	6.39	18.12	1308	363	-69.3
	6/6/2012	2.78	6.57	17.41	1106	362	1.3
	9/20/2012	1.61	6.11	18.8	1303	1000	95.9
	12/13/2012	2.93	6.67	18.42	1274	524	-22
	3/27/2013	3.01	6.51	17.1	1256	335	2.1
	6/10/2013	2.55	6.22	17.81	1232	672	8
	9/16/2013	3.59	6.21	19.19	1264	999	45.9
	12/5/2013	2.76	6.63	17.96	1212	999	6.5
	3/12/2014	2.59	6.22	18.85	1406	1086	36
	9/22/2014	1.84	6.67	20.2	1297	999	-85
	12/22/2014	2.11	6.56	20.19	1300	33.2	-51.1
	3/19/2015	1.37	6.51	19.09	1267	33.4	-34.7
	6/3/2015	1.56	6.7	18.81	1393	59.9	-88.5
	9/10/2015	2.97	6.77	20.35	1381	207	-31.1
	12/28/2015	**1.45**	**6.82**	**20.32**	**1500**	**73.8**	**12**
MW-10	9/22/2014	1.8	6.53	19.9	1266	252	-36.7
	12/22/2014	2.57	6.56	20.05	1183	200	37.7
	3/19/2015	1.78	6.53	19.72	1233	221	-49.8
	6/3/2015	0.91	6.54	19.48	1381	273	-109.1
	9/10/2015	0.98	6.33	21.2	1385	315	-11
	12/28/2015	**1.45**	**6.45**	**19.74**	**1320**	**265**	**41**
MW-11	9/22/2014	1.31	6.85	19.2	1158	999	-57.2
	12/22/2014	1.85	6.78	19.7	1137	780	-28.8
	3/19/2015	1.17	6.74	18.68	1052	932	-31.5
	6/3/2015	1.12	6.85	18.36	1226	440	-79.9
	9/10/2015	1.97	6.74	19.6	1187	313	-12.4
	12/28/2015	**1.41**	**6.72**	**19.68**	**1300**	**76.1**	**-15**
MPE-1	6/6/2012	1.73	6.83	19.34	1269	16.8	-41.9
	9/20/2012	0.62	5.87	19.36	1389	16.2	20.2
	12/14/2012	0.7	6.76	19.14	1473	16.4	-63.5
	3/27/2013	2.01	6.64	19.96	1499	7.03	-214.9
	6/10/2013	0.59	6.62	20.05	1497	20	-59.7
	9/17/2013	0.65	6.59	19.97	1467	16.2	-66.7
	12/6/2013	0.78	6.63	19.41	1390	32	-77.5
	3/13/2014	0.2	6.58	20.53	1163	52.4	-73
	9/23/2014	0.73	6.77	20.8	1253	67.4	-150.1
	12/23/2014	0.9	7.04	21.09	1170	14	-37.6
	3/20/2015	0.7	6.91	20.15	1019	4.97	-108.6
	6/4/2015	0.84	6.96	20.1	1075	8.64	-161.4
	9/11/2015	0.73	6.75	20.64	1270	3.18	-146.4
	12/29/2015	**1.24**	**7.56**	**20.57**	**1120**	**11.6**	**-51**
MPE-2	3/2/2012	1.30	6.40	21.18	1303	8.70	-164.9
	6/7/2012	0.48	6.62	20.32	1309	3.63	-20.4
	9/21/2012	0.46	6.29	20.27	1284	7.05	72.4
	12/14/2012	0.47	6.68	20.14	1223	7.29	-60.5
	3/28/2013	0.84	6.51	20.93	1327	8.35	-64.3
	6/11/2013	0.52	6.63	20.34	1192	29.70	-56.8
	9/17/2013	0.61	6.69	21.15	1201	26.50	-80.7
	12/5/2013	FP	FP	FP	FP	FP	FP
	3/12/2014	FP	FP	FP	FP	FP	FP
	9/23/2014	0.55	6.83	21.7	1062	6.41	-190.8
	12/23/2014	1.03	6.67	22.33	1376	16.90	-123.2
	3/20/2015	1.33	6.61	21.7	1472	3.95	-91.9
	6/4/2015	1.05	6.66	21.35	1549	2.79	-125.4
	9/11/2015	0.79	6.63	21.64	1353	5.72	-84.2
	12/29/2015	**1.35**	**7.35**	**21.44**	**1170**	**88.7**	**-78**

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

Monitoring Well	Date	Dissolved Oxygen (mg/L)	pH	Temperature °C	Electrical Conductivity µS/cm	Turbidity NTU	ORP
2nd WBZ							
MW-1D	8/26/2009	0.45	7.04	19.93	1388	7.75	-11
	12/1/2009	0.51	7.4	19.79	1342	19.1	-21.7
	3/16/2010	0.57	6.45	19.99	1353	98.9	-28.2
	6/4/2010	0.58	6.66	19.98	1336	3.85	97.7
	9/1/2010	0.52	6.94	20.12	1404	4.41	-6.6
	12/3/2010	0.49	6.64	19.73	1328	7.12	-75.3
	3/3/2011	2.77	7.35	19.79	1294	9.97	18.8
	5/19/2011	2.81	7.07	19.95	1330	5.26	6.6
	9/8/2011	3.21	6.66	20.03	1309	9.98	-35.5
	3/2/2012	2.04	6.75	19.76	1306	22.0	-71.3
	6/6/2012	1.1	7.29	19.54	1228	10.8	58.7
	9/20/2012	0.42	6.85	19.57	1256	18.6	93.7
	12/13/2012	1.03	7.29	18.82	1234	11.4	93.7
	3/27/2013	1.45	7.08	19.7	1253	5.8	-1
	6/10/2013	0.52	7.27	19.8	1238	16	111.5
	9/16/2013	0.78	7.09	19.88	1225	19	80.1
	12/5/2013	0.87	7.29	18.47	1184	23.2	5.2
	3/12/2014	0.34	8.11	19.69	1375	51.5	8
	9/22/2014	1.04	7.29	19.8	1236	9.9	16.8
	12/23/2014	2.56	7.19	19.62	1238	18.3	189.3
	3/19/2015	0.69	7.14	19.46	1201	9.4	41
	6/3/2015	0.93	7.26	19.35	1297	15.1	-43.1
	9/10/2015	0.41	6.86	20.12	1254	1.15	-1.0
MW-3D	8/26/2009	0.73	6.93	20.17	1276	1.73	-18.8
	12/1/2009	0.98	7.3	20.04	1236	2.48	-23.5
	3/16/2010	0.69	6.38	20.29	1272	8.05	-27.8
	6/4/2010	0.77	6.54	20.2	1254	0.42	78.1
	9/1/2010	0.79	6.85	20.33	1304	0.25	-29.4
	12/3/2010	0.81	6.49	20.04	1252	1.49	-79.2
	3/3/2011	2	7.24	20.02	1254	0.85	54
	5/19/2011	1.99	6.91	20.21	1260	2.03	-14.8
	9/8/2011	1.73	6.52	20.19	1247	3.53	-32.6
	3/2/2012	2.17	6.99	20.02	1269	9.02	-84.2
	6/6/2012	0.33	7.16	19.76	1225	4.78	67.5
	9/20/2012	0.54	6.77	19.71	1233	4.70	88.0
	12/13/2012	0.85	7.14	19.02	1229	5.27	104.1
	3/27/2013	2.11	7.01	19.94	1241	5.31	66.3
	6/10/2013	0.73	7.19	20.32	1238	12.6	100.2
	9/16/2013	0.84	7.03	20	1236	16	72.9
	12/5/2013	0.74	7.16	18.64	1193	11.9	28.3
	3/13/2014	0.35	8.09	19.82	1373	8.2	217.0
	9/22/2014	0.76	7.19	20	1208	3.73	41.7
	12/23/2014	1.32	7.19	19.95	1205	8.20	147.8
	3/19/2015	0.66	6.98	19.87	1212	0.68	56.2
	6/3/2015	0.58	7.17	19.9	1266	0.97	4.0
	9/10/2015	0.33	7.2	20.85	1184	1.15	39.9
MW-4D	8/27/2009	0.98	6.93	19.46	1280	4.31	-26.4
	12/1/2009	1.9	7.36	19.42	1249	4.66	-24.2
	3/16/2010	1.4	6.36	19.58	1283	24.8	-16.7
	6/4/2010	1.3	6.53	19.49	1259	5.1	115.8
	9/1/2010	1.44	6.92	19.67	1333	2.2	-26.9
	12/3/2010	1.3	6.5	19.4	1266	1.57	-116.6
	3/3/2011	2.11	7.36	19.42	1219	1.8	-96.4
	5/19/2011	2.12	6.95	19.56	1262	2.09	-15.5
	9/8/2011	2.03	6.57	19.62	1261	3.13	-54
	3/2/2012	2.15	6.92	19.39	1272	13.1	-86.5
	6/6/2012	0.32	7.27	19.25	1189	6.32	22.9
	9/20/2012	0.39	6.76	19.21	1232	6.12	91.1
	12/13/2012	0.89	7.2	18.46	1210	7.34	-15.7
	3/27/2013	2.01	7.02	19.39	1236	5.31	47.4
	6/10/2013	0.75	7.14	19.54	1223	24.7	43.7
	9/16/2013	0.77	7.13	19.44	1220	24.2	42.8
	12/6/2013	1.34	7.17	18.05	1175	20	75
	3/13/2014	0.55	7.69	19.26	1359	20.3	150
	9/23/2014	8.52	7.36	19.6	1092	338	147.7
	12/23/2014	7.73	7.46	19.76	1074	115	129.1
	3/19/2015	7.93	7.28	19.47	1023	3.25	20.2
	6/3/2015	6.42	7.29	19.09	1143	134	-18.3
	9/10/2015	7.98	7.37	19.9	1022	17.8	3.6

Appendix C

Laboratory Reports and Chain of Custody Forms
for the Fourth Quarter 2015 Monitoring Event

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

Laboratory Job Number 272751
ANALYTICAL REPORT

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

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

Sample ID	Lab ID
MW-1	272751-001
MW-2	272751-002
MW-3	272751-003
MW-4	272751-004
MW-5	272751-005
MW-6	272751-006
MW-7	272751-007
MW-10	272751-008
MW-11	272751-009
EX-1	272751-010
EX-2	272751-011
MPE-1	272751-012
MPE-2	272751-013

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: 01/05/2016

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

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**272751**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2551**
Location:	**15101 Freedom Avenue San Leandro**
Request Date:	**12/29/15**
Samples Received:	**12/29/15**

This data package contains sample and QC results for thirteen water samples, requested for the above referenced project on 12/29/15. The samples were received cold and intact.

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

Low response was observed for isopropyl ether (DIPE) in the CCV analyzed 12/29/15 12:28; this analyte met minimum response criteria, and affected data was qualified with "b". MPE-1 (lab # 272751-012) 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

C&T LOGIN # 272751

Sampler: Lizzie Hightower/Conor Goulding

Project No: 2551

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave.,San Leandro

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPHg, BTEX, MtBE 8260B	Analyses: Gasoline Oxygenates & Lead Scavengers
1	MW-1	12/28/15 15:30		*		3-VOAs	*			*	*	*
2	MW-2	12/28/15 15:06		*		3-VOAs	*			*	*	*
3	MW-3	12/29/15 10:09		*		3-VOAs	*			*	*	*
4	MW-4	12/29/15 10:32		*		3-VOAs	*			*	*	*
5	MW-5	12/29/15 11:02		*		3-VOAs	*			*	*	*
6	MW-6	12/28/15 14:09		*		3-VOAs	*			*	*	*
7	MW-7	12/28/15 13:44		*		3-VOAs	*			*	*	*
8	MW-10	12/28/15 12:44		*		3-VOAs	*			*	*	*
9	MW-11	12/28/15 13:14		*		3-VOAs	*			*	*	*
10	EX-1	12/28/15 14:35		*		3-VOAs	*			*	*	*
11	EX-2	12/28/15 14:28		*		3-VOAs	*			*	*	*
12	MPE-1	12/29/15 11:27		*		3-VOAs	*			*	*	*
13	MPE-2	12/29/15 09:51		*		3-VOAs	*			*	*	*

Notes: **EDF OUTPUT REQUIRED**
Ethanol

RELINQUISHED BY:	RECEIVED BY:
12/29/15 12:30 DATE/TIME	12/29/15 12:30 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 272751 Date Received 12/24/15 Number of coolers 0
Client Sema Environmental Project 15101 Freedom Ave.

Date Opened 12/29 By (print) BL (sign)
Date Logged in ↓ By (print) CJN (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# 5 ☐ 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

_____
_____
_____
_____
_____
_____

Rev 12, 12/01/15

Curtis & Tompkins, Ltd.

Detections Summary for 272751

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 : 272751-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	590		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	1.4		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	0.55		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-2 Laboratory Sample ID : 272751-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	170		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	0.51		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-3 Laboratory Sample ID : 272751-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	13,000		500	ug/L	As Recd	10.00	EPA 8260B	EPA 5030B
Benzene	74		5.0	ug/L	As Recd	10.00	EPA 8260B	EPA 5030B
Ethylbenzene	220		5.0	ug/L	As Recd	10.00	EPA 8260B	EPA 5030B
m,p-Xylenes	570		5.0	ug/L	As Recd	10.00	EPA 8260B	EPA 5030B
o-Xylene	58		5.0	ug/L	As Recd	10.00	EPA 8260B	EPA 5030B

Client Sample ID : MW-4 Laboratory Sample ID : 272751-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	440		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
tert-Butyl Alcohol (TBA)	32		10	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Methyl tert-Amyl Ether (TAME)	1.4		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
MTBE	17		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	91		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	0.84		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	0.74		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-5 Laboratory Sample ID : 272751-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	260		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	1.5		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	1.1		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	0.89		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Curtis & Tompkins, Ltd.

Client Sample ID : MW-6 Laboratory Sample ID : 272751-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	4,600		100	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
Benzene	27		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
Ethylbenzene	160		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
m,p-Xylenes	24		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-7 Laboratory Sample ID : 272751-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	2,500		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	3.1		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	5.2		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	4.0		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : MW-10 Laboratory Sample ID : 272751-008

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
Ethylbenzene	930		10	ug/L	As Recd	20.00	EPA 8260B	EPA 5030B
m,p-Xylenes	1,700		10	ug/L	As Recd	20.00	EPA 8260B	EPA 5030B
o-Xylene	37		10	ug/L	As Recd	20.00	EPA 8260B	EPA 5030B

Client Sample ID : MW-11 Laboratory Sample ID : 272751-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	170		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	3.0		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	4.2		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Client Sample ID : EX-1 Laboratory Sample ID : 272751-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	400		50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
tert-Butyl Alcohol (TBA)	38		10	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethyl tert-Butyl Ether (ETBE)	0.70		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Methyl tert-Amyl Ether (TAME)	2.4		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	21		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	27		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	4.6		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	9.8		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
o-Xylene	1.1		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

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Client Sample ID : EX-2 Laboratory Sample ID : 272751-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	3,500		100	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
MTBE	4.5		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
Benzene	46		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
Toluene	6.0		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
Ethylbenzene	120		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
m,p-Xylenes	240		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B
o-Xylene	26		1.0	ug/L	As Recd	2.000	EPA 8260B	EPA 5030B

Client Sample ID : MPE-1 Laboratory Sample ID : 272751-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	3,100		170	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Methyl tert-Amyl Ether (TAME)	1.6		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	0.88		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	24		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	11		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	8.2		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	150		0.50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
o-Xylene	87		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B

Client Sample ID : MPE-2 Laboratory Sample ID : 272751-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	16,000		630	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
Benzene	220		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
Toluene	10		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
Ethylbenzene	210		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
m,p-Xylenes	690		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B
o-Xylene	300		6.3	ug/L	As Recd	12.50	EPA 8260B	EPA 5030B

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	230796
Lab ID:	272751-001	Sampled:	12/28/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	590	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	1.4	0.50
m,p-Xylenes	0.55	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	110	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	230796
Lab ID:	272751-002	Sampled:	12/28/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	170	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	0.51	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	114	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	230796
Lab ID:	272751-003	Sampled:	12/29/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	10.00		

Analyte	Result	RL
Gasoline C7-C12	13,000	500
tert-Butyl Alcohol (TBA)	ND	100
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	10,000
MTBE	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	74	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	220	5.0
m,p-Xylenes	570	5.0
o-Xylene	58	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-4	Units:	ug/L
Lab ID:	272751-004	Sampled:	12/29/15
Matrix:	Water	Received:	12/29/15

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	440	50	1.000	230796	12/30/15
tert-Butyl Alcohol (TBA)	32	10	1.000	230796	12/30/15
Isopropyl Ether (DIPE)	ND	0.50	1.000	230796	12/30/15
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	230796	12/30/15
Methyl tert-Amyl Ether (TAME)	1.4	1.0	2.000	230759	12/29/15
Ethanol	ND	1,000	1.000	230796	12/30/15
MTBE	17	0.50	1.000	230796	12/30/15
1,2-Dichloroethane	ND	0.50	1.000	230796	12/30/15
Benzene	91	0.50	1.000	230796	12/30/15
Toluene	ND	0.50	1.000	230796	12/30/15
1,2-Dibromoethane	ND	0.50	1.000	230796	12/30/15
Ethylbenzene	0.84	0.50	1.000	230796	12/30/15
m,p-Xylenes	0.74	0.50	1.000	230796	12/30/15
o-Xylene	ND	0.50	1.000	230796	12/30/15

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	101	80-128	1.000	230796	12/30/15
1,2-Dichloroethane-d4	101	75-139	1.000	230796	12/30/15
Toluene-d8	101	80-120	1.000	230796	12/30/15
Bromofluorobenzene	102	80-120	1.000	230796	12/30/15

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	230796
Lab ID:	272751-005	Sampled:	12/29/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	260	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	1.5	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	1.1	0.50
m,p-Xylenes	0.89	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	108	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	230796
Lab ID:	272751-006	Sampled:	12/28/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	2.000		

Analyte	Result	RL
Gasoline C7-C12	4,600	100
tert-Butyl Alcohol (TBA)	ND	20
Isopropyl Ether (DIPE)	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	1.0
Ethanol	ND	2,000
MTBE	ND	1.0
1,2-Dichloroethane	ND	1.0
Benzene	27	1.0
Toluene	ND	1.0
1,2-Dibromoethane	ND	1.0
Ethylbenzene	160	1.0
m,p-Xylenes	24	1.0
o-Xylene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	230796
Lab ID:	272751-007	Sampled:	12/28/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	2,500	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	3.1	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	5.2	0.50
m,p-Xylenes	4.0	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	89	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-10	Batch#:	230796
Lab ID:	272751-008	Sampled:	12/28/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	20.00		

Analyte	Result	RL
Gasoline C7-C12	22,000	1,000
tert-Butyl Alcohol (TBA)	ND	200
Isopropyl Ether (DIPE)	ND	10
Ethyl tert-Butyl Ether (ETBE)	ND	10
Methyl tert-Amyl Ether (TAME)	ND	10
Ethanol	ND	20,000
MTBE	ND	10
1,2-Dichloroethane	ND	10
Benzene	ND	10
Toluene	ND	10
1,2-Dibromoethane	ND	10
Ethylbenzene	930	10
m,p-Xylenes	1,700	10
o-Xylene	37	10

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	230796
Lab ID:	272751-009	Sampled:	12/28/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	170	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	3.0	0.50
m,p-Xylenes	4.2	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	111	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	EX-1	Batch#:	230796
Lab ID:	272751-010	Sampled:	12/28/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	400	50
tert-Butyl Alcohol (TBA)	38	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	0.70	0.50
Methyl tert-Amyl Ether (TAME)	2.4	0.50
Ethanol	ND	1,000
MTBE	21	0.50
1,2-Dichloroethane	ND	0.50
Benzene	27	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	4.6	0.50
m,p-Xylenes	9.8	0.50
o-Xylene	1.1	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	EX-2	Batch#:	230796
Lab ID:	272751-011	Sampled:	12/28/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	2.000		

Analyte	Result	RL
Gasoline C7-C12	3,500	100
tert-Butyl Alcohol (TBA)	ND	20
Isopropyl Ether (DIPE)	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	1.0
Ethanol	ND	2,000
MTBE	4.5	1.0
1,2-Dichloroethane	ND	1.0
Benzene	46	1.0
Toluene	6.0	1.0
1,2-Dibromoethane	ND	1.0
Ethylbenzene	120	1.0
m,p-Xylenes	240	1.0
o-Xylene	26	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MPE-1	Units:	ug/L
Lab ID:	272751-012	Sampled:	12/29/15
Matrix:	Water	Received:	12/29/15

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	3,100	170	3.333	230828	12/31/15
tert-Butyl Alcohol (TBA)	ND	10	1.000	230796	12/30/15
Isopropyl Ether (DIPE)	ND	0.50	1.000	230796	12/30/15
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	230796	12/30/15
Methyl tert-Amyl Ether (TAME)	1.6	0.50	1.000	230796	12/30/15
Ethanol	ND	1,000	1.000	230796	12/30/15
MTBE	0.88	0.50	1.000	230796	12/30/15
1,2-Dichloroethane	ND	0.50	1.000	230796	12/30/15
Benzene	24	0.50	1.000	230796	12/30/15
Toluene	11	0.50	1.000	230796	12/30/15
1,2-Dibromoethane	ND	0.50	1.000	230796	12/30/15
Ethylbenzene	8.2	0.50	1.000	230796	12/30/15
m,p-Xylenes	150	0.50	1.000	230796	12/30/15
o-Xylene	87	1.7	3.333	230828	12/31/15

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	102	80-128	1.000	230796	12/30/15
1,2-Dichloroethane-d4	105	75-139	1.000	230796	12/30/15
Toluene-d8	100	80-120	1.000	230796	12/30/15
Bromofluorobenzene	80	80-120	1.000	230796	12/30/15

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Field ID:	MPE-2	Batch#:	230796
Lab ID:	272751-013	Sampled:	12/29/15
Matrix:	Water	Received:	12/29/15
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	12.50		

Analyte	Result	RL
Gasoline C7-C12	16,000	630
tert-Butyl Alcohol (TBA)	ND	130
Isopropyl Ether (DIPE)	ND	6.3
Ethyl tert-Butyl Ether (ETBE)	ND	6.3
Methyl tert-Amyl Ether (TAME)	ND	6.3
Ethanol	ND	13,000
MTBE	ND	6.3
1,2-Dichloroethane	ND	6.3
Benzene	220	6.3
Toluene	10	6.3
1,2-Dibromoethane	ND	6.3
Ethylbenzene	210	6.3
m,p-Xylenes	690	6.3
o-Xylene	300	6.3

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	92	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	230759
Units:	ug/L	Analyzed:	12/29/15
Diln Fac:	1.000		

Type: BS Lab ID: QC818115

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	46.71	75	32-155
Isopropyl Ether (DIPE)	12.50	8.229 b	66	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	10.34	83	62-120
Methyl tert-Amyl Ether (TAME)	12.50	10.97	88	69-120
MTBE	12.50	12.86	103	65-120
1,2-Dichloroethane	12.50	13.08	105	74-133
Benzene	12.50	12.20	98	80-123
Toluene	12.50	11.29	90	80-121
1,2-Dibromoethane	12.50	11.92	95	80-120
Ethylbenzene	12.50	12.00	96	80-123
m,p-Xylenes	25.00	24.40	98	80-126
o-Xylene	12.50	12.04	96	80-126

