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

January 13, 2012

Mr. Paresh Khatri
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. Khatri:

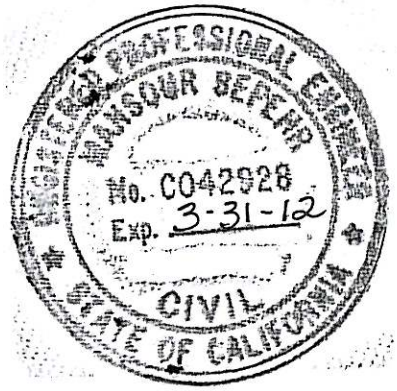
SOMA's "Fourth Quarter 2011 Groundwater Monitoring and Remediation Progress Report" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

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 2011
# Groundwater Monitoring and
# Remediation Progress Report

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

**January 13, 2012**

**Project 2551/2555**

**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. A. 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 2011 groundwater monitoring event.

Mansour Sepehr, PhD, PE
Principal Hydrogeologist

# TABLE OF CONTENTS

CERTIFICATION ..... i

TABLE OF CONTENTS ..... ii

LIST OF FIGURES ..... iii

LIST OF TABLES ..... iii

LIST OF APPENDICES ..... iv

1. INTRODUCTION ..... 1
   1.1 Field Activities ..... 1
   1.2 Laboratory Analysis ..... 2

2. RESULTS ..... 2
   2.1 Field Measurements, First WBZ Wells ..... 2
   2.2 Laboratory Analysis, First WBZ Wells ..... 3
   2.3 Field Measurements, Second WBZ Wells ..... 4
   2.4 Laboratory Analysis for Second WBZ Wells ..... 5

3. OPERATION OF TREATMENT SYSTEM ..... 5

4. MULTI-PHASE EXTRACTION EVENTS ..... 6

5. CONCLUSIONS AND RECOMMENDATIONS ..... 6

6. REPORT LIMITATIONS ..... 7

## LIST OF FIGURES


Figure 1: Site vicinity map

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

Figure 3: Groundwater elevation contour map in feet, First WBZ December 1, 2011

Figure 4: Contour map of TPH-g concentrations in groundwater, First WBZ December 1 and 2, 2011

Figure 5: Contour map of benzene concentrations in groundwater, First WBZ December 1 and 2, 2011

Figure 6: Contour map of MtBE concentrations in groundwater, First WBZ, December 1 and 2, 2011

Figure 7: Contour map of TBA concentrations in groundwater, First WBZ December 1 and 2, 2011

Figure 8: Contour map of TAME concentrations in groundwater, First WBZ December 1 and 2, 2011

Figure 9: Map of ETBE concentrations in groundwater, First WBZ, December 1 and 2, 2011

Figure 10: Groundwater elevation contour map in feet, Second WBZ December 1, 2011

Figure 11: Map showing concentrations of MtBE and TAME in groundwater, Second WBZ. December 1 and 2, 2011

Figure 12: Schematic diagram of groundwater remediation system

Figure 13: Cumulative mass of VOCs removed


## LIST OF TABLES


Table 1: Historical Groundwater Elevation Data and Analytical Results

Table 2: Historical Gasoline Oxygenates Results

Table 3: Effluent Chemical Analytical Results and Operational History of Remediation System

Table 4: Cumulative Masses of Petroleum Hydrocarbons Removed from the Groundwater Since Installation of the Treatment System

## LIST OF APPENDICES

Appendix A: Standard Operating Procedures for Conducting Groundwater Monitoring Activities

Appendix B: Table of Elevations and Coordinates on Monitoring Wells and Field Measurements of Physical, Chemical, and Natural Attenuation Parameters of Groundwater Samples

Appendix C: Laboratory Report and Chain of Custody Form for the Fourth Quarter 2011 Monitoring Event

Appendix D: Laboratory Report and Chain of Custody Form for the Treatment System

# 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 of "Freedom Food and Gas" formerly "Freedom Arco Mini-Mart".

This report summarizes results of the Fourth Quarter 2011 groundwater monitoring event conducted on December 1 and 2, 2011. 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 2011, which includes operation of a groundwater extraction and treatment system. During this reporting period, no multi-phase extraction (MPE) events were conducted.

## 1.1 Field Activities

In December 2011, SOMA's field crew conducted a groundwater monitoring event in accordance with procedures and guidelines of Alameda County Health Care Services Environmental Health Department (ACEH) and the California Regional Water Quality Control Board (CRWQCB). Figure 2 shows well locations.

On December 1, 2011, the following wells were measured for depth to groundwater: five on-site monitoring wells (MW-1 to MW-5) and two off-site wells (MW-6 and MW-7) in the First water-bearing zone (WBZ); two extraction wells (EX-1 and EX-2), two MPE wells (MPE-1 and MPE-2), and three on-site monitoring wells (MW-1D, MW-3D, and MW-4D) in the Second WBZ. On December 1 and 2, 2011, additional field measurements and groundwater samples were collected from all monitoring and MPE wells, except from MW-6 where free product (FP) was observed. Grab groundwater samples were also collected from the two extraction wells. Properties measured include pH, temperature, and electrical conductivity (EC). 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 wells.

### 1.2 Laboratory Analysis

Torrent Laboratory, Inc., 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 analyzed using EPA Method 8260B.

## 2. RESULTS

Following are results of field measurements and laboratory analysis for the December 2011 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 13.59 feet in MW-7 to 21.97 feet in MW-1. 0.02 feet of FP was observed at MW-6. Depth corrected to reflect the presence of FP in this well is detailed below.*

*Corrected Depth of MW-6: During monitoring, 0.02 feet of FP was observed in MW-6. Depth to groundwater and the corresponding groundwater elevation were corrected for product thickness. Specific gravity of gas at 20$^{o}$C, which is based on the average density of gas of 0.68 (g/cm$^{3}$) at 20$^{o}$C and the density of water at 1 (g/cm$^{3}$), is approximately 0.68. This resulted in a 0.0136-foot correction factor from the actual measured groundwater column at well MW-6. The above correction factor was based on the specific gravity of gas multiplied by the FP thickness. The correction factor, which accounted for the FP layer, was subtracted from the actual measured depth to water. This caused the corrected groundwater elevation to be slightly higher than the field measured value. Values reflecting the correction for product thickness are shown in Table 1.

Corresponding groundwater elevations ranged from 29.66 feet in MW-6 to 32.49 feet in MW-1. Groundwater elevations at extraction wells EX-1 and EX-2 were 31.26 feet and 23.36 feet, respectively.

Figure 3 displays the contour map of groundwater elevations. As illustrated, groundwater flows southwesterly toward extraction well EX-2, at a gradient of 0.12 feet/feet. The groundwater flow direction remained similar to the previous monitoring event (Third Quarter 2011) while the gradient increased.

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO concentrations in the First WBZ ranged from 1.03 mg/L in MW-4 to 1.77 mg/L in MW-3. ORP showed negative redox

potentials in all First WBZ monitoring wells. Negative redox potentials indicate that contaminants in groundwater are conducive to anaerobic biodegradation.

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. Note that due to the presence of FP, MW-6 could not be sampled and hence no comparisons can be made for this well.

TPH-g concentrations ranged from 780 µg/L in EX-1 to 56,000 µg/L in MPE-1. Since the previous monitoring event (Third Quarter 2011), TPH-g decreased in MW-1, MW-2, MW-3, MW-4, MPE-1 and MPE-2, and increased in all other tested First WBZ wells, most significantly in EX-1 and EX-2.

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

The following BTEX concentrations were observed:

- In MW-2 and MW-7, benzene and toluene were below laboratory-reporting limits and ethylbenzene and total xylenes were at low levels.
- Toluene was also below laboratory-reporting limit in MW-1 and MW-4.
- The highest BTEX concentrations were detected in MPE-1 at 9,000 µg/L, 7,700 µg/L, 2,200 µg/L, and 10,800 µg/L, respectively.

Figure 5 displays the contour map of benzene concentrations in groundwater. The highest benzene impact is in the southern portion of the site and in the vicinity of the dispenser islands around MPE extraction well MPE-1. Since the previous monitoring event (Third Quarter 2011), benzene has increased in MW-4, EX-1, EX-2, and MPE-1 and decreased in MW-1, MW-3, MW-5, and MPE-2.

MtBE was below the laboratory-reporting limit in MW-1, MW-2, MW-3, EX-2, and MPE-2. Detectable MtBE concentrations ranged from 13 µg/L in MW-7 to 2,600 µg/L in MPE-1. Figure 6 displays the contour map of MtBE concentrations in groundwater. The highest MtBE impact is in the southern portion of the site and in the vicinity of the dispenser islands around MPE extraction well MPE-1. Since

the previous monitoring event (Third Quarter 2011), MtBE has increased in MW-4, MW-5, MW-7, EX-1, and MPE-1 and decreased in MW-3 and EX-2.

As shown in Table 1, TPH-g, BTEX, and MtBE decreased in the more impacted well MW-3, since the previous monitoring event (Third Quarter 2011) and have shown a declining trend since October 2008 except benzene which has been fluctuating.

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-2, MW-3, and MPE-2, all gasoline oxygenates and lead scavengers were below laboratory-reporting limits.
- Detectable tertiary-butyl alcohol (TBA) concentrations ranged from 15 µg/L in MW-7 to 1,200 µg/L in EX-1.

  Figure 7 shows the contour map of TBA concentrations in groundwater. The highest TBA impact was in the vicinity of extraction well EX-1.
- Methyl tertiary-amyl ether (TAME) was detected in MW-4, MW-5, MW-7, EX-1, and MPE-1 at 8.2 µg/L, 14 µg/L, 2.4 µg/L, 6.8 µg/L, and 750 µg/L, respectively and was below the laboratory-reporting limit in remaining wells. Figure 8 displays the contour map of TAME concentrations in First WBZ wells.
- Ethyl tertiary-butyl ether (ETBE) was detected in MW-4 and EX-1 at 5.4 µg/L and 8.3 µg/L, respectively and were below laboratory-reporting limits in remaining wells. Figure 9 displays the map of ETBE concentrations in First WBZ wells
- Isopropyl ether (DIPE), 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (EDB), and ethanol concentrations were below laboratory-reporting limits in all groundwater samples. Analysis results for ethanol are shown in Appendix C.

## 2.3 Field Measurements, Second WBZ Wells

Table 1 presents calculated groundwater elevations and depths to groundwater for each Second WBZ monitoring well. Depths to groundwater ranged from 21.19 feet in MW-4D to 22.86 feet in MW-3D. Corresponding groundwater elevations ranged from 31.24 feet in MW-3D to 32.16 feet in MW-1D.

Figure 10 displays the contour map of groundwater elevations in the Second WBZ. Groundwater flows southeasterly as compared to southwesterly during the

previous monitoring event (Third Quarter 2011), at a gradient of 0.017 feet/feet. The groundwater gradient increased since the previous monitoring event.

Upon equalization with the surrounding aquifer at each well location, when the purge cycle was terminated, DO concentrations in the Second WBZ ranged from 1.87 mg/L in MW-3D to 2.20 mg/L in MW-4D. ORP showed negative potentials in all second WBZ wells. Negative redox potentials indicate that contaminants in groundwater are conducive to anaerobic biodegradation.

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

### 2.4 Laboratory Analysis for Second WBZ Wells

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

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

TPH-g and BTEX were below laboratory-reporting limits in all second WBZ wells. Since the previous monitoring event (Third Quarter 2011), TPH-g and total xylenes have decreased in all Second WBZ wells and ethylbenzene has decreased in MW-1D.

MtBE concentrations were below the laboratory-reporting limit in MW-1D and were detected in MW-3D and MW-4D at 10 µg/L and 4.2 µg/L, respectively. Since the previous monitoring event (Third Quarter 2011), MtBE has slightly increased in both wells. Figure 11 shows the map of MtBE concentrations in Second WBZ.

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

All gasoline oxygenate, lead scavenger, and ethanol concentrations were below laboratory-reporting limits in Second WBZ wells, except for TAME detected at a low level in MW-3D. Figure 11 displays a map of TAME concentrations in Second WBZ wells.

## 3. OPERATION OF TREATMENT SYSTEM

SOMA installed a groundwater treatment system at the site in December 2009. The system includes two extraction wells (EX-1 and EX-2), trenching containing influent and effluent lines and electrical conduits, and the treatment system compound. During system operation, extracted groundwater is pumped from

extraction wells through underground piping to a fenced treatment compound, adjacent to the existing service station building.

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

The treatment system operates under discharge permit issued by Oro Loma Sanitary District (OLSD) in May 2009. This discharge permit was renewed in May 2010. Treated groundwater has been discharging to the OLSD sewer since December 9, 2009. Figure 12 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, 2011, cumulative masses of TPH-g and BTEX extracted from groundwater were approximately 18 pounds, 0.78 pounds, 0.21 pounds, 0.37 pounds, and 2.71 pounds, respectively. Appendix D includes laboratory analytical results. Since the system began discharging, approximately 1,711,363 gallons of groundwater have been treated and discharged at the site (as of December 22, 2011).

## 4. MULTI-PHASE EXTRACTION EVENTS

No MPE events were performed during Fourth Quarter 2011. The overall estimated total mass of VOCs extracted by previous MPE events is 806 pounds. This includes the following: 106 pounds, November 2007 pilot test; 243 pounds, October 2009 event; 72 pounds, November 2009 event; 97 pounds, December 2009 event; 17 pounds, February 2010 event; 11 pounds, March 2010 event; 30 pounds, June 2010 event; 30 pounds, August 2010 event; 79 pounds, October 2010 event; 27 pounds, April 2011 event; and 94 pounds, August 2011 event. Figure 13 shows the cumulative mass of VOCs removed in pounds.

## 5. CONCLUSIONS AND RECOMMENDATIONS

Fourth Quarter 2011 groundwater monitoring and previous MPE events results are summarized below.

- Groundwater flows southwesterly across the site in the First WBZ toward EX-2 and southeasterly in the Second WBZ.
- The highest hydrocarbon concentrations were observed in the southern portion of the site and in the vicinity of the dispenser islands around MPE extraction well MPE-1. FP was observed at off-site well MW-6.
- Since the previous quarterly monitoring event (Third Quarter 2011), TPH-g concentrations decreased in MW-1, MW-2, MW-3, MW-4, MPE-1, and MPE-2 and increased in all other tested First WBZ wells, most significantly in EX-1 and EX-2.
- In the Second WBZ, TPH-g and BTEX were below laboratory-reporting limits, and MtBE was below laboratory-reporting limit in MW-1D. Since the previous monitoring event (Third Quarter 2011), MtBE increased slightly in MW-3D and MW-4D.
- MPE events conducted since November 2007 have removed an estimated 806 pounds of VOCs.

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

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

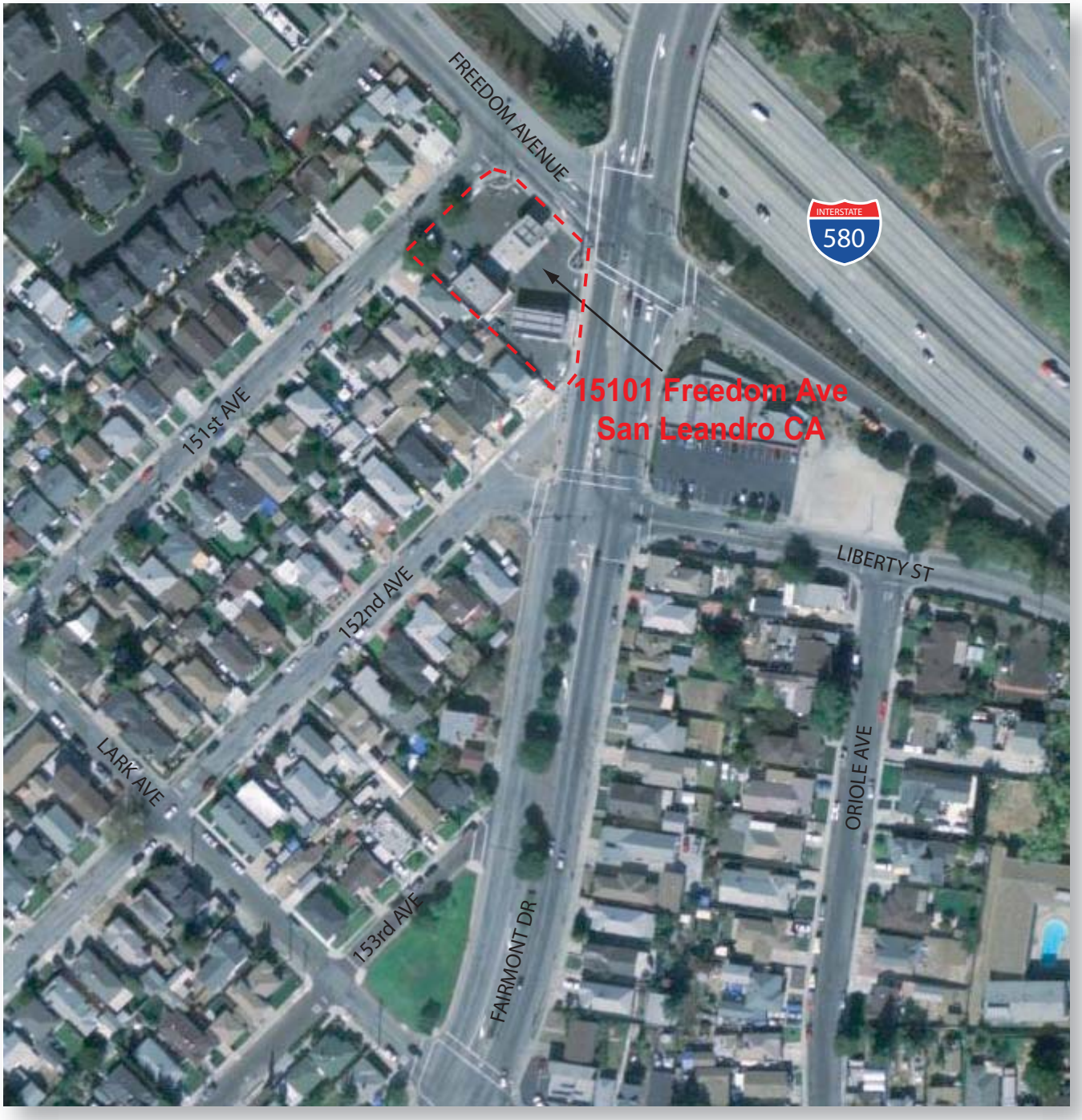
Other ongoing activities: SOMA has recently submitted a site evaluation workplan, based on ACEH directive dated September 21, 2011, which discusses construction of extraction well MW-6 and its probable radius of influence (under pumping conditions). The workplan will be implemented upon receipt of written authorization from 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 Torrent Laboratory, Inc. for the current groundwater monitoring event. Quantities and locations of wells were selected to provide the required information, but may not be representative of entire site conditions. All conclusions and recommendations are based on laboratory analysis results. Conclusions beyond those specifically stated in this document should not be inferred from this report.