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-128
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	92	80-120

Type: BSD Lab ID: QC818116

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	41.10	66	32-155	13	33
Isopropyl Ether (DIPE)	12.50	8.310 b	66	57-128	1	20
Ethyl tert-Butyl Ether (ETBE)	12.50	9.872	79	62-120	5	20
Methyl tert-Amyl Ether (TAME)	12.50	10.94	87	69-120	0	20
MTBE	12.50	11.99	96	65-120	7	22
1,2-Dichloroethane	12.50	12.55	100	74-133	4	20
Benzene	12.50	11.81	94	80-123	3	20
Toluene	12.50	10.87	87	80-121	4	20
1,2-Dibromoethane	12.50	11.70	94	80-120	2	20
Ethylbenzene	12.50	11.79	94	80-123	2	21
m,p-Xylenes	25.00	23.74	95	80-126	3	21
o-Xylene	12.50	11.88	95	80-126	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-128
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	89	80-120
Bromofluorobenzene	89	80-120

b= See narrative
RPD= Relative Percent Difference

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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	272751	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:	QC818117	Batch#:	230759
Matrix:	Water	Analyzed:	12/29/15
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	113	80-128
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	89	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	230759
Units:	ug/L	Analyzed:	12/29/15
Diln Fac:	1.000		

Type: BS Lab ID: QC818174

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	993.1	99	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-128
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	88	80-120
Bromofluorobenzene	93	80-120

Type: BSD Lab ID: QC818175

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	923.1	92	76-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-128
1,2-Dichloroethane-d4	93	75-139
Toluene-d8	90	80-120
Bromofluorobenzene	93	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	230796
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	1.000		

Type: BS Lab ID: QC818277

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	44.88	72	32-155
Isopropyl Ether (DIPE)	12.50	11.93	95	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	11.27	90	62-120
Methyl tert-Amyl Ether (TAME)	12.50	10.57	85	69-120
MTBE	12.50	10.98	88	65-120
1,2-Dichloroethane	12.50	10.45	84	74-133
Benzene	12.50	11.73	94	80-123
Toluene	12.50	11.97	96	80-121
1,2-Dibromoethane	12.50	10.59	85	80-120
Ethylbenzene	12.50	11.84	95	80-123
m,p-Xylenes	25.00	22.93	92	80-126
o-Xylene	12.50	11.01	88	80-126

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	90	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC818278

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	47.82	77	32-155	6	33
Isopropyl Ether (DIPE)	12.50	11.70	94	57-128	2	20
Ethyl tert-Butyl Ether (ETBE)	12.50	11.40	91	62-120	1	20
Methyl tert-Amyl Ether (TAME)	12.50	10.84	87	69-120	2	20
MTBE	12.50	11.06	88	65-120	1	22
1,2-Dichloroethane	12.50	11.30	90	74-133	8	20
Benzene	12.50	11.68	93	80-123	0	20
Toluene	12.50	11.61	93	80-121	3	20
1,2-Dibromoethane	12.50	10.97	88	80-120	4	20
Ethylbenzene	12.50	11.51	92	80-123	3	21
m,p-Xylenes	25.00	22.21	89	80-126	3	21
o-Xylene	12.50	10.60	85	80-126	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-128
1,2-Dichloroethane-d4	93	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	230796
Units:	ug/L	Analyzed:	12/30/15
Diln Fac:	1.000		

Type: BS Lab ID: QC818313

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,105	111	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-128
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	106	80-120

Type: BSD Lab ID: QC818314

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,142	114	76-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	272751	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:	QC818315	Batch#:	230796
Matrix:	Water	Analyzed:	12/30/15
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	100	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	116	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	230828
Units:	ug/L	Analyzed:	12/31/15
Diln Fac:	1.000		

Type: BS Lab ID: QC818407

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	51.96	83	32-155
Isopropyl Ether (DIPE)	12.50	13.44	107	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	12.93	103	62-120
Methyl tert-Amyl Ether (TAME)	12.50	11.95	96	69-120
MTBE	12.50	12.50	100	65-120
1,2-Dichloroethane	12.50	12.99	104	74-133
Benzene	12.50	13.06	104	80-123
Toluene	12.50	13.20	106	80-121
1,2-Dibromoethane	12.50	12.25	98	80-120
Ethylbenzene	12.50	13.54	108	80-123
m,p-Xylenes	25.00	25.90	104	80-126
o-Xylene	12.50	12.28	98	80-126

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-120

Type: BSD Lab ID: QC818408

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	57.05	91	32-155	9	33
Isopropyl Ether (DIPE)	12.50	13.14	105	57-128	2	20
Ethyl tert-Butyl Ether (ETBE)	12.50	12.77	102	62-120	1	20
Methyl tert-Amyl Ether (TAME)	12.50	12.14	97	69-120	2	20
MTBE	12.50	12.56	101	65-120	0	22
1,2-Dichloroethane	12.50	13.25	106	74-133	2	20
Benzene	12.50	12.60	101	80-123	4	20
Toluene	12.50	12.97	104	80-121	2	20
1,2-Dibromoethane	12.50	12.28	98	80-120	0	20
Ethylbenzene	12.50	13.06	104	80-123	4	21
m,p-Xylenes	25.00	25.62	102	80-126	1	21
o-Xylene	12.50	12.08	97	80-126	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	272751	Location:	15101 Freedom Avenue San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2551	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	230828
Units:	ug/L	Analyzed:	12/31/15
Diln Fac:	1.000		

Type: BS Lab ID: QC818409

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,119	112	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-128
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	106	80-120

Type: BSD Lab ID: QC818410

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,073	107	76-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	108	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	272751	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:	QC818411	Batch#:	230828
Matrix:	Water	Analyzed:	12/31/15
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	100	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	117	80-120

ND= Not Detected
RL= Reporting Limit

Data File: \\gcmsserver\DD\chem\MSVOA10.i\123015.b\JLU16TVH.D

Date : 30-DEC-2015 15:50

Client ID: DYNA P&T

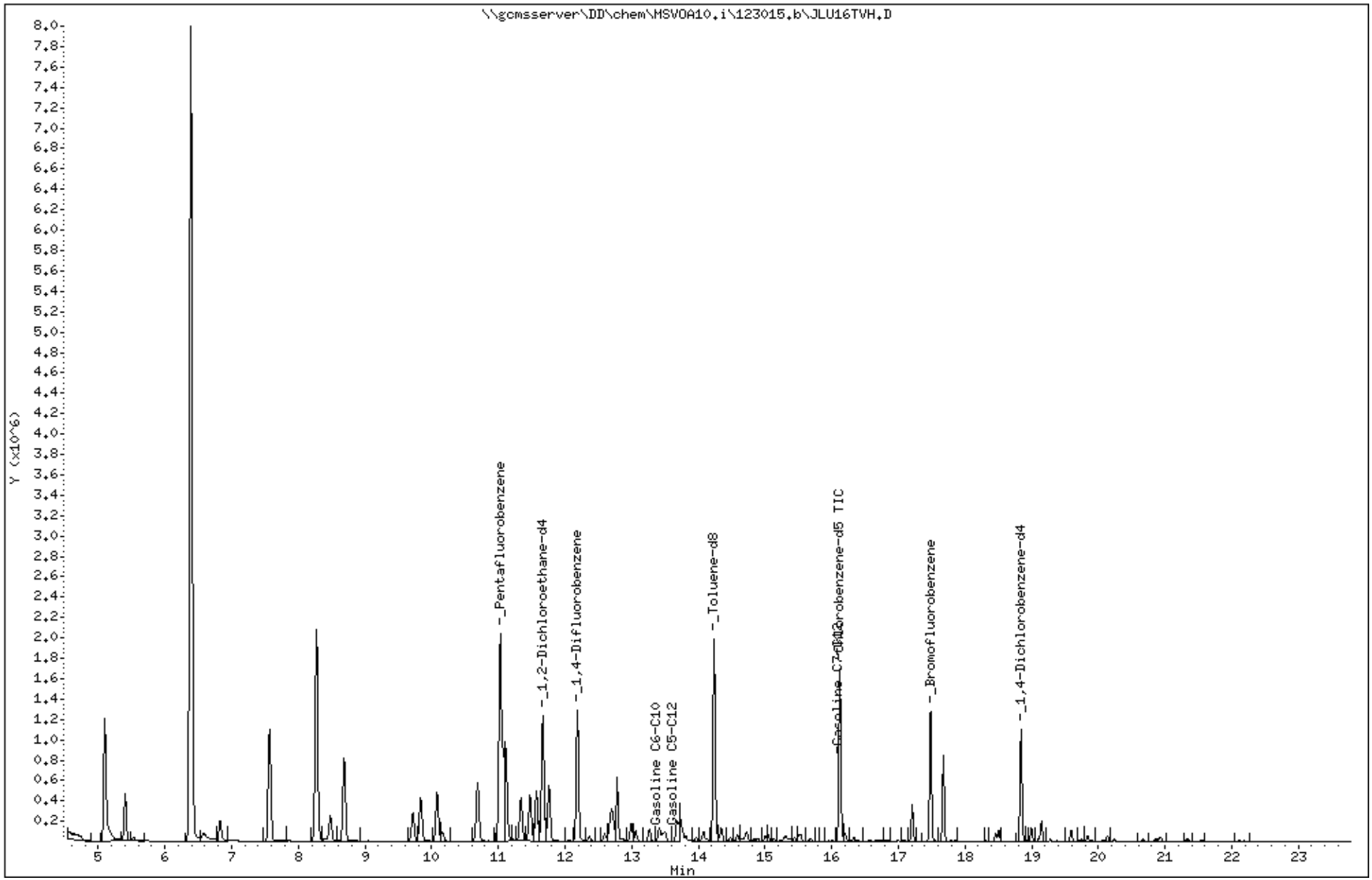
Instrument: MSVOA10.i

Sample Info: S,272751-001

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-DEC-2015 16:21

Client ID: DYNA P&T

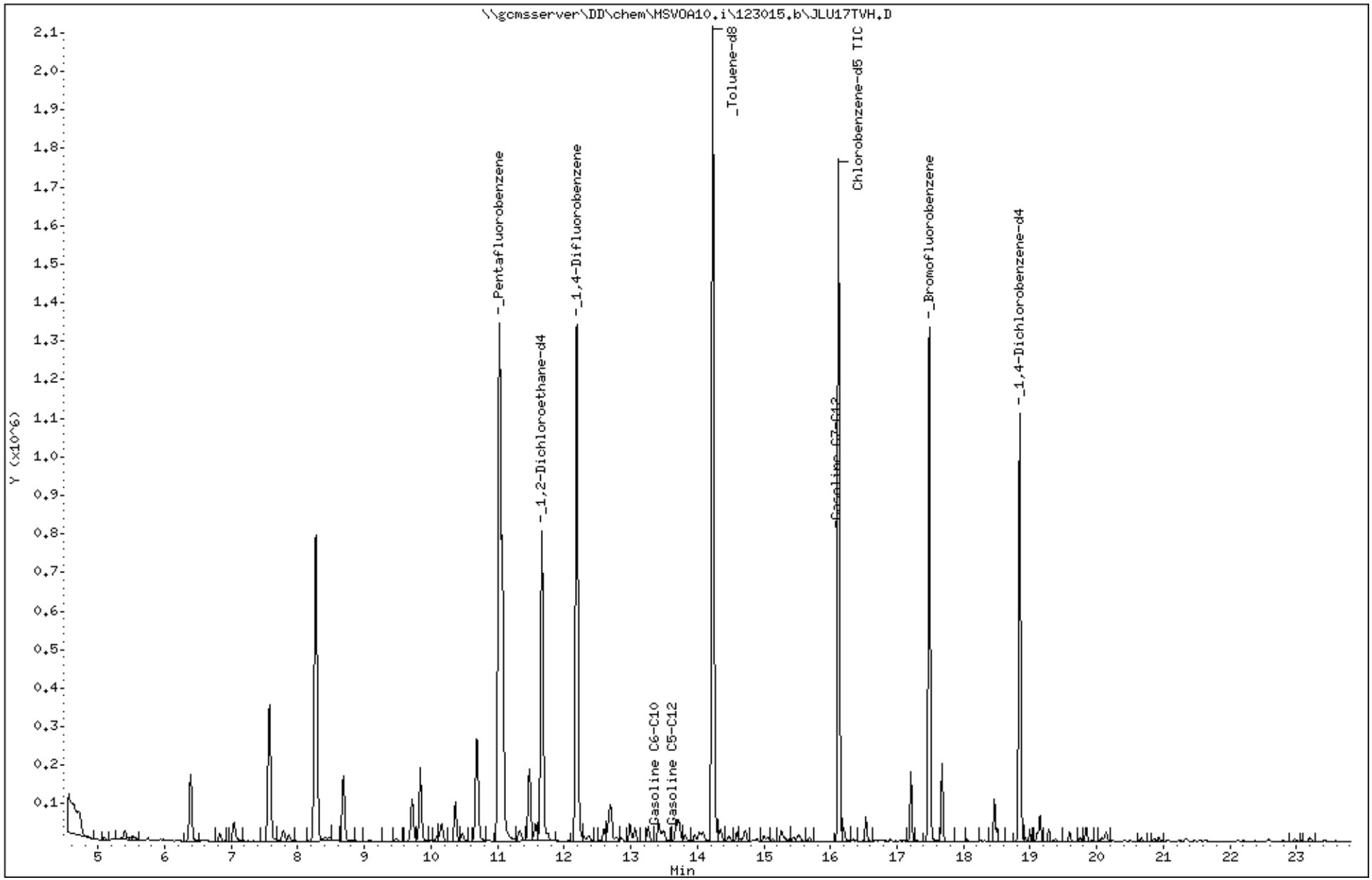
Instrument: MSVOA10.i

Sample Info: S,272751-002

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-DEC-2015 18:26

Client ID: DYNA P&T

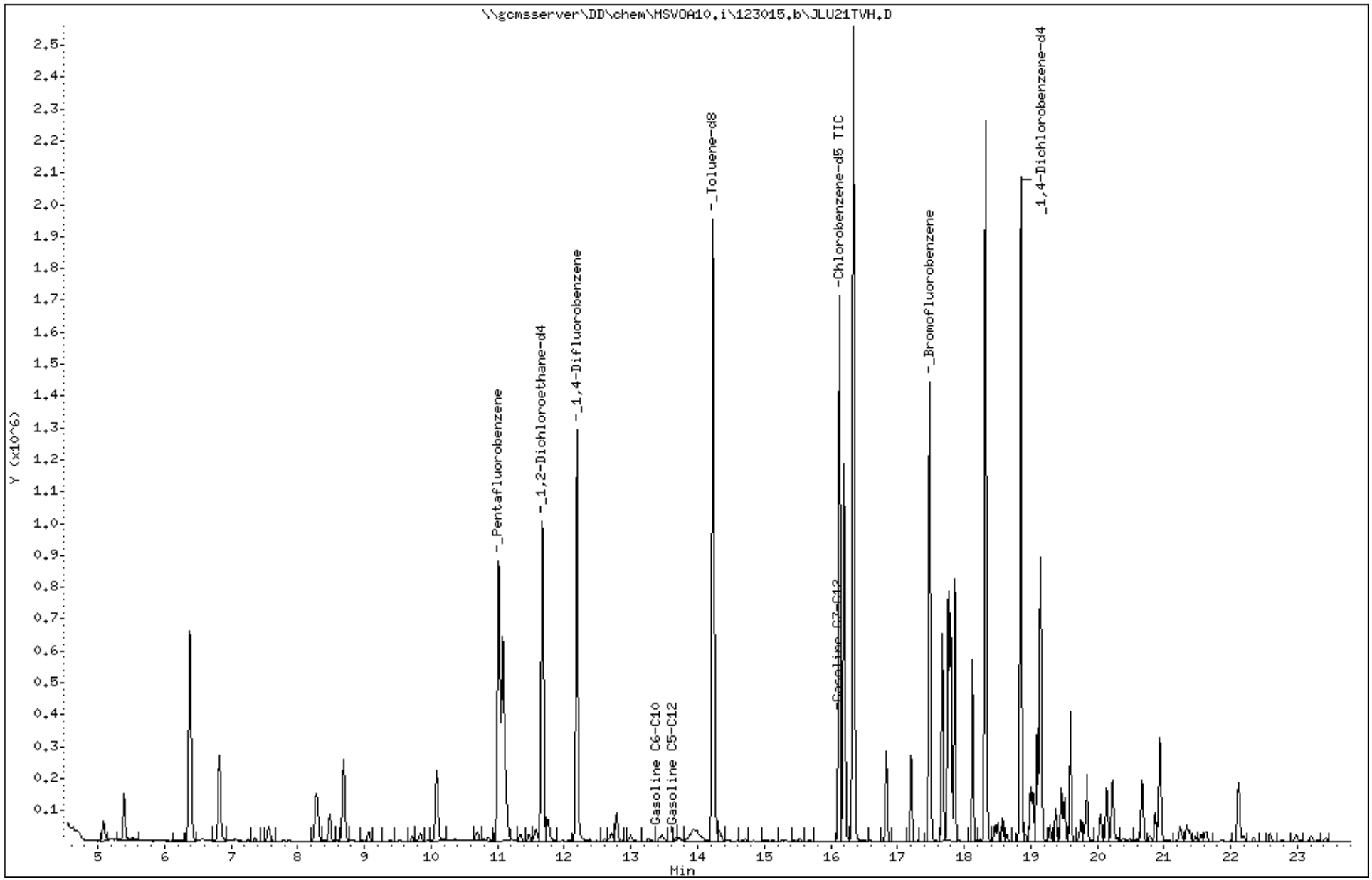
Instrument: MSVOA10.i

Sample Info: S,272751-003

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-DEC-2015 16:52

Client ID: DYNA P&T

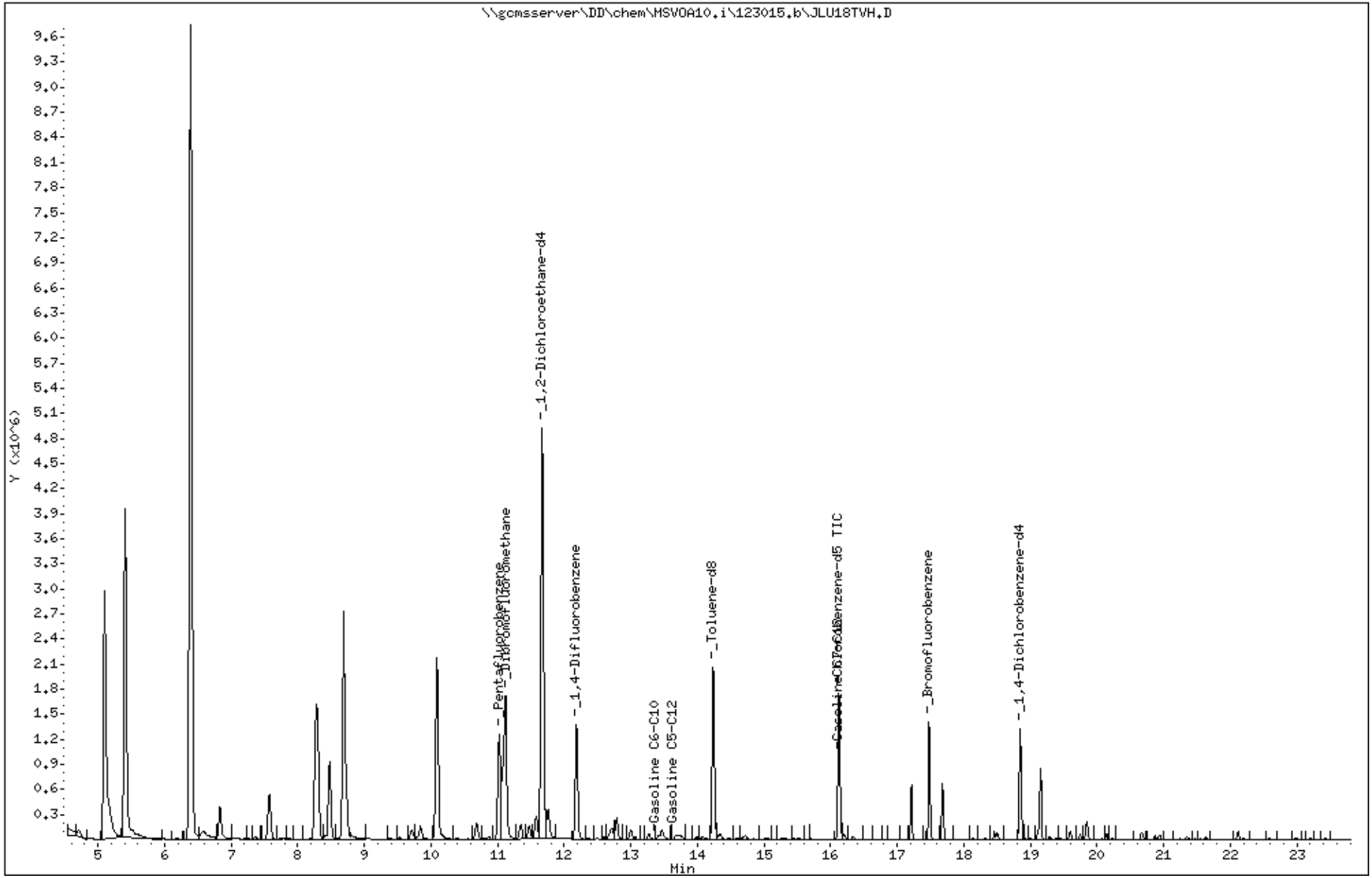
Instrument: MSVOA10.i

Sample Info: S,272751-004

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-DEC-2015 17:23

Client ID: DYNA P&T

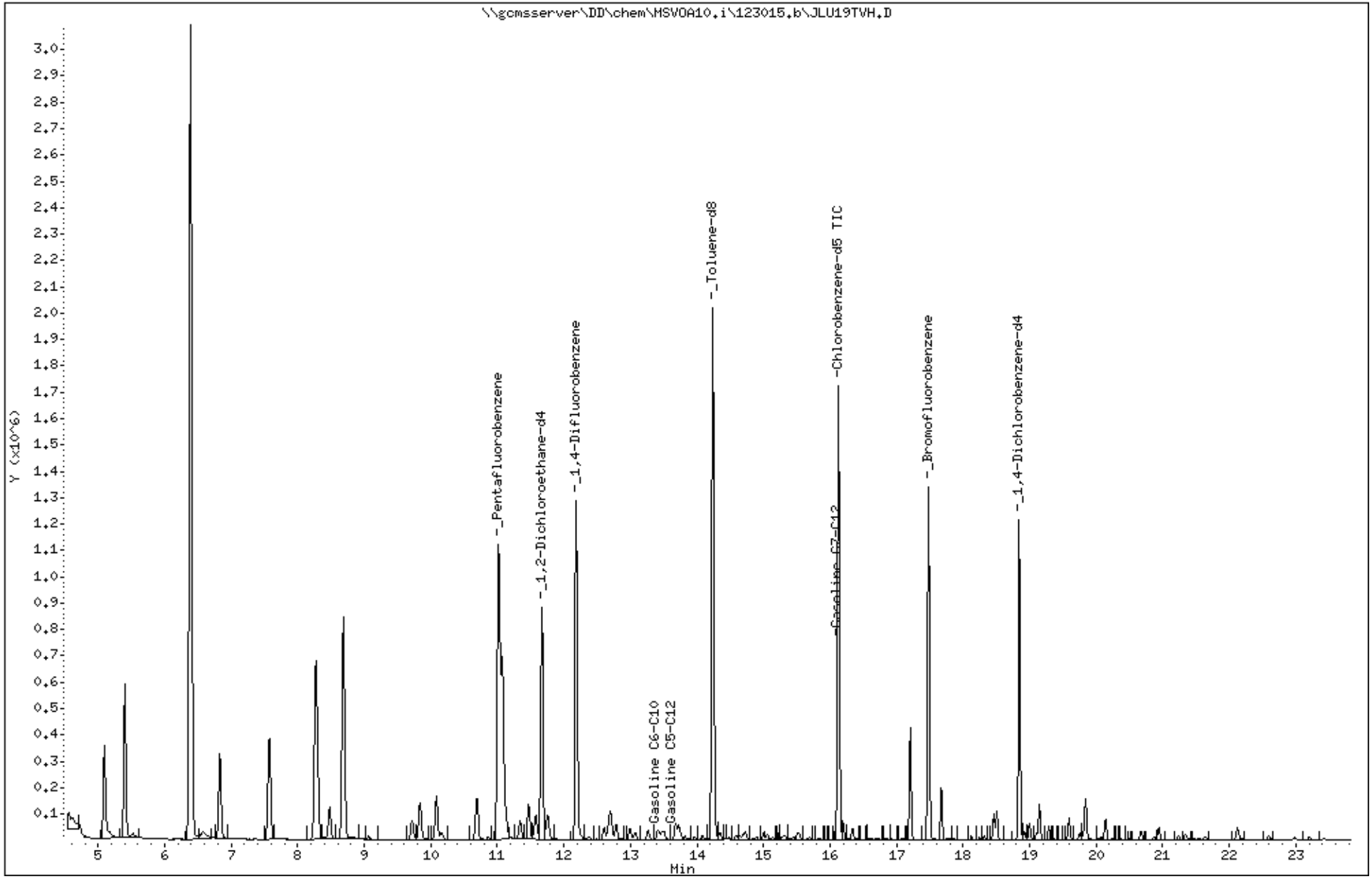
Instrument: MSVOA10.i

Sample Info: S,272751-005

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-DEC-2015 18:57

Client ID: DYNA P&T

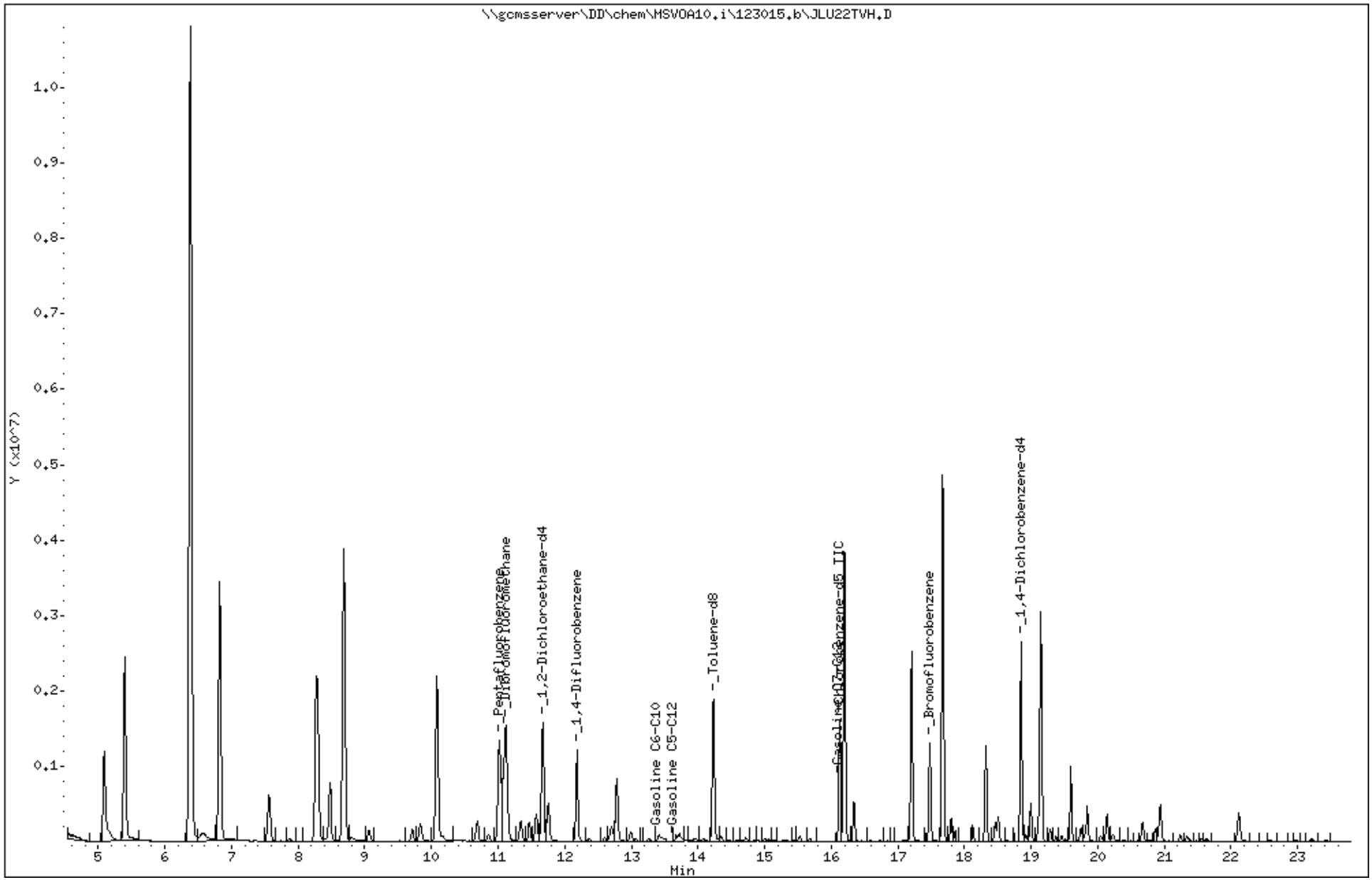
Instrument: MSVOA10.i

Sample Info: S,272751-006

Operator: VOA

Column phase:

Column diameter: 2.00



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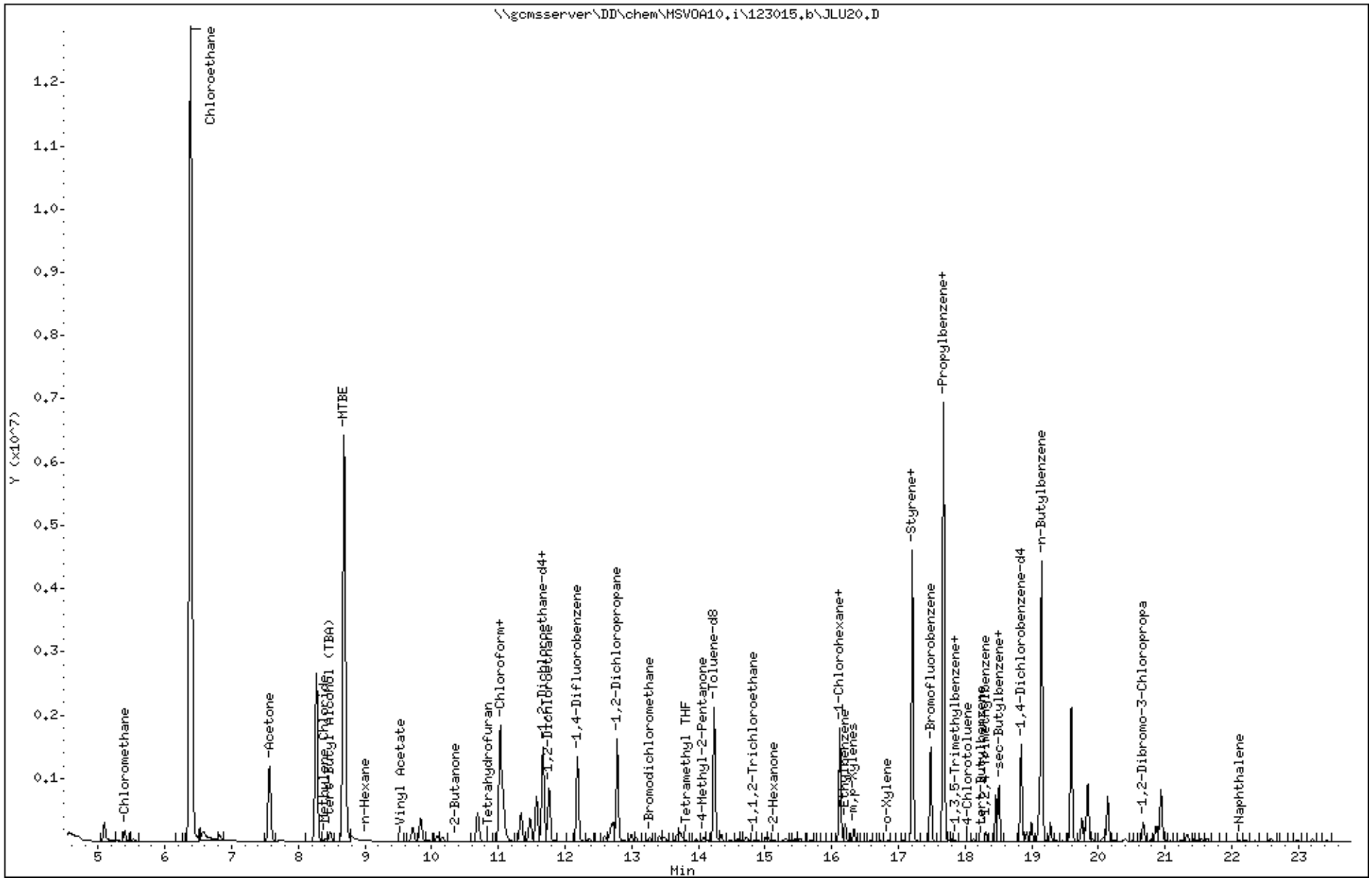
Date : 30-DEC-2015 17:55
Client ID: DYNA P&T
Instrument: MSVOA10.i
Sample Info: S,272751-007
Purge Volume: 5.0
Operator: VOA
Column phase: RTx Volatiles
Column diameter: 0.32