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

# Figures

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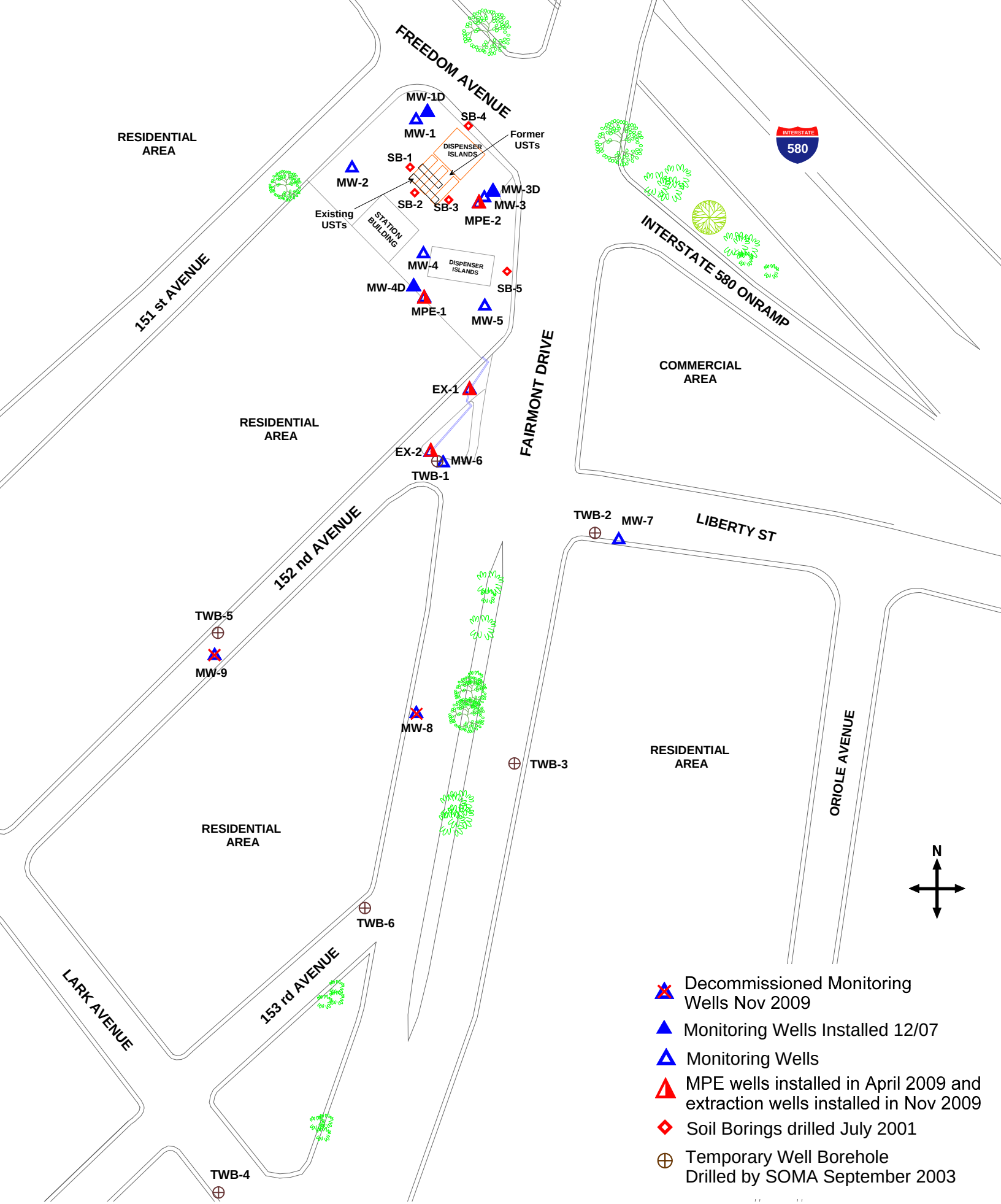
approximate scale in feet

0 150 300

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.

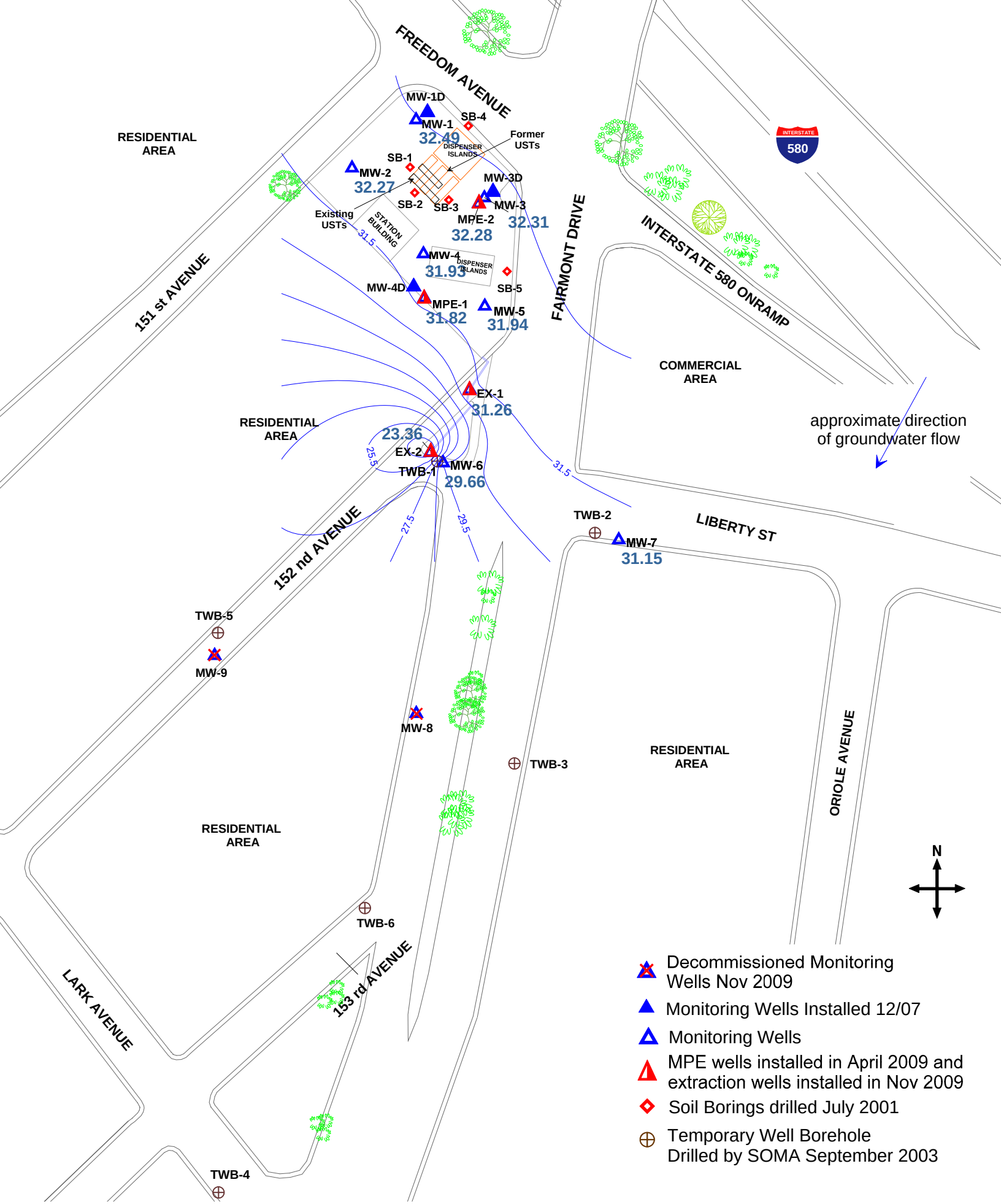



approximate scale in feet

0 50 100

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

SOMA ENVIRONMENTAL ENGINEERING, INC.




approximate scale in feet

0 50 100

Figure 3: Groundwater Elevation Contour Map in Feet, First WBZ
December 1, 2011

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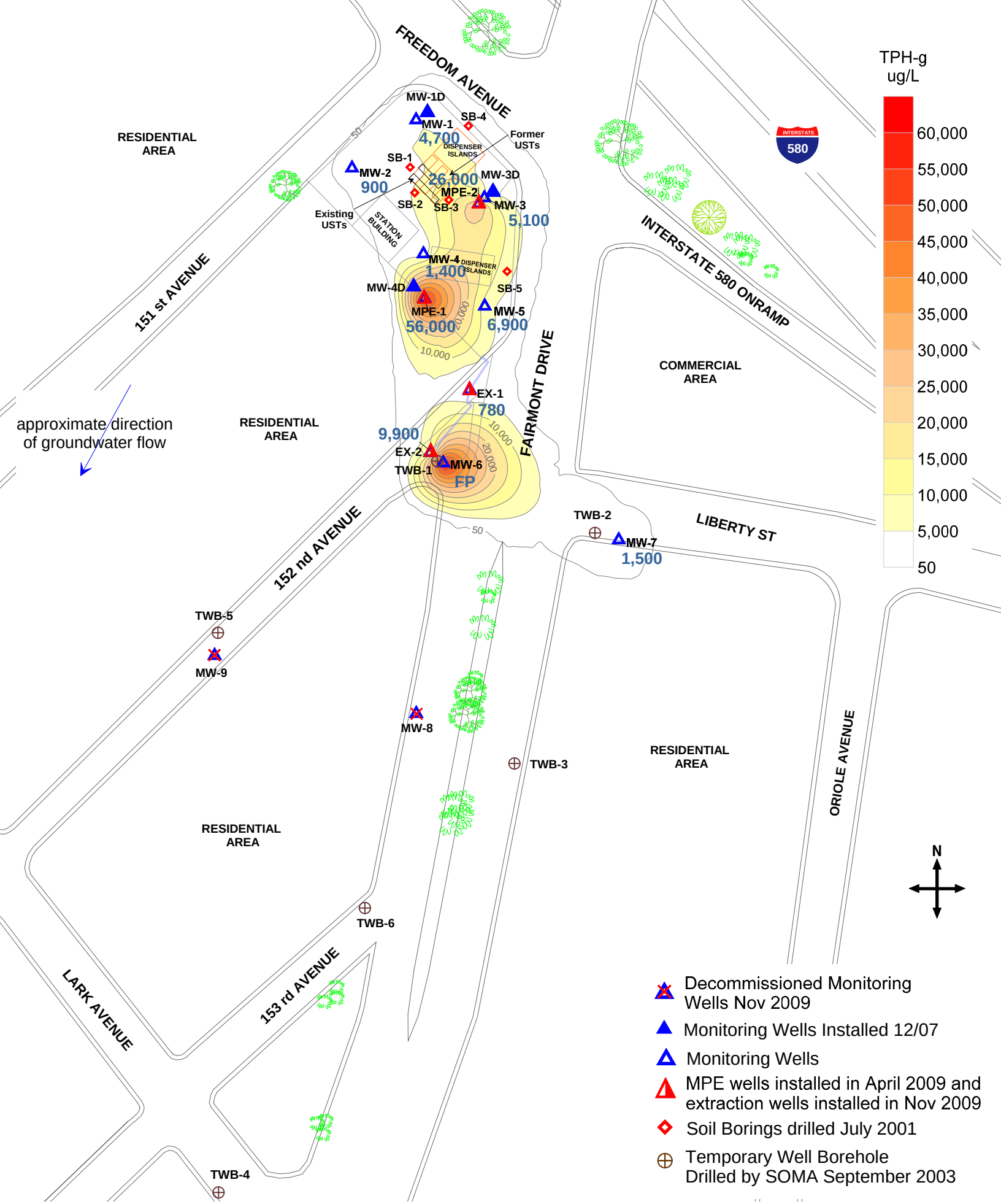


approximate scale in feet

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Figure 4: Contour Map of TPH-g Concentrations in Groundwater, First WBZ, December 1 and 2, 2011

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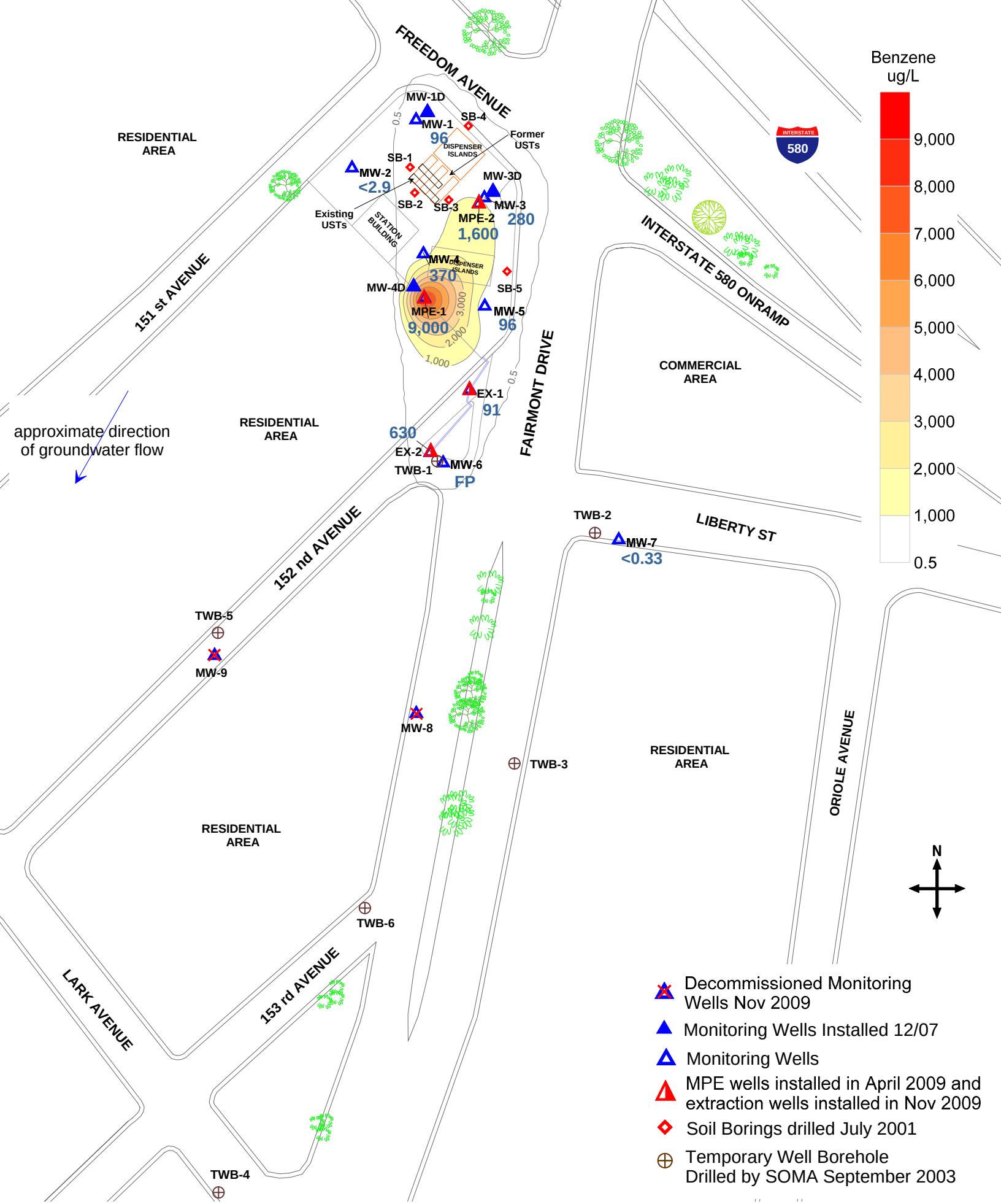


Figure 5: Contour Map of benzene Concentrations in Groundwater, First WBZ, December 1 and 2, 2011

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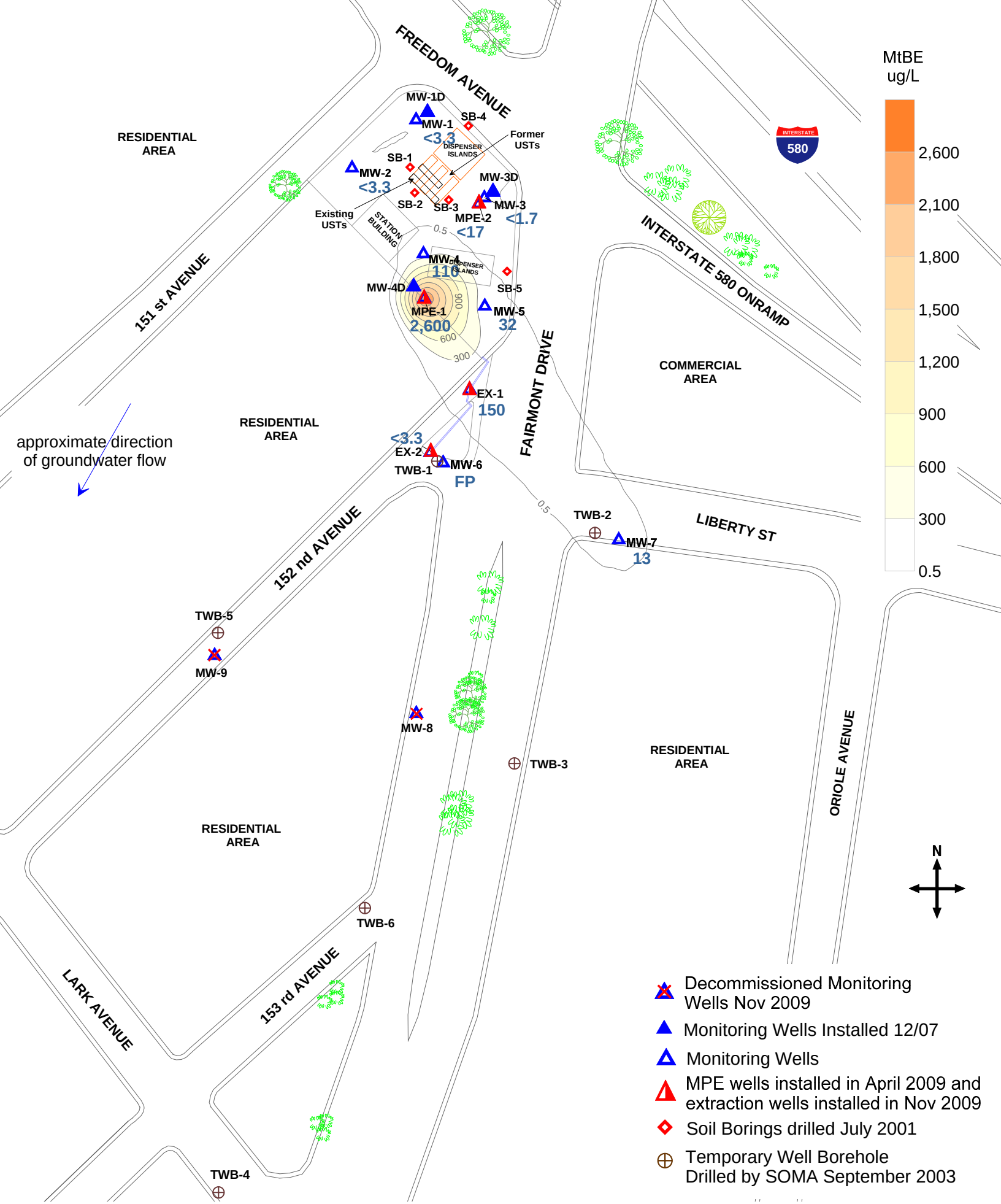


Figure 6: Contour Map of MtBE Concentrations in Groundwater, First WBZ, December 1 and 2, 2011

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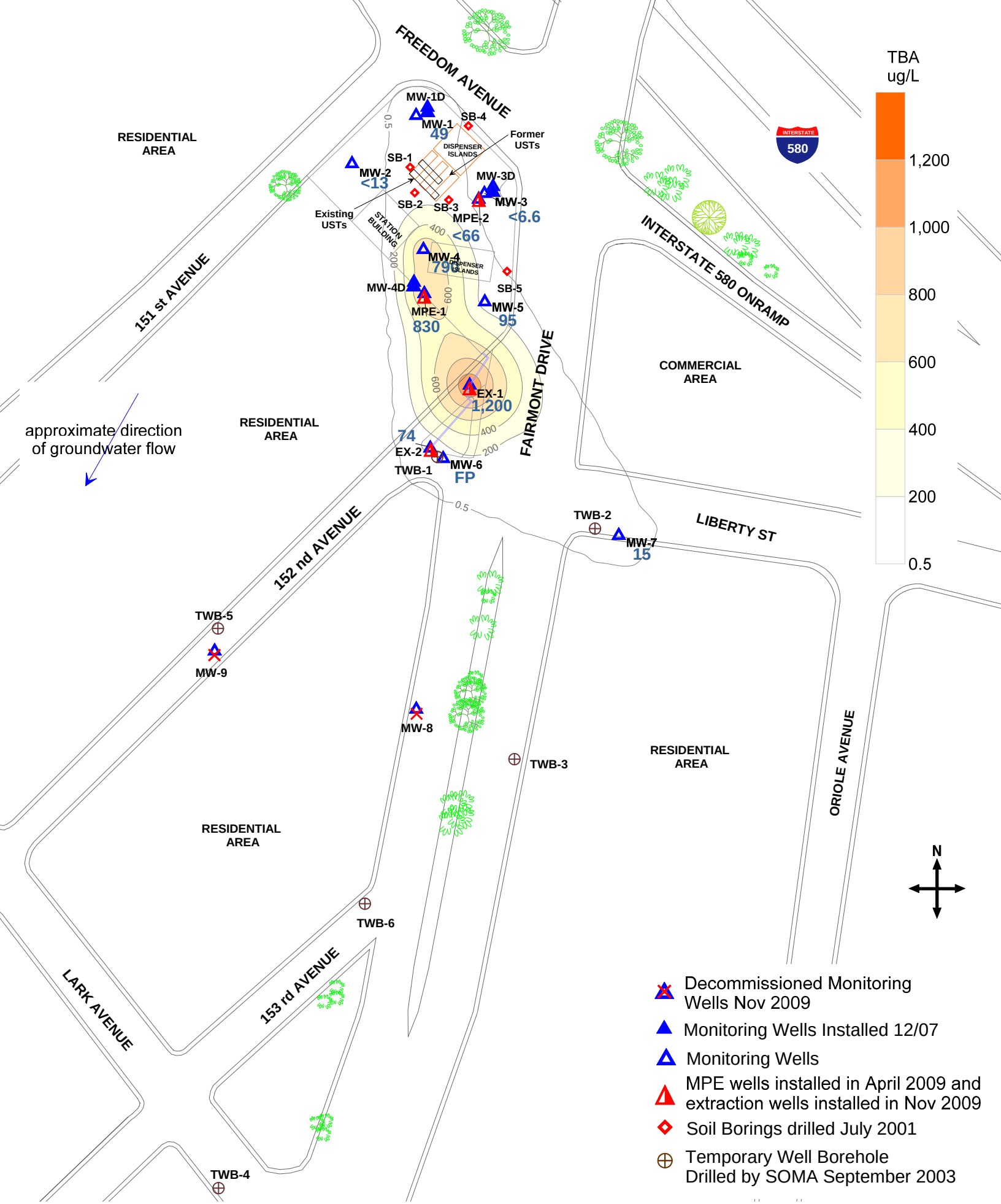