Data File: \\gcmsserver\DD\chem\MSVOA10.i\123015.b\JLU25TVH.D

Date : 30-DEC-2015 20:31

Client ID: DYNA P&T

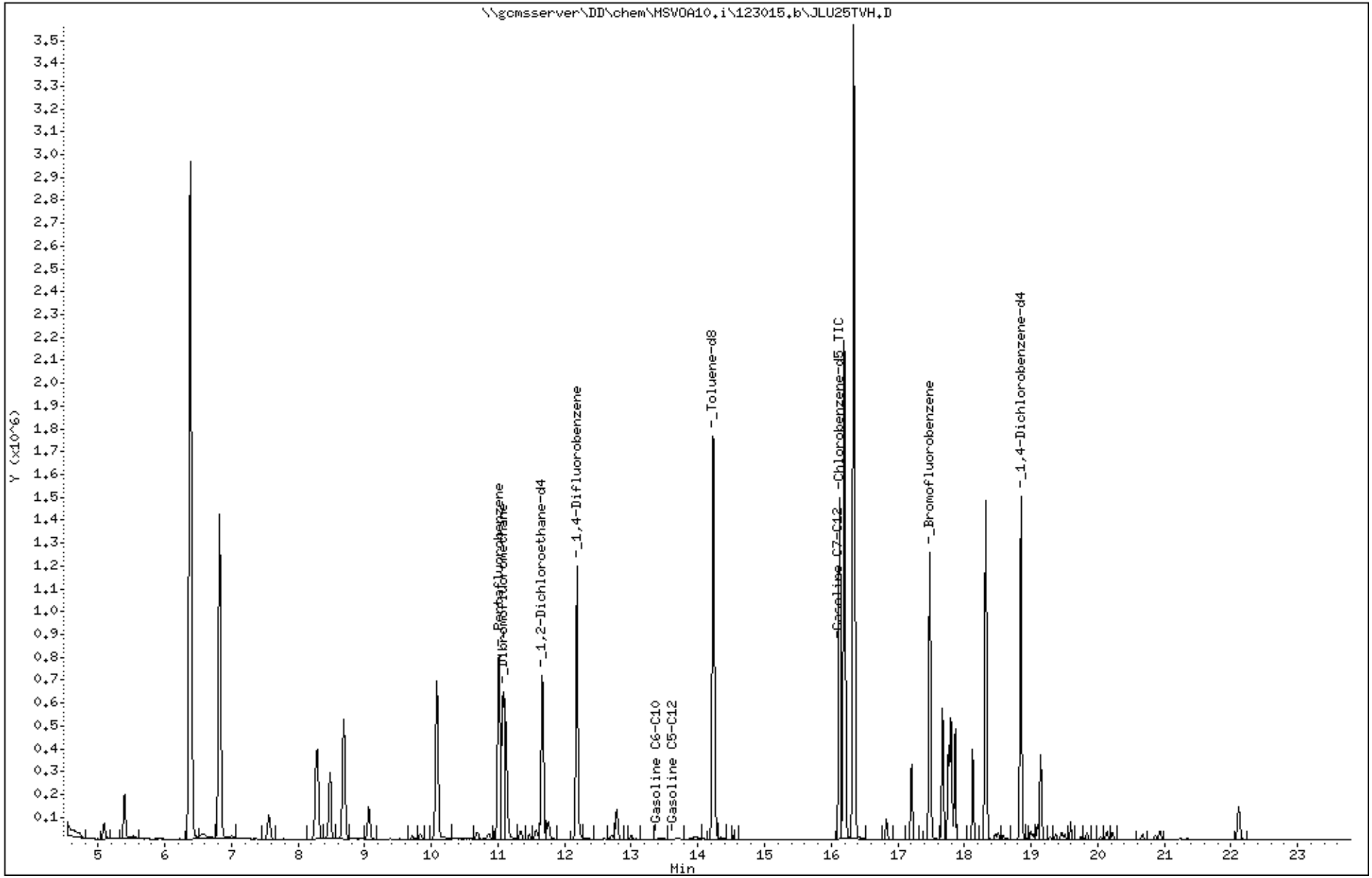
Instrument: MSVOA10.i

Sample Info: S,272751-008

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-DEC-2015 21:03

Client ID: DYNA P&T

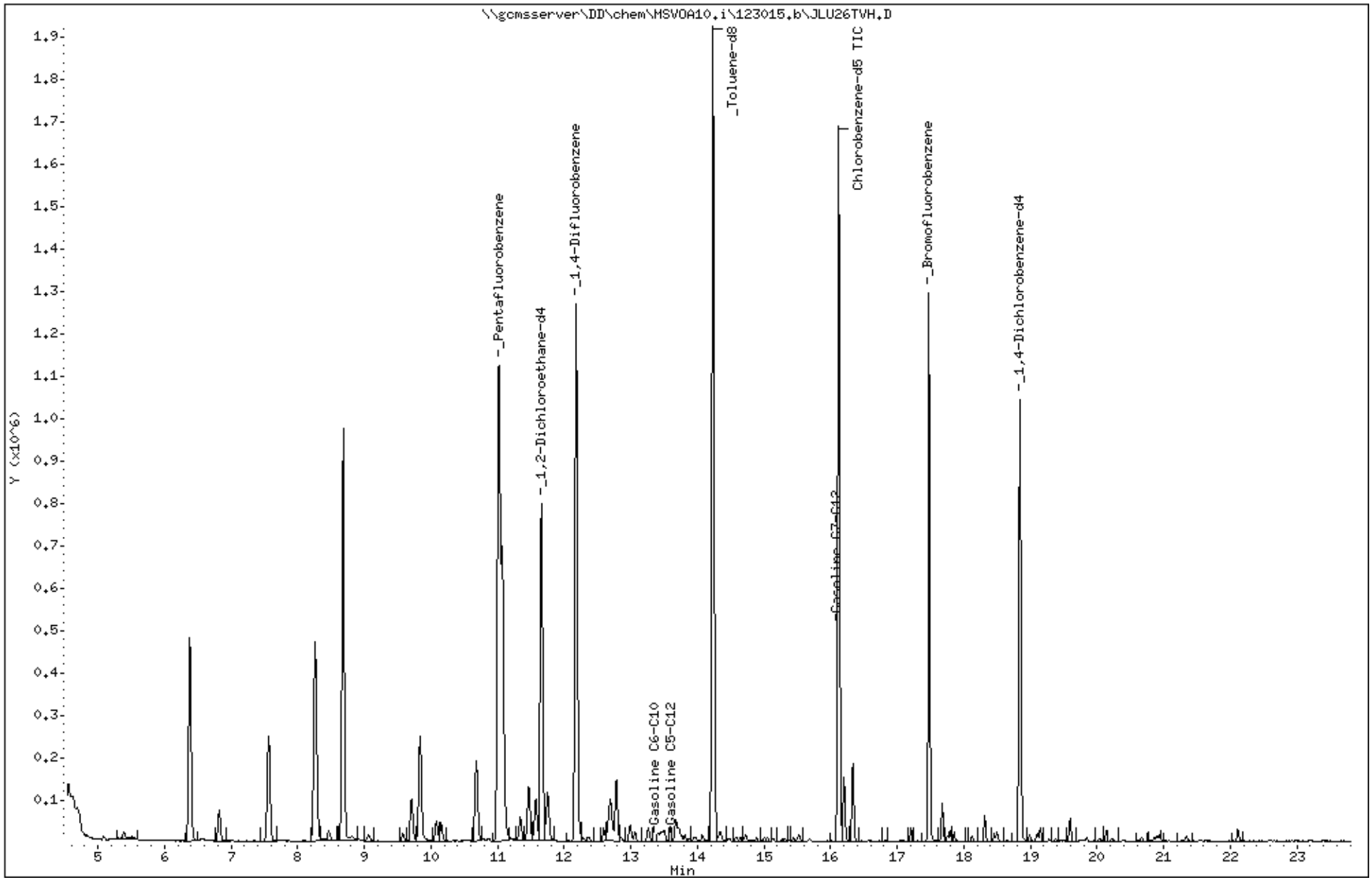
Instrument: MSVOA10.i

Sample Info: S,272751-009

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-DEC-2015 21:34

Client ID: DYNA P&T

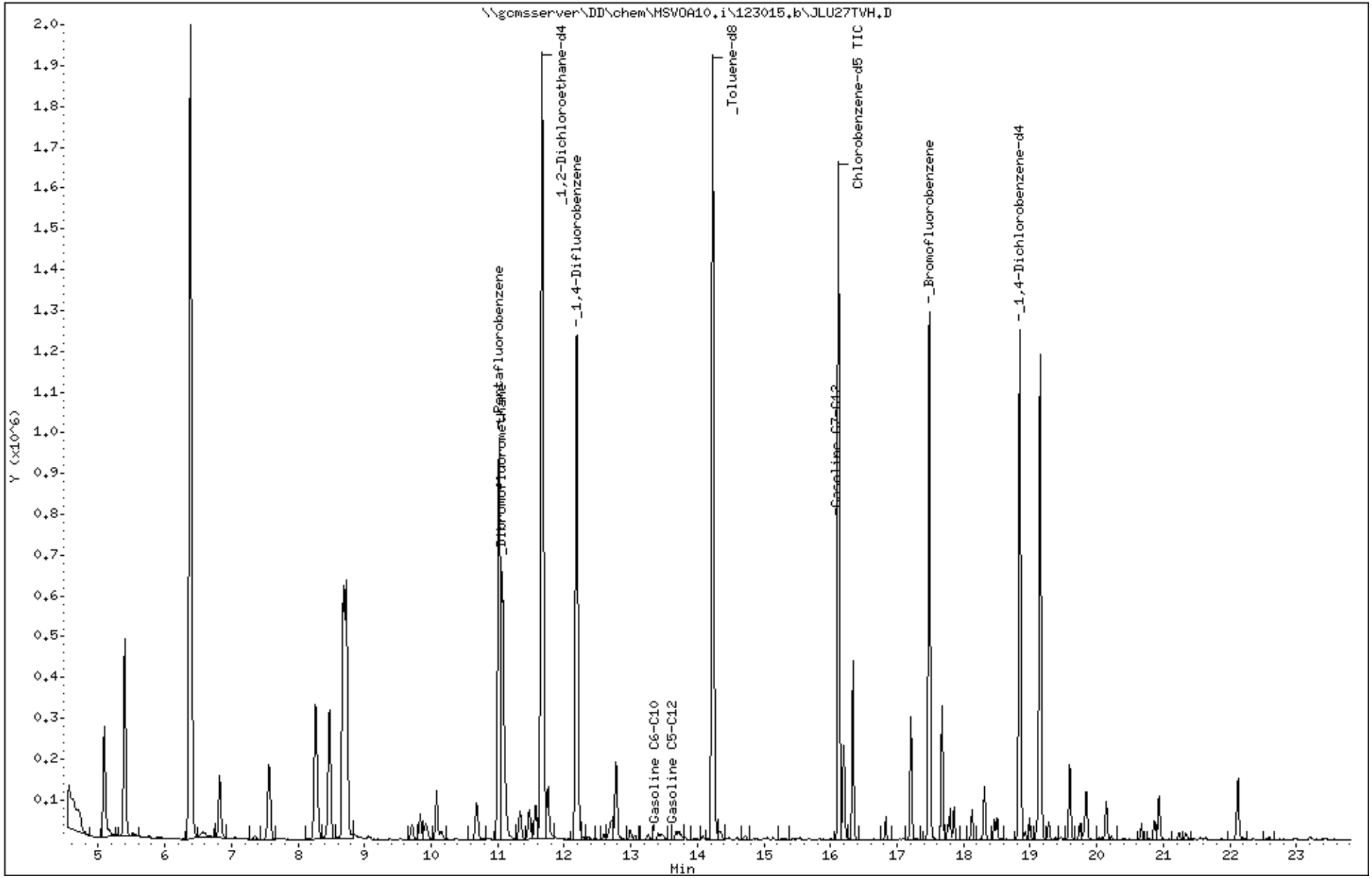
Instrument: MSVOA10.i

Sample Info: S,272751-010

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-DEC-2015 20:00

Client ID: DYNA P&T

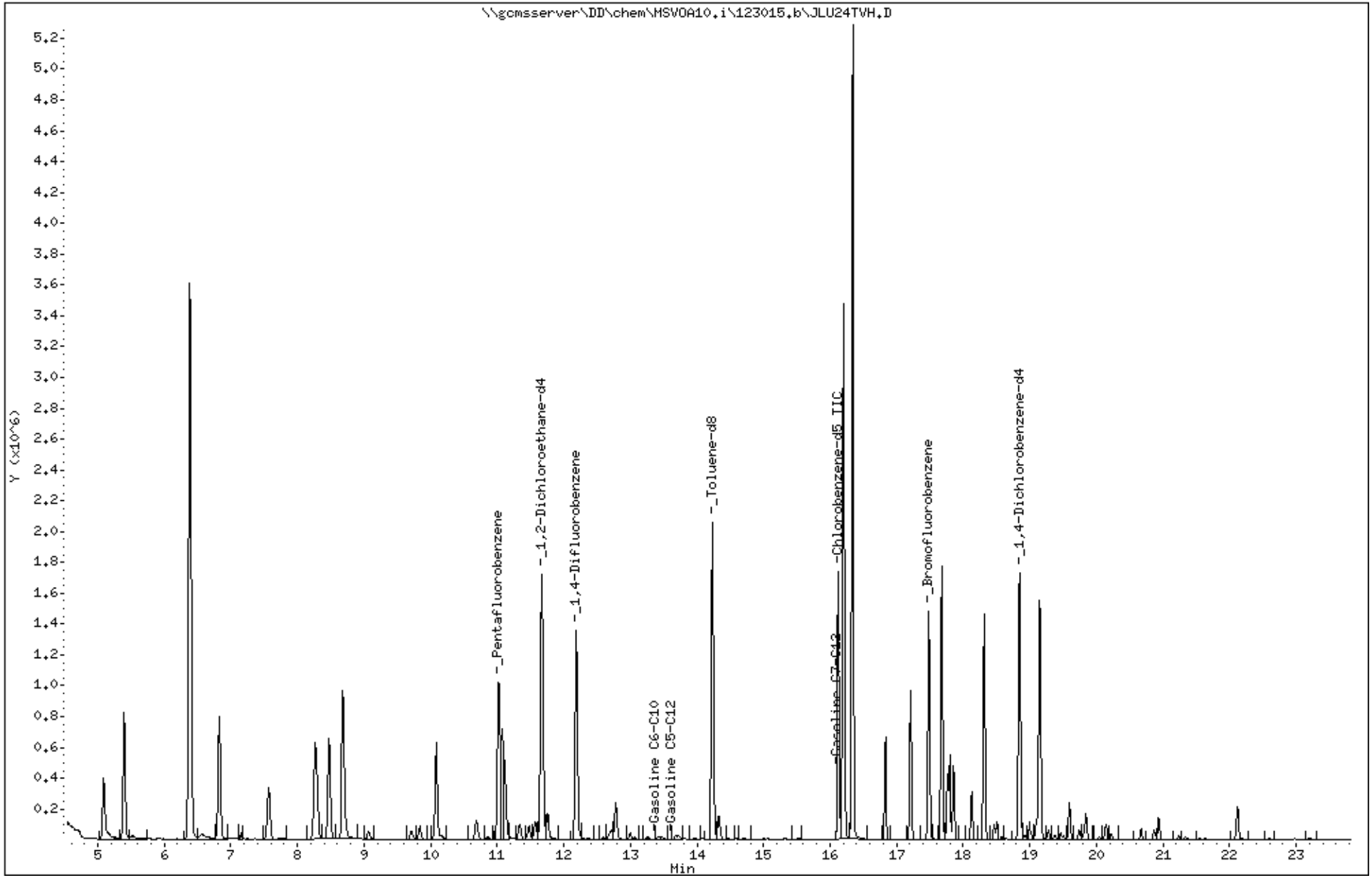
Instrument: MSVOA10.i

Sample Info: S,272751-011

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 31-DEC-2015 13:56

Client ID: DYNA P&T

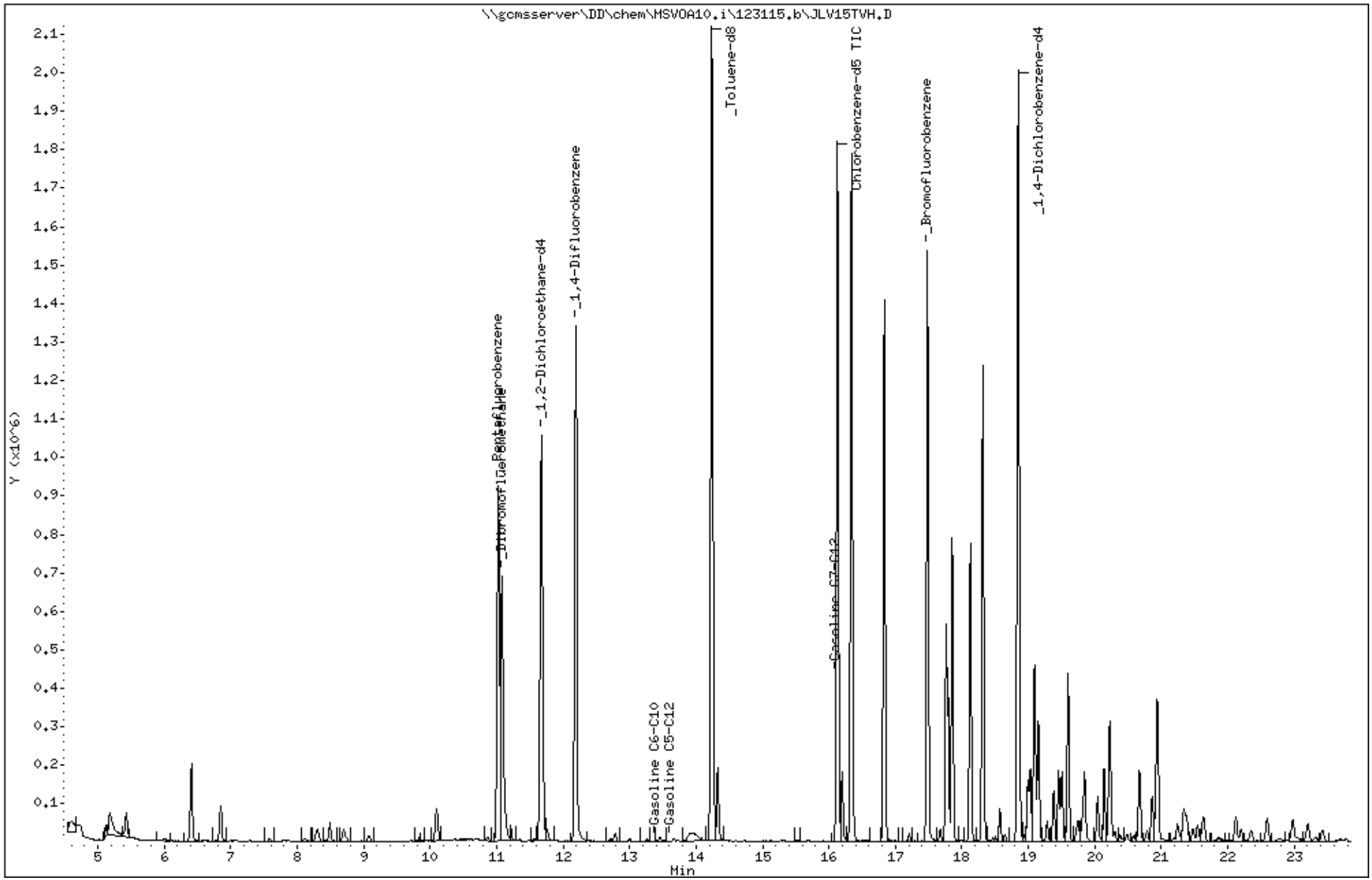
Instrument: MSVOA10.i

Sample Info: S,272751-012

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-DEC-2015 22:36

Client ID: DYNA P&T

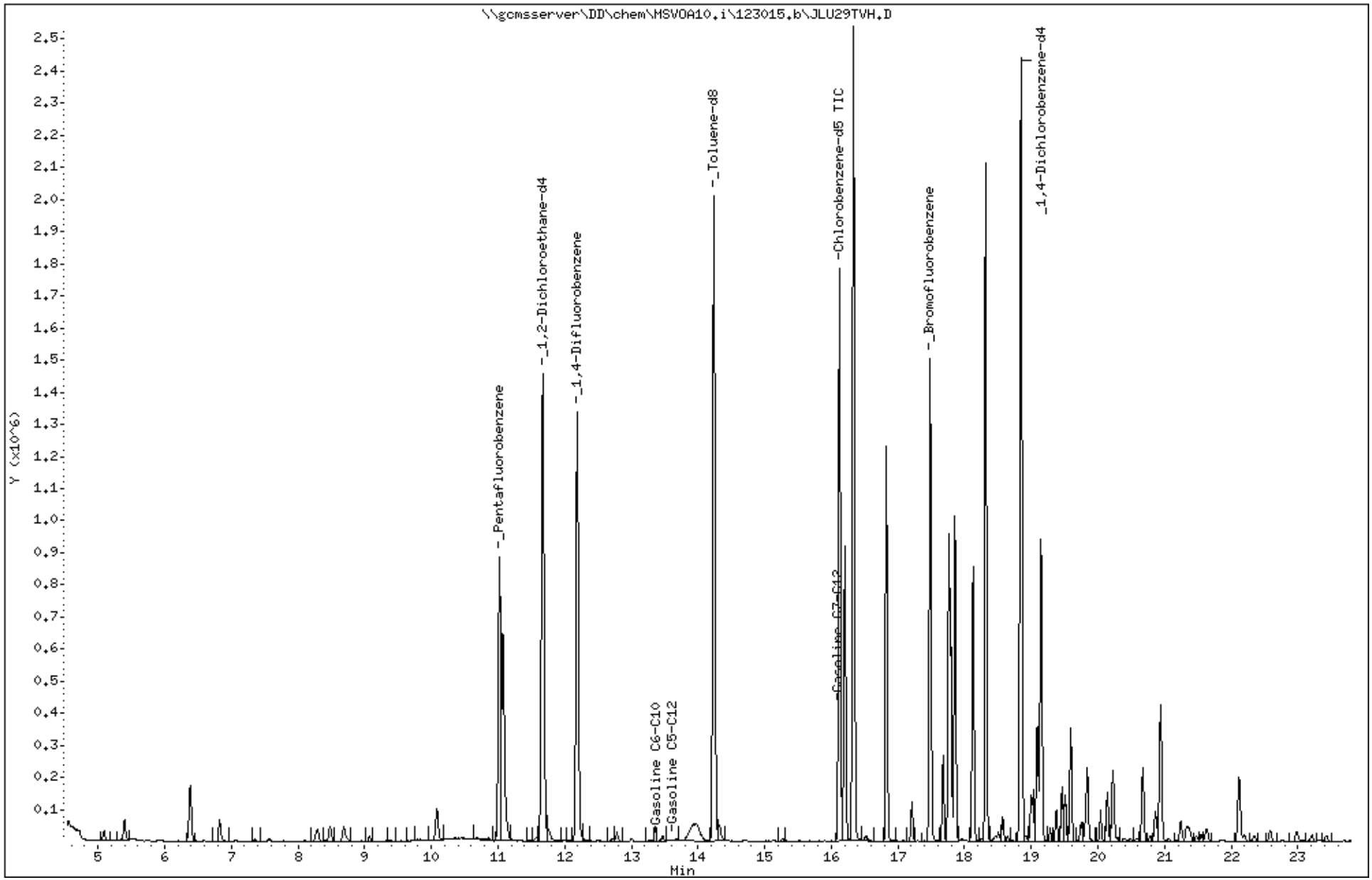
Instrument: MSVOA10.i

Sample Info: S,272751-013

Operator: VOA

Column phase:

Column diameter: 2.00



Data File: \\gcmsserver\DD\chem\MSVOA06.i\122915.b\FLT16TVH.D

Date : 29-DEC-2015 14:36

Client ID: DYNA P&T

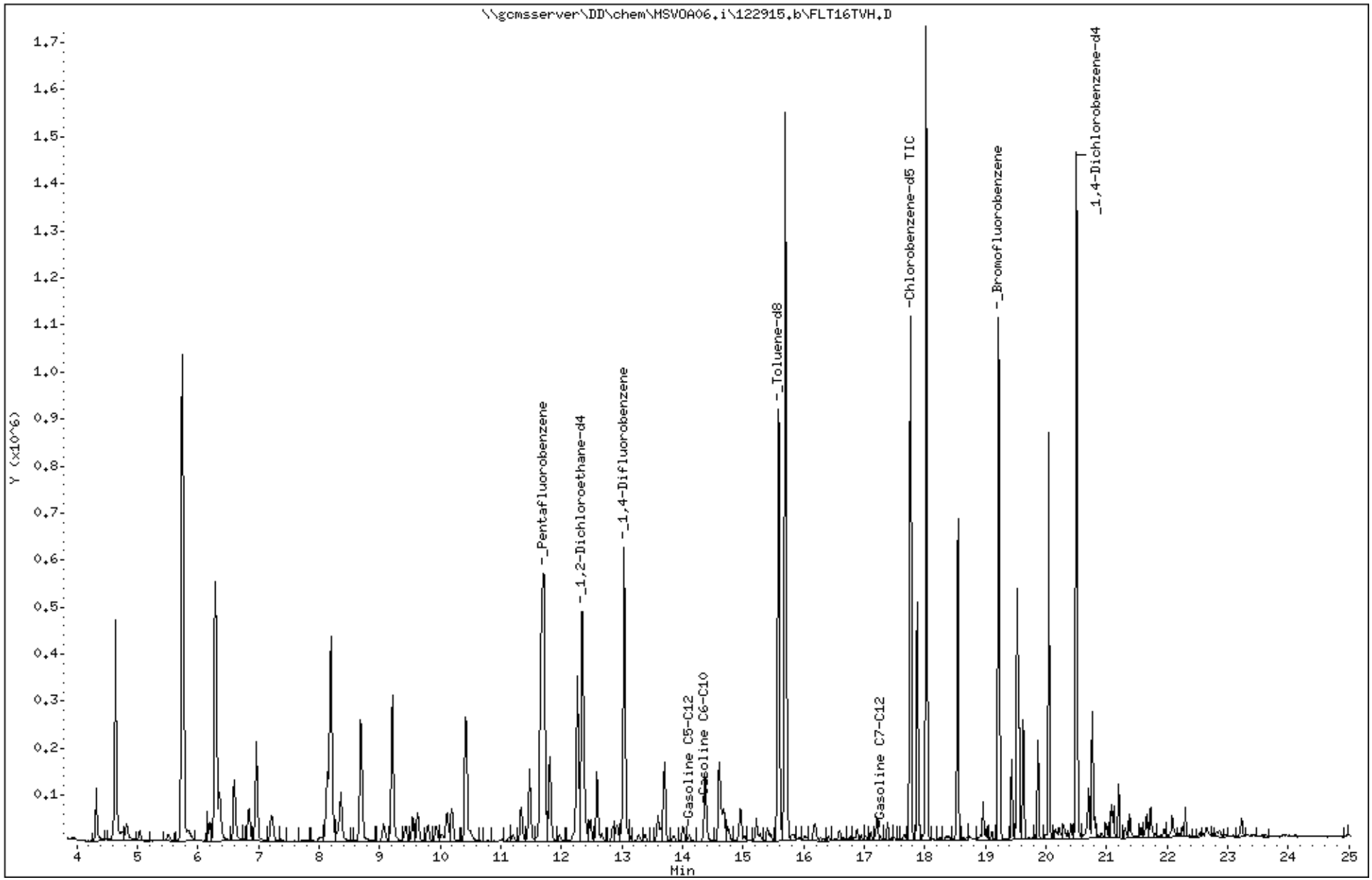
Instrument: MSVOA06.i

Sample Info: CCV/BS,QC818174,230759,S27677,.01/100

Operator: VOC

Column phase:

Column diameter: 2.00



Appendix D

Laboratory Reports and Chain of Custody Forms for the Treatment System

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

Laboratory Job Number 270998
ANALYTICAL REPORT

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

Sample ID	Lab ID
EFFLUENT	270998-001
GAC-1	270998-002
INFLUENT	270998-003

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

Signature: Tracy Babjar Date: 11/06/2015

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

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**270998**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2553**
Location:	**15101 Freedom Ave. San Leandro**
Request Date:	**10/27/15**
Samples Received:	**10/27/15**

This data package contains sample and QC results for three water samples, requested for the above referenced project on 10/27/15. The samples were received cold and intact.

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

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

Subject: RE: 2553 - C&T Login Summary (270998)
From: Ruchi Mathur <rmathur@somaenv.com>
Date: 11/4/2015 12:37 PM
To: 'Tracy Babjar' <tracy.babjar@ctberk.com>

Hi Tracy,
It seems Davoud made an error on the COC. I was wondering if you can please correct the login summary? The date of sample collection for all three samples was 10/27/15, he wrote 10/25/15 erroneously for sample 003. Attached is a revised COC for you.

Thank You,
Ruchi Mathur
Project Engineer
SOMA Environmental Engineering, Inc.
Phone: 925-734-6400
FAX : 925-734-6401

From: C&T Sample Control [mailto:sample.control@ctberk.com]
Sent: Tuesday, October 27, 2015 12:46 PM
To: Rmathur@somaenv.com; jbobek@somaenv.com
Subject: 2553 - C&T Login Summary (270998)

C&T Login Summary for 270998

Project: 2553 **Site:** 15101 Freedom Ave. San Leandro **Lab Login #:** 270998 **Report Level:** II **PO#:** **C&T Proj Mgr:** Tracy Babjar	**Report To:** SOMA Environmental Engineering Inc. 6620 Owens Dr. Suite A Pleasanton, CA 94588 ATTN: Joyce Bobek (925) 734-6400	**Bill To:** SOMA Environmental Engineering Inc. 6620 Owens Dr. Suite A Pleasanton, CA 94588 ATTN: Joyce Bobek (925) 734-6400

Client ID	Lab ID	Sampled	Received	DueDate	Matrix	Dry	Analyses	COC #	Comments
EFFLUENT	001	10/27/15 10:00	10/27/15			N			
				11/03	Water		TEHM		
				11/03	Water		TVH/BTXE		
GAC-1	002	10/27/15 10:10	10/27/15			N			
				11/03	Water		TVH/BTXE		
INFLUENT	003	10/25/15 10:25	10/27/15			N			
				11/03	Water		TVH/BTXE		

Email compiled and sent 10/27/15 12:45 PM.

Attachments:

COC_270998.pdf 351 KB

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 # _____

Sampler: Davoud Bazrpash

Project No: 2553

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave, San Leandr

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	Analyses: TPH-g 8015	TPH-d, TPH-mo 8015	BTEX 8020
1	EFFLUENT	10/27/15 10:00AM		*		6 VOAs	*			*	*		*
		10/27/15 9:55AM		*		2-500 mL Amber				*		*	
2	GAC-1	10/27/15 10:10AM		*		6 VOAs	*			*	*		*
3	INFLUENT	10/27/15 10:25AM		*		6 VOAs	*			*	*		*

Notes: **EDF OUTPUT REQUIRED**

RELINQUISHED BY:	RECEIVED BY:
10/27/15 11:17 AM DATE/TIME	10/27/15 11:17 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 270998 Date Received 10/27/15 Number of coolers 0
Client SoNA Environmental Project 15121 Freedom Ave

Date Opened 10/27 By (print) RL (sign)
Date Logged in L By (print) L (sign) L

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

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

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

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

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

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

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

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

COMMENTS

Rev 10, 9/12

Curtis & Tompkins, Ltd.

Detections Summary for 270998

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 : 270998-001

No Detections

Client Sample ID : GAC-1 Laboratory Sample ID : 270998-002

No Detections

Client Sample ID : INFLUENT Laboratory Sample ID : 270998-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	420		50	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Benzene	9.5		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Toluene	0.73		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
Ethylbenzene	3.0		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
m,p-Xylenes	19		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B
o-Xylene	4.6		0.50	ug/L	As Recd	1.000	EPA 8021B	EPA 5030B

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	270998	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Matrix:	Water	Sampled:	10/27/15
Units:	ug/L	Received:	10/27/15
Diln Fac:	1.000	Analyzed:	10/29/15
Batch#:	228865		

Field ID: EFFLUENT
Type: SAMPLE
Lab ID: 270998-001

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)	92	71-141	EPA 8021B

Field ID: GAC-1
Type: SAMPLE
Lab ID: 270998-002

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)	91	71-141	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	270998	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Matrix:	Water	Sampled:	10/27/15
Units:	ug/L	Received:	10/27/15
Diln Fac:	1.000	Analyzed:	10/29/15
Batch#:	228865		

Field ID: INFLUENT Lab ID: 270998-003
Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	420	50	EPA 8015B
Benzene	9.5	0.50	EPA 8021B
Toluene	0.73	0.50	EPA 8021B
Ethylbenzene	3.0	0.50	EPA 8021B
m,p-Xylenes	19	0.50	EPA 8021B
o-Xylene	4.6	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	113	80-132	EPA 8015B
Bromofluorobenzene (PID)	93	71-141	EPA 8021B

Type: BLANK Lab ID: QC810475

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)	107	71-141	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	270998	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:	QC810474	Batch#:	228865
Matrix:	Water	Analyzed:	10/29/15
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	998.7	100	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	112	80-132

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	270998	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	228865
MSS Lab ID:	270998-001	Sampled:	10/27/15
Matrix:	Water	Received:	10/27/15
Units:	ug/L	Analyzed:	10/29/15
Diln Fac:	1.000		

Type: MS Lab ID: QC810476

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	48.11	2,000	1,865	91	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	122	80-132

Type: MSD Lab ID: QC810477

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,781	87	76-120	5	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	119	80-132

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	270998	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	228865
Units:	ug/L	Analyzed:	10/29/15
Diln Fac:	1.000		

Type: BS Lab ID: QC810478

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	10.46	105	80-120
Toluene	10.00	10.78	108	80-120
Ethylbenzene	10.00	11.34	113	80-120
m,p-Xylenes	10.00	11.02	110	80-120
o-Xylene	10.00	10.67	107	80-120

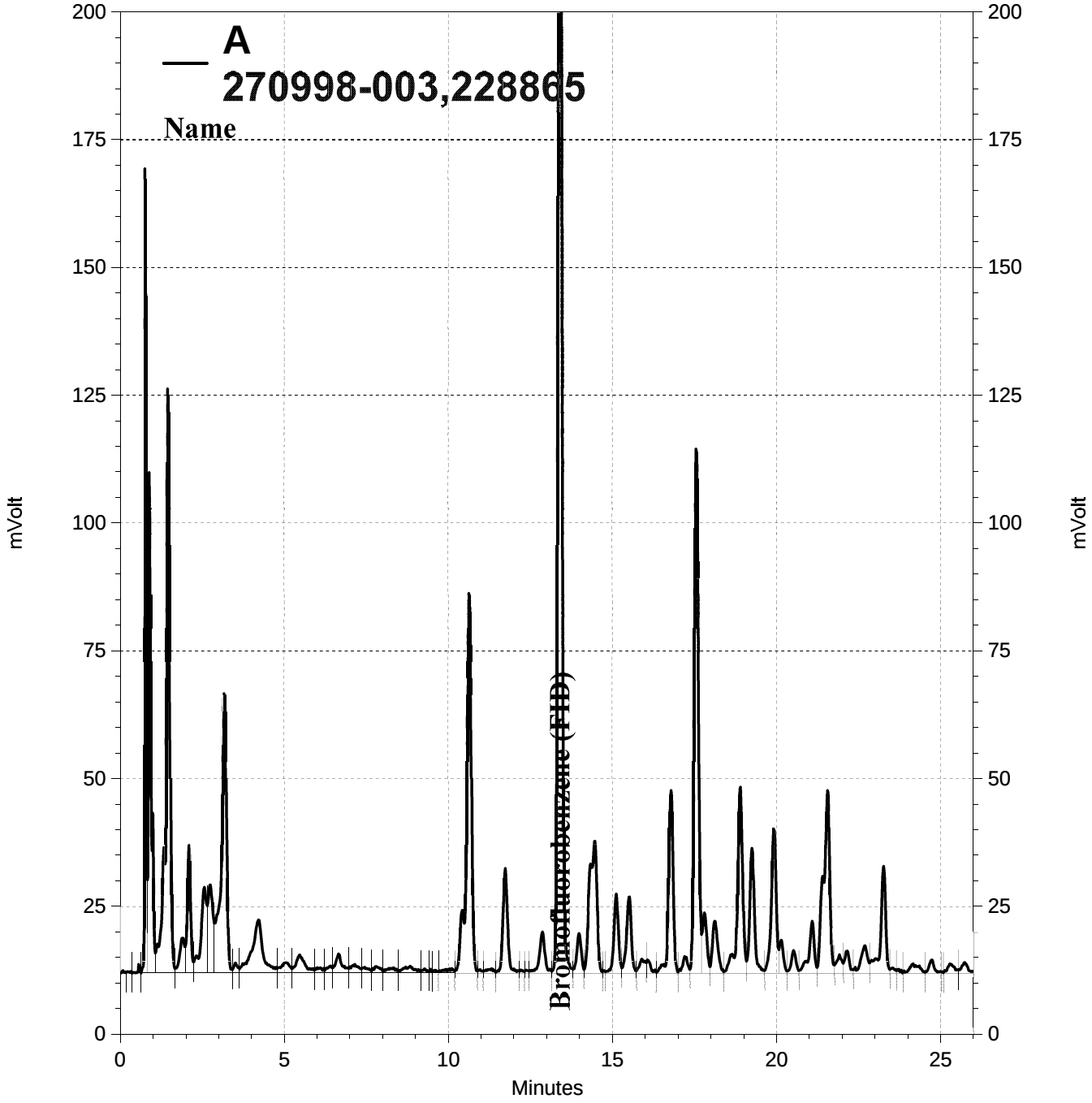
Surrogate	%REC	Limits
Bromofluorobenzene (PID)	106	71-141

Type: BSD Lab ID: QC810479

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	11.17	112	80-120	7	20
Toluene	10.00	11.47	115	80-120	6	20
Ethylbenzene	10.00	11.81	118	80-120	4	20
m,p-Xylenes	10.00	11.89	119	80-120	8	20
o-Xylene	10.00	11.65	117	80-120	9	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	117	71-141

RPD= Relative Percent Difference



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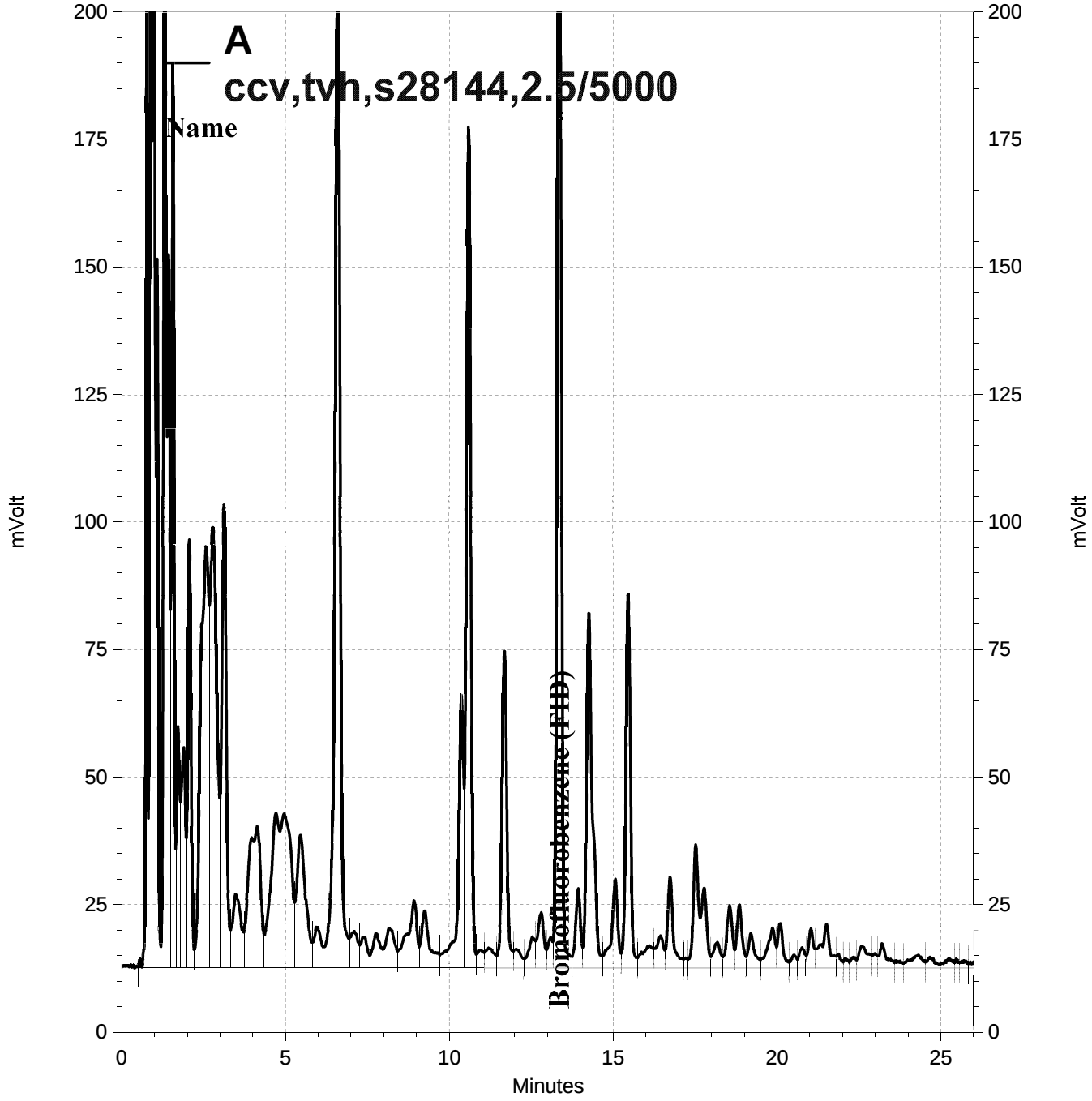
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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	270998	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	228972
Matrix:	Water	Sampled:	10/27/15
Units:	ug/L	Received:	10/27/15
Diln Fac:	1.000	Prepared:	11/02/15

Type: SAMPLE Analyzed: 11/05/15
Lab ID: 270998-001

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

Surrogate	%REC	Limits
o-Terphenyl	100	67-136

Type: BLANK Analyzed: 11/04/15
Lab ID: QC810888

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

Surrogate	%REC	Limits
o-Terphenyl	96	67-136

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	270998	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	228972
Units:	ug/L	Prepared:	11/02/15
Diln Fac:	1.000	Analyzed:	11/05/15

Type: BS
Lab ID: QC810889
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,725	69	60-121

Surrogate	%REC	Limits
o-Terphenyl	84	67-136

Type: BSD
Lab ID: QC810890
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,273	91	60-121	27	32

Surrogate	%REC	Limits
o-Terphenyl	102	67-136

RPD= Relative Percent Difference

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

Laboratory Job Number 271814
ANALYTICAL REPORT

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

Sample ID	Lab ID
EFFLUENT	271814-001

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

Signature: Tracy Babjar Date: 11/25/2015

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

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**271814**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2553**
Location:	**15101 Freedom Ave. San Leandro**
Request Date:	**11/19/15**
Samples Received:	**11/19/15**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 11/19/15. 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 # 27184

Sampler: Davoud Bazrpash

Project No: 2553

Report To: Joyce Bobek

Project Name:15101 Freedom Ave, San Leandr

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste		# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPH-g 8015	Analyses: BTEX 8020	Analyses: TPH-d, TPH-mo 8015
	Effluent	11/19/15 2.25PM		*			6 VOAs	*			*	*	*	
				*			2-500 mL Ambers				*			*

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:	RECEIVED BY:
11/19/15 5:33PM DATE/TIME	11/17/15 1733 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 27814 Date Received 11/19/15 Number of coolers 0
Client SCMA Project 15 101 Freedom Ave.

Date Opened 11/19 By (print) CN (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

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

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

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

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

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

☐ 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? _____ YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

Rev 11, 10/15

Curtis & Tompkins, Ltd.

Detections Summary for 271814

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 : 271814-001

No Detections

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	271814	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Field ID:	EFFLUENT	Batch#:	229680
Matrix:	Water	Sampled:	11/19/15
Units:	ug/L	Received:	11/19/15
Diln Fac:	1.000	Analyzed:	11/20/15

Type: SAMPLE Lab ID: 271814-001

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)	94	80-132	EPA 8015B
Bromofluorobenzene (PID)	100	71-141	EPA 8021B

Type: BLANK Lab ID: QC813814

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)	87	80-132	EPA 8015B
Bromofluorobenzene (PID)	93	71-141	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	271814	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:	QC813813	Batch#:	229680
Matrix:	Water	Analyzed:	11/20/15
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	972.1	97	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	80-132

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	271814	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	229680
MSS Lab ID:	271805-001	Sampled:	11/19/15
Matrix:	Water	Received:	11/19/15
Units:	ug/L	Analyzed:	11/20/15
Diln Fac:	1.000		

Type: MS Lab ID: QC813815

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	23.53	2,000	1,759	87	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	80-132

Type: MSD Lab ID: QC813816

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,609	79	76-120	9	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	80-132

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	271814	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	229680
Units:	ug/L	Analyzed:	11/20/15
Diln Fac:	1.000		

Type: BS Lab ID: QC813817

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	10.09	101	80-120
Toluene	10.00	9.517	95	80-120
Ethylbenzene	10.00	9.861	99	80-120
m,p-Xylenes	10.00	9.845	98	80-120
o-Xylene	10.00	9.658	97	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	92	71-141

Type: BSD Lab ID: QC813818

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	10.37	104	80-120	3	20
Toluene	10.00	10.04	100	80-120	5	20
Ethylbenzene	10.00	9.965	100	80-120	1	20
m,p-Xylenes	10.00	10.01	100	80-120	2	20
o-Xylene	10.00	9.833	98	80-120	2	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	105	71-141

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	271814	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Sampled:	11/19/15
Matrix:	Water	Received:	11/19/15
Units:	ug/L	Prepared:	11/20/15
Diln Fac:	1.000	Analyzed:	11/23/15
Batch#:	229701		

Type: SAMPLE Lab ID: 271814-001

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

Surrogate	%REC	Limits
o-Terphenyl	96	67-136

Type: BLANK Lab ID: QC813904

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

Surrogate	%REC	Limits
o-Terphenyl	102	67-136

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	271814	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:	QC813905	Batch#:	229701
Matrix:	Water	Prepared:	11/20/15
Units:	ug/L	Analyzed:	11/23/15

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,046	82	60-121

Surrogate	%REC	Limits
o-Terphenyl	97	67-136

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	271814	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	229701
MSS Lab ID:	271815-007	Sampled:	11/18/15
Matrix:	Water	Received:	11/19/15
Units:	ug/L	Prepared:	11/20/15
Diln Fac:	1.000	Analyzed:	11/23/15

Type: MS Lab ID: QC813906

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	1,305	2,500	3,519	89	55-122

Surrogate	%REC	Limits
o-Terphenyl	107	67-136

Type: MSD Lab ID: QC813907

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,451	3,136	75	55-122	10	53

Surrogate	%REC	Limits
o-Terphenyl	100	67-136

RPD= Relative Percent Difference

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

Laboratory Job Number 272413
ANALYTICAL REPORT

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

Sample ID	Lab ID
EFFLUENT	272413-001

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: Mikelle Chong Date: 12/21/2015

Mikelle Chong
Project Manager
mikelle.chong@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**272413**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2553**
Location:	**15101 Freedom Ave. San Leandro**
Request Date:	**12/14/15**
Samples Received:	**12/14/15**

This data package contains sample and QC results for one water sample, requested for the above referenced project on 12/14/15. The sample was received on ice and intact, directly from the field.

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 # 272413

Sampler: Davoud Bazrpash

Project No: 2553

Report To: Joyce Bobek

Project Name:15101 Freedom Ave, San Leandr

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPH-g 8015	Analyses: BTEX 8020	Analyses: TPH-d, TPH-mo 8015
	Effluent	12/14/15 11:40 AM		*		6 VOAs	*			*	*	*	
		12/14/15 11:35 AM		*		2-500 mL Ambers				*			*

Notes: **EDF OUTPUT REQUIRED**

RELINQUISHED BY:	RECEIVED BY:
12/14/15 12:35 DATE/TIME	R C 12/14/15 12:36 DATE/TIME
DATE/TIME	DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 272413 Date Received 12/14/15 Number of coolers 1
Client SOMA Environmental Project 15101 Freedom Ave, San Leandro

Date Opened 12/14 By (print) CJN (sign) [signature]
Date Logged in ↓ By (print) ↓ (sign) ↓

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

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

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

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

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

☐ 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

_____
_____
_____
_____
_____
_____

Rev 12, 12/01/15

Curtis & Tompkins, Ltd.

Detections Summary for 272413

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 : 272413-001

No Detections

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	272413	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553		
Field ID:	EFFLUENT	Batch#:	230422
Matrix:	Water	Sampled:	12/14/15
Units:	ug/L	Received:	12/14/15
Diln Fac:	1.000	Analyzed:	12/15/15

Type: SAMPLE Lab ID: 272413-001

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

Surrogate	%REC	Limits	Analysis
Bromofluorobenzene (FID)	112	80-132	EPA 8015B
Bromofluorobenzene (PID)	106	71-141	EPA 8021B

Type: BLANK Lab ID: QC816838

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)	103	80-132	EPA 8015B
Bromofluorobenzene (PID)	94	71-141	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	272413	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:	QC816837	Batch#:	230422
Matrix:	Water	Analyzed:	12/15/15
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	926.5	93	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	80-132

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	272413	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Batch#:	230422
MSS Lab ID:	272413-001	Sampled:	12/14/15
Matrix:	Water	Received:	12/14/15
Units:	ug/L	Analyzed:	12/15/15
Diln Fac:	1.000		

Type: MS Lab ID: QC816839

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	45.98	2,000	1,849	90	76-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	122	80-132

Type: MSD Lab ID: QC816840

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,826	89	76-120	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	120	80-132

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	272413	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2553	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	230422
Units:	ug/L	Analyzed:	12/15/15
Diln Fac:	1.000		

Type: BS Lab ID: QC816841

Analyte	Spiked	Result	%REC	Limits
Benzene	10.00	9.164	92	80-120
Toluene	10.00	9.117	91	80-120
Ethylbenzene	10.00	9.506	95	80-120
m,p-Xylenes	10.00	9.862	99	80-120
o-Xylene	10.00	9.349	93	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	92	71-141

Type: BSD Lab ID: QC816842

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	10.00	9.698	97	80-120	6	20
Toluene	10.00	9.635	96	80-120	6	20
Ethylbenzene	10.00	9.887	99	80-120	4	20
m,p-Xylenes	10.00	10.09	101	80-120	2	20
o-Xylene	10.00	9.611	96	80-120	3	20

Surrogate	%REC	Limits
Bromofluorobenzene (PID)	90	71-141

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	272413	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Field ID:	EFFLUENT	Sampled:	12/14/15
Matrix:	Water	Received:	12/14/15
Units:	ug/L	Prepared:	12/15/15
Diln Fac:	1.000	Analyzed:	12/16/15
Batch#:	230413		

Type: SAMPLE Lab ID: 272413-001

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

Surrogate	%REC	Limits
o-Terphenyl	101	67-136

Type: BLANK Lab ID: QC816806

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

Surrogate	%REC	Limits
o-Terphenyl	115	67-136

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	272413	Location:	15101 Freedom Ave. San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 3520C
Project#:	2553	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	230413
Units:	ug/L	Prepared:	12/15/15
Diln Fac:	1.000	Analyzed:	12/16/15

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC816807

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,284	91	60-121

Surrogate	%REC	Limits
o-Terphenyl	117	67-136

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC816808

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,995	80	60-121	13	32

Surrogate	%REC	Limits
o-Terphenyl	104	67-136

RPD= Relative Percent Difference

Appendix E

MPE Event Field Data Sheets

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave, San Leandro
PROJECT #: 2556

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
11/19/2015	1245	Begin Extraction at MPE-1 and MPE-2								0
	1300	1402	205	21.1	25	70	10	60	741	
	1400	1400	206	21.1	25	70	10	60	inf=754; eff=2	146
	1500	1401	207	21.2	25	70	10	60	776	
	1600	1400	207	21.2	25	70	10	60	757	204
	1645	1401	205	21	25	70	10	60	810	
11/20/2015	815	1403	196	19.9	24.9	71	10	61	831	920
	900	1401	196	19.9	24.9	71	10	61	844	
	1000	1403	201	21	25	70	10	60	875	
	1100	1402	205	21	25	70	10	60	917	
	1200	1402	205	21	25	70	10	60	892	
	1300	1403	206	21	25	70	10	60	871	
		Extraction from MPE-1, MPE-2, & MW-3								
	1400	1401	207	20.9	24.8	73	0	73	907	
	1500	1400	208	20.9	24.9	71	0	71	884	
	1600	1401	210	20.9	24.9	71	0	71	877	1,205
11/23/2015	1000	1400	195	19.8	24.6	76	10	66	960	
	1100	1400	196	19.8	24.6	76	10	66	864	

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave, San Leandro
PROJECT #: 2556

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
	1200	1403	196	19.7	24.6	76	10	66	771	
	1300	1401	197	19.8	24.7	74	10	64	787	
	1400	1400	200	20.8	24.9	71	0	71	800	
	1500	1402	199	20.9	25	70	0	70	805	
	1600	1400	197	20.9	25	70	0	70	797	
	1700	1401	195	21	25	70	0	70	795	1,604
11/24/2015	900	1400	196	20.9	25	70	0	70	761	2,393
	1000	1400	194	20.9	25	70	0	70	755	
	1100	1401	189	20.9	25	70	0	70	757	
	1200	1400	192	20.9	25	70	0	70	758	
	1300	1400	196	20.9	25	70	0	70	758	
	1400	1401	198	20.9	25	70	0	70	755	
	1500	1400	196	20.9	25	70	0	70	750	
	1600	1400	195	20.9	25	70	0	70	746	
	1700	1400	193	20.9	25	70	0	70	741	
11/25/2015	900	1402	186	20.9	24.9	71	0	71	747	2,976
	1000	1400	186	21	24.9	71	0	71	742	
	1100	1401	189	21	24.8	73	0	73	738	
	1200	1400	194	21.1	24.8	73	0	73	733	

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave, San Leandro
PROJECT #: 2556

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
	1300	1402	196	21.1	24.8	73	0	73	737	
	1400	1400	197	21.1	24.8	73	0	73	744	
	1500	1403	196	21.1	24.8	73	0	73	735	
	1600	1401	192	21.1	24.8	73	0	73	731	
		System shut down for the long weekend. Restart on 11/30/15 @10 AM								
11/30/2015	1000	1410	183	19.6	24.3	81	0	81	810	3,268
	1100	1405	183	19.6	24.3	81	0	81	905	
	1200	1400	184	19.2	24	85	0	85	1068	
	1300	1400	185	18.9	23.8	89	0	89	1111	
	1400	1401	187	18.7	23.8	89	0	89	1067	
	1500	1403	186	18.5	22.8	104	0	104	897	
	1600	1400	183	18.5	22.7	106	0	106	850	
	1700	1402	184	18.5	23.7	90	0	90	1015	4,671
12/1/2015	900	1402	194	18.3	24.2	82	0	82	867	7,649
	1000	1400	195	18.3	23.5	93	0	93	910	
	1100	1400	195	18.2	23.5	93	0	93	860	
	1200	1400	198	18.3	23.4	95	0	95	922	
	1300	1400	199	18.2	23.4	95	0	95	1067	
	1400	1400	200	18.2	23.3	96	0	96	1017	

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave, San Leandro
PROJECT #: 2556

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
	1500	1402	200	18.2	23.2	98	0	98	968	
	1600	1400	198	18.1	23.2	98	0	98	935	
	1700	1401	196	18.1	23.2	98	0	98	921	
12/2/2015	1000	1405	189	17.2	22.8	104	0	104	657	10,466
	1100	1400	194	17.7	23.2	98	0	98	697	
	1200	1401	195	17.5	23.1	100	0	100	810	
	1300	1400	197	17.5	23	101	0	101	776	
	1400	1402	198	17.4	22.8	104	0	104	729	
	1500	1400	200	17.3	22.8	104	0	104	747	
	1600	1401	202	17.3	22.8	104	0	104	715	
12/3/2015	900	1400	204	17.9	22.1	116	0	116	633	13,609
	1000	1402	205	17	22.1	116	0	116	604	
	1100	1400	197	17	22.1	116	0	116	612	
	1200	1400	201	17	22.1	116	0	116	610	
	1300	1406	195	17	22.1	116	0	116	549	
	1400	1402	198	17	22.1	116	0	116	532	
	1500	1401	200	17	22.2	114	0	114	645	
	1600	1400	201	17	22.2	114	0	114	631	
	1700	1400	197	17	22.2	114	0	114	647	

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave, San Leandro
PROJECT #: 2556

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
12/4/2015	1100	1403	189	17.6	23.7	90	0	90	505	15,147
	1200	1401	195	17.6	23.2	98	0	98	inf=397; eff=0	
	1300	1404	198	17.4	23	101	0	101	478	
	1400	1400	200	17.2	22.8	104	0	104	500	
	1500	1401	201	17.1	22.7	106	0	106	482	
	1600	1403	200	17.1	22.5	109	0	109	456	
		System shut down for the weekend. Restart on 12/7/15 @ 1030 AM								
12/7/2015	1100	1402	183	18	23.4	95	0	95	457	15,740
	1200	1400	191	17.6	23	101	0	101	489	
	1300	1400	196	17.1	22.8	104	0	104	462	
	1400	1401	200	17	22.7	106	0	106	487	
	1500	1400	199	17	22.6	108	0	108	461	
	1600	1403	198	17	22.5	109	0	109	459	
12/8/2015	900	1401	196	16.6	22	117	0	117	496	18,770
	1000	1400	196	16.6	21.9	119	0	119	517	
	1100	1400	199	16.6	21.9	119	0	119	529	
	1200	1400	201	16.1	21.9	119	0	119	491	
	1300	1400	201	16.1	21.8	120	0	120	472	
	1400	1400	202	16	21.8	120	0	120	449	

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave, San Leandro
PROJECT #: 2556