Figure 7: Contour Map of TBA Concentrations in Groundwater, First WBZ, December 1 and 2, 2011

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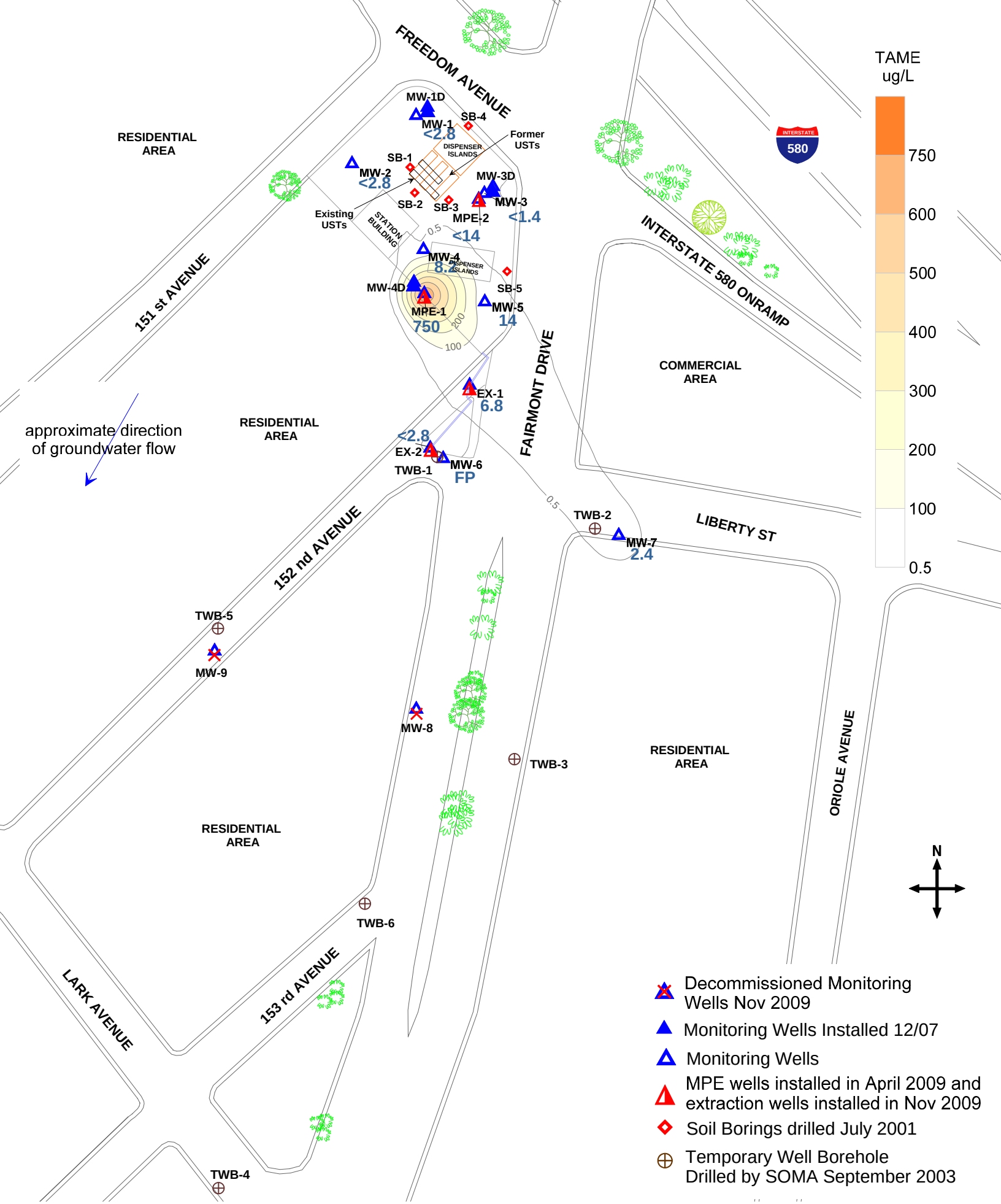


Figure 8: Contour Map of TAME Concentrations in Groundwater, First WBZ, December 1 and 2, 2011

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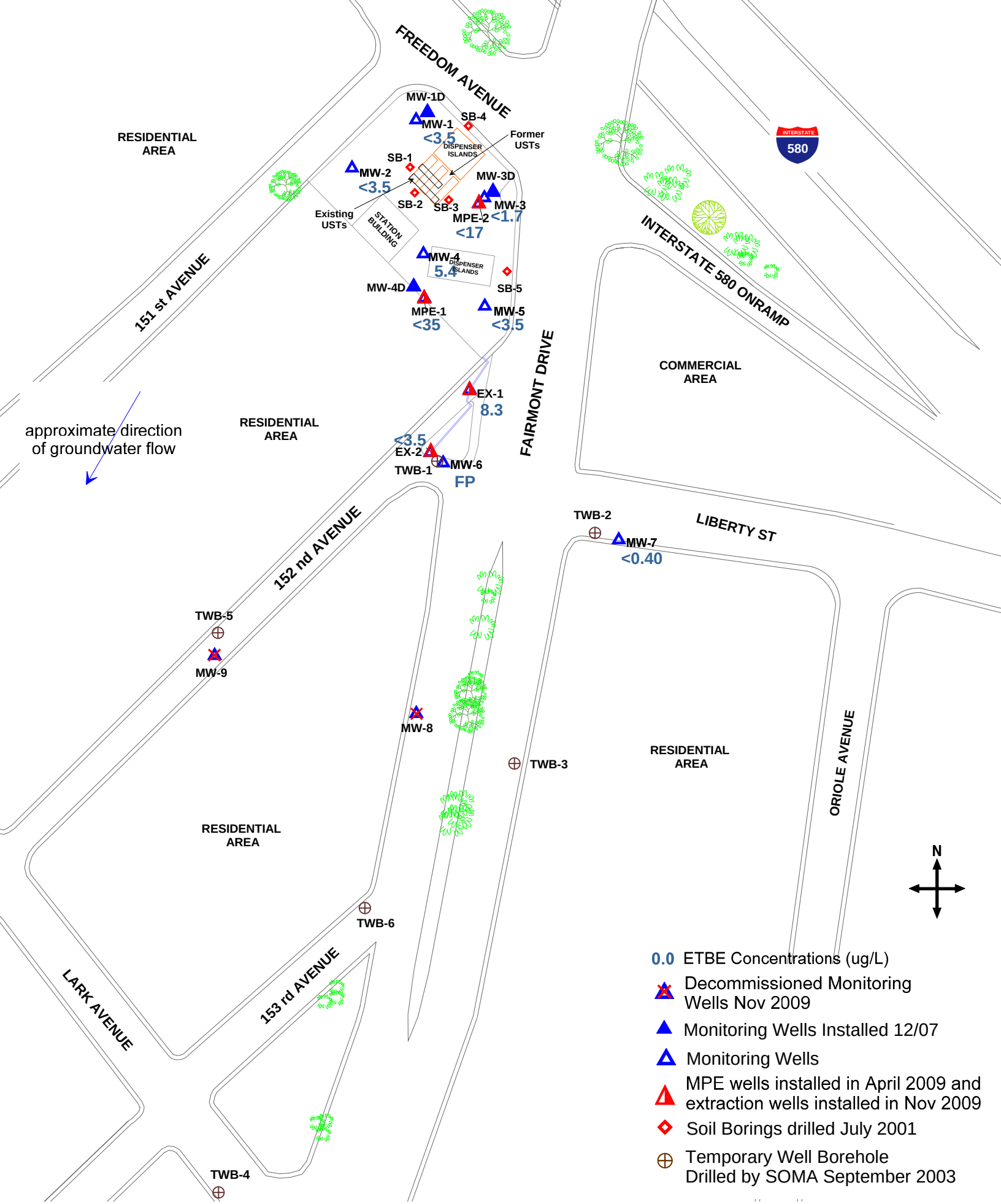


approximate scale in feet

0 50 100

Figure 9: Map of ETBE Concentrations in Groundwater, First WBZ, December 1 and 2, 2011

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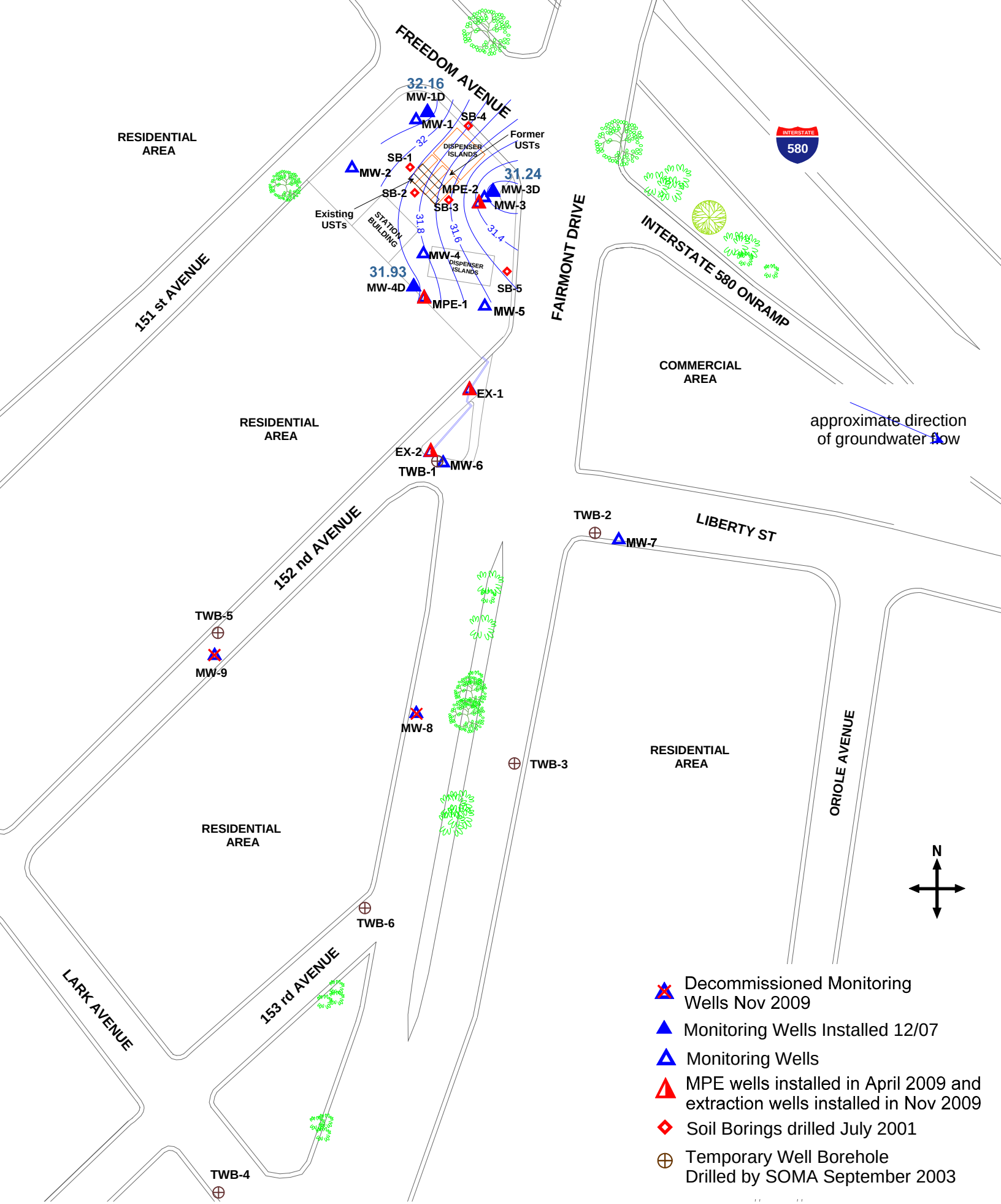


approximate scale in feet

0 50 100

Figure 10: Groundwater Elevation Contour Map in Feet, Second WBZ, December 1, 2011

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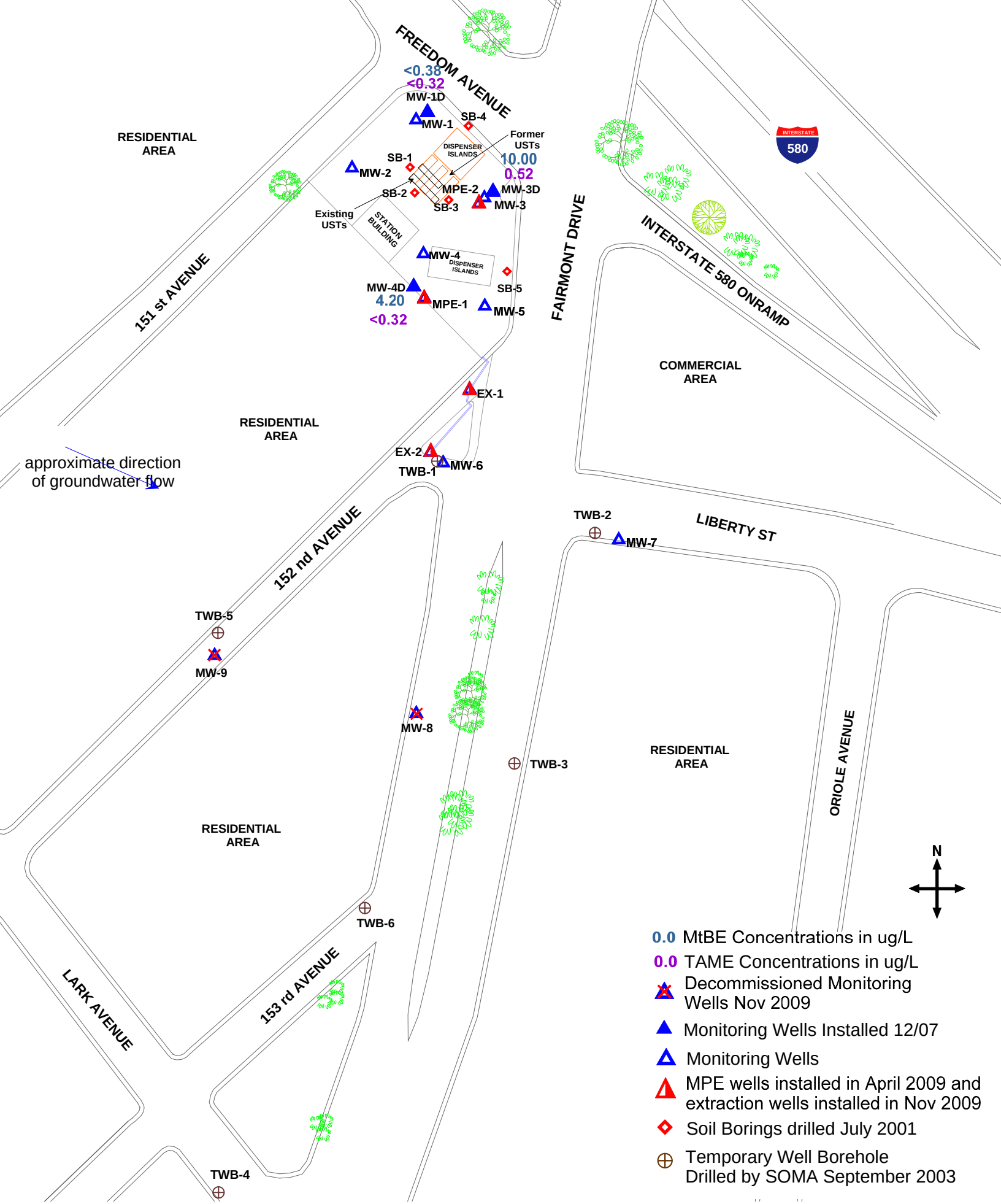


approximate scale in feet

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Figure 11: Map Showig Concentrations of MtBE and TAME in Groundwater, Second WBZ, December 1 and 2, 2011

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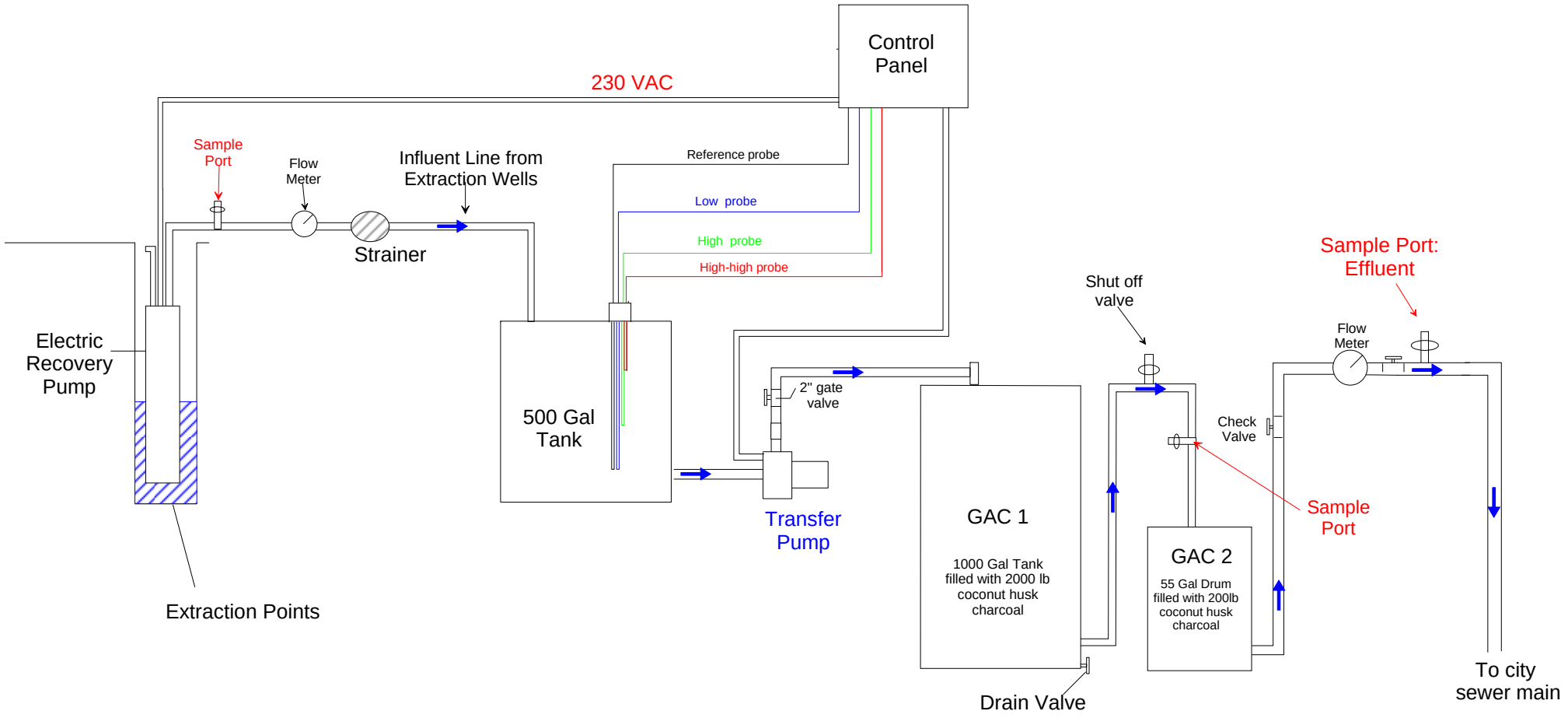