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
	1500	1405	202	16	21.7	122	0	122	407	
	1600	1401	201	16	21.6	123	0	123	384	
	1700	1403	201	16	21.7	122	0	122	367	
12/9/2015	900	1400	199	17.6	22	117	0	117	310	20,227
	1000	1400	198	17.1	22.6	108	0	108	357	
	1100	1404	201	16.8	22	117	0	117	428	
	1200	1400	204	16.5	21.9	119	0	119	454	
	1300	1402	203	16.4	21.7	122	0	122	471	
	1400	1401	204	16.3	21.7	122	0	122	485	
	1500	1400	206	16.2	21.7	122	0	122	497	
	1600	1403	207	16.1	21.6	123	0	123	519	
	1700	1400	205	16.1	21.5	125	0	125	487	
12/10/2015	1000	1400	200	18	22.6	108	0	108	371	23,039
	1100	1405	193	18.1	22.7	106	0	106	364	
	1200	1404	196	18.1	22.6	108	0	108	352	
	1300	1400	199	18.1	22.7	106	0	106	345	
	1400	1404	202	18.1	22.8	104	0	104	349	
	1500	1400	201	18.1	22.8	104	0	104	357	
	1600	1400	198	16.7	21.9	119	0	119	398	

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave, San Leandro
PROJECT #: 2556

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
	1700	1400	193	16.7	21.9	119	0	119	387	
12/11/2015	1000	1400	190	17	22.5	109	0	109	357	24,070
	1100	1401	192	17.2	22.7	106	0	106	419	
	1200	1404	196	17.2	22.6	108	0	108	357	
	1300	1400	199	17	22.4	111	0	111	388	
	1400	1403	200	17	22.4	111	0	111	416	
	1500	1400	201	17	22.3	112	0	112	429	
	1600	1400	199	17	22.3	112	0	112	414	
		System shut down for the weekend. Restart on 12/14/15 @ 1045 AM								
12/14/2015	1100	1400	186	13.2	19.4	158	0	158	314	24,939
	1200	1402	191	12.4	19.2	162	0	162	inf=324; eff=0	
	1300	1403	194	12.4	19.2	162	0	162	316	
	1400	1400	193	12.4	19.2	162	0	162	305	
	1500	1400	195	12.4	19.2	162	0	162	295	
	1600	1400	192	12.4	19.2	162	0	162	293	
	1700	1400	191	12.4	19.2	162	0	162	287	
12/15/2015	1200	1400	185	12.4	19.2	162	0	162	297	25,931
	1300	1400	184	12.4	19.2	162	0	162	309	
	1400	1401	186	12.4	19.1	163	0	163	306	

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave, San Leandro
PROJECT #: 2556

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
	1500	1400	190	12.3	19.1	163	0	163	302	
	1600	1402	191	12.3	19	165	0	165	299	
	1700	1404	189	12.3	19	165	0	165	305	
12/16/2015	900	Air compressor on								
	1000	1403	186	12	18.8	168	0	168	182	26,749
	1100	1400	192	12.3	18.9	166	0	166	229	
	1200	1400	192	12	18.8	168	0	168	306	
	1300	1401	194	12	18.6	171	0	171	437	
	1400	1404	197	12	18.5	173	0	173	485	
	1500	1400	194	11.9	18.5	173	0	173	477	
	1600	1400	194	11.9	18.5	173	0	173	455	
12/17/2015	1200	1430	180	12.4	19.2	162	0	162	406	27,420
	1300	1405	195	11.8	18.6	171	0	171	334	
	1400	1400	197	11.7	18.6	171	0	171	347	
	1500	1400	196	11.7	18.5	173	0	173	339	
	1600	1402	195	11.7	18.5	173	0	173	245	
	1700	1400	194	11.8	18.4	174	0	174	241	
12/18/2015	900	1400	197	11.9	18.4	174	0	174	186	28,001
	1000	1405	192	11.8	18.4	174	0	174	191	

Golden Gate Remediation Technology

ADDRESS: 15101 Freedom Ave, San Leandro
PROJECT #: 2556

MTS OPERATIONAL DATA

DATE	TIME	OXIDIZER TEMPERATURE (F)	PUMP/AIR TEMPERATURE (F)	STINGER VACUUM (IN-Hg)	PUMP VACUUM (IN-Hg)	TOTAL FLOW (SCFM)	DILUTION FLOW (SCFM)	WELL FLOW (SCFM)	INFLUENT CONCENTRATION (PPMV)	WATER TOTALIZER
	1100	1400	192	11.8	18.5	173	0	173	199	
	1200	1400	191	11.8	18.5	173	0	173	217	
	1300	1402	189	11.8	18.4	174	0	174	233	
	1400	1400	190	11.8	18.4	174	0	174	245	
	1500	1401	189	11.7	18.4	174	0	174	254	

Appendix F

Laboratory Reports and Chain of Custody Forms for the MPE Event

Soma Environmental
6620 Owens Dr. Suite A
Pleasanton, California 94588
Tel: 925-734-6400
Fax: 925-734-6401

RE: 15101 Freedom Ave, San Leandro

Work Order No.: 1511180

Dear Joyce Bobek:

Torrent Laboratory, Inc. received 2 sample(s) on November 20, 2015 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

Patti Sandrock
QA Officer

December 01, 2015
Date

Date: 12/1/2015

Client: Soma Environmental

Project: 15101 Freedom Ave, San Leandro

Work Order: 1511180

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Joyce Bobek
Soma Environmental

Date Received: 11/20/15
Date Reported: 12/01/15

EFF MPE 1511180-001A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
Benzene	ETO15	1	0.69	1.6	12.6
Toluene	ETO15	1	0.95	1.9	7.26
m,p-Xylene	ETO15	1	1.6	4.3	4.30
TPH-Gasoline	ETO15	5	200	880	2300

INF MPE 1511180-002A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
TPH-Gasoline	ETO15	50	2000	8800	150000
MTBE	ETO15	50	43	90	117
Benzene	ETO15	50	34	80	2520
Toluene	ETO15	50	48	95	6330
Ethyl Benzene	ETO15	50	50	110	1120
m,p-Xylene	ETO15	50	81	220	7260
o-Xylene	ETO15	50	40	110	2730

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joyce Bobek
Soma Environmental

Date Received: 11/20/15
Date Reported: 12/01/15

Client Sample ID:	EFF MPE	**Lab Sample ID:**	1511180-001A
Project Name/Location:	15101 Freedom Ave, San Leandro	**Sample Matrix:**	Air
Project Number:			
Date/Time Sampled:	11/19/15 / 13:38	**Certified Clean WO # :**	
Canister/Tube ID:		**Received PSI :**	0.0
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	15101 Freedom Ave		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO15	NA	11/20/15	5	200	880	2300	653.41	x	427846	NA

NOTE: x - TPH value due to individual peak.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	11/20/15	1	0.87	1.8	ND	ND		427885	NA
tert-Butanol	ETO15	NA	11/20/15	1	0.91	8.4	ND	ND		427885	NA
Diisopropyl ether (DIPE)	ETO15	NA	11/20/15	1	0.88	2.1	ND	ND		427885	NA
ETBE	ETO15	NA	11/20/15	1	0.68	2.1	ND	ND		427885	NA
Benzene	ETO15	NA	11/20/15	1	0.69	1.6	12.6	3.94		427885	NA
TAME	ETO15	NA	11/20/15	1	0.36	2.1	ND	ND		427885	NA
1,2-Dichloroethane (EDC)	ETO15	NA	11/20/15	1	0.99	2.1	ND	ND		427885	NA
Toluene	ETO15	NA	11/20/15	1	0.95	1.9	7.26	1.91		427885	NA
1,2-Dibromoethane (EDB)	ETO15	NA	11/20/15	1	2.0	7.7	ND	ND		427885	NA
Ethyl Benzene	ETO15	NA	11/20/15	1	0.99	2.2	ND	ND		427885	NA
m,p-Xylene	ETO15	NA	11/20/15	1	1.6	4.3	4.30	1.00		427885	NA
o-Xylene	ETO15	NA	11/20/15	1	0.81	2.2	ND	ND		427885	NA
(S) 4-Bromofluorobenzene	ETO15	NA	11/20/15	1	65	135	98.0 %			427885	NA

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joyce Bobek
Soma Environmental

Date Received: 11/20/15
Date Reported: 12/01/15

Client Sample ID:	INF MPE	**Lab Sample ID:**	1511180-002A
Project Name/Location:	15101 Freedom Ave, San Leandro	**Sample Matrix:**	Air
Project Number:			
Date/Time Sampled:	11/19/15 / 13:48	**Certified Clean WO # :**	
Canister/Tube ID:		**Received PSI :**	0.0
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	15101 Freedom Ave		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO15	NA	11/20/15	50	2000	8800	150000	42,613.64	x	427846	NA

NOTE: x - Although TPH as Gasoline is present, the reported TPH value is elevated due to non-target compounds within gasoline quantitative range.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
1,1-Difluoroethane	ETO15	NA	11/20/15	50	25	1400	ND	ND		427885	NA
2-Propanol (Isopropyl Alcohol)	ETO15	NA	11/20/15	50	49	1300	ND	ND		427885	NA
MTBE	ETO15	NA	11/20/15	50	43	90	117	32.50		427885	NA
tert-Butanol	ETO15	NA	11/20/15	50	46	420	ND	ND		427885	NA
Diisopropyl ether (DIPE)	ETO15	NA	11/20/15	50	44	110	ND	ND		427885	NA
ETBE	ETO15	NA	11/20/15	50	34	110	ND	ND		427885	NA
Benzene	ETO15	NA	11/20/15	50	34	80	2520	787.50		427885	NA
TAME	ETO15	NA	11/20/15	50	18	110	ND	ND		427885	NA
1,2-Dichloroethane (EDC)	ETO15	NA	11/20/15	50	49	100	ND	ND		427885	NA
Toluene	ETO15	NA	11/20/15	50	48	95	6330	1,665.79		427885	NA
1,2-Dibromoethane (EDB)	ETO15	NA	11/20/15	50	100	390	ND	ND		427885	NA
Ethyl Benzene	ETO15	NA	11/20/15	50	50	110	1120	260.47		427885	NA
m,p-Xylene	ETO15	NA	11/20/15	50	81	220	7260	1,688.37		427885	NA
o-Xylene	ETO15	NA	11/20/15	50	40	110	2730	634.88		427885	NA
Naphthalene	ETO15	NA	11/20/15	50	73	260	ND	ND		427885	NA
(S) 4-Bromofluorobenzene	ETO15	NA	11/20/15	50	65	135	90.6 %			427885	NA

MB Summary Report

Work Order:	1511180	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	11/20/15	**Analytical Batch:**	427846
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH-Gasoline	11	50.0	ND	

Work Order:	1511180	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	11/20/15	**Analytical Batch:**	427885
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.30	1.00	ND	
1,1-Difluoroethane	0.18	10.0	ND	
1,2-Dichlorotetrafluoroethane	0.70	2.00	ND	
Chloromethane	0.15	0.500	ND	
Vinyl Chloride	0.26	1.00	ND	
1,3-Butadiene	0.20	0.500	ND	
Bromomethane	0.18	0.500	ND	
Chloroethane	0.19	0.500	ND	
Trichlorofluoromethane	0.32	1.00	ND	
1,1-Dichloroethene	0.15	0.500	ND	
Freon 113	0.11	0.500	ND	
Carbon Disulfide	0.26	1.00	ND	
2-Propanol (Isopropyl Alcohol)	0.39	10.0	ND	
Methylene Chloride	0.17	8.00	ND	
Acetone	0.37	8.00	ND	
trans-1,2-Dichloroethene	0.16	0.500	ND	
Hexane	0.15	0.500	ND	
MTBE	0.24	0.500	ND	
tert-Butanol	0.22	2.00	ND	
Diisopropyl ether (DIPE)	0.21	0.500	ND	
1,1-Dichloroethane	0.18	0.500	ND	
ETBE	0.16	0.500	ND	
cis-1,2-Dichloroethene	0.13	0.500	ND	
Chloroform	0.25	1.00	ND	
Vinyl Acetate	0.16	0.500	ND	
Carbon Tetrachloride	0.14	0.500	ND	
1,1,1-Trichloroethane	0.15	0.500	ND	
2-Butanone (MEK)	0.21	0.500	ND	
Ethyl Acetate	0.21	0.500	ND	
Tetrahydrofuran	0.10	0.500	ND	
Benzene	0.21	0.500	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1511180	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	11/20/15	**Analytical Batch:**	427885
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TAME	0.086	0.500	ND	
1,2-Dichloroethane (EDC)	0.24	0.500	ND	
Trichloroethylene	0.26	1.00	ND	
1,2-Dichloropropane	0.29	1.00	ND	
Bromodichloromethane	0.13	0.500	ND	
1,4-Dioxane	0.35	1.00	ND	
trans-1,3-Dichloropropene	0.19	0.500	ND	
Toluene	0.25	0.500	ND	
4-Methyl-2-Pentanone (MIBK)	0.21	0.500	ND	
cis-1,3-Dichloropropene	0.25	0.500	ND	
Tetrachloroethylene	0.13	0.500	ND	
1,1,2-Trichloroethane	0.17	0.500	ND	
Dibromochloromethane	0.20	0.500	ND	
1,2-Dibromoethane (EDB)	0.27	1.00	ND	
2-Hexanone	0.27	1.00	ND	
Ethyl Benzene	0.23	0.500	ND	
Chlorobenzene	0.15	0.500	ND	
1,1,1,2-Tetrachloroethane	0.15	0.500	ND	
m,p-Xylene	0.38	1.00	ND	
o-Xylene	0.19	0.500	ND	
Styrene	0.16	0.500	ND	
Bromoform	0.11	0.500	ND	
1,1,2,2-Tetrachloroethane	0.10	0.500	ND	
4-Ethyl Toluene	0.17	0.500	ND	
1,3,5-Trimethylbenzene	0.15	0.500	ND	
1,2,4-Trimethylbenzene	0.14	0.500	ND	
1,4-Dichlorobenzene	0.11	0.500	ND	
1,3-Dichlorobenzene	0.14	0.500	ND	
1,2-Dichlorobenzene	0.15	0.500	ND	
Hexachlorobutadiene	0.22	0.500	ND	
1,2,4-Trichlorobenzene	0.46	1.00	ND	
Naphthalene	0.28	1.00	ND	
(S) 4-Bromofluorobenzene			95.1	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1511180	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	11/20/15	**Analytical Batch:**	427846
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH-Gasoline	11	50.0	ND	504	84.1	83.7	0.523	50 - 150	30	

Work Order:	1511180	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	11/20/15	**Analytical Batch:**	427885
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.15	0.500	ND	8	99.8	105	5.48	65 - 135	30	
Benzene	0.21	0.500	ND	8	94.9	105	9.89	65 - 135	30	
Trichloroethylene	0.26	1.00	ND	8	93.8	101	6.95	65 - 135	30	
Toluene	0.25	0.500	ND	8	91.3	98.0	7.13	65 - 135	30	
Chlorobenzene	0.15	0.500	ND	8	91.0	93.1	2.31	65 - 135	30	
(S) 4-Bromofluorobenzene			ND	8	105	106		65 - 135		

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg.m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the anlayte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Soma Environmental

Project Name: 15101 Freedom Ave, San Leandro

Work Order No.: 1511180

Date and Time Received: 11/20/2015 10:10

Received By: ldi

Physically Logged By: ldi

Checklist Completed By: ldi

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes		
Container/Temp Blank temperature in compliance?	Yes	Temperature:	°C
Water-VOA vials have zero headspace?	No VOA vials submitted		
Water-pH acceptable upon receipt?	N/A		

pH Checked by: n/a

pH Adjusted by: n/a

Torrent LABORATORY, INC.

Torrent LABORATORY, INC.
483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258 RESET
FAX: 408.263.8293
www.torrentlab.com

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 151118D

Company Name: SOMA Environmental Engineering, Inc.	Location of Sampling: 15101 Freedom Ave, San Leandro
Address: 6620 Owens Drive, Suite A	Purpose: MPE Air Sampling
City: Pleasanton State: CA Zip Code: 94588	Special Instructions / Comments: Please report in ug/m3 & ppbv
Telephone: 925-734-6400 FAX: 925-734-6401	gas-ox: TBA, DIPE, ETBE, TAME
REPORT TO: Joyce Bobek SAMPLER: Mansour Sepehr	P.O. #: 2556 EMAIL: jbobek@somaenv.com

TURNAROUND TIME:
☐ 10 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☐ 7 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours
☑ 5 Work Days ☐ 1 Work Day ☐ Other

SAMPLE TYPE:
☐ Storm Water ☐ Air
☐ Waste Water ☐ Other
☐ Ground Water
☐ Soil

REPORT FORMAT:
☐ QC Level IV
☑ EDF
☐ Excel / EDD

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-15 (TPH-g,	BTEX, gas-oxygenat	MtBE)						REMARKS
-001A	EFF MPE	11/19/15 1:38	Air	1	tedlar	✓								
-002A	INF MPE	11/19/15 1:48	Air	1	tedlar	✓								

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1		MANSOUR SEPEHR	11/20/15	9:00 AM		E Hightower	11/20/15	09:00
2		E Hightower	11/20/15	10:10		L-D Imbat	11-20-15	10:10

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment L-D Imbat Sample seals intact? ☐ Yes ☐ NO ☒ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrange -ments are made.

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____

Page 1 of 1

Soma Environmental
6620 Owens Dr. Suite A
Pleasanton, California 94588
Tel: 925-734-6400
Fax: 925-734-6401

RE: 15101 Freedom Ave, San Leandro

Work Order No.: 1512040

Dear Joyce Bobek:

Torrent Laboratory, Inc. received 2 sample(s) on December 04, 2015 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

Patti Sandrock
QA Officer

December 11, 2015
Date

Date: 12/11/2015

Client: Soma Environmental

Project: 15101 Freedom Ave, San Leandro

Work Order: 1512040

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Joyce Bobek
Soma Environmental

Date Received: 12/04/15
Date Reported: 12/11/15

EFF MPE 1512040-001A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
Toluene	ETO15	1	0.95	1.9	3.76
TPH-Gasoline	ETO15	1	40	180	3500

INF MPE 1512040-002A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
TPH-Gasoline	ETO15	100	4000	18000	400000
Toluene	ETO15	25	24	48	2450
Ethyl Benzene	ETO15	25	25	54	1960
m,p-Xylene	ETO15	25	40	110	9620
o-Xylene	ETO15	25	20	54	2580
Benzene	ETO15	50	34	80	4930

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joyce Bobek
Soma Environmental

Date Received: 12/04/15
Date Reported: 12/11/15

Client Sample ID:	EFF MPE	**Lab Sample ID:**	1512040-001A
Project Name/Location:	15101 Freedom Ave, San Leandro	**Sample Matrix:**	Soil Vapor
Project Number:			
Date/Time Sampled:	12/04/15 / 12:25	**Certified Clean WO # :**	
Canister/Tube ID:		**Received PSI :**	0.0
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	15101 Freedom Ave		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO15	NA	12/04/15	1	40	180	3500	994.32	x	428052	NA

NOTE: x - TPH value due to individual, non-target peak within range of C5-C12 quantified as Gasoline.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	12/04/15	1	0.87	1.8	ND	ND		428028	NA
tert-Butanol	ETO15	NA	12/04/15	1	0.91	8.4	ND	ND		428028	NA
Diisopropyl ether (DIPE)	ETO15	NA	12/04/15	1	0.88	2.1	ND	ND		428028	NA
ETBE	ETO15	NA	12/04/15	1	0.68	2.1	ND	ND		428028	NA
Benzene	ETO15	NA	12/04/15	1	0.69	1.6	ND	ND		428028	NA
TAME	ETO15	NA	12/04/15	1	0.36	2.1	ND	ND		428028	NA
Toluene	ETO15	NA	12/04/15	1	0.95	1.9	3.76	0.99		428028	NA
Ethyl Benzene	ETO15	NA	12/04/15	1	0.99	2.2	ND	ND		428028	NA
m,p-Xylene	ETO15	NA	12/04/15	1	1.6	4.3	ND	ND		428028	NA
o-Xylene	ETO15	NA	12/04/15	1	0.81	2.2	ND	ND		428028	NA
(S) 4-Bromofluorobenzene	ETO15	NA	12/04/15	1	65	135	102 %			428028	NA

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joyce Bobek
Soma Environmental

Date Received: 12/04/15
Date Reported: 12/11/15

Client Sample ID:	INF MPE	**Lab Sample ID:**	1512040-002A
Project Name/Location:	15101 Freedom Ave, San Leandro	**Sample Matrix:**	Soil Vapor
Project Number:			
Date/Time Sampled:	12/04/15 / 12:30	**Certified Clean WO # :**	
Canister/Tube ID:		**Received PSI :**	0.0
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	15101 Freedom Ave		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO15	NA	12/08/15	100	4000	18000	400000	113,636.36		428050	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	12/04/15	25	22	45	ND	ND		428028	NA
tert-Butanol	ETO15	NA	12/04/15	25	23	210	ND	ND		428028	NA
Diisopropyl ether (DIPE)	ETO15	NA	12/04/15	25	22	53	ND	ND		428028	NA
ETBE	ETO15	NA	12/04/15	25	17	53	ND	ND		428028	NA
TAME	ETO15	NA	12/04/15	25	9.1	53	ND	ND		428028	NA
Toluene	ETO15	NA	12/04/15	25	24	48	2450	644.74		428028	NA
Ethyl Benzene	ETO15	NA	12/04/15	25	25	54	1960	455.81		428028	NA
m,p-Xylene	ETO15	NA	12/04/15	25	40	110	9620	2,237.21		428028	NA
o-Xylene	ETO15	NA	12/04/15	25	20	54	2580	600.00		428028	NA
(S) 4-Bromofluorobenzene	ETO15	NA	12/04/15	25	65	135	109 %			428028	NA
Benzene	ETO15	NA	12/04/15	50	34	80	4930	1,540.63		428028	NA
(S) 4-Bromofluorobenzene	ETO15	NA	12/04/15	50	65	135	102 %			428028	NA

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1512040	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/04/15	**Analytical Batch:**	428028
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	0.30	1.00	ND		
1,1-Difluoroethane	0.18	10.0	ND		
1,2-Dichlorotetrafluoroethane	0.70	2.00	ND		
Chloromethane	0.15	0.500	ND		
Vinyl Chloride	0.26	1.00	ND		
1,3-Butadiene	0.20	0.500	ND		
Bromomethane	0.18	0.500	ND		
Chloroethane	0.19	0.500	ND		
Trichlorofluoromethane	0.32	1.00	ND		
1,1-Dichloroethene	0.15	0.500	ND		
Freon 113	0.11	0.500	ND		
Carbon Disulfide	0.26	1.00	ND		
2-Propanol (Isopropyl Alcohol)	0.39	10.0	ND		
Methylene Chloride	0.17	8.00	ND		
Acetone	0.37	8.00	ND		
trans-1,2-Dichloroethene	0.16	0.500	ND		
Hexane	0.15	0.500	ND		
MTBE	0.24	0.500	ND		
tert-Butanol	0.22	2.00	ND		
Diisopropyl ether (DIPE)	0.21	0.500	ND		
1,1-Dichloroethane	0.18	0.500	ND		
ETBE	0.16	0.500	ND		
cis-1,2-Dichloroethene	0.13	0.500	ND		
Chloroform	0.25	1.00	ND		
Vinyl Acetate	0.16	0.500	ND		
Carbon Tetrachloride	0.14	0.500	ND		
1,1,1-Trichloroethane	0.15	0.500	ND		
2-Butanone (MEK)	0.21	0.500	ND		
Ethyl Acetate	0.21	0.500	ND		
Tetrahydrofuran	0.10	0.500	ND		
Benzene	0.21	0.500	ND		
TAME	0.086	0.500	ND		
1,2-Dichloroethane (EDC)	0.24	0.500	ND		
Trichloroethylene	0.26	1.00	ND		
1,2-Dichloropropane	0.29	1.00	ND		
Bromodichloromethane	0.13	0.500	ND		
1,4-Dioxane	0.35	1.00	ND		
trans-1,3-Dichloropropene	0.19	0.500	ND		
Toluene	0.25	0.500	ND		
4-Methyl-2-Pentanone (MIBK)	0.21	0.500	ND		
cis-1,3-Dichloropropene	0.25	0.500	ND		