Figure 12: Schematic diagram of Groundwater Remediation System

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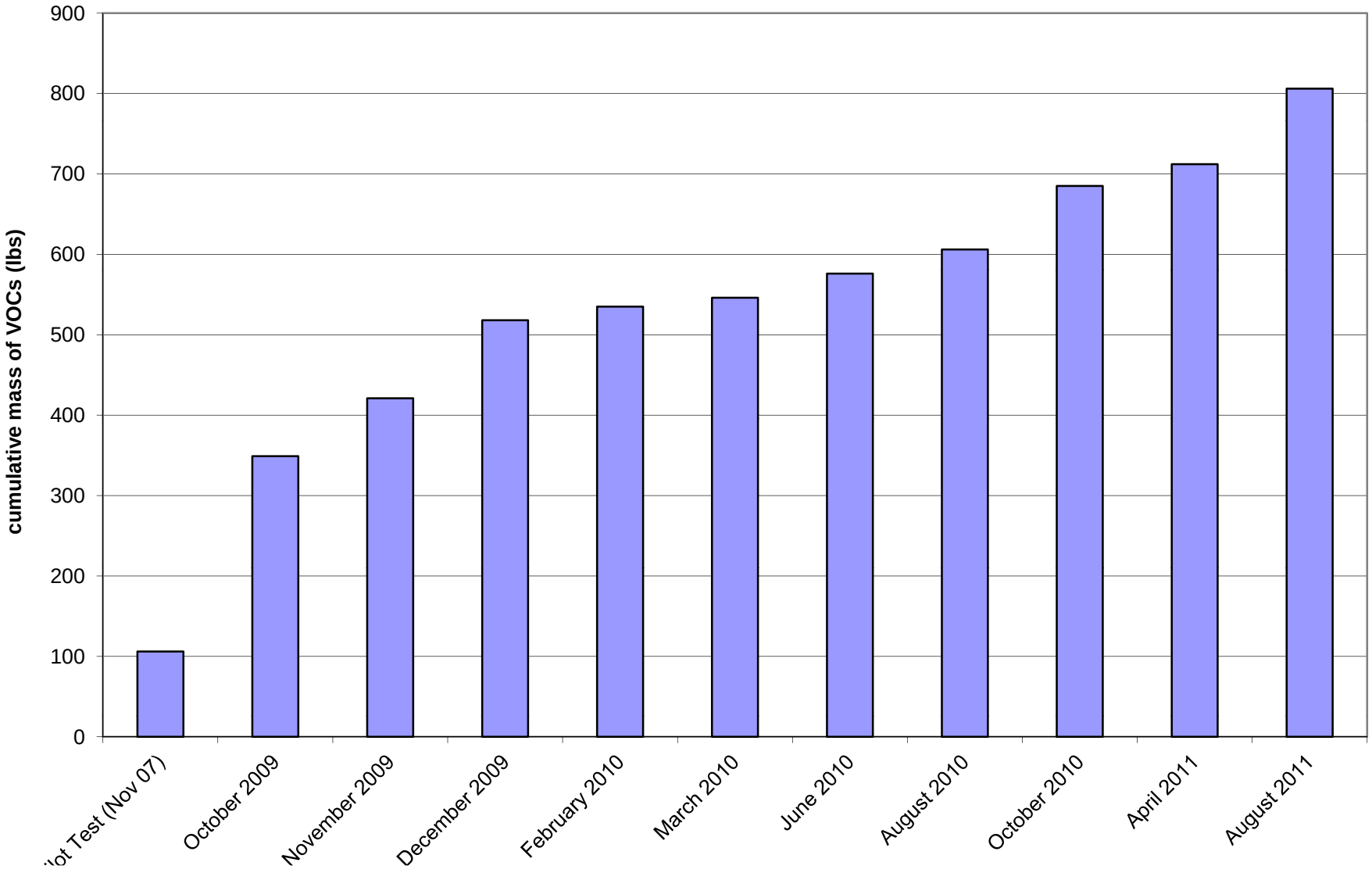



Figure 13: Cumulative mass of VOCs removed

# 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) | Depth corrected for presence of FP (feet) | 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) | Depth corrected for presence of FP (feet) | 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 | | 32.51 | 2,400 | 67 | <0.5 | 45 | 8.4 | 2.20 |
| | 5/20/2011 | 54.46 | 22.8 | | 31.66 | 9,500 | 260 | 6.2 | 970 | 480 | <3.6 |
| | 9/9/2011 | 54.46 | 22.81 | | 31.65 | 6,400 | 220 | <1.3 | 380 | 160 | 2.30 |
| | **12/2/2011** | **54.46** | **21.97** | | **32.49** | **4,700** X | **96** | **<1.7** | **310** | **200** | **<3.3** |
| | | | | | | | | | | | |
| **MW-2** | 5/10/2002 | 49.66 | 22.83 | | 26.83 * | 3,100 | 67 | 8 | 250 | 215 | 56 |
| | 8/8/2002 | 49.66 | 21.41 | | 28.25 | 2,700 | 4.6 | <0.5 | 310 | 140 | <0.5 |
| | 11/8/2002 | 49.66 | 21.79 | | 27.87 | 3,400 | 4.6 | < 0.5 | 310 | 160 | < 0.5 |
| | 2/21/2003 | 49.66 | 20.51 | | 29.15 | 890 | 1.7 C | 0.80 C | 68 | 38.92 C | <0.5 |
| | 5/28/2003 | 49.66 | 20.33 | | 29.33 | 2,700 | 5.2 C | <0.5 | 120 | 140 | 1.2 |
| | 8/12/2003 | 49.66 | 23.18 | | 26.48* | 8,500 | 640 | <2.5 | 560 | 659 | <0.8 |
| | 10/9/2003 | 49.66 | 21.71 | | 27.95 | 3100 H | 4.3 C | <0.5 | 210 | 160 | <0.5 |
| | 1/15/2004 | 49.66 | 20.31 | | 29.35 | 660 H | 1.5 C | <0.5 | 8.9 | 25 | <0.5 |
| | 5/25/2004 | 49.66 | 21.09 | | 28.57 | 4,500 | 5.1 C | <0.5 | 190 | 230 | 0.70 |
| | 9/21/2004 | 52.41 | 21.71 | | 30.70 | 370 | 0.76 C | <0.5 | 25 | 16 | 0.50 |
| | 12/14/2004 | 52.41 | 21.20 | | 31.21 | 880 | 1.0 | <0.5 | 66 | 52 | <0.5 |

# Table 1

## Historical Groundwater Elevation Data and Analytical Results

### 15101 Freedom Avenue, San Leandro, CA

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

# Table 1

## Historical Groundwater Elevation Data and Analytical Results

### 15101 Freedom Avenue, San Leandro, CA

| Monitoring Well | Date | Casing Elevation [1] (feet) | Depth to Groundwater (feet) | Depth corrected for presence of FP (feet) | 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** | 5/10/2002 | 51.16 | 22.28 | | 28.88 | 44,000 | 6,000 | 900 | 1,500 | 6,200 | 2,400 |
| | 8/8/2002 | 51.16 | 22.88 | | 28.28 | 40,000 | 5,800 | 1,100 | 1,600 | 6,500 | 1,300 |
| | 11/8/2002 | 51.16 | 23.19 | | 27.97 | 47,000 | 5,300 | 1,200 | 2,200 | 8,600 | 1,000 |
| | 2/21/2003 | 51.16 | 22.02 | | 29.14 | 39,000 | 5,500 | 1,500 | 2,000 | 8,600 | 1,300 |
| | 5/28/2003 | 51.16 | 21.89 | | 29.27 | 52,000 | 7,300 | 3,000 | 2,800 | 12,700 | 2,100 |
| | 8/12/2003 | 51.16 | 22.66 | | 28.50 | 31,000 | 6,100 | 860 | 1,500 | 6,900 | 1,200 |
| | 10/9/2003 | 51.16 | 23.06 | | 28.10 | 41,000 | 6,100 | 1,100 | 2,200 | 10,200 | 960 |
| | 1/15/2004 | 51.16 | 21.85 | | 29.31 | 51,000 | 4,100 | 1,100 | 2,000 | 8,400 | 590 |
| | 5/25/2004 | 51.16 | 22.55 | | 28.61 | 65,000 | 4,300 | 1,300 | 2,500 | 10,500 | 720 |
| | 9/21/2004 | 53.91 | 23.08 | | 30.83 | 42,000 | 4,900 | 890 | 2,200 | 8,700 | 480 |
| | 12/14/2004 | 53.91 | 22.52 | | 31.39 | 35,151 | 4,066 | 972 | 2,942 | 13,032 | 491 |
| | 3/11/2005 | 53.91 | 20.90 | | 33.01 | 42,600 | 3,040 | 1,100 | 1,530 | 6,670 | 968 |
| | 6/15/2005 | 53.91 | 21.85 | | 32.06 | 84,100 | 5,110 | 2,160 | 3,030 | 8,800 | 2,670 |
| | 8/26/2005 | 53.91 | 22.49 | | 31.42 | 43,500 | 3,630 | 1,080 | 2,500 | 6,830 | 1,440 |
| | 11/11/2005 | 53.91 | 22.81 | | 31.10 | 47,700 | 4,240 | 520 | 2,170 | 6,320 | 1,390 |
| | 2/9/2006 | 53.91 | 21.12 | | 32.79 | 44,500 | 5,070 | 1360 | 1,920 | 4,840 | 3,280 |
| | 5/9/2006 | 53.91 | 21.09 | | 32.82 | 48,100 | 2,510 | 1,140 | 1,950 | 5,030 | 2,210 |
| | 8/10/2006 | 53.91 | 22.26 | | 31.65 | 42,100 | 3,450 | 869 | 1,760 | 5,650 | 3,570 |
| | 10/26/2006 | 53.91 | 22.73 | | 31.18 | 33,400 | 4,800 | 331 | 1,170 | 3,510 | 4,790 |
| | 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 |

# 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) | Depth corrected for presence of FP (feet) | Groundwater Elevation (feet) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MtBE 8260B [2] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-3** cont. | 1/22/2008 | 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 | | 32.47 | 18,000 | 410 | 32 | 850 | 2,480 | 16 |
| | 5/20/2011 | 53.91 | 22.36 | | 31.55 | 12,000 | 710 | 24 | 620 | 1,460 | 11 |
| | 9/9/2011 | 53.91 | 22.44 | | 31.47 | 11,000 | 1,100 | 26 | 580 | 1,430 | 7.8 |
| | **12/2/2011** | **53.91** | **21.60** | | **32.31** | **5,100** [x] | **280** | **12** | **370** | **740** | **<1.7** |
| | | | | | | | | | | | |
| **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 |

# 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) | Depth corrected for presence of FP (feet) | 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 |
| | 3/3/2011 | 53.31 | 20.64 | | 32.67 | 2,400 | 28 | <0.71 | 28 | 17 | 3 |
| | 5/19/2011 | 53.31 | 21.84 | | 31.47 | 1,800 | 27 | <0.5 | 29 | 11.2 | 4.8 |
| | 9/8/2011 | 53.31 | 22.11 | | 31.20 | 3,600 | 300 | 2.6 | 270 | 68.5 | 59 |
| | **12/1/2011** | **53.31** | **21.38** | | **31.93** | **1,400** [x] | **370** | **<0.84** | **110** | **30.6** | **110** |

# Table 1

## Historical Groundwater Elevation Data and Analytical Results

### 15101 Freedom Avenue, San Leandro, CA

| Monitoring Well | Date | Casing Elevation [1] (feet) | Depth to Groundwater (feet) | Depth corrected for presence of FP (feet) | 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** | 5/10/2002 | 47.79 | 19.02 | | 28.77 | 25,000 | 1,000 | 1200 | 1,100 | 3,060 | 1,800 |
| | 8/8/2002 | 47.79 | 19.80 | | 27.99 | 18,000 | 1,000 | 660 | 950 | 1,720 | 1,500 |
| | 11/8/2002 | 47.79 | 20.14 | | 27.65 | 16,000 | 1,300 | 380 | 930 | 1,550 | 1,200 |
| | 2/21/2003 | 47.79 | 18.70 | | 29.09 | 12,000 | 390 | 71 | 770 | 1,100 | 860 |
| | 5/28/2003 | 47.79 | 18.52 | | 29.27 | 9,100 | 210 | 31 | 560 | 790 | 600 |
| | 8/12/2003 | 47.79 | 19.54 | | 28.25 | 12,000 | 660 | 75 | 660 | 1,110 | 1,000 |
| | 10/9/2003 | 47.79 | 20.06 | | 27.73 | 15,000 | 1,000 | 130 | 1,000 | 1,430 | 1,700 |
| | 1/15/2004 | 47.79 | 18.42 | | 29.37 | 9,900 | 450 C | 16 | 500 | 431 | 1,100 |
| | 5/25/2004 | 47.79 | 19.30 | | 28.49 | 9,200 | 380 | 24 | 490 | 536 | 720 |
| | 9/21/2004 | 50.53 | 20.15 | | 30.38 | 10,000 | 980 | 71 | 560 | 770 | 1200 |
| | 12/14/2004 | 50.53 | 19.30 | | 31.23 | 10,502 | 587 | 64 | 1040 | 1133 | 1015 |
| | 3/11/2005 | 50.53 | 17.20 | | 33.33 | 8,390 | 407 | <5.5 | 83 | 42.5 | 1530 |
| | 6/15/2005 | 50.53 | 18.54 | | 31.99 | 9,350 | 147 | 18.3 | 435 | 146.2 | 573 |
| | 8/26/2005 | 50.53 | 19.31 | | 31.22 | 9,500 | 261 | <22 | 726 | 321.3 | 749 |
| | 11/11/2005 | 50.53 | 19.75 | | 30.78 | 10,000 | 443 | 41.5 | 527 | 278.5 | 1,430 |
| | 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 |

# 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) | Depth corrected for presence of FP (feet) | 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. | 1/22/2008 | 50.18 | 18.69 | | 31.49 | 9,810 | 572 | 22 | 574 | 184.1 | 126 |
| | 4/15/2008 | 50.18 | 19.16 | | 31.02 | 8,890 | 335 | 15.1 | 477 | 397.5 | 136 |
| | 7/3/2008 | 50.53 | 19.88 | | 30.65 | 13,100 | 949 | 34.4 | 875 | 825.5 | 176 |
| | 10/16/2008 | 50.53 | 20.45 | | 30.08 | 11,000 | 870 | 25 | 820 | 668 | 160 |
| | 1/8/2009 | 50.53 | 19.72 | | 30.81 | 12,000 | 490 | 21 | 690 | 456 | 76 |
| | 4/13/2009 | 50.53 | 18.81 | | 31.72 | 9,000 [Y] | 200 | 11 | 390 | 198 | 44 |
| | 8/27/2009 | 50.53 | 21.30 | | 29.23 | 7,400 | 610 | 15 | 320 | 185 | 66 |
| | 12/2/2009 | 50.53 | 20.00 | | 30.53 | 8,400 [Y] | 400 | 12 | 540 | 296 | 45 |
| | 3/17/2010 | 50.53 | 18.73 | | 31.80 | 4,800 | 120 | 8.7 | 120 | 107 | 14 |
| | 6/4/2010 | 50.53 | 19.60 | | 30.93 | 7,200 | 160 | 5.7 | 190 | 149.2 | 24 |
| | 9/2/2010 | 50.53 | 19.82 | | 30.71 | 9,200 | 110 | 12 | 270 | 318 | 35 |
| | 12/2/2010 | 50.53 | 20.10 | | 30.43 | 9,100 | 170 | 6.7 | 350 | 442 | 23 |
| | 3/4/2011 | 50.53 | 18.00 | | 32.53 | 2,600 | 18 | 0.62 | 54 | 18.1 | 3 |
| | 5/20/2011 | 50.53 | 19.18 | | 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 | | 31.12 | 4,200 | 120 | 2.8 | 140 | 61.1 | 22 |
| | **12/2/2011** | **50.53** | **18.59** | | **31.94** | **6,900** [X] | **96** | **12** | **220** | **104** | **32** |
| | | | | | | | | | | | |
| **MW-6** | 9/21/2004 | 45.82 | 17.64 | | 28.18 | 34,000 | 150 | 130 | 2200 | 8100 | 0.6 |
| | 12/14/2004 | 45.82 | 15.75 | | 30.07 | 5,161 | 137 | 7 | 436 | 1136 | <5.5 |
| | 3/11/2005 | 45.82 | 13.80 | | 32.02 | 6,040 | 125 | 3.22 | 260 | 722.1 | 4.94 |
| | 6/15/2005 | 45.82 | 14.78 | | 31.04 | 5,590 | 44.3 | 6.60 | 272 | 382 | 5.85 |
| | 8/26/2005 | 45.82 | 15.91 | | 29.91 | 6,130 | 99 | <8.6 | 378 | 492.9 | 5.66 |
| | 11/11/2005 | 45.82 | 16.55 | | 29.27 | 11,400 | 101 | <8.6 | 645 | 834.7 | 4.33 |
| | 2/9/2006 | 45.82 | 13.92 | | 31.90 | 2,790 | 32.3 | <8.6 | 131 | 131.22 | 7.30 |
| | 5/9/2006 | 45.82 | 13.95 | | 31.87 | 3,730 | 25 | <2.0 | 213 | 207.82 | 5.87 |
| | 8/10/2006 | 45.82 | 15.28 | | 30.54 | 4,800 | 41.9 | <2.0 | 201 | 189 | 10.4 |
| | 10/26/2006 | 45.82 | 16.11 | | 29.71 | 6,080 | 37.4 | <2.0 | 116 | 183 | 9.78 |

# 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) | Depth corrected for presence of FP (feet) | 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. | 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 |
| | 3/3/2011 | 45.82 | 14.35 | | 31.47 | 7,000 | 18 | <2.5 | 97 | 237 | 11 |
| | 5/20/2011 | 45.82 | 14.95 | | 30.87 | 14,000 | 14 | <2.5 | 300 | 823 | 7.2 |
| | 9/8/2011 | 45.82 | 16.14 | | 29.68 | 23,000 | 28 | <2.5 | 360 | 812 | 3.4 |
| | **12/1/2011** | **45.82** | **16.17** | **16.156** | **29.66** | **FP** | **FP** | **FP** | **FP** | **FP** | **FP** |
| | | | | | | | | | | | |
| **MW-7** | 9/21/2004 | 44.74 | 15.21 | | 29.53 | 2,900 | <0.5 | <0.5 | 52 | 61 | 8.1 |
| | 12/14/2004 | 44.74 | 13.90 | | 30.84 | <50 | 1.6 | <0.5 | 29 | 58 | 6.0 |
| | 3/11/2005 | 44.74 | 11.46 | | 33.28 | 2,230 | <2.5 | <2.5 | 39.4 | 51.4 | 12.4 |
| | 6/15/2005 | 44.74 | 12.97 | | 31.77 | 2,940 | 0.85 | <2.0 | 50.6 | 31.9 | 13.7 |
| | 8/26/2005 | 44.74 | 14.10 | | 30.64 | 2,310 | <0.50 | <2.0 | 55.7 | 29.6 | 4.01 |
| | 11/11/2005 | 44.74 | 14.59 | | 30.15 | 3,030 | <0.5 | <2.0 | 66.5 | 42.3 | 9.76 |

# 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) | Depth corrected for presence of FP (feet) | 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 | | 31.43 | 1,000 | <0.5 | <0.5 | 1.8 | <0.5 | 16 |
| | 5/19/2011 | 44.74 | 13.43 | | 31.31 | 810 | <0.5 | <0.5 | 2.2 | 0.79 | 7.8 |
| | 9/8/2011 | 44.74 | 14.38 | | 30.36 | 1,000 | <0.5 | <0.5 | 8.3 | 2.9 | 5.4 |
| | **12/1/2011** | **44.74** | **13.59** | | **31.15** | **1,500** [X] | **<0.33** | **<0.19** | **12** | **5.7** | **13** |
| | | | | | | | | | | | |
| **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 |

# 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) | Depth corrected for presence of FP (feet) | 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. | 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 |
| | 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 |

# 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) | Depth corrected for presence of FP (feet) | 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. | 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 |
| | 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** | | | | | | | | | | |

# 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) | Depth corrected for presence of FP (feet) | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **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 | | 32.4 | 530 | 51 | 0.94 | 15 | 31.3 | 110 |
| | 5/19/2011 | 47.36 | 16.12 | | 31.24 | 370 | 42 | <0.71 | 7.6 | 17.2 | 110 |
| | 9/8/2011 | 47.36 | 16.47 | | 30.89 | 110 | 5 | <0.5 | 2.2 | 6.4 | 12 |
| | **12/1/2011** | **47.36** | **16.1** | | **31.26** | **780** [x] | **91** | **3** | **29** | **85** | **150** |
| | | | | | | | | | | | |
| **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 | | 31.35 | 8,600 | 340 | 52 | 460 | 1,350 | 13 |
| | 5/19/2011 | 45.96 | 15.08 | | 30.88 | 7,500 | 260 | 65 | 390 | 1,080 | 11 |
| | 9/8/2011 | 45.96 | 16.34 | | 29.62 | 3,400 | 190 | 28 | 160 | 451 | 5.4 |
| | **12/1/2011** | **45.96** | **22.60** | | **23.36** | **9,900** [x] | **630** | **200** | **690** | **1,760** | **<3.3** |
| **MPE Wells** | | | | | | | | | | | |
| **MPE-1** | 12/1/2009 | 51.96 | 21.41 | | 30.55 | NA | NA | NA | NA | NA | NA |
| | 3/16/2010 | 51.96 | 20.22 | | 31.74 | NA | NA | NA | NA | NA | NA |
| | 6/3/2010 | 51.96 | 21.18 | | 30.78 | NA | NA | NA | NA | NA | NA |
| | 9/1/2010 | 51.96 | 21.25 | | 30.71 | NA | NA | NA | NA | NA | NA |
| | 12/2/2010 | 51.96 | 21.64 | | 30.32 | NA | NA | NA | NA | NA | NA |