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1512040	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/04/15	**Analytical Batch:**	428028
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Tetrachloroethylene	0.13	0.500	ND	
1,1,2-Trichloroethane	0.17	0.500	ND	
Dibromochloromethane	0.20	0.500	ND	
1,2-Dibromoethane (EDB)	0.27	1.00	ND	
2-Hexanone	0.27	1.00	ND	
Ethyl Benzene	0.23	0.500	ND	
Chlorobenzene	0.15	0.500	ND	
1,1,1,2-Tetrachloroethane	0.15	0.500	ND	
m,p-Xylene	0.38	1.00	ND	
o-Xylene	0.19	0.500	ND	
Styrene	0.16	0.500	ND	
Bromoform	0.11	0.500	ND	
1,1,2,2-Tetrachloroethane	0.10	0.500	ND	
4-Ethyl Toluene	0.17	0.500	ND	
1,3,5-Trimethylbenzene	0.15	0.500	ND	
1,2,4-Trimethylbenzene	0.14	0.500	ND	
1,4-Dichlorobenzene	0.11	0.500	ND	
1,3-Dichlorobenzene	0.14	0.500	ND	
1,2-Dichlorobenzene	0.15	0.500	ND	
Hexachlorobutadiene	0.22	0.500	ND	
1,2,4-Trichlorobenzene	0.46	1.00	ND	
Naphthalene	0.28	1.00	ND	
(S) 4-Bromofluorobenzene			108	

Work Order:	1512040	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/08/15	**Analytical Batch:**	428050
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH-Gasoline	11	50.0	ND	

MB Summary Report

Work Order:	1512040	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/04/15	**Analytical Batch:**	428052
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH-Gasoline	11	50.0	ND		

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1512040	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/04/15	**Analytical Batch:**	428028
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.15	0.500	ND	8	97.1	93.5	3.80	65 - 135	30	
Benzene	0.21	0.500	ND	8	98.1	99.8	1.64	65 - 135	30	
Trichloroethylene	0.26	1.00	ND	8	94.5	99.4	5.03	65 - 135	30	
Toluene	0.25	0.500	ND	8	96.1	95.5	0.652	65 - 135	30	
Chlorobenzene	0.15	0.500	ND	8	89.0	95.8	7.31	65 - 135	30	
(S) 4-Bromofluorobenzene			ND	8	105	108		65 - 135		

Work Order:	1512040	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/08/15	**Analytical Batch:**	428050
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH-Gasoline	11	50.0	ND	504	97.0	84.2	14.1	50 - 150	30	

Work Order:	1512040	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/04/15	**Analytical Batch:**	428052
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH-Gasoline	11	50.0	ND	504	95.1	90.8	4.56	50 - 150	30	

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg.m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the anlayte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Soma Environmental

Project Name: 15101 Freedom Ave, San Leandro

Work Order No.: 1512040

Date and Time Received: 12/4/2015 13:22

Received By: ng

Physically Logged By: ng

Checklist Completed By: ng

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes		
Container/Temp Blank temperature in compliance?	Yes	Temperature:	°C
Water-VOA vials have zero headspace?	No VOA vials submitted		
Water-pH acceptable upon receipt?	N/A		

pH Checked by: na

pH Adjusted by: na

Torrent LABORATORY, INC.

Torrent LABORATORY, INC.
483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

RESET

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 1512040

Company Name: SOMA Environmental Engineering, Inc.		Location of Sampling: 15101 Freedom Ave, San Leandro
Address: 6620 Owens Drive, Suite A		Purpose: MPE Air Sampling
City: Pleasanton	State: CA Zip Code: 94588	Special Instructions / Comments: Please report in ug/m3 & ppbv
Telephone: 925-734-6400	FAX: 925-734-6401	gas-ox: TBA, DIPE, ETBE, TAME
REPORT TO: Joyce Bobek	SAMPLER: Davoud Bazrpash	P.O. #: 2556 EMAIL: jbobek@somaenv.com

TURNAROUND TIME:
☐ 10 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☐ 7 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours
☑ 5 Work Days ☐ 1 Work Day ☐ Other

SAMPLE TYPE:
☐ Storm Water ☑ Air
☐ Waste Water ☐ Other
☐ Ground Water
☐ Soil

REPORT FORMAT:
☐ QC Level IV
☑ EDF
☐ Excel / EDD

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-15 (TPH-g,	BTEX, gas-oxygenat	MtBE)						REMARKS
001A	EFF MPE	12,4,15 12:25	Air	1	tedlar	✓								
002A	INF MPE	12,4,15 12:30	Air	1	tedlar	✓								
	REC ING LI ING LBL ING LIR													

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	DB	DAVOUD	12,4,15	1122	[illegible]	NAVEN G	12-4-15	1:22 P.M.
2	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

Were Samples Received in Good Condition? ☒ Yes ☐ NO Samples on Ice? ☐ Yes ☒ NO Method of Shipment D/O. Sample seals intact? ☐ Yes ☐ NO ☒ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrange -ments are made.

Page 1 of 1

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____

Soma Environmental
6620 Owens Dr. Suite A
Pleasanton, California 94588
Tel: 925-734-6400
Fax: 925-734-6401

RE: 15101 Freedom Ave, San Leandro

Work Order No.: 1512102

Dear Joyce Bobek:

Torrent Laboratory, Inc. received 2 sample(s) on December 14, 2015 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

Patti Sandrock
QA Officer

December 21, 2015
Date

Date: 12/21/2015

Client: Soma Environmental

Project: 15101 Freedom Ave, San Leandro

Work Order: 1512102

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Joyce Bobek
Soma Environmental

Date Received: 12/14/15
Date Reported: 12/21/15

EFF MPE 1512102-001A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
TPH-Gasoline	ETO15	1	40	180	3700
Benzene	ETO15	1	0.69	1.6	11.7
Toluene	ETO15	1	0.95	1.9	6.23

INF MPE 1512102-002A

Parameters:	Analysis Method	DF	MDL	PQL	Results ug/m3
Benzene	ETO15	50	34	80	728
Toluene	ETO15	50	48	95	1200
Ethyl Benzene	ETO15	50	50	110	131
m,p-Xylene	ETO15	50	81	220	1630
o-Xylene	ETO15	50	40	110	406
TPH-Gasoline	ETO15	50	2000	8800	230000

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joyce Bobek
Soma Environmental

Date Received: 12/14/15
Date Reported: 12/21/15

Client Sample ID:	EFF MPE	**Lab Sample ID:**	1512102-001A
Project Name/Location:	15101 Freedom Ave, San Leandro	**Sample Matrix:**	Air
Project Number:			
Date/Time Sampled:	12/14/15 / 11:55	**Certified Clean WO # :**	
Canister/Tube ID:		**Received PSI :**	0.0
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	15101 Freedom Ave		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO15	NA	12/14/15	1	40	180	3700	1,051.14	x	428162	NA

NOTE: x - TPH value due to individual, non-target peak within range of C5-C12 quantified as Gasoline.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	12/14/15	1	0.87	1.8	ND	ND		428161	NA
tert-Butanol	ETO15	NA	12/14/15	1	0.91	8.4	ND	ND		428161	NA
Diisopropyl ether (DIPE)	ETO15	NA	12/14/15	1	0.88	2.1	ND	ND		428161	NA
ETBE	ETO15	NA	12/14/15	1	0.68	2.1	ND	ND		428161	NA
Benzene	ETO15	NA	12/14/15	1	0.69	1.6	11.7	3.66		428161	NA
TAME	ETO15	NA	12/14/15	1	0.36	2.1	ND	ND		428161	NA
Toluene	ETO15	NA	12/14/15	1	0.95	1.9	6.23	1.64		428161	NA
Ethyl Benzene	ETO15	NA	12/14/15	1	0.99	2.2	ND	ND		428161	NA
m,p-Xylene	ETO15	NA	12/14/15	1	1.6	4.3	ND	ND		428161	NA
o-Xylene	ETO15	NA	12/14/15	1	0.81	2.2	ND	ND		428161	NA
(S) 4-Bromofluorobenzene	ETO15	NA	12/14/15	1	65	135	107 %			428161	NA

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Joyce Bobek
Soma Environmental

Date Received: 12/14/15
Date Reported: 12/21/15

Client Sample ID:	INF MPE	**Lab Sample ID:**	1512102-002A
Project Name/Location:	15101 Freedom Ave, San Leandro	**Sample Matrix:**	Air
Project Number:			
Date/Time Sampled:	12/14/15 / 12:00	**Certified Clean WO # :**	
Canister/Tube ID:		**Received PSI :**	0.0
Collection Volume (L):	0.00	**Corrected PSI :**	0.0
Tag Number:	15101 Freedom Ave		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
TPH-Gasoline	ETO15	NA	12/14/15	50	2000	8800	230000	65,340.91		428162	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Lab Qualifier	Analytical Batch	Prep Batch
MTBE	ETO15	NA	12/14/15	50	43	90	ND	ND		428161	NA
tert-Butanol	ETO15	NA	12/14/15	50	46	420	ND	ND		428161	NA
Diisopropyl ether (DIPE)	ETO15	NA	12/14/15	50	44	110	ND	ND		428161	NA
ETBE	ETO15	NA	12/14/15	50	34	110	ND	ND		428161	NA
Benzene	ETO15	NA	12/14/15	50	34	80	728	227.50		428161	NA
TAME	ETO15	NA	12/14/15	50	18	110	ND	ND		428161	NA
Toluene	ETO15	NA	12/14/15	50	48	95	1200	315.79		428161	NA
Ethyl Benzene	ETO15	NA	12/14/15	50	50	110	131	30.47		428161	NA
m,p-Xylene	ETO15	NA	12/14/15	50	81	220	1630	379.07		428161	NA
o-Xylene	ETO15	NA	12/14/15	50	40	110	406	94.42		428161	NA
(S) 4-Bromofluorobenzene	ETO15	NA	12/14/15	50	65	135	107 %			428161	NA

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1512102	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/14/15	**Analytical Batch:**	428161
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.30	1.00	ND	
1,1-Difluoroethane	0.18	10.0	ND	
1,2-Dichlorotetrafluoroethane	0.70	2.00	ND	
Chloromethane	0.15	0.500	ND	
Vinyl Chloride	0.26	1.00	ND	
1,3-Butadiene	0.20	0.500	ND	
Bromomethane	0.18	0.500	ND	
Chloroethane	0.19	0.500	ND	
Trichlorofluoromethane	0.32	1.00	ND	
1,1-Dichloroethene	0.15	0.500	ND	
Freon 113	0.11	0.500	ND	
Carbon Disulfide	0.26	1.00	ND	
2-Propanol (Isopropyl Alcohol)	0.39	10.0	ND	
Methylene Chloride	0.17	8.00	ND	
Acetone	0.37	8.00	ND	
trans-1,2-Dichloroethene	0.16	0.500	ND	
Hexane	0.15	0.500	ND	
MTBE	0.24	0.500	ND	
tert-Butanol	0.22	2.00	ND	
Diisopropyl ether (DIPE)	0.21	0.500	ND	
1,1-Dichloroethane	0.18	0.500	ND	
ETBE	0.16	0.500	ND	
cis-1,2-Dichloroethene	0.13	0.500	ND	
Chloroform	0.25	1.00	ND	
Vinyl Acetate	0.16	0.500	ND	
Carbon Tetrachloride	0.14	0.500	ND	
1,1,1-Trichloroethane	0.15	0.500	ND	
2-Butanone (MEK)	0.21	0.500	ND	
Ethyl Acetate	0.21	0.500	ND	
Tetrahydrofuran	0.10	0.500	ND	
Benzene	0.21	0.500	ND	
TAME	0.086	0.500	ND	
1,2-Dichloroethane (EDC)	0.24	0.500	ND	
Trichloroethylene	0.26	1.00	ND	
1,2-Dichloropropane	0.29	1.00	ND	
Bromodichloromethane	0.13	0.500	ND	
1,4-Dioxane	0.35	1.00	ND	
trans-1,3-Dichloropropene	0.19	0.500	ND	
Toluene	0.25	0.500	ND	
4-Methyl-2-Pentanone (MIBK)	0.21	0.500	ND	
cis-1,3-Dichloropropene	0.25	0.500	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1512102	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/14/15	**Analytical Batch:**	428161
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Tetrachloroethylene	0.13	0.500	ND	
1,1,2-Trichloroethane	0.17	0.500	ND	
Dibromochloromethane	0.20	0.500	ND	
1,2-Dibromoethane (EDB)	0.27	1.00	ND	
2-Hexanone	0.27	1.00	ND	
Ethyl Benzene	0.23	0.500	ND	
Chlorobenzene	0.15	0.500	ND	
1,1,1,2-Tetrachloroethane	0.15	0.500	ND	
m,p-Xylene	0.38	1.00	ND	
o-Xylene	0.19	0.500	ND	
Styrene	0.16	0.500	ND	
Bromoform	0.11	0.500	ND	
1,1,2,2-Tetrachloroethane	0.10	0.500	ND	
4-Ethyl Toluene	0.17	0.500	ND	
1,3,5-Trimethylbenzene	0.15	0.500	ND	
1,2,4-Trimethylbenzene	0.14	0.500	ND	
1,4-Dichlorobenzene	0.11	0.500	ND	
1,3-Dichlorobenzene	0.14	0.500	ND	
1,2-Dichlorobenzene	0.15	0.500	ND	
Hexachlorobutadiene	0.22	0.500	ND	
1,2,4-Trichlorobenzene	0.46	1.00	ND	
Naphthalene	0.28	1.00	ND	
(S) 4-Bromofluorobenzene			105	

Work Order:	1512102	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/14/15	**Analytical Batch:**	428162
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH-Gasoline	11	50.0	40.0	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1512102	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/14/15	**Analytical Batch:**	428161
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.15	0.500	ND	8	108	103	4.76	65 - 135	30	
Benzene	0.21	0.500	ND	8	108	103	5.23	65 - 135	30	
Trichloroethylene	0.26	1.00	ND	8	103	97.4	5.61	65 - 135	30	
Toluene	0.25	0.500	ND	8	96.9	92.9	4.22	65 - 135	30	
Chlorobenzene	0.15	0.500	ND	8	99.1	95.8	3.46	65 - 135	30	
(S) 4-Bromofluorobenzene			ND	8	108	106		65 - 135		

Work Order:	1512102	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Air	**Analytical Method:**	ETO15	**Analyzed Date:**	12/14/15	**Analytical Batch:**	428162
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH-Gasoline	11	50.0	40.0	504	84.5	77.9	8.06	50 - 150	30	

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg.m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the anlayte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Soma Environmental

Project Name: 15101 Freedom Ave, San Leandro

Work Order No.: 1512102

Date and Time Received: 12/14/2015 13:45

Received By: LDI

Physically Logged By: LDI

Checklist Completed By: LDI

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes		
Container/Temp Blank temperature in compliance?	Yes	Temperature:	°C
Water-VOA vials have zero headspace?	No VOA vials submitted		
Water-pH acceptable upon receipt?	N/A		

pH Checked by: N/A

pH Adjusted by: N/A

Torrent LABORATORY, INC.

Torrent LABORATORY, INC.
483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

RESET

CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO: 1512102

Company Name: SOMA Environmental Engineering, Inc.	Location of Sampling: 15101 Freedom Ave, San Leandro
Address: 6620 Owens Drive, Suite A	Purpose: MPE Air Sampling
City: Pleasanton / State: CA / Zip Code: 94588	Special Instructions / Comments: Please report in ug/m3 & ppbv
Telephone: 925-734-6400 / FAX: 925-734-6401	gas-ox: TBA, DIPE, ETBE, TAME
REPORT TO: Joyce Bobek / SAMPLER: Davoud Bazrpash	P.O. #: 2556 / EMAIL: jbobek@somaenv.com

TURNAROUND TIME:
- ☐ 10 Work Days
- ☐ 3 Work Days
- ☐ Noon - Nxt Day
- ☐ 7 Work Days
- ☐ 2 Work Days
- ☐ 2 - 8 Hours
- ☑ 5 Work Days
- ☐ 1 Work Day
- ☐ Other

SAMPLE TYPE:
- ☐ Storm Water
- ☐ Waste Water
- ☐ Ground Water
- ☐ Soil
- ☑ Air
- ☐ Other

REPORT FORMAT:
- ☐ QC Level IV
- ☑ EDF
- ☐ Excel / EDD

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TO-15 (TPH-g,	BTEX, gas-oxygenat	MtBE)						REMARKS
-001A	EFF MPE	12/14/15 11:55	Air	1	tedlar	✓								
-002A	INF MPE	12/14/15 12:00	Air	1	tedlar	✓								

	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:
1	DB		12/14/15	13:45		L-D-Imbo	12-14-15	13:45
2								

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment: D/6 Sample seals intact? ☐ Yes ☐ NO ☑ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrange -ments are made.

Page 1 of 1

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____

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

Laboratory Job Number 272590
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.	Project : 2556
6620 Owens Dr.	Location : 15101 Freedom Ave, San Leandro
Pleasanton, CA 94588	Level : II

Sample ID	Lab ID
SV-2	272590-001
AA-2	272590-002

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

Signature: Tracy Babjar Date: 01/07/2016

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

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**272590**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2556**
Location:	**15101 Freedom Ave, San Leandro**
Request Date:	**12/18/15**
Samples Received:	**12/18/15**

This data package contains sample and QC results for two air samples, requested for the above referenced project on 12/18/15. The samples were received intact. This job was reprocessed on 01/06/16 to report data to MDL. The dilution factor for sample -002 is based on the very low initial pressure of the sample in the canister.

Volatile Organics in Air by MS (EPA TO-15):

Low response was observed for vinyl acetate in the CCV analyzed 12/23/15 11:21; affected data was qualified with "b". Low recoveries were observed for acetone and vinyl acetate in the BS/BSD for batch 230666; the associated RPDs were within limits. Ethylbenzene was detected between the MDL and the RL in the method blank for batch 230666; this analyte was either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. No other analytical problems were encountered.

Volatile Organics in Air GC (ASTM D1946 and EPA TO-3):

No analytical problems were encountered.

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

AIR TESTING CHAIN OF CUSTODY
& PURCHASE ORDER

Chain of Custody # : _____

C&T LOGIN # 272590

Project No: 2556
Project Name: 15101 Freedom Ave, San Leandro
EDD Format: EDF **Rpt Level: II III IV**
Turnaround Time: ☐ RUSH _____ ☑ Standa

Sampler: Conor Goulding
Report To: Joyce Bobek
Company : SOMA Environmental Engineering
Telephone: 925-734-6400
Email: jbobek@somaenv.com

Lab No.	Sample ID.	Sampling Information					TESTING REQUESTED				
		Date Collected	Time Collected	Canister ID (Bar Code #)	Flow Controller ID	Sample Volume (Gauge Reading)	TO-15	TO-3	D1946 (standard list)		
1		12/17 to 12/18/2015	9:50am	23	A00143	29.5/2.8	X	X	X		
2		12/17 to 12/18/2015	9.50am	358	A00109	28.5/5	X	X	X		

Notes:

RELIQUISHED BY:	RECEIVED BY:
12-18 15 10:50am DATE/TIME	12/18/15 10:50 DATE/TIME
12/18/15 11:34 DATE/TIME	12/18/15 1134 DATE/TIME
DATE/TIME	DATE/TIME

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 272590 Date Received 12/18/15 Number of coolers 0
Client SOMA Project 15101 Freedom Ave

Date Opened 12/21/15 By (print) AM (sign)
Date Logged in ↓ By (print) ↓ (sign) ↓

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

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

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

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

☐ Samples Received on ice & cold without a temperature blank

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

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

COMMENTS

Rev 9, 10/11

Curtis & Tompkins, Ltd.