# 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) | Depth corrected for presence of FP (feet) | Groundwater Elevation (feet) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MtBE 8260B [2] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MPE-1** cont. | 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 | | 31.02 | 62,000 | 6,300 | 3,700 | 1,800 | 9,400 | 1,200 |
| | **12/2/2011** | **51.96** | **20.14** | | **31.82** | **56,000** | **9,000** | **7,700** | **2,200** | **10,800** | **2,600** |
| | | | | | | | | | | | |
| **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 | | 31.34 | 37,000 | 1,800 | 33 | 1,700 | 2,760 | <17 |
| | **12/2/2011** | **53.72** | **21.44** | | **32.28** | **26,000** | **1,600** | **43** | **1,800** | **3,370** | **<17** |
| **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 |

# 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) | Depth corrected for presence of FP (feet) | 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. | 3/16/2010 | 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 | | 32.15 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 5/19/2011 | 54.42 | 22.89 | | 31.53 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 9/8/2011 | 54.42 | 23.08 | | 31.34 | 220 | <0.5 | <0.5 | 0.6 | 1.4 | <0.5 |
| | **12/1/2011** | **54.42** | **22.26** | | **32.16** | **<22** | **<0.33** | **<0.19** | **<0.15** | **<0.20** | **<0.38** |
| **MW-3D** | 1/3/2008 | 54.10 | | | - | <50 | <0.50 | <2.0 | <0.50 | <2.0 | 87.6 |
| | 1/22/2008 | 54.10 | 22.31 | | 31.79 | <50 | <0.50 | <2.0 | <0.50 | <2.0 | 88.3 |
| | 4/16/2008 | 54.10 | 22.64 | | 31.46 | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 71.1 |
| | 7/3/2008 | 54.10 | 23.17 | | 30.93 | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 67.4 |
| | 10/16/2008 | 54.10 | 23.62 | | 30.48 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 37 |
| | 1/8/2009 | 54.10 | 23.07 | | 31.03 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 29 |
| | 4/14/2009 | 54.10 | 22.36 | | 31.74 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 44 |
| | 8/26/2009 | 54.10 | 23.41 | | 30.69 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 20 |
| | 12/1/2009 | 54.10 | 23.27 | | 30.83 | 110 Y | <0.5 | <0.5 | <0.5 | 0.52 | 24 |
| | 3/16/2010 | 54.10 | 22.10 | | 32.00 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 7.1 |
| | 6/4/2010 | 54.10 | 22.70 | | 31.40 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 17 |
| | 9/1/2010 | 54.10 | 23.09 | | 31.01 | 78 | <0.5 | <0.5 | 1.1 | 4.71 | 24 |
| | 12/3/2010 | 54.10 | 22.90 | | 31.20 | <50 | <0.5 | <0.5 | 0.56 | 1.4 | 13 |
| | 3/3/2011 | 54.10 | 21.66 | | 32.44 | <50 | 1.3 | <0.5 | <0.5 | 0.59 | 14 |
| | 5/19/2011 | 54.10 | 22.61 | | 31.49 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.2 |
| | 9/8/2011 | 54.10 | 22.68 | | 31.42 | 69 | <0.5 | <0.5 | <0.5 | 0.62 | 4.8 |
| | **12/1/2011** | **54.10** | **22.86** | | **31.24** | **<22** | **<0.33** | **<0.19** | **<0.15** | **<0.20** | **10** |

# 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) | Depth corrected for presence of FP (feet) | Groundwater Elevation (feet) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MtBE 8260B [2] (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-4D** | 1/4/2008 | 53.12 | | | - | <50 | <0.50 | <2.0 | <0.50 | <2.0 | <0.50 |
| | 1/22/2008 | 53.12 | 21.11 | | 32.01 | 91.5 | 18.7 | <2.0 | 7.08 | 11.42 | 219 |
| | 4/15/2008 | 53.12 | 21.67 | | 31.45 | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 27 |
| | 7/3/2008 | 53.12 | 22.39 | | 30.73 | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 6.27 |
| | 10/16/2008 | 53.12 | 22.98 | | 30.14 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.9 |
| | 1/8/2009 | 53.12 | 22.25 | | 30.87 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2 |
| | 4/14/2009 | 53.12 | 21.34 | | 31.78 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.2 |
| | 8/27/2009 | 53.12 | 22.79 | | 30.33 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.2 |
| | 12/1/2009 | 53.12 | 22.49 | | 30.63 | 120 [Y] | <0.5 | <0.5 | 1.4 | 2.3 | 2.3 |
| | 3/16/2010 | 53.12 | 21.02 | | 32.10 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.65 |
| | 6/4/2010 | 53.12 | 21.93 | | 31.19 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.1 |
| | 9/1/2010 | 53.12 | 23.32 | | 29.80 | <50 | <0.5 | <0.5 | 0.85 | 3.76 | 2.2 |
| | 12/3/2010 | 53.12 | 22.46 | | 30.66 | <50 | <0.5 | <0.5 | <0.5 | 0.67 | <0.5 |
| | 3/3/2011 | 53.12 | 20.45 | | 32.67 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.58 |
| | 5/19/2011 | 53.12 | 21.57 | | 31.55 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 9/8/2011 | 53.12 | 21.92 | | 31.20 | 59 | <0.5 | <0.5 | <0.5 | 0.51 | 1.7 |
| | **12/1/2011** | **53.12** | **21.19** | | **31.93** | **<22** | **<0.33** | **<0.19** | **<0.15** | **<0.20** | **4.2** |
| **1573 153 RD** | 7/2/2008 | NS | NM | | NC | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 10/16/2008 | NS | NM | | NC | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **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** |

# 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) | Depth corrected for presence of FP (feet) | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|

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: During Q4 2011 GWM Free-Product was observed in MW-6

# 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** |
| | | | | | | | |
| **MW-2** | 8/8/2002 | 21 | <0.5 | <0.5 | <0.5 | NA | NA |
| | 11/1/2002 | 15 | <0.5 | <0.5 | <0.5 | NA | NA |
| | 2/21/2003 | 12 | <0.5 | <0.5 | <0.5 | NA | NA |
| | 5/28/2003 | 31 | <0.5 | <0.5 | <0.5 | NA | NA |
| | 8/12/2003 | 69 | <0.8 | <0.8 | <0.8 | NA | NA |
| | 10/9/2003 | 12 | <0.5 | <0.5 | <0.5 | NA | NA |
| | 1/15/2004 | <10 | <0.5 | <0.5 | <0.5 | NA | NA |
| | 5/25/2004 | 14 | <0.5 | <0.5 | <0.5 | NA | NA |
| | 9/21/2004 | <10 | <0.5 | <0.5 | <0.5 | NA | NA |
| | 12/14/2004 | <2.5 | <0.5 | <0.5 | <2.0 | NA | NA |

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

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

# Table 2
## Historical Gasoline Oxygenates Results
## 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. | 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** |
| | | | | | | | |
| **MW-4** | 8/8/2002 | 1500 | <17 | <17 | 18 | NA | NA |
| | 11/1/2002 | 580 | < 5.0 | 6 | 13 | NA | NA |
| | 2/21/2003 | 1600 | <20 | 22 | <20 | NA | NA |
| | 5/28/2003 | 690 | <8.3 | <8.3 | 17 | NA | NA |
| | 8/12/2003 | 550 | <7.1 | 7.3 | 18 | NA | NA |
| | 10/9/2003 | 1400 | <31 | 50 | <31 | NA | NA |
| | 1/15/2004 | 1,300 | <20 | 25 | 21 | NA | NA |
| | 5/25/2004 | 560 | <8.3 | <8.3 | 24 | NA | NA |
| | 9/21/2004 | 1,300 | <50 | <50 | <50 | NA | NA |
| | 12/14/2004 | 826 | <10.75 | 21 | 49 | NA | NA |
| | 3/11/2005 | 1,110 | <10.8 | 12.1 | <43 | NA | NA |
| | 6/15/2005 | <110 | <5.5 | <5.5 | 22.9 | NA | NA |
| | 8/26/2005 | 902 | <5.50 | <5.50 | 37.4 | NA | NA |
| | 11/11/2005 | 884 | <10.8 | <10.8 | <43 | NA | NA |
| | 2/9/2006 | 769 | <10.8 | 16.4 | 45.6 | NA | NA |
| | 5/9/2006 | 405 | <2.15 | 2.95 | 31.3 | <2.15 | <2.15 |
| | 8/10/2006 | 306 | <2.15 | <2.15 | 35.3 | <2.15 | <2.15 |
| | 10/26/2006 | 3430 | <10.8 | 13.8 | <43 | <10.8 | <10.8 |
| | 1/25/2007 | 822 | <2.15 | 2.4 | 28 | 2.25 | <2.15 |
| | 4/26/2007 | 556 | <2.15 | 2.28 | 29.2 | <2.15 | <2.15 |
| | 7/25/2007 | 1,860 | <2.15 | 9.94 | 24 | <2.15 | <2.15 |
| | 10/23/2007 | 3,400 | <2.15 | 18.4 | 25.9 | <2.15 | <2.15 |
| | 1/22/2008 | 2,580 | <5.50 | 64.7 | <22 | <0.5 | <0.5 |
| | 4/15/2008 | 1,100 | <5.50 | 11.7 | <22 | 39.9 | <5.50 |
| | 7/2/2008 | 8,720 | <5.50 | 75.2 | <22 | <5.50 | <5.50 |
| | 10/16/2008 | 700 | <3.6 | 4.2 | 37 | 5.4 | <3.6 |
| | 1/8/2009 | 1,500 | <3.6 | 9.9 | 41 | 3.6 | <3.6 |
| | 4/13/2009 | 1,100 | <8.3 | <8.3 | 28 | <8.3 | <8.3 |
| | 8/27/2009 | 4,900 | <5.0 | 24 | <5.0 | <5.0 | <5.0 |
| | 12/2/2009 | 6,800 | <5.0 | 69 | <5.0 | <5.0 | <5.0 |
| | 3/17/2010 | 1,900 | <3.6 | 18 | <3.6 | <3.6 | <3.6 |
| | 6/3/2010 | 930 | <3.6 | 7.7 | <3.6 | <3.6 | <3.6 |
| | 9/2/2010 | 7,200 | <3.6 | 57 | <3.6 | <3.6 | <3.6 |
| | 12/2/2010 | 3,800 | <10 | 30 | <10 | <10 | <10 |
| | 3/3/2011 | 410 | <0.71 | 3.2 | <0.71 | <0.71 | <0.71 |
| | 5/19/2011 | 130 | <0.5 | 1.4 | <0.5 | <0.5 | <0.5 |
| | 9/8/2011 | 380 | <0.5 | 3.5 | <0.5 | 1.1 | <0.5 |
| | **12/1/2011** | **790** | **<1.6** | **5.4** | **8.2** | **<1.2** | **<0.86** |
| | | | | | | | |
| **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 |

# 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. | 3/11/2005 | 88.8 | <5.5 | <5.5 | 448 | NA | NA |
| | 6/15/2005 | <43 | <2.15 | <2.15 | 88.1 | NA | NA |
| | 8/26/2005 | 274 | <5.50 | <5.50 | 195 | NA | NA |
| | 11/11/2005 | 192 | <5.50 | <5.50 | 360 | NA | NA |
| | 2/9/2006 | 218 | <5.50 | <5.50 | 523 | NA | NA |
| | 5/9/2006 | 91.8 | <2.15 | <2.15 | 163 | <2.15 | <2.15 |
| | 8/10/2006 | 138 | <5.50 | <5.50 | 342 | <5.50 | <5.50 |
| | 10/26/2006 | 322 | <5.50 | <5.50 | 712 | <5.50 | <5.50 |
| | 1/25/2007 | 878 | <5.50 | <5.50 | 552 | <5.50 | <5.50 |
| | 4/26/2007 | 708 | <2.15 | <2.15 | 310 | <2.15 | <2.15 |
| | 7/25/2007 | 1,020 | <2.15 | <2.15 | 356 | <2.15 | <2.15 |
| | 10/23/2007 | 1,510 | <2.15 | <2.15 | 181 | <2.15 | <2.15 |
| | 1/22/2008 | 470 | <0.5 | 4.56 | 62.1 | <0.5 | <0.5 |
| | 4/15/2008 | 566 | <1.0 | <1.0 | 29.6 | 231 | 5.66 |
| | 7/3/2008 | 2,320 | <2.15 | <2.15 | 53.3 | <2.15 | <2.15 |
| | 10/16/2008 | 990 | <5.0 | <5.0 | 82 | <5.0 | <5.0 |
| | 1/8/2009 | 360 | <6.3 | <6.3 | 51 | <6.3 | <6.3 |
| | 4/13/2009 | 280 | <3.1 | <3.1 | <3.1 | <3.1 | <3.1 |
| | 8/27/2009 | 1,300 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| | 12/2/2009 | 320 | <5.0 | <5.0 | 25 | <5.0 | <5.0 |
| | 3/17/2010 | 570 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 6/4/2010 | 340 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| | 9/2/2010 | 320 | <2.5 | <2.5 | 13 | <2.5 | <2.5 |
| | 12/2/2010 | 200 | <3.1 | <3.1 | <3.1 | <3.1 | <3.1 |
| | 3/4/2011 | 180 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 5/20/2011 | 480 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Pre- MPE | 8/4/2011 | 110 | <0.71 | <0.71 | 2.6 | <0.71 | <0.71 |
| | 9/9/2011 | 260 | <1.0 | <1.0 | 11 | <1.0 | <1.0 |
| | **12/2/2011** | **95** | **<3.2** | **<3.5** | **14** | **<2.4** | **<1.7** |
| | | | | | | | |
| **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** | **FP** | **FP** | **FP** | **FP** | **FP** | **FP** |

## 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-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** |
| **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 |
| | 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 |

# 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-9** contd. | 3/11/2005 | <2.5 | <0.5 | <0.5 | <2.0 | NA | NA |
| | 6/15/2005 | <10 | <0.5 | <0.5 | <2.0 | NA | NA |
| | 8/26/2005 | <10 | <0.5 | <0.5 | <2.0 | NA | NA |
| | 11/11/2005 | <10 | <0.5 | <0.5 | <2.0 | NA | NA |
| | 2/9/2006 | <10 | <0.5 | <0.5 | <2.0 | NA | NA |
| | 5/9/2006 | <10 | <0.5 | <0.5 | <2.0 | 2.8 | <0.5 |
| | 8/10/2006 | <10 | <0.5 | <0.5 | <2.0 | 1.83 | <0.5 |
| | 10/26/2006 | <10 | <0.5 | <0.5 | <2.0 | 3.07 | <0.5 |
| | 1/25/2007 | <2.0 | <0.5 | <0.5 | <2.0 | 2.92 | <0.5 |
| | 4/26/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 7/25/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 10/23/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 1/21/2008 | <2.0 | <0.5 | <0.5 | <2.0 | 1.18 | <0.5 |
| | 4/15/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 7/2/2008 | <2.0 | <0.5 | <0.5 | <2.0 | 2.07 | <0.5 |
| | 10/15/2008 | <10 | <0.5 | <0.5 | <0.5 | 1.5 | <0.5 |
| | 1/7/2009 | <10 | <0.5 | <0.5 | <0.5 | 1.4 | <0.5 |
| | 4/13/2009 | <10 | <0.5 | <0.5 | <0.5 | 0.97 | <0.5 |
| | 8/26/2009 | <10 | <0.5 | <0.5 | <0.5 | 2.6 | <0.5 |
| **Well Decommissioned 11/13/2009** | | | | | | | |
| | | | | | | | |
| **EX-1** | 12/2/2009 | 150 | <1.3 | <1.3 | <1.3 | <1.3 | <1.3 |
| | 3/16/2010 | 980 | <1.3 | 2.4 | 27 | <1.3 | <1.3 |
| | 6/3/2010 | 570 | <1.3 | 1.9 | <1.3 | <1.3 | <1.3 |
| | 9/1/2010 | 470 | <0.5 | 1.4 | 2 | <0.5 | <0.5 |
| | 12/2/2010 | 1,300 | <2.0 | 3.6 | 15 | <2.0 | <2.0 |
| | 3/3/2011 | 690 | <0.71 | 2.5 | 12 | <0.71 | <0.71 |
| | 5/19/2011 | 370 | <0.71 | 1.9 | 13 | <0.71 | <0.71 |
| | 9/8/2011 | 32 | <0.5 | <0.5 | 0.53 | <0.5 | <0.5 |
| | **12/1/2011** | **1,200** | **<1.6** | **8.3** | **6.8** | **<1.2** | **<0.86** |
| | | | | | | | |
| **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** |
| **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** |
| | | | | | | | |
| **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** |
| **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 |

# 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-1D** cont. | 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** |
| **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** |
| **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** |
| **1573 153 RD** | 7/2/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| | 10/16/2008 | <10 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| **EB-PMP** | 1/21/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| **EB-PRB** | 1/21/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| **EB-PMP2** | 1/22/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| **EB-PRB2** | 1/22/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <0.5 | <0.5 |
| **ESL** | | **12** | **NE** | **NE** | **NE** | **0.5** | **0.05** |

Notes:
August 8, 2002 was the first time that samples were analyzed for Gasoline Oxygenates
<: Not detected above the laboratory reporting limit.
NA: Not Analyzed. Well MW-8 was inaccessible during the 1Q05 & well MW-7 (1Q06) car was parked over each well.
NE: Not Established
TBA: tert-Butyl Alcohol
DIPE: Isopropyl Ether
ETBE: Ethyl tert-Butyl Ether
TAME: Methyl tert-Amyl Ether
ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008); Table F-1a,Groundwater Screening Levels (groundwater is a current or potential drinking water resource)
MW-8 and MW-9 were decommissioned November 13, 2009
FP: During Q4 2011 GWM Free-Product was observed 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** |

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

# 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** |

Notes:

< : Below laboratory-reporting limit

Y : sample exhibits chromatographic pattern which does not resmeble standard

# Appendix A

Standard Operating Procedures for
Conducting Groundwater Monitoring Activities

# Standard Operating Procedures for Conducting Groundwater Monitoring Activities

## Water Level 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.

## 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.

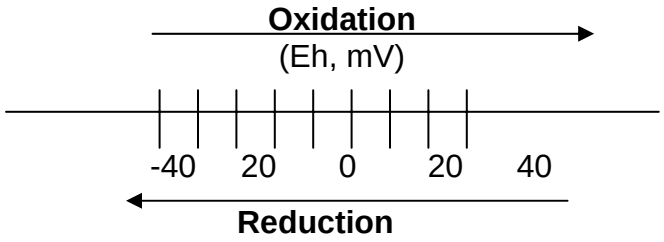
The pH of groundwater has an effect on the activity of microbial populations in the groundwater. The groundwater temperature affects the metabolic activity of bacteria. The groundwater EC is directly related to the concentration of total dissolved solids (TDS) in solution.

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, nonpreserved 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 and Field Measurements of Physical, Chemical, and Natural Attenuation Parameters of Groundwater Samples

**AMMENDED REPORT**
**15101 FREEDOM AVE**
**SAN LEANDRO, CA.**

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

**JOB NO. 2445**
**DATE: FEB. 21,2008**

| | NAD 83 | NAD 83 | NAVD 88 | | NORTH | WEST |
|---|---|---|---|---|---|---|
| PT | NORTH (sft) | EAST(sft) | ELEV. | DESCRIPTION | LATITUDE (DMS) | LONGITUDE (DMS) |
| 1 | 2087731.02 | 6094039.23 | 442.77 | FD CHABOT B | 37°43'02.71762" | 122°07'00.46339" |
| 2 | 2088584.99 | 6093351.39 | 492.08 | FD CHABOT A | 37°43'11.04190" | 122°07'09.20691" |
| 51 | 2084348.54 | 6092159.32 | 55.44 | FD. X-8 | | |
| 52 | 2084073.17 | 6092141.24 | 46.15 | MW-6 PAV | | |
| 53 | 2084072.72 | 6092140.95 | 46.15 | MW-6 PUNCH | | |
| 54 | 2084072.47 | 6092140.95 | 45.82 | MW-6 NOTCH | 37°42'26.22635" | 122°07'23.29643 |
| 55 | 2083909.71 | 6091947.10 | 40.61 | MW-9 PAV | | |
| 56 | 2083909.10 | 6091946.97 | 40.61 | MW-9 PUNCH | | |
| 57 | 2083908.71 | 6091947.00 | 40.26 | MW-9 NOTCH | 37°42'24.57425" | 122°07'25.67431" |
| 58 | 2083861.20 | 6092118.11 | 41.38 | MW-8 PAV | | |
| 59 | 2083860.43 | 6092118.36 | 41.44 | MW-8 PUNCH | | |
| 60 | 2083860.03 | 6092118.52 | 41.14 | MW-8 NOTCH | 37°42'24.12245" | 122°07'23.52966" |
| 61 | 2084008.21 | 6092290.11 | 44.94 | MW-7 PAV | | |
| 62 | 2084007.88 | 6092290.27 | 44.95 | MW-7 PVNCH | | |
| 63 | 2084007.68 | 6092290.40 | 44.74 | MW-7 NOTCH | 37°42'25.61150" | 122°07'21.42290" |
| 64 | 2084206.49 | 6092175.95 | 51.03 | MW-5 PAV | | |
| 65 | 2084206.17 | 6092176.55 | 50.96 | MW-5 PUNCH | | |
| 66 | 2084206.01 | 6092176.79 | 50.53 | MW-5 NOTCH | 37°42'27.55260 | 122°07'22.87930 |
| 67 | 2084670.41 | 6092307.68 | 69.79 | FD BM FAIR580 | | |
| 68 | 2084251.32 | 6092125.25 | 53.70 | MW-4 PAV | Ammended 2\21\08 | From here down |
| 69 | 2084250.55 | 6092124.46 | 53.74 | MW-4 PUNCH | | |
| 70 | 2084250.36 | 6092124.67 | 53.31 | MW-4 NOTCH | 37°42'27.98205" | 122°07'23.53734" |
| 71 | 2084298.86 | 6092176.07 | 54.37 | MW-3 PAV | | |
| 72 | 2084298.19 | 6092176.26 | 54.33 | MW-3 PUNCH | | |
| 73 | 2084297.82 | 6092176.29 | 53.91 | MW-3 NOTCH | 37°42'28.46009" | 122°07'22.90536" |
| 74 | 2084365.28 | 6092117.89 | 54.82 | MW-1 PAV | | |
| 75 | 2084364.32 | 6092118.22 | 54.79 | MW-1 PUNCH | | |
| 76 | 2084364.03 | 6092118.49 | 54.46 | MW-1 NOTCH | 37°42'29.10470" | 122°07'23.63882" |
| 77 | 2084323.98 | 6092063.51 | 52.88 | MW-2 PAV | | |
| 78 | 2084323.44 | 6092063.77 | 52.92 | MW-2 PUNCH | | |
| 79 | 2084323.06 | 6092063.88 | 52.41 | MW-2 NOTCH | 37°42'28.69039" | 122°07'24.30947" |
| 80 | 2084930.49 | 6091759.33 | 58.50 | FD BM K1256 | 37°42'34.64279" | 122°07'28.23011" |
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DATE: 1/08/2008
JOB NUMBER 0208101
DATE OF SURVEY 1/03/08
INSTRUMENT LIECA SR520

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

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

BENCH MARK: NGS BENCH MARK NO. HT1871

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

ELEVATION = 58.50 NAVD 88 DATUM

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

FD CHABOT A, CALIFORNIA STATE PLAIN COORDINATE SYSTEM, NAD 83, ZONE 3. NORTH 2,088,584.99 EAST 6,093,351.39. LAT N 37°43'11.04190" LONG W 122°07'09.20691", ELEVATION 492.08 NAVD 88.

FD CHABOT B, CALIFORNIA STATE PLAIN COORDINATE SYSTEM, NAD 83, ZONE 3. NORTH 2,087,731.02 EAST 6,094,039.23. . LAT N 37°43'02.71762" LONG W 122°07'00.46339", ELEVATION 442.77 NAVD 88.

DATE: 12/11/2009

JOB# 09039

# TABLE OF ELEVATIONS & COORDINATES
## ON MONITORING WELLS

SOMA ENVIRONMENTAL ENGINEERING
15101 FREEDOM AVENUE
SAN LEANDRO, CA 94579

| WELL ID # | NORTHING (FT.) / LATITUDE (D.DEG.) | EASTING (FT.) / LONGITUDE (D.DEG.) | ELEVATION (FT.) | DESCRIPTION |
|---|---|---|---|---|
| EX-1 | 2084135.454 | 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

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-1 | **Project No.:** | 2551 |
| **Casing Diameter:** | 4 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 30.50 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 54.46 feet | **Date:** | December 2, 2011 |
| **Depth to Groundwater:** | 21.97 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 32.49 feet | | |
| **Water Column Height:** | 8.53 feet | | |
| **Purged Volume:** | 14 gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**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 | 2.75 | 6.10 | 20.54 | 1279 | 6.17 | -205.5 |
| 09:45 | 6 | 2.33 | 6.07 | 20.67 | 1281 | 5.60 | -231.6 |
| 09:47 | 10 | 1.71 | 6.07 | 20.71 | 1288 | 6.41 | -234.1 |
| 09:48 | 12 | 1.53 | 6.07 | 20.71 | 1297 | 7.60 | -235.2 |
| 09:49 | 14 | 1.50 | 6.06 | 20.72 | 1195 | 6.48 | -236.5 |
| 09:54 | Sampled | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-2 | **Project No.:** | 2551 |
| **Casing Diameter:** | 4 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 30.15 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 52.41 feet | **Date:** | December 2, 2011 |
| **Depth to Groundwater:** | 20.14 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 32.27 feet | | |
| **Water Column Height:** | 10.01 feet | | |
| **Purged Volume:** | 14 gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 09:16 | Started purging well | | | | | | |
| 09:17 | 2 | 3.10 | 6.21 | 20.58 | 1390 | 6.73 | -158.4 |
| 09:19 | 6 | 2.79 | 6.05 | 20.78 | 1048 | 8.25 | -182.2 |
| 09:21 | 10 | 2.13 | 6.02 | 20.88 | 1023 | 10.5 | -180.2 |
| 09:22 | 12 | 1.88 | 6.01 | 20.91 | 1026 | 10.1 | -178.9 |
| 09:23 | 14 | 1.33 | 6.00 | 20.91 | 1075 | 9.74 | -177.9 |
| 09:28 | Sampled | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-3 | **Project No.:** | 2551 |
| **Casing Diameter:** | 4 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 29.90 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 53.91 feet | **Date:** | December 2, 2011 |
| **Depth to Groundwater:** | 21.60 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 32.31 feet | | |
| **Water Column Height:** | 8.30 feet | | |
| **Purged Volume:** | 14 gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 10:43 | Started purging well | | | | | | |
| 10:44 | 2 | 2.83 | 6.61 | 20.74 | 1222 | 12.7 | -205.2 |
| 10:46 | 6 | 2.51 | 6.52 | 20.82 | 1196 | 7.58 | -244.7 |
| 10:48 | 10 | 2.02 | 6.45 | 20.79 | 1198 | 7.17 | -252.2 |
| 10:49 | 12 | 1.80 | 6.43 | 20.79 | 1200 | 7.35 | -254.7 |
| 10:50 | 14 | 1.77 | 6.40 | 20.80 | 1197 | 7.82 | -255.2 |
| 10:55 | sampled | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-4 | **Project No.:** | 2551 |
| **Casing Diameter:** | 4 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 30.20 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 53.31 feet | **Date:** | December 1, 2011 |
| **Depth to Groundwater:** | 21.38 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 31.93 feet | | |
| **Water Column Height:** | 8.82 feet | | |
| **Purged Volume:** | 14 gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 14:48 | Started purging well | | | | | | |
| 14:49 | 2 | 2.42 | 6.37 | 20.19 | 1301 | 6.91 | -158.5 |
| 14:51 | 6 | 2.03 | 6.17 | 20.19 | 1450 | 6.40 | -174.9 |
| 14:53 | 10 | 1.85 | 6.10 | 20.20 | 1476 | 5.33 | -173.4 |
| 14:54 | 12 | 1.22 | 6.07 | 20.18 | 1491 | 5.93 | -171.2 |
| 14:55 | 14 | 1.03 | 6.04 | 20.19 | 1512 | 5.43 | -168.6 |
| 15:00 | Sampled | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-5 | **Project No.:** | 2551 |
| **Casing Diameter:** | 4 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 29.80 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 50.53 feet | **Date:** | December 2, 2011 |
| **Depth to Groundwater:** | 18.59 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 31.94 feet | | |
| **Water Column Height:** | 11.21 feet | | |
| **Purged Volume:** | 14 gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

**Color:** Yes ☐ No ☑ Describe: _____

**Sheen:** Yes ☐ No ☑ Describe: _____

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 11:51 | Started purging well | | | | | | |
| 11:52 | 2 | 2.01 | 6.69 | 21.72 | 1260 | 8.51 | -169.1 |
| 11:54 | 6 | 1.89 | 6.62 | 21.75 | 1261 | 6.22 | -206.6 |
| 11:56 | 10 | 1.41 | 6.58 | 21.72 | 1265 | 6.05 | -228.4 |
| 11:57 | 12 | 1.17 | 6.56 | 21.73 | 1263 | 7.52 | -232.3 |
| 11:58 | 14 | 1.04 | 6.55 | 21.72 | 1264 | 8.39 | -235.1 |
| 12:03 | Sampled | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-6 | **Project No.:** | 2551 |
| **Casing Diameter:** | 4 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 27.30 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 45.82 feet | **Date:** | December 1, 2011 |
| **Depth to Groundwater:** | 16.17 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 29.65 feet | | |
| **Water Column Height:** | 11.13 feet | | |
| **Purged Volume:** | — gallons | | |
| | Not purged | | |

**Purging Method:** Bailer ☐ Pump ☐

**Sampling Method:** Bailer ☐ Pump ☐ Not Sampled

| | | | | |
|---|---|---|---|---|
| **Color:** | Yes ☐ | No ☐ | **Describe:** | Unknown |
| **Sheen:** | Yes ☐ | No ☐ | **Describe:** | Free product |
| **Odor:** | Yes ☐ | No ☐ | **Describe:** | Strong Petro |

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
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Depth to free product: 16.15 ft.
0.02 feet of free product

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-7 | **Project No.:** | 2551 |
| **Casing Diameter:** | 2 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 21.00 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 44.74 feet | **Date:** | December 1, 2011 |
| **Depth to Groundwater:** | 13.59 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 31.15 feet | | |
| **Water Column Height:** | 7.43 feet | | |
| **Purged Volume:** | 3.5 gallons | | |

**Purging Method:** Bailer ☑ Pump ☐

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 11:29 | Started purging well | | | | | | |
| 11:31 | 1 | 2.47 | 6.21 | 18.57 | 1299 | 204 | -11.4 |
| 11:35 | 2 | 2.15 | 6.08 | 18.63 | 1312 | 522 | -42.4 |
| 11:38 | 3 | 1.73 | 6.04 | 18.65 | 1318 | 539 | -51.6 |
| 11:41 | 3.5 | 1.09 | 6.03 | 18.65 | 1333 | 585 | -51.4 |
| 11:46 | Sampled | | | | | | |
| | | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | EX-1 | **Project No.:** | 2551 |
| **Casing Diameter:** | 6 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | — feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 47.36 feet | **Date:** | December 1, 2011 |
| **Depth to Groundwater:** | 16.10 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 31.26 feet | | |
| **Water Column Height:** | NC feet | | |
| **Purged Volume:** | — gallons | | |
| | Not purged | | |

**Purging Method:** Bailer ☐ Pump ☐

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 12:06 | Grab Sample | | | | | | |
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ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | EX-2 | **Project No.:** | 2551 |
| **Casing Diameter:** | 6 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | — feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 45.96 feet | **Date:** | December 1, 2011 |
| **Depth to Groundwater:** | 22.60 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 23.36 feet | | |
| **Water Column Height:** | NC feet | | |
| **Purged Volume:** | — gallons | | |
| | Not purged | | |

**Purging Method:** Bailer ☐ Pump ☐

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 12:10 | Grab Sample | | | | | | |
| | | | | | | | |
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ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MPE-1 | **Project No.:** | 2551 |
| **Casing Diameter:** | 4 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 30.00 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 51.96 feet | **Date:** | December 2, 2011 |
| **Depth to Groundwater:** | 20.14 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 31.82 feet | | |
| **Water Column Height:** | 9.86 feet | | |
| **Purged Volume:** | _____ gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

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

**Sheen:** Yes ☑ No ☐ **Describe:** Rainbow Sheen (some product globules)

**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 |
|---|---|---|---|---|---|---|---|
| 11:25 | Started purging well | | | | | | |
| 11:26 | 2 | 2.03 | 6.46 | 20.04 | 1560 | 29.8 | -232.1 |
| 11:28 | 6 | 1.74 | 6.40 | 20.12 | 1540 | 15.6 | -240.0 |
| 11:30 | 10 | 1.60 | 6.38 | 20.16 | 1540 | 17.4 | -241.9 |
| 11:31 | 12 | 1.42 | 6.38 | 20.17 | 1556 | 15.5 | -243.3 |
| 11:32 | 14 | 1.07 | 6.37 | 20.18 | 1572 | 16.4 | -244.8 |
| 11:37 | Sampled | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MPE-2 | **Project No.:** | 2551 |
| **Casing Diameter:** | 4 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 30.00 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 53.72 feet | **Date:** | December 2, 2011 |
| **Depth to Groundwater:** | 21.44 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 32.28 feet | | |
| **Water Column Height:** | 8.56 feet | | |
| **Purged Volume:** | 14 gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

**Color:** Yes ☐ No ☑ Describe: _____

**Sheen:** Yes ☐ No ☑ Describe: _____

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 10:15 | Started purging well | | | | | | |
| 10:16 | 2 | 2.35 | 6.62 | 21.02 | 1304 | 10.9 | -187.0 |
| 10:18 | 6 | 2.19 | 6.46 | 21.10 | 1305 | 6.82 | -217.0 |
| 10:20 | 10 | 1.89 | 6.42 | 21.17 | 1305 | 7.33 | -229.9 |
| 10:21 | 12 | 1.23 | 6.41 | 21.17 | 1305 | 5.69 | -233.7 |
| 10:22 | 14 | 1.15 | 6.40 | 21.18 | 1306 | 6.56 | -235.0 |
| 10:27 | Sampled | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-1D | **Project No.:** | 2551 |
| **Casing Diameter:** | 2 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 59.81 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 54.42 feet | **Date:** | December 1 , 2011 |
| **Depth to Groundwater:** | 22.26 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 32.16 feet | | |
| **Water Column Height:** | 37.55 feet | | |
| **Purged Volume:** | 14 gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 13:08 | Started purging well | | | | | | |
| 13:09 | 2 | 3.57 | 6.73 | 19.79 | 1296 | 12.4 | -11.7 |
| 13:11 | 6 | 3.01 | 6.64 | 19.78 | 1298 | 7.16 | -12.2 |
| 13:13 | 10 | 2.62 | 6.57 | 19.79 | 1297 | 20.0 | -15.6 |
| 13:14 | 12 | 2.13 | 6.55 | 19.78 | 1297 | 18.9 | -17.5 |
| 13:15 | 14 | 1.88 | 6.54 | 19.79 | 1297 | 15.3 | -18.9 |
| 13:20 | Sampled | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-3D | **Project No.:** | 2551 |
| **Casing Diameter:** | 2 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 58.59 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 54.10 feet | **Date:** | December 1, 2011 |
| **Depth to Groundwater:** | 22.86 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 31.24 feet | | |
| **Water Column Height:** | 35.73 feet | | |
| **Purged Volume:** | _____ gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 13:47 | Started purging well | | | | | | |
| 13:48 | 2 | 3.15 | 6.59 | 19.98 | 1256 | 66.4 | -3.7 |
| 13:50 | 6 | 2.87 | 6.48 | 20.01 | 1263 | 9.53 | -11.1 |
| 13:52 | 10 | 2.19 | 6.45 | 20.01 | 1263 | 7.82 | -15.0 |
| 13:53 | 12 | 1.95 | 6.43 | 20.02 | 1264 | 7.26 | -17.5 |
| 13:54 | 14 | 1.87 | 6.42 | 20.02 | 1265 | 5.31 | -18.5 |
| 13:54 | sampled | | | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-4D | **Project No.:** | 2551 |
| **Casing Diameter:** | 2 inches | **Address:** | 15101 Freedom Avenue |
| **Depth of Well:** | 58.79 feet | | San Leandro, CA |
| **Top of Casing Elevation:** | 53.12 feet | **Date:** | December 1 , 2011 |
| **Depth to Groundwater:** | 21.19 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 31.93 feet | | |
| **Water Column Height:** | 37.60 feet | | |
| **Purged Volume:** | 14 gallons | | |

**Purging Method:** Bailer ☐ Pump ☑

**Sampling Method:** Bailer ☑ Pump ☐

**Color:** Yes ☐ No ☑ Describe: _____

**Sheen:** Yes ☐ No ☑ Describe: _____

**Odor:** Yes ☐ No ☑ Describe: _____

**Field Measurements:**

| Time | Volume (gallons) | D.O. mg/L | pH | Temp °C | E.C. (µS/cm) | Turb. NTU | ORP |
|---|---|---|---|---|---|---|---|
| 14:19 | Started purging well | | | | | | |
| 14:20 | 2 | 3.09 | 6.63 | 19.39 | 1264 | 69.3 | -5.3 |
| 14:22 | 6 | 2.81 | 6.54 | 19.41 | 1267 | 30.2 | -12.7 |
| 14:24 | 10 | 2.69 | 6.50 | 19.42 | 1264 | 17.7 | -16.7 |
| 14:25 | 12 | 2.63 | 6.48 | 19.43 | 1262 | 13.8 | -17.9 |
| 14:26 | 14 | 2.20 | 6.47 | 19.43 | 1261 | 10.2 | -18.8 |
| 14:31 | Sampled | | | | | | |

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

| Monitoring Well | Date | Dissolved Oxygen (mg/L) | pH | Temperature °C | Electrical Conductivity µS/cm | Turbidity NTU | ORP |
|---|---|---|---|---|---|---|---|
| 1st WBZ | | | | | | | |
| **MW-1** | 8/27/2009 | 0.38 | 6.32 | 20.8 | 1357 | 4.69 | -95.7 |
| | 12/2/2009 | 0.15 | 6.4 | 20.82 | 1261 | 6.19 | -136.4 |
| | 3/17/2010 | 0.58 | 5.68 | 20.97 | 1186 | 7.00 | -155.9 |
| | 6/3/2010 | 0.91 | 6.11 | 20.81 | 1285 | 2.49 | -131.6 |
| | 9/2/2010 | 0.92 | 6.04 | 20.66 | 1361 | 2.46 | -86.4 |
| | 12/2/2010 | 0.97 | 5.96 | 20.74 | 1309 | 4.32 | -119.7 |
| | 3/4/2011 | 1.4 | 6.69 | 20.96 | 1169 | 1.98 | -101.2 |
| | 5/20/2011 | 1.51 | 6.22 | 20.68 | 1305 | 1.85 | -164.5 |
| | 9/9/2011 | 1.73 | 6.02 | 20.53 | 1320 | 4.63 | -179.2 |
| | **12/2/2011** | **1.50** | **6.06** | **20.72** | **1195** | **6.48** | **-236.5** |
| | | | | | | | |
| **MW-2** | 8/27/2009 | 0.43 | 6.57 | 20.72 | 1530 | 2.59 | -168.1 |
| | 12/1/2009 | 0.48 | 6.75 | 21.12 | 1297 | 5.01 | -191.3 |
| | 3/17/2010 | 0.51 | 5.78 | 21.08 | 1025 | 5.65 | -108 |
| | 6/3/2010 | 0.62 | 6.28 | 20.84 | 930 | 2.66 | -150.2 |
| | 9/2/2010 | 0.66 | 6.29 | 20.73 | 1269 | 2.67 | -174.2 |
| | 12/2/2010 | 0.63 | 6.06 | 20.94 | 1439 | 2062 | -162.4 |
| | 3/4/2011 | 1.55 | 6.84 | 20.91 | 815 | 3.34 | -87.8 |
| | 5/20/2011 | 1.22 | 6.39 | 20.59 | 981 | 2.58 | -185.9 |
| | 9/9/2011 | 1.67 | 5.89 | 20.48 | 1303 | 6.19 | -157.7 |
| | **12/2/2011** | **1.33** | **6.00** | **20.91** | **1075** | **9.74** | **-177.9** |
| | | | | | | | |
| **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 |
| | **12/2/2011** | **1.77** | **6.4** | **20.8** | **1197** | **7.82** | **-255.2** |
| | | | | | | | |
| **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 |
| | **12/1/2011** | **1.03** | **6.04** | **20.19** | **1512** | **5.43** | **-168.6** |
| | | | | | | | |
| **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 |
| | **12/2/2011** | **1.04** | **6.55** | **21.72** | **1264** | **8.39** | **-235.1** |

# 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** | 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 |
| | **12/1/2011** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |
| **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 |
| | **12/1/2011** | **1.09** | **6.03** | **18.65** | **1333** | **585** | **-51.4** |
| **MPE-1** | **12/2/2011** | **1.07** | **6.37** | **20.18** | **1572** | **16.4** | **-244.8** |
| **MPE-2** | **12/2/2011** | **1.15** | **6.4** | **21.18** | **1306** | **6.56** | **-235** |
| **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 |
| | **12/1/2011** | **1.88** | **6.54** | **19.79** | **1297** | **15.3** | **-18.9** |
| **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 |
| | **12/1/2011** | **1.87** | **6.42** | **20.02** | **1265** | **5.31** | **-18.5** |
| **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 |

# 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-4D** cont. | 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 |
| | **12/1/2011** | **2.2** | **6.47** | **19.43** | **1261** | **10.2** | **-18.8** |

Note:
MW-6 was not sampled during Q4 2011 due to presence of Free-Product

# Appendix C

Laboratory Report and Chain of Custody Form
for the Fourth Quarter 2011 Monitoring 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

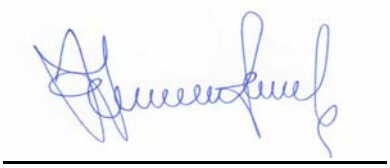
Work Order No.: 1112015

Dear Joyce Bobek:

Torrent Laboratory, Inc. received 13 sample(s) on December 02, 2011 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.