Detections Summary for 272590

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

Client : SOMA Environmental Engineering Inc.
Project : 2556
Location : 15101 Freedom Ave, San Leandro

Client Sample ID : SV-2 Laboratory Sample ID : 272590-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Benzene	0.42		0.092	0.040	ppbv	As Recd	1.830	EPA TO-15	METHOD
Toluene	1.0		0.92		ppbv	As Recd	1.830	EPA TO-15	METHOD
Ethylbenzene	0.20		0.092	0.026	ppbv	As Recd	1.830	EPA TO-15	METHOD
Oxygen	180,000		1,800		ppmv	As Recd	1.830	ASTM D1946	METHOD

Client Sample ID : AA-2 Laboratory Sample ID : 272590-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Benzene	0.47	J	0.63	0.28	ppbv	As Recd	12.67	EPA TO-15	METHOD
Ethylbenzene	0.24	J	0.63	0.18	ppbv	As Recd	12.67	EPA TO-15	METHOD
Oxygen	140,000		13,000		ppmv	As Recd	12.67	ASTM D1946	METHOD

J = Estimated value

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Field ID:	SV-2	Diln Fac:	1.830
Lab ID:	272590-001	Batch#:	230666
Matrix:	Air	Sampled:	12/18/15
Units (V):	ppbv	Received:	12/18/15
Units (M):	ug/m3	Analyzed:	12/23/15

Analyte	Result (V)	RL	MDL	Result (M)	RL	MDL
Freon 12	ND	0.92		ND	4.5	
Freon 114	ND	0.92		ND	6.4	
Chloromethane	ND	0.92		ND	1.9	
Vinyl Chloride	ND	0.92		ND	2.3	
1,3-Butadiene	ND	0.92		ND	2.0	
Bromomethane	ND	0.92		ND	3.6	
Chloroethane	ND	0.92		ND	2.4	
Trichlorofluoromethane	ND	0.92		ND	5.1	
Acrolein	ND	3.7		ND	8.4	
1,1-Dichloroethene	ND	0.92		ND	3.6	
Freon 113	ND	0.92		ND	7.0	
Acetone	ND	3.7		ND	8.7	
Carbon Disulfide	ND	0.92		ND	2.8	
Isopropanol	ND	3.7		ND	9.0	
Methylene Chloride	ND	0.92		ND	3.2	
trans-1,2-Dichloroethene	ND	0.92		ND	3.6	
MTBE	ND	0.92		ND	3.3	
n-Hexane	ND	0.92		ND	3.2	
1,1-Dichloroethane	ND	0.92		ND	3.7	
Vinyl Acetate	ND	3.1		ND	11	
cis-1,2-Dichloroethene	ND	0.92		ND	3.6	
2-Butanone	ND	3.1		ND	9.0	
Ethyl Acetate	ND	0.92		ND	3.3	
Tetrahydrofuran	ND	0.92		ND	2.7	
Chloroform	ND	0.92		ND	4.5	
1,1,1-Trichloroethane	ND	0.92		ND	5.0	
Cyclohexane	ND	0.92		ND	3.1	
Carbon Tetrachloride	ND	0.92		ND	5.8	
Benzene	0.42	0.092	0.040	1.3	0.29	0.13
1,2-Dichloroethane	ND	0.92		ND	3.7	
n-Heptane	ND	0.92		ND	3.7	
Trichloroethene	ND	0.92		ND	4.9	
1,2-Dichloropropane	ND	0.92		ND	4.2	
Bromodichloromethane	ND	0.92		ND	6.1	

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

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Field ID:	SV-2	Diln Fac:	1.830
Lab ID:	272590-001	Batch#:	230666
Matrix:	Air	Sampled:	12/18/15
Units (V):	ppbv	Received:	12/18/15
Units (M):	ug/m3	Analyzed:	12/23/15

Analyte	Result (V)	RL	MDL	Result (M)	RL	MDL
cis-1,3-Dichloropropene	ND	0.92		ND	4.2	
4-Methyl-2-Pentanone	ND	0.92		ND	3.7	
Toluene	1.0	0.92		3.9	3.4	
trans-1,3-Dichloropropene	ND	0.92		ND	4.2	
1,1,2-Trichloroethane	ND	0.92		ND	5.0	
Tetrachloroethene	ND	0.92		ND	6.2	
2-Hexanone	ND	0.92		ND	3.7	
Dibromochloromethane	ND	0.92		ND	7.8	
1,2-Dibromoethane	ND	0.92		ND	7.0	
Chlorobenzene	ND	0.92		ND	4.2	
Ethylbenzene	0.20	0.092	0.026	0.87	0.40	0.11
m,p-Xylenes	ND	0.92		ND	4.0	
o-Xylene	ND	0.92		ND	4.0	
Styrene	ND	0.92		ND	3.9	
Bromoform	ND	0.92		ND	9.5	
1,1,2,2-Tetrachloroethane	ND	0.92		ND	6.3	
4-Ethyltoluene	ND	0.92		ND	4.5	
1,3,5-Trimethylbenzene	ND	0.92		ND	4.5	
1,2,4-Trimethylbenzene	ND	0.92		ND	4.5	
1,3-Dichlorobenzene	ND	0.92		ND	5.5	
1,4-Dichlorobenzene	ND	0.92		ND	5.5	
Benzyl chloride	ND	0.92		ND	4.7	
1,2-Dichlorobenzene	ND	0.92		ND	5.5	
1,2,4-Trichlorobenzene	ND	0.92		ND	6.8	
Hexachlorobutadiene	ND	3.1		ND	33	
Naphthalene	ND	3.7	0.080	ND	19	0.42

Surrogate	%REC	Limits
Bromofluorobenzene	96	80-121

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

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Field ID:	AA-2	Diln Fac:	12.67
Lab ID:	272590-002	Batch#:	230666
Matrix:	Air	Sampled:	12/18/15
Units (V):	ppbv	Received:	12/18/15
Units (M):	ug/m3	Analyzed:	12/23/15

Analyte	Result (V)	RL	MDL	Result (M)	RL	MDL
Freon 12	ND	6.3		ND	31	
Freon 114	ND	6.3		ND	44	
Chloromethane	ND	6.3		ND	13	
Vinyl Chloride	ND	6.3		ND	16	
1,3-Butadiene	ND	6.3		ND	14	
Bromomethane	ND	6.3		ND	25	
Chloroethane	ND	6.3		ND	17	
Trichlorofluoromethane	ND	6.3		ND	36	
Acrolein	ND	25		ND	58	
1,1-Dichloroethene	ND	6.3		ND	25	
Freon 113	ND	6.3		ND	49	
Acetone	ND	25		ND	60	
Carbon Disulfide	ND	6.3		ND	20	
Isopropanol	ND	25		ND	62	
Methylene Chloride	ND	6.3		ND	22	
trans-1,2-Dichloroethene	ND	6.3		ND	25	
MTBE	ND	6.3		ND	23	
n-Hexane	ND	6.3		ND	22	
1,1-Dichloroethane	ND	6.3		ND	26	
Vinyl Acetate	ND	21		ND	74	
cis-1,2-Dichloroethene	ND	6.3		ND	25	
2-Butanone	ND	21		ND	62	
Ethyl Acetate	ND	6.3		ND	23	
Tetrahydrofuran	ND	6.3		ND	19	
Chloroform	ND	6.3		ND	31	
1,1,1-Trichloroethane	ND	6.3		ND	35	
Cyclohexane	ND	6.3		ND	22	
Carbon Tetrachloride	ND	6.3		ND	40	
Benzene	0.47 J	0.63	0.28	1.5 J	2.0	0.88
1,2-Dichloroethane	ND	6.3		ND	26	
n-Heptane	ND	6.3		ND	26	
Trichloroethene	ND	6.3		ND	34	
1,2-Dichloropropane	ND	6.3		ND	29	

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Field ID:	AA-2	Diln Fac:	12.67
Lab ID:	272590-002	Batch#:	230666
Matrix:	Air	Sampled:	12/18/15
Units (V):	ppbv	Received:	12/18/15
Units (M):	ug/m3	Analyzed:	12/23/15

Analyte	Result (V)	RL	MDL	Result (M)	RL	MDL
Bromodichloromethane	ND	6.3		ND	42	
cis-1,3-Dichloropropene	ND	6.3		ND	29	
4-Methyl-2-Pentanone	ND	6.3		ND	26	
Toluene	ND	6.3		ND	24	
trans-1,3-Dichloropropene	ND	6.3		ND	29	
1,1,2-Trichloroethane	ND	6.3		ND	35	
Tetrachloroethene	ND	6.3		ND	43	
2-Hexanone	ND	6.3		ND	26	
Dibromochloromethane	ND	6.3		ND	54	
1,2-Dibromoethane	ND	6.3		ND	49	
Chlorobenzene	ND	6.3		ND	29	
Ethylbenzene	0.24 J	0.63	0.18	1.0 J	2.8	0.79
m,p-Xylenes	ND	6.3		ND	28	
o-Xylene	ND	6.3		ND	28	
Styrene	ND	6.3		ND	27	
Bromoform	ND	6.3		ND	65	
1,1,2,2-Tetrachloroethane	ND	6.3		ND	43	
4-Ethyltoluene	ND	6.3		ND	31	
1,3,5-Trimethylbenzene	ND	6.3		ND	31	
1,2,4-Trimethylbenzene	ND	6.3		ND	31	
1,3-Dichlorobenzene	ND	6.3		ND	38	
1,4-Dichlorobenzene	ND	6.3		ND	38	
Benzyl chloride	ND	6.3		ND	33	
1,2-Dichlorobenzene	ND	6.3		ND	38	
1,2,4-Trichlorobenzene	ND	6.3		ND	47	
Hexachlorobutadiene	ND	21		ND	230	
Naphthalene	ND	25	0.55	ND	130	2.9

Surrogate	%REC	Limits
Bromofluorobenzene	96	80-121

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	230666
Units (V):	ppbv	Analyzed:	12/23/15
Diln Fac:	1.000		

Type: BS Lab ID: QC817758

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	10.99	110	70-130
Freon 114	10.00	11.42	114	70-130
Chloromethane	10.00	10.87	109	70-130
Vinyl Chloride	10.00	10.26	103	70-130
1,3-Butadiene	10.00	9.258	93	70-130
Bromomethane	10.00	10.57	106	70-130
Chloroethane	10.00	9.929	99	70-130
Trichlorofluoromethane	10.00	11.00	110	70-130
Acrolein	10.00	8.597	86	70-130
1,1-Dichloroethene	10.00	10.15	101	70-130
Freon 113	10.00	10.29	103	70-130
Acetone	10.00	7.190	72	70-130
Carbon Disulfide	10.00	10.06	101	70-130
Isopropanol	10.00	8.564	86	70-130
Methylene Chloride	10.00	10.64	106	70-130
trans-1,2-Dichloroethene	10.00	10.39	104	70-130
MTBE	10.00	10.15	102	70-130
n-Hexane	10.00	8.920	89	70-130
1,1-Dichloroethane	10.00	10.36	104	70-130
Vinyl Acetate	10.00	6.452 b	65 *	70-130
cis-1,2-Dichloroethene	10.00	9.325	93	70-130
2-Butanone	10.00	8.161	82	70-130
Ethyl Acetate	10.00	9.532	95	70-130
Tetrahydrofuran	10.00	10.01	100	70-130
Chloroform	10.00	9.994	100	70-130
1,1,1-Trichloroethane	10.00	11.08	111	70-130
Cyclohexane	10.00	10.20	102	70-130
Carbon Tetrachloride	10.00	9.230	92	70-130
Benzene	10.00	9.830	98	70-130
1,2-Dichloroethane	10.00	10.02	100	70-130
n-Heptane	10.00	9.329	93	70-130
Trichloroethene	10.00	9.799	98	70-130

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	230666
Units (V):	ppbv	Analyzed:	12/23/15
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
1,2-Dichloropropane	10.00	10.66	107	70-130
Bromodichloromethane	10.00	10.36	104	70-130
cis-1,3-Dichloropropene	10.00	9.850	99	70-130
4-Methyl-2-Pentanone	10.00	10.97	110	70-130
Toluene	10.00	9.580	96	70-130
trans-1,3-Dichloropropene	10.00	10.12	101	70-130
1,1,2-Trichloroethane	10.00	9.908	99	70-130
Tetrachloroethene	10.00	9.916	99	70-130
2-Hexanone	10.00	10.80	108	70-130
Dibromochloromethane	10.00	9.648	96	70-130
1,2-Dibromoethane	10.00	9.971	100	70-130
Chlorobenzene	10.00	8.650	87	70-130
Ethylbenzene	10.00	8.765	88	70-130
m,p-Xylenes	20.00	19.57	98	70-130
o-Xylene	10.00	9.670	97	70-130
Styrene	10.00	10.34	103	70-130
Bromoform	10.00	7.199	72	70-130
1,1,2,2-Tetrachloroethane	10.00	8.159	82	70-130
4-Ethyltoluene	10.00	9.463	95	70-130
1,3,5-Trimethylbenzene	10.00	10.59	106	70-130
1,2,4-Trimethylbenzene	10.00	10.48	105	70-130
1,3-Dichlorobenzene	10.00	10.03	100	70-130
1,4-Dichlorobenzene	10.00	10.27	103	70-130
Benzyl chloride	10.00	8.178	82	70-130
1,2-Dichlorobenzene	10.00	9.771	98	70-130
1,2,4-Trichlorobenzene	10.00	8.587	86	70-130
Hexachlorobutadiene	10.00	10.31	103	70-130
Naphthalene	10.00	9.273	93	70-130

Surrogate	%REC	Limits
Bromofluorobenzene	111	70-130

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	230666
Units (V):	ppbv	Analyzed:	12/23/15
Diln Fac:	1.000		

Type: BSD Lab ID: QC817759

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	10.69	107	70-130	3	25
Freon 114	10.00	11.00	110	70-130	4	25
Chloromethane	10.00	9.930	99	70-130	9	25
Vinyl Chloride	10.00	9.829	98	70-130	4	25
1,3-Butadiene	10.00	8.939	89	70-130	4	25
Bromomethane	10.00	10.41	104	70-130	1	25
Chloroethane	10.00	9.134	91	70-130	8	25
Trichlorofluoromethane	10.00	10.51	105	70-130	5	25
Acrolein	10.00	8.071	81	70-130	6	25
1,1-Dichloroethene	10.00	9.819	98	70-130	3	25
Freon 113	10.00	9.958	100	70-130	3	25
Acetone	10.00	6.889	69 *	70-130	4	25
Carbon Disulfide	10.00	9.724	97	70-130	3	25
Isopropanol	10.00	8.257	83	70-130	4	25
Methylene Chloride	10.00	10.03	100	70-130	6	25
trans-1,2-Dichloroethene	10.00	9.695	97	70-130	7	25
MTBE	10.00	9.596	96	70-130	6	25
n-Hexane	10.00	8.435	84	70-130	6	25
1,1-Dichloroethane	10.00	10.01	100	70-130	3	25
Vinyl Acetate	10.00	6.183 b	62 *	70-130	4	25
cis-1,2-Dichloroethene	10.00	9.025	90	70-130	3	25
2-Butanone	10.00	8.011	80	70-130	2	25
Ethyl Acetate	10.00	9.510	95	70-130	0	25
Tetrahydrofuran	10.00	10.42	104	70-130	4	25
Chloroform	10.00	9.588	96	70-130	4	25
1,1,1-Trichloroethane	10.00	11.08	111	70-130	0	25
Cyclohexane	10.00	10.44	104	70-130	2	25
Carbon Tetrachloride	10.00	9.339	93	70-130	1	25
Benzene	10.00	10.19	102	70-130	4	25
1,2-Dichloroethane	10.00	10.11	101	70-130	1	25
n-Heptane	10.00	9.303	93	70-130	0	25
Trichloroethene	10.00	9.787	98	70-130	0	25

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	230666
Units (V):	ppbv	Analyzed:	12/23/15
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
1,2-Dichloropropane	10.00	10.87	109	70-130	2	25
Bromodichloromethane	10.00	10.55	105	70-130	2	25
cis-1,3-Dichloropropene	10.00	9.849	98	70-130	0	25
4-Methyl-2-Pentanone	10.00	11.05	110	70-130	1	25
Toluene	10.00	9.547	95	70-130	0	25
trans-1,3-Dichloropropene	10.00	10.01	100	70-130	1	25
1,1,2-Trichloroethane	10.00	9.559	96	70-130	4	25
Tetrachloroethene	10.00	9.505	95	70-130	4	25
2-Hexanone	10.00	10.47	105	70-130	3	25
Dibromochloromethane	10.00	9.390	94	70-130	3	25
1,2-Dibromoethane	10.00	9.557	96	70-130	4	25
Chlorobenzene	10.00	8.357	84	70-130	3	25
Ethylbenzene	10.00	8.628	86	70-130	2	25
m,p-Xylenes	20.00	18.73	94	70-130	4	25
o-Xylene	10.00	9.314	93	70-130	4	25
Styrene	10.00	10.05	100	70-130	3	25
Bromoform	10.00	6.954	70	70-130	3	25
1,1,2,2-Tetrachloroethane	10.00	7.973	80	70-130	2	25
4-Ethyltoluene	10.00	9.111	91	70-130	4	25
1,3,5-Trimethylbenzene	10.00	10.29	103	70-130	3	25
1,2,4-Trimethylbenzene	10.00	9.953	100	70-130	5	25
1,3-Dichlorobenzene	10.00	9.590	96	70-130	4	25
1,4-Dichlorobenzene	10.00	9.601	96	70-130	7	25
Benzyl chloride	10.00	7.813	78	70-130	5	25
1,2-Dichlorobenzene	10.00	9.391	94	70-130	4	25
1,2,4-Trichlorobenzene	10.00	8.073	81	70-130	6	25
Hexachlorobutadiene	10.00	9.792	98	70-130	5	25
Naphthalene	10.00	9.122	91	70-130	2	25

Surrogate	%REC	Limits
Bromofluorobenzene	108	70-130

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC817760	Diln Fac:	1.000
Matrix:	Air	Batch#:	230666
Units (V):	ppbv	Analyzed:	12/23/15

Analyte	Result (V)	RL	MDL	Result (M)	RL	MDL
Freon 12	ND	0.50		ND	2.5	
Freon 114	ND	0.50		ND	3.5	
Chloromethane	ND	0.50		ND	1.0	
Vinyl Chloride	ND	0.50		ND	1.3	
1,3-Butadiene	ND	0.50		ND	1.1	
Bromomethane	ND	0.50		ND	1.9	
Chloroethane	ND	0.50		ND	1.3	
Trichlorofluoromethane	ND	0.50		ND	2.8	
Acrolein	ND	2.0		ND	4.6	
1,1-Dichloroethene	ND	0.50		ND	2.0	
Freon 113	ND	0.50		ND	3.8	
Acetone	ND	2.0		ND	4.8	
Carbon Disulfide	ND	0.50		ND	1.6	
Isopropanol	ND	2.0		ND	4.9	
Methylene Chloride	ND	0.50		ND	1.7	
trans-1,2-Dichloroethene	ND	0.50		ND	2.0	
MTBE	ND	0.50		ND	1.8	
n-Hexane	ND	0.50		ND	1.8	
1,1-Dichloroethane	ND	0.50		ND	2.0	
Vinyl Acetate	ND	1.7		ND	5.9	
cis-1,2-Dichloroethene	ND	0.50		ND	2.0	
2-Butanone	ND	1.7		ND	4.9	
Ethyl Acetate	ND	0.50		ND	1.8	
Tetrahydrofuran	ND	0.50		ND	1.5	
Chloroform	ND	0.50		ND	2.4	
1,1,1-Trichloroethane	ND	0.50		ND	2.7	
Cyclohexane	ND	0.50		ND	1.7	
Carbon Tetrachloride	ND	0.50		ND	3.1	
Benzene	ND	0.050	0.022	ND	0.16	0.069
1,2-Dichloroethane	ND	0.50		ND	2.0	
n-Heptane	ND	0.50		ND	2.0	
Trichloroethene	ND	0.50		ND	2.7	
1,2-Dichloropropane	ND	0.50		ND	2.3	

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Batch QC Report

Volatile Organics in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC817760	Diln Fac:	1.000
Matrix:	Air	Batch#:	230666
Units (V):	ppbv	Analyzed:	12/23/15

Analyte	Result (V)	RL	MDL	Result (M)	RL	MDL
Bromodichloromethane	ND	0.50		ND	3.4	
cis-1,3-Dichloropropene	ND	0.50		ND	2.3	
4-Methyl-2-Pentanone	ND	0.50		ND	2.0	
Toluene	ND	0.50		ND	1.9	
trans-1,3-Dichloropropene	ND	0.50		ND	2.3	
1,1,2-Trichloroethane	ND	0.50		ND	2.7	
Tetrachloroethene	ND	0.50		ND	3.4	
2-Hexanone	ND	0.50		ND	2.0	
Dibromochloromethane	ND	0.50		ND	4.3	
1,2-Dibromoethane	ND	0.50		ND	3.8	
Chlorobenzene	ND	0.50		ND	2.3	
Ethylbenzene	0.015 J	0.050	0.014	0.065 J	0.22	0.062
m,p-Xylenes	ND	0.50		ND	2.2	
o-Xylene	ND	0.50		ND	2.2	
Styrene	ND	0.50		ND	2.1	
Bromoform	ND	0.50		ND	5.2	
1,1,2,2-Tetrachloroethane	ND	0.50		ND	3.4	
4-Ethyltoluene	ND	0.50		ND	2.5	
1,3,5-Trimethylbenzene	ND	0.50		ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50		ND	2.5	
1,3-Dichlorobenzene	ND	0.50		ND	3.0	
1,4-Dichlorobenzene	ND	0.50		ND	3.0	
Benzyl chloride	ND	0.50		ND	2.6	
1,2-Dichlorobenzene	ND	0.50		ND	3.0	
1,2,4-Trichlorobenzene	ND	0.50		ND	3.7	
Hexachlorobutadiene	ND	1.7		ND	18	
Naphthalene	ND	2.0	0.044	ND	10	0.23

Surrogate	%REC	Limits
Bromofluorobenzene	96	70-130

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit
Result M= Result in mass units
Result V= Result in volume units

Curtis & Tompkins, Ltd.

Fixed Gas Analysis

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	ASTM D1946
Matrix:	Air	Sampled:	12/18/15
Units:	ppmv	Received:	12/18/15
Units (Mol %):	MOL %	Analyzed:	12/22/15
Batch#:	230639		

Field ID: SV-2 Lab ID: 272590-001
Type: SAMPLE Diln Fac: 1.830

Analyte	Result	RL	Result (Mol %)	RL
Carbon Monoxide	ND	1,800	ND	0.18
Carbon Dioxide	ND	1,800	ND	0.18
Oxygen	180,000	1,800	18	0.18
Methane	ND	1,800	ND	0.18

Field ID: AA-2 Lab ID: 272590-002
Type: SAMPLE Diln Fac: 12.67

Analyte	Result	RL	Result (Mol %)	RL
Carbon Monoxide	ND	13,000	ND	1.3
Carbon Dioxide	ND	13,000	ND	1.3
Oxygen	140,000	13,000	14	1.3
Methane	ND	13,000	ND	1.3

Type: BLANK Diln Fac: 1.000
Lab ID: QC817669

Analyte	Result	RL	Result (Mol %)	RL
Carbon Monoxide	ND	1,000	ND	0.10
Carbon Dioxide	ND	1,000	ND	0.10
Oxygen	ND	1,000	ND	0.10
Methane	ND	1,000	ND	0.10

ND= Not Detected
RL= Reporting Limit
Result Mol %= Result in Mole Percent

Curtis & Tompkins, Ltd.

Aromatic / Petroleum Hydrocarbons in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-3
Analyte:	Gasoline Range Organics C6-C12	Batch#:	230687
Matrix:	Air	Sampled:	12/18/15
Units (V):	ppbv	Received:	12/18/15
Units (M):	ug/m3	Analyzed:	12/23/15

Field ID	Type	Lab ID	Result (V)	RL	MDL	Result (M)	RL	MDL	Diln Fac
SV-2	SAMPLE	272590-001	ND	92	10	ND	370	42	1.830
AA-2	SAMPLE	272590-002	ND	630	71	ND	2,600	290	12.67
	BLANK	QC817846	ND	50	5.6	ND	200	23	1.000

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

Curtis & Tompkins, Ltd.

Batch QC Report

Fixed Gas Analysis

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	ASTM D1946
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC817668	Batch#:	230639
Matrix:	Air	Analyzed:	12/22/15
Units:	ppmv		

Analyte	Spiked	Result	%REC	Limits
Carbon Monoxide	2,000	2,013	101	70-130
Carbon Dioxide	2,000	2,043	102	70-130
Oxygen	2,000	1,847	92	70-130
Methane	2,000	1,718	86	70-130

Curtis & Tompkins, Ltd.

Batch QC Report

Fixed Gas Analysis

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	ASTM D1946
Field ID:	ZZZZZZZZZZ	Units (Mol %):	MOL %
Type:	SDUP	Diln Fac:	1.700
MSS Lab ID:	272593-001	Batch#:	230639
Lab ID:	QC817670	Sampled:	12/18/15
Matrix:	Air	Received:	12/18/15
Units:	ppmv	Analyzed:	12/22/15

Analyte	MSS Result	Result	RL	Result (Mol %)	RL	RPD	Lim
Carbon Monoxide	<1,700	ND	1,700	ND	0.1700	NC	30
Carbon Dioxide	86,840	86,790	1,700	8.679	0.1700	0	30
Oxygen	10,330	10,320	1,700	1.032	0.1700	0	30
Methane	303,600	302,700	1,700	30.27	0.1700	0	30

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit
RPD= Relative Percent Difference
Result Mol %= Result in Mole Percent

Curtis & Tompkins, Ltd.

Batch QC Report

Aromatic / Petroleum Hydrocarbons in Air

Lab #:	272590	Location:	15101 Freedom Ave, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2556	Analysis:	EPA TO-3
Analyte:	Gasoline Range Organics C6-C12	Diln Fac:	1.000
Matrix:	Air	Batch#:	230687
Units (V):	ppbv	Analyzed:	12/23/15

Type	Lab ID	Spiked	Result (V)	%REC	Limits	RPD	Lim
BS	QC817844	210.0	181.2	86	70-130		
BSD	QC817845	210.0	200.8	96	70-130	10	25

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