G.Gueorguieva
Sr. Project Manager

December 09, 2011
Date

**Date:** 12/9/2011

**Client:** Soma Environmental

**Project:** 15101 Freedom Ave., San Leandro

**Work Order:** 1112015

## 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:** 12/02/11
**Date Reported:** 12/09/11

**MW-1** 1112015-001

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| tert-Butanol | SW8260B | 8.8 | 13 | 44 | 49 | ug/L |
| Benzene | SW8260B | 8.8 | 2.9 | 4.4 | 96 | ug/L |
| Ethyl Benzene | SW8260B | 8.8 | 1.4 | 4.4 | 310 | ug/L |
| m,p-Xylene | SW8260B | 8.8 | 1.8 | 8.8 | 200 | ug/L |
| TPH(Gasoline) | 8260TPH | 8.8 | 190 | 440 | 4700 | ug/L |

**MW-2** 1112015-002

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| Ethyl Benzene | SW8260B | 8.8 | 1.4 | 4.4 | 14 | ug/L |
| m,p-Xylene | SW8260B | 8.8 | 1.8 | 8.8 | 1.9 | ug/L |
| TPH(Gasoline) | 8260TPH | 8.8 | 190 | 440 | 900 | ug/L |

**MW-3** 1112015-003

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| Benzene | SW8260B | 4.4 | 1.5 | 2.2 | 280 | ug/L |
| Toluene | SW8260B | 4.4 | 0.84 | 2.2 | 12 | ug/L |
| Ethyl Benzene | SW8260B | 4.4 | 0.68 | 2.2 | 370 | ug/L |
| m,p-Xylene | SW8260B | 4.4 | 0.88 | 4.4 | 570 | ug/L |
| o-Xylene | SW8260B | 4.4 | 0.56 | 2.2 | 170 | ug/L |
| TPH(Gasoline) | 8260TPH | 4.4 | 95 | 220 | 5100 | ug/L |

Torrent LABORATORY, INC.

## Sample Result Summary

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

**MW-4** 1112015-004

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| MTBE | SW8260B | 4.4 | 1.7 | 2.2 | 110 | ug/L |
| tert-Butanol | SW8260B | 4.4 | 6.6 | 22 | 790 | ug/L |
| ETBE | SW8260B | 4.4 | 1.7 | 2.2 | 5.4 | ug/L |
| Benzene | SW8260B | 4.4 | 1.5 | 2.2 | 370 | ug/L |
| TAME | SW8260B | 4.4 | 1.4 | 2.2 | 8.2 | ug/L |
| Ethyl Benzene | SW8260B | 4.4 | 0.68 | 2.2 | 110 | ug/L |
| m,p-Xylene | SW8260B | 4.4 | 0.88 | 4.4 | 28 | ug/L |
| o-Xylene | SW8260B | 4.4 | 0.56 | 2.2 | 2.6 | ug/L |
| TPH(Gasoline) | 8260TPH | 4.4 | 95 | 220 | 1400 | ug/L |

**MW-5** 1112015-005

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| MTBE | SW8260B | 8.8 | 3.3 | 4.4 | 32 | ug/L |
| tert-Butanol | SW8260B | 8.8 | 13 | 44 | 95 | ug/L |
| Benzene | SW8260B | 8.8 | 2.9 | 4.4 | 96 | ug/L |
| TAME | SW8260B | 8.8 | 2.8 | 4.4 | 14 | ug/L |
| Toluene | SW8260B | 8.8 | 1.7 | 4.4 | 12 | ug/L |
| Ethyl Benzene | SW8260B | 8.8 | 1.4 | 4.4 | 220 | ug/L |
| m,p-Xylene | SW8260B | 8.8 | 1.8 | 8.8 | 95 | ug/L |
| o-Xylene | SW8260B | 8.8 | 1.1 | 4.4 | 9.0 | ug/L |
| TPH(Gasoline) | 8260TPH | 8.8 | 190 | 440 | 6900 | ug/L |

**MW-7** 1112015-006

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| MTBE | SW8260B | 1 | 0.38 | 0.50 | 13 | ug/L |
| tert-Butanol | SW8260B | 1 | 1.5 | 5.0 | 15 | ug/L |
| TAME | SW8260B | 1 | 0.32 | 0.50 | 2.4 | ug/L |
| Ethyl Benzene | SW8260B | 1 | 0.15 | 0.50 | 12 | ug/L |
| m,p-Xylene | SW8260B | 1 | 0.20 | 1.0 | 5.7 | ug/L |
| TPH(Gasoline) | 8260TPH | 1 | 22 | 50 | 1500 | ug/L |

Torrent LABORATORY, INC.

## Sample Result Summary

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

**MW-1D** 1112015-007

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|

**All compounds were non-detectable for this sample.**

**MW-3D** 1112015-008

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| MTBE | SW8260B | 1 | 0.38 | 0.50 | 10 | ug/L |
| TAME | SW8260B | 1 | 0.32 | 0.50 | 0.52 | ug/L |

**MW-4D** 1112015-009

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| MTBE | SW8260B | 1 | 0.38 | 0.50 | 4.2 | ug/L |

**EX-1** 1112015-010

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | 1 | 22 | 50 | 780 | ug/L |
| MTBE | SW8260B | 4.4 | 1.7 | 2.2 | 150 | ug/L |
| tert-Butanol | SW8260B | 4.4 | 6.6 | 22 | 1200 | ug/L |
| ETBE | SW8260B | 4.4 | 1.7 | 2.2 | 8.3 | ug/L |
| Benzene | SW8260B | 4.4 | 1.5 | 2.2 | 91 | ug/L |
| TAME | SW8260B | 4.4 | 1.4 | 2.2 | 6.8 | ug/L |
| Toluene | SW8260B | 4.4 | 0.84 | 2.2 | 3.0 | ug/L |
| Ethyl Benzene | SW8260B | 4.4 | 0.68 | 2.2 | 29 | ug/L |
| m,p-Xylene | SW8260B | 4.4 | 0.88 | 4.4 | 66 | ug/L |
| o-Xylene | SW8260B | 4.4 | 0.56 | 2.2 | 19 | ug/L |

Torrent LABORATORY, INC.

## Sample Result Summary

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

**EX-2** 1112015-011

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| tert-Butanol | SW8260B | 8.8 | 13 | 44 | 74 | ug/L |
| Benzene | SW8260B | 8.8 | 2.9 | 4.4 | 630 | ug/L |
| Toluene | SW8260B | 8.8 | 1.7 | 4.4 | 200 | ug/L |
| Ethyl Benzene | SW8260B | 8.8 | 1.4 | 4.4 | 690 | ug/L |
| m,p-Xylene | SW8260B | 8.8 | 1.8 | 8.8 | 1400 | ug/L |
| o-Xylene | SW8260B | 8.8 | 1.1 | 4.4 | 360 | ug/L |
| TPH(Gasoline) | 8260TPH | 8.8 | 190 | 440 | 9900 | ug/L |

**MPE-1** 1112015-012

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | 44 | 950 | 2200 | 56000 | ug/L |
| MTBE | SW8260B | 88 | 33 | 44 | 2600 | ug/L |
| tert-Butanol | SW8260B | 88 | 130 | 440 | 830 | ug/L |
| Benzene | SW8260B | 88 | 29 | 44 | 9000 | ug/L |
| TAME | SW8260B | 88 | 28 | 44 | 750 | ug/L |
| Toluene | SW8260B | 88 | 17 | 44 | 7700 | ug/L |
| Ethyl Benzene | SW8260B | 88 | 14 | 44 | 2200 | ug/L |
| m,p-Xylene | SW8260B | 88 | 18 | 88 | 8000 | ug/L |
| o-Xylene | SW8260B | 88 | 11 | 44 | 2800 | ug/L |

**MPE-2** 1112015-013

| Parameters: | Analysis Method | DF | MDL | PQL | Results | Unit |
|---|---|---|---|---|---|---|
| Benzene | SW8260B | 44 | 15 | 22 | 1600 | ug/L |
| Toluene | SW8260B | 44 | 8.4 | 22 | 43 | ug/L |
| Ethyl Benzene | SW8260B | 44 | 6.8 | 22 | 1800 | ug/L |
| m,p-Xylene | SW8260B | 44 | 8.8 | 44 | 2600 | ug/L |
| o-Xylene | SW8260B | 44 | 5.6 | 22 | 770 | ug/L |
| TPH(Gasoline) | 8260TPH | 44 | 950 | 2200 | 26000 | ug/L |

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-1 | **Lab Sample ID:** | 1112015-001A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/02/11 / 9:54 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 8.8 | 3.3 | 4.4 | ND | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 8.8 | 13 | 44 | 49 | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 8.8 | 3.2 | 4.4 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 8.8 | 3.5 | 4.4 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 8.8 | 2.9 | 4.4 | 96 | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 8.8 | 2.8 | 4.4 | ND | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 8.8 | 2.4 | 4.4 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 8.8 | 1.7 | 4.4 | ND | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 8.8 | 1.7 | 4.4 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 8.8 | 1.4 | 4.4 | 310 | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 8.8 | 1.8 | 8.8 | 200 | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 8.8 | 1.1 | 4.4 | ND | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 8.8 | 61.2 | 131 | 109 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 8.8 | 75.1 | 127 | 103 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 8.8 | 64.1 | 120 | 105 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 8.8 | 880 | 880 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 8.8 | 190 | 440 | 4700 | x | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 8.8 | 41.5 | 125 | 74.0 | | % | 407735 | NA |

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

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-2 | **Lab Sample ID:** | 1112015-002A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/02/11 / 9:28 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ***The results shown below are reported using their MDL.*** | | | | | | | | | | | |
| MTBE | SW8260B | NA | 12/08/11 | 8.8 | 3.3 | 4.4 | ND | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 8.8 | 13 | 44 | ND | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 8.8 | 3.2 | 4.4 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 8.8 | 3.5 | 4.4 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 8.8 | 2.9 | 4.4 | ND | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 8.8 | 2.8 | 4.4 | ND | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 8.8 | 2.4 | 4.4 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 8.8 | 1.7 | 4.4 | ND | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 8.8 | 1.7 | 4.4 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 8.8 | 1.4 | 4.4 | 14 | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 8.8 | 1.8 | 8.8 | 1.9 | J | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 8.8 | 1.1 | 4.4 | ND | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 8.8 | 61.2 | 131 | 107 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 8.8 | 75.1 | 127 | 102 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 8.8 | 64.1 | 120 | 104 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 8.8 | 880 | 880 | ND | TIC | ug/L | 407735 | NA |

**NOTE:** Sample was analyzed with dilution due to sample matrix (foaming during purging).

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 8.8 | 190 | 440 | 900 | x | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 8.8 | 41.5 | 125 | 74.6 | | % | 407735 | NA |

**NOTE:** Raised reporting limit - see comment for 8260B analysis. x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-3 | **Lab Sample ID:** | 1112015-003A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/02/11 / 10:55 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 4.4 | 1.7 | 2.2 | ND | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 4.4 | 6.6 | 22 | ND | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 4.4 | 1.6 | 2.2 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 4.4 | 1.7 | 2.2 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 4.4 | 1.5 | 2.2 | 280 | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 4.4 | 1.4 | 2.2 | ND | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 4.4 | 1.2 | 2.2 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 4.4 | 0.84 | 2.2 | 12 | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 4.4 | 0.86 | 2.2 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 4.4 | 0.68 | 2.2 | 370 | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 4.4 | 0.88 | 4.4 | 570 | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 4.4 | 0.56 | 2.2 | 170 | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 4.4 | 61.2 | 131 | 113 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 4.4 | 75.1 | 127 | 106 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 4.4 | 64.1 | 120 | 107 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 4.4 | 440 | 440 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 4.4 | 95 | 220 | 5100 | x | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 4.4 | 41.5 | 125 | 68.9 | | % | 407735 | NA |

**NOTE:** x - Does not match pattern of reference Gasoline standard. Result is elevated due to contribution from heavy end hydrocarbons in the C5-C12 range quantified as Gasoline (possibly aged gasoline).

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-4 | **Lab Sample ID:** | 1112015-004A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/01/11 / 15:00 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 4.4 | 1.7 | 2.2 | 110 | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 4.4 | 6.6 | 22 | 790 | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 4.4 | 1.6 | 2.2 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 4.4 | 1.7 | 2.2 | 5.4 | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 4.4 | 1.5 | 2.2 | 370 | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 4.4 | 1.4 | 2.2 | 8.2 | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 4.4 | 1.2 | 2.2 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 4.4 | 0.84 | 2.2 | ND | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 4.4 | 0.86 | 2.2 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 4.4 | 0.68 | 2.2 | 110 | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 4.4 | 0.88 | 4.4 | 28 | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 4.4 | 0.56 | 2.2 | 2.6 | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 4.4 | 61.2 | 131 | 126 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 4.4 | 75.1 | 127 | 101 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 4.4 | 64.1 | 120 | 109 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 4.4 | 440 | 440 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 4.4 | 95 | 220 | 1400 | x | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 4.4 | 41.5 | 125 | 69.3 | | % | 407735 | NA |

**NOTE:** x - Does not match pattern of reference Gasoline standard. Result is elevated due to contribution from light hydrocarbons (MTBE/TBA) in the C5-C12 range quantified as Gasoline.

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-5 | **Lab Sample ID:** | 1112015-005A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/02/11 / 12:03 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 8.8 | 3.3 | 4.4 | 32 | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 8.8 | 13 | 44 | 95 | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 8.8 | 3.2 | 4.4 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 8.8 | 3.5 | 4.4 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 8.8 | 2.9 | 4.4 | 96 | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 8.8 | 2.8 | 4.4 | 14 | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 8.8 | 2.4 | 4.4 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 8.8 | 1.7 | 4.4 | 12 | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 8.8 | 1.7 | 4.4 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 8.8 | 1.4 | 4.4 | 220 | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 8.8 | 1.8 | 8.8 | 95 | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 8.8 | 1.1 | 4.4 | 9.0 | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 8.8 | 61.2 | 131 | 111 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 8.8 | 75.1 | 127 | 103 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 8.8 | 64.1 | 120 | 108 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 8.8 | 880 | 880 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 8.8 | 190 | 440 | 6900 | x | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 8.8 | 41.5 | 125 | 65.8 | | % | 407735 | NA |

**NOTE:** x - Does not match pattern of reference Gasoline standard. Result is elevated due to contribution from heavy end hydrocarbons (possibly aged gasoline) in the C5-C12 range quantified as Gasoline.

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-7 | **Lab Sample ID:** | 1112015-006A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/01/11 / 11:46 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 1 | 0.38 | 0.50 | 13 | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 1 | 1.5 | 5.0 | 15 | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 1 | 0.36 | 0.50 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 1 | 0.40 | 0.50 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 1 | 0.33 | 0.50 | ND | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 1 | 0.32 | 0.50 | 2.4 | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 1 | 0.28 | 0.50 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 1 | 0.19 | 0.50 | ND | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 1 | 0.19 | 0.50 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 1 | 0.15 | 0.50 | 12 | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 1 | 0.20 | 1.0 | 5.7 | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 1 | 0.13 | 0.50 | ND | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 1 | 61.2 | 131 | 125 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 1 | 75.1 | 127 | 106 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 1 | 64.1 | 120 | 113 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 1 | 100 | 100 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 1 | 22 | 50 | 1500 | x | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 1 | 41.5 | 125 | 57.2 | | % | 407735 | NA |

**NOTE:** x - Does not match pattern of reference Gasoline standard. Result is elevated due to contribution from heavy end hydrocarbons (possibly aged gasoline) in the C5-C12 range quantified as Gasoline.

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-1D | **Lab Sample ID:** | 1112015-007A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/01/11 / 13:20 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 1 | 0.38 | 0.50 | ND | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 1 | 1.5 | 5.0 | ND | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 1 | 0.36 | 0.50 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 1 | 0.40 | 0.50 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 1 | 0.33 | 0.50 | ND | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 1 | 0.32 | 0.50 | ND | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 1 | 0.28 | 0.50 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 1 | 0.19 | 0.50 | ND | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 1 | 0.19 | 0.50 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 1 | 0.15 | 0.50 | ND | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 1 | 0.20 | 1.0 | ND | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 1 | 0.13 | 0.50 | ND | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 1 | 61.2 | 131 | 120 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 1 | 75.1 | 127 | 106 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 1 | 64.1 | 120 | 110 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 1 | 100 | 100 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 1 | 22 | 50 | ND | | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 1 | 41.5 | 125 | 56.0 | | % | 407735 | NA |

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-3D | **Lab Sample ID:** | 1112015-008A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/01/11 / 13:59 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 1 | 0.38 | 0.50 | 10 | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 1 | 1.5 | 5.0 | ND | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 1 | 0.36 | 0.50 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 1 | 0.40 | 0.50 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 1 | 0.33 | 0.50 | ND | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 1 | 0.32 | 0.50 | 0.52 | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 1 | 0.28 | 0.50 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 1 | 0.19 | 0.50 | ND | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 1 | 0.19 | 0.50 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 1 | 0.15 | 0.50 | ND | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 1 | 0.20 | 1.0 | ND | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 1 | 0.13 | 0.50 | ND | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 1 | 61.2 | 131 | 113 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 1 | 75.1 | 127 | 106 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 1 | 64.1 | 120 | 108 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 1 | 100 | 100 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 1 | 22 | 50 | ND | | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 1 | 41.5 | 125 | 62.0 | | % | 407735 | NA |

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MW-4D | **Lab Sample ID:** | 1112015-009A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/01/11 / 14:31 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 1 | 0.38 | 0.50 | 4.2 | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 1 | 1.5 | 5.0 | ND | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 1 | 0.36 | 0.50 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 1 | 0.40 | 0.50 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 1 | 0.33 | 0.50 | ND | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 1 | 0.32 | 0.50 | ND | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 1 | 0.28 | 0.50 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 1 | 0.19 | 0.50 | ND | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 1 | 0.19 | 0.50 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 1 | 0.15 | 0.50 | ND | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 1 | 0.20 | 1.0 | ND | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 1 | 0.13 | 0.50 | ND | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 1 | 61.2 | 131 | 124 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 1 | 75.1 | 127 | 101 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 1 | 64.1 | 120 | 112 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 1 | 100 | 100 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 1 | 22 | 50 | ND | | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 1 | 41.5 | 125 | 62.5 | | % | 407735 | NA |

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | EX-1 | **Lab Sample ID:** | 1112015-010A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/01/11 / 12:06 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 4.4 | 1.7 | 2.2 | 150 | | ug/L | 407754 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 4.4 | 6.6 | 22 | 1200 | | ug/L | 407754 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 4.4 | 1.6 | 2.2 | ND | | ug/L | 407754 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 4.4 | 1.7 | 2.2 | 8.3 | | ug/L | 407754 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 4.4 | 1.5 | 2.2 | 91 | | ug/L | 407754 | NA |
| TAME | SW8260B | NA | 12/08/11 | 4.4 | 1.4 | 2.2 | 6.8 | | ug/L | 407754 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 4.4 | 1.2 | 2.2 | ND | | ug/L | 407754 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 4.4 | 0.84 | 2.2 | 3.0 | | ug/L | 407754 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 4.4 | 0.86 | 2.2 | ND | | ug/L | 407754 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 4.4 | 0.68 | 2.2 | 29 | | ug/L | 407754 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 4.4 | 0.88 | 4.4 | 66 | | ug/L | 407754 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 4.4 | 0.56 | 2.2 | 19 | | ug/L | 407754 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 4.4 | 61.2 | 131 | 110 | | % | 407754 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 4.4 | 75.1 | 127 | 103 | | % | 407754 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 4.4 | 64.1 | 120 | 106 | | % | 407754 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 4.4 | 440 | 440 | ND | TIC | ug/L | 407754 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 1 | 22 | 50 | 780 | x | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 1 | 41.5 | 125 | 58.0 | | % | 407735 | NA |

**NOTE:** x - Does not match pattern of reference Gasoline standard. Result is elevated due to contribution from heavy end hydrocarbons (possibly aged gasoline) in the C5-C12 range quantified as Gasoline.

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | EX-2 | **Lab Sample ID:** | 1112015-011A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/01/11 / 12:10 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 8.8 | 3.3 | 4.4 | ND | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 8.8 | 13 | 44 | 74 | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 8.8 | 3.2 | 4.4 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 8.8 | 3.5 | 4.4 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 8.8 | 2.9 | 4.4 | 630 | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 8.8 | 2.8 | 4.4 | ND | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 8.8 | 2.4 | 4.4 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 8.8 | 1.7 | 4.4 | 200 | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 8.8 | 1.7 | 4.4 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 8.8 | 1.4 | 4.4 | 690 | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 8.8 | 1.8 | 8.8 | 1400 | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 8.8 | 1.1 | 4.4 | 360 | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 8.8 | 61.2 | 131 | 116 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 8.8 | 75.1 | 127 | 106 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 8.8 | 64.1 | 120 | 115 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 8.8 | 880 | 880 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 8.8 | 190 | 440 | 9900 | | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 8.8 | 41.5 | 125 | 70.3 | | % | 407735 | NA |

**NOTE:** Result is elevated due to contribution from heavy end hydrocarbons (possibly aged gasoline) in the C5-C12 range quantified as Gasoline.

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MPE-1 | **Lab Sample ID:** | 1112015-012A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/02/11 / 11:37 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 88 | 33 | 44 | 2600 | | ug/L | 407754 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 88 | 130 | 440 | 830 | | ug/L | 407754 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 88 | 32 | 44 | ND | | ug/L | 407754 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 88 | 35 | 44 | ND | | ug/L | 407754 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 88 | 29 | 44 | 9000 | | ug/L | 407754 | NA |
| TAME | SW8260B | NA | 12/08/11 | 88 | 28 | 44 | 750 | | ug/L | 407754 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 88 | 24 | 44 | ND | | ug/L | 407754 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 88 | 17 | 44 | 7700 | | ug/L | 407754 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 88 | 17 | 44 | ND | | ug/L | 407754 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 88 | 14 | 44 | 2200 | | ug/L | 407754 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 88 | 18 | 88 | 8000 | | ug/L | 407754 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 88 | 11 | 44 | 2800 | | ug/L | 407754 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 88 | 61.2 | 131 | 108 | | % | 407754 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 88 | 75.1 | 127 | 103 | | % | 407754 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 88 | 64.1 | 120 | 106 | | % | 407754 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 88 | 8800 | 8800 | ND | TIC | ug/L | 407754 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 44 | 950 | 2200 | 56000 | | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 44 | 41.5 | 125 | 66.7 | | % | 407735 | NA |

Torrent LABORATORY, INC.

## SAMPLE RESULTS

**Report prepared for:** Joyce Bobek
Soma Environmental

**Date Received:** 12/02/11
**Date Reported:** 12/09/11

| | | | |
|---|---|---|---|
| **Client Sample ID:** | MPE-2 | **Lab Sample ID:** | 1112015-013A |
| **Project Name/Location:** | 15101 Freedom Ave., San Leandro | **Sample Matrix:** | Groundwater |
| **Project Number:** | 2551 | | |
| **Date/Time Sampled:** | 12/02/11 / 10:27 | | |
| **Tag Number:** | 15101 Freedom Ave | | |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTBE | SW8260B | NA | 12/08/11 | 44 | 17 | 22 | ND | | ug/L | 407735 | NA |
| tert-Butanol | SW8260B | NA | 12/08/11 | 44 | 66 | 220 | ND | | ug/L | 407735 | NA |
| Diisopropyl ether (DIPE) | SW8260B | NA | 12/08/11 | 44 | 16 | 22 | ND | | ug/L | 407735 | NA |
| ETBE | SW8260B | NA | 12/08/11 | 44 | 17 | 22 | ND | | ug/L | 407735 | NA |
| Benzene | SW8260B | NA | 12/08/11 | 44 | 15 | 22 | 1600 | | ug/L | 407735 | NA |
| TAME | SW8260B | NA | 12/08/11 | 44 | 14 | 22 | ND | | ug/L | 407735 | NA |
| 1,2-Dichloroethane | SW8260B | NA | 12/08/11 | 44 | 12 | 22 | ND | | ug/L | 407735 | NA |
| Toluene | SW8260B | NA | 12/08/11 | 44 | 8.4 | 22 | 43 | | ug/L | 407735 | NA |
| 1,2-Dibromoethane | SW8260B | NA | 12/08/11 | 44 | 8.6 | 22 | ND | | ug/L | 407735 | NA |
| Ethyl Benzene | SW8260B | NA | 12/08/11 | 44 | 6.8 | 22 | 1800 | | ug/L | 407735 | NA |
| m,p-Xylene | SW8260B | NA | 12/08/11 | 44 | 8.8 | 44 | 2600 | | ug/L | 407735 | NA |
| o-Xylene | SW8260B | NA | 12/08/11 | 44 | 5.6 | 22 | 770 | | ug/L | 407735 | NA |
| (S) Dibromofluoromethane | SW8260B | NA | 12/08/11 | 44 | 61.2 | 131 | 110 | | % | 407735 | NA |
| (S) Toluene-d8 | SW8260B | NA | 12/08/11 | 44 | 75.1 | 127 | 107 | | % | 407735 | NA |
| (S) 4-Bromofluorobenzene | SW8260B | NA | 12/08/11 | 44 | 64.1 | 120 | 111 | | % | 407735 | NA |
| Ethanol | SW8260B | NA | 12/08/11 | 44 | 4400 | 4400 | ND | TIC | ug/L | 407735 | NA |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL | PQL | Results | Lab Qualifier | Unit | Analytical Batch | Prep Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 8260TPH | NA | 12/08/11 | 44 | 950 | 2200 | 26000 | | ug/L | 407735 | NA |
| (S) 4-Bromofluorobenzene | 8260TPH | NA | 12/08/11 | 44 | 41.5 | 125 | 61.6 | | % | 407735 | NA |

Torrent LABORATORY, INC.

# MB Summary Report

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Work Order:** | 1112015 | **Prep Method:** | NA | **Prep Date:** | NA | **Prep Batch:** | NA |
| **Matrix:** | Water | **Analytical Method:** | SW8260B | **Analyzed Date:** | 12/08/11 | **Analytical Batch:** | 407735 |
| **Units:** | ug/L | | | | | | |

| Parameters | MDL | PQL | Method Blank Conc. | Lab Qualifier |
|---|---|---|---|---|
| Dichlorodifluoromethane | 0.41 | 0.50 | ND | |
| Chloromethane | 0.41 | 0.50 | ND | |
| Vinyl Chloride | 0.37 | 0.50 | ND | |
| Bromomethane | 0.37 | 0.50 | ND | |
| Trichlorofluoromethane | 0.34 | 0.50 | ND | |
| 1,1-Dichloroethene | 0.29 | 0.50 | ND | |
| Freon 113 | 0.38 | 0.50 | ND | |
| Methylene Chloride | 0.18 | 5.0 | 0.35 | |
| trans-1,2-Dichloroethene | 0.31 | 0.50 | ND | |
| MTBE | 0.38 | 0.50 | ND | |
| tert-Butanol | 1.5 | 5.0 | ND | |
| Diisopropyl ether (DIPE) | 0.36 | 0.50 | ND | |
| 1,1-Dichloroethane | 0.28 | 0.50 | ND | |
| ETBE | 0.40 | 0.50 | ND | |
| cis-1,2-Dichloroethene | 0.33 | 0.50 | ND | |
| 2,2-Dichloropropane | 0.37 | 0.50 | ND | |
| Bromochloromethane | 0.34 | 0.50 | ND | |
| Chloroform | 0.29 | 0.50 | ND | |
| Carbon Tetrachloride | 0.26 | 0.50 | ND | |
| 1,1,1-Trichloroethane | 0.32 | 0.50 | ND | |
| 1,1-Dichloropropene | 0.40 | 0.50 | ND | |
| Benzene | 0.33 | 0.50 | ND | |
| TAME | 0.32 | 0.50 | ND | |
| 1,2-Dichloroethane | 0.28 | 0.50 | ND | |
| Trichloroethylene | 0.38 | 0.50 | ND | |
| Dibromomethane | 0.21 | 0.50 | ND | |
| 1,2-Dichloropropane | 0.37 | 0.50 | ND | |
| Bromodichloromethane | 0.23 | 0.50 | ND | |
| cis-1,3-Dichloropropene | 0.30 | 0.50 | ND | |
| Toluene | 0.19 | 0.50 | ND | |
| Tetrachloroethylene | 0.15 | 0.50 | ND | |
| trans-1,3-Dichloropropene | 0.20 | 0.50 | ND | |
| 1,1,2-Trichloroethane | 0.20 | 0.50 | ND | |
| Dibromochloromethane | 0.21 | 0.50 | ND | |
| 1,3-Dichloropropane | 0.18 | 0.50 | ND | |
| 1,2-Dibromoethane | 0.19 | 0.50 | ND | |
| Chlorobenzene | 0.14 | 0.50 | ND | |
| Ethyl Benzene | 0.15 | 0.50 | ND | |
| 1,1,1,2-Tetrachloroethane | 0.10 | 0.50 | ND | |
| m,p-Xylene | 0.20 | 1.0 | ND | |

Torrent LABORATORY, INC.

# MB Summary Report

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Work Order:** | 1112015 | **Prep Method:** | NA | **Prep Date:** | NA | **Prep Batch:** | NA |
| **Matrix:** | Water | **Analytical Method:** | SW8260B | **Analyzed Date:** | 12/08/11 | **Analytical Batch:** | 407735 |
| **Units:** | ug/L | | | | | | |

| Parameters | MDL | PQL | Method Blank Conc. | Lab Qualifier | |
|---|---|---|---|---|---|
| o-Xylene | 0.13 | 0.50 | ND | | |
| Styrene | 0.20 | 0.50 | ND | | |
| Bromoform | 0.45 | 1.0 | ND | | |
| Isopropyl Benzene | 0.28 | 0.50 | ND | | |
| Bromobenzene | 0.39 | 0.50 | ND | | |
| 1,1,2,2-Tetrachloroethane | 0.26 | 0.50 | ND | | |
| n-Propylbenzene | 0.30 | 0.50 | ND | | |
| 2-Chlorotoluene | 0.33 | 0.50 | ND | | |
| 1,3,5-Trimethylbenzene | 0.20 | 0.50 | ND | | |
| 4-Chlorotoluene | 0.32 | 0.50 | ND | | |
| tert-Butylbenzene | 0.29 | 0.50 | ND | | |
| 1,2,3-Trichloropropane | 0.59 | 1.0 | ND | | |
| 1,2,4-Trimethylbenzene | 0.33 | 0.50 | ND | | |
| sec-Butyl Benzene | 0.24 | 0.50 | ND | | |
| p-Isopropyltoluene | 0.25 | 0.50 | ND | | |
| 1,3-Dichlorobenzene | 0.31 | 0.50 | ND | | |
| 1,4-Dichlorobenzene | 0.37 | 0.50 | ND | | |
| n-Butylbenzene | 0.32 | 0.50 | ND | | |
| 1,2-Dichlorobenzene | 0.39 | 0.50 | ND | | |
| 1,2-Dibromo-3-Chloropropane | 0.45 | 1.0 | ND | | |
| Hexachlorobutadiene | 0.22 | 0.50 | ND | | |
| 1,2,4-Trichlorobenzene | 0.48 | 1.0 | ND | | |
| Naphthalene | 0.57 | 1.0 | ND | | |
| 1,2,3-Trichlorobenzene | 0.52 | 1.0 | ND | | |
| Ethanol | 100 | 100 | ND | TIC | |
| (S) Dibromofluoromethane | | | 111 | | |
| (S) Toluene-d8 | | | 107 | | |
| (S) 4-Bromofluorobenzene | | | 110 | | |

Torrent LABORATORY, INC.

# MB Summary Report

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Work Order:** | 1112015 | **Prep Method:** | NA | **Prep Date:** | NA | **Prep Batch:** | NA |
| **Matrix:** | Water | **Analytical Method:** | SW8260B | **Analyzed Date:** | 12/08/11 | **Analytical Batch:** | 407754 |
| **Units:** | ug/L | | | | | | |

| Parameters | MDL | PQL | Method Blank Conc. | Lab Qualifier | |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 0.41 | 0.50 | ND | | |
| Chloromethane | 0.41 | 0.50 | ND | | |
| Vinyl Chloride | 0.37 | 0.50 | ND | | |
| Bromomethane | 0.37 | 0.50 | ND | | |
| Trichlorofluoromethane | 0.34 | 0.50 | ND | | |
| 1,1-Dichloroethene | 0.29 | 0.50 | ND | | |
| Freon 113 | 0.38 | 0.50 | ND | | |
| Methylene Chloride | 0.18 | 5.0 | ND | | |
| trans-1,2-Dichloroethene | 0.31 | 0.50 | ND | | |
| MTBE | 0.38 | 0.50 | ND | | |
| tert-Butanol | 1.5 | 5.0 | ND | | |
| Diisopropyl ether (DIPE) | 0.36 | 0.50 | ND | | |
| 1,1-Dichloroethane | 0.28 | 0.50 | ND | | |
| ETBE | 0.40 | 0.50 | ND | | |
| cis-1,2-Dichloroethene | 0.33 | 0.50 | ND | | |
| 2,2-Dichloropropane | 0.37 | 0.50 | ND | | |
| Bromochloromethane | 0.34 | 0.50 | ND | | |
| Chloroform | 0.29 | 0.50 | ND | | |
| Carbon Tetrachloride | 0.26 | 0.50 | ND | | |
| 1,1,1-Trichloroethane | 0.32 | 0.50 | ND | | |
| 1,1-Dichloropropene | 0.40 | 0.50 | ND | | |
| Benzene | 0.33 | 0.50 | ND | | |
| TAME | 0.32 | 0.50 | ND | | |
| 1,2-Dichloroethane | 0.28 | 0.50 | ND | | |
| Trichloroethylene | 0.38 | 0.50 | ND | | |
| Dibromomethane | 0.21 | 0.50 | ND | | |
| 1,2-Dichloropropane | 0.37 | 0.50 | ND | | |
| Bromodichloromethane | 0.23 | 0.50 | ND | | |
| cis-1,3-Dichloropropene | 0.30 | 0.50 | ND | | |
| Toluene | 0.19 | 0.50 | ND | | |
| Tetrachloroethylene | 0.15 | 0.50 | ND | | |
| trans-1,3-Dichloropropene | 0.20 | 0.50 | ND | | |
| 1,1,2-Trichloroethane | 0.20 | 0.50 | ND | | |
| Dibromochloromethane | 0.21 | 0.50 | ND | | |
| 1,3-Dichloropropane | 0.18 | 0.50 | ND | | |
| 1,2-Dibromoethane | 0.19 | 0.50 | ND | | |
| Chlorobenzene | 0.14 | 0.50 | ND | | |
| Ethyl Benzene | 0.15 | 0.50 | ND | | |
| 1,1,1,2-Tetrachloroethane | 0.10 | 0.50 | ND | | |
| m,p-Xylene | 0.20 | 1.0 | ND | | |
| o-Xylene | 0.13 | 0.50 | ND | | |

Torrent LABORATORY, INC.

# MB Summary Report

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Work Order:** | 1112015 | **Prep Method:** | NA | **Prep Date:** | NA | **Prep Batch:** | NA |
| **Matrix:** | Water | **Analytical Method:** | SW8260B | **Analyzed Date:** | 12/08/11 | **Analytical Batch:** | 407754 |
| **Units:** | ug/L | | | | | | |

| Parameters | MDL | PQL | Method Blank Conc. | Lab Qualifier |
|---|---|---|---|---|
| Styrene | 0.20 | 0.50 | ND | |
| Bromoform | 0.45 | 1.0 | ND | |
| Isopropyl Benzene | 0.28 | 0.50 | ND | |
| Bromobenzene | 0.39 | 0.50 | ND | |
| 1,1,2,2-Tetrachloroethane | 0.26 | 0.50 | ND | |
| n-Propylbenzene | 0.30 | 0.50 | ND | |
| 2-Chlorotoluene | 0.33 | 0.50 | ND | |
| 1,3,5-Trimethylbenzene | 0.20 | 0.50 | ND | |
| 4-Chlorotoluene | 0.32 | 0.50 | ND | |
| tert-Butylbenzene | 0.29 | 0.50 | ND | |
| 1,2,3-Trichloropropane | 0.59 | 1.0 | ND | |
| 1,2,4-Trimethylbenzene | 0.33 | 0.50 | ND | |
| sec-Butyl Benzene | 0.24 | 0.50 | ND | |
| p-Isopropyltoluene | 0.25 | 0.50 | ND | |
| 1,3-Dichlorobenzene | 0.31 | 0.50 | ND | |
| 1,4-Dichlorobenzene | 0.37 | 0.50 | ND | |
| n-Butylbenzene | 0.32 | 0.50 | ND | |
| 1,2-Dichlorobenzene | 0.39 | 0.50 | ND | |
| 1,2-Dibromo-3-Chloropropane | 0.45 | 1.0 | ND | |
| Hexachlorobutadiene | 0.22 | 0.50 | ND | |
| 1,2,4-Trichlorobenzene | 0.48 | 1.0 | ND | |
| Naphthalene | 0.57 | 1.0 | ND | |
| 1,2,3-Trichlorobenzene | 0.52 | 1.0 | ND | |
| Ethanol | 100 | 100 | ND | TIC |
| (S) Dibromofluoromethane | | | 121 | |
| (S) Toluene-d8 | | | 105 | |
| (S) 4-Bromofluorobenzene | | | 113 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Work Order:** | 1112015 | **Prep Method:** | 5030 | **Prep Date:** | 12/08/11 | **Prep Batch:** | 4297 |
| **Matrix:** | Water | **Analytical Method:** | 8260TPH | **Analyzed Date:** | 12/08/11 | **Analytical Batch:** | 407735 |
| **Units:** | ug/L | | | | | | |

| Parameters | MDL | PQL | Method Blank Conc. | Lab Qualifier |
|---|---|---|---|---|
| TPH(Gasoline) | 22 | 50 | ND | |
| (S) 4-Bromofluorobenzene | | | 66.8 | |

Torrent LABORATORY, INC.

# LCS/LCSD Summary Report

*Raw values are used in quality control assessment.*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Work Order:** | 1112015 | **Prep Method:** | NA | **Prep Date:** | NA | **Prep Batch:** | NA |
| **Matrix:** | Water | **Analytical Method:** | SW8260B | **Analyzed Date:** | 12/08/11 | **Analytical Batch:** | 407735 |
| **Units:** | ug/L | | | | | | |

| Parameters | MDL | PQL | Method Blank Conc. | Spike Conc. | LCS % Recovery | LCSD % Recovery | LCS/LCSD % RPD | % Recovery Limits | % RPD Limits | Lab Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 0.29 | 0.50 | ND | 17.04 | 115 | 119 | 3.04 | 61.4 - 129 | 30 | |
| Benzene | 0.33 | 0.50 | ND | 17.04 | 122 | 129 | 5.69 | 66.9 - 140 | 30 | |
| Trichloroethylene | 0.38 | 0.50 | ND | 17.04 | 97.5 | 100 | 2.57 | 69.3 - 144 | 30 | |
| Toluene | 0.19 | 0.50 | ND | 17.04 | 108 | 112 | 4.23 | 76.6 - 123 | 30 | |
| Chlorobenzene | 0.14 | 0.50 | ND | 17.04 | 99.6 | 104 | 3.94 | 73.9 - 137 | 30 | |
| (S) Dibromofluoromethane | | | ND | 11.36 | 107 | 108 | | 61.2 - 131 | | |
| (S) Toluene-d8 | | | ND | 11.36 | 109 | 109 | | 75.1 - 127 | | |
| (S) 4-Bromofluorobenzene | | | 0.35 | 11.36 | 113 | 110 | | 64.1 - 120 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Work Order:** | 1112015 | **Prep Method:** | NA | **Prep Date:** | NA | **Prep Batch:** | NA |
| **Matrix:** | Water | **Analytical Method:** | SW8260B | **Analyzed Date:** | 12/08/11 | **Analytical Batch:** | 407754 |
| **Units:** | ug/L | | | | | | |

| Parameters | MDL | PQL | Method Blank Conc. | Spike Conc. | LCS % Recovery | LCSD % Recovery | LCS/LCSD % RPD | % Recovery Limits | % RPD Limits | Lab Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 0.29 | 0.50 | ND | 17.04 | 111 | 121 | 9.37 | 61.4 - 129 | 30 | |
| Benzene | 0.33 | 0.50 | ND | 17.04 | 118 | 125 | 5.22 | 66.9 - 140 | 30 | |
| Trichloroethylene | 0.38 | 0.50 | ND | 17.04 | 90.3 | 99.2 | 9.35 | 69.3 - 144 | 30 | |
| Toluene | 0.19 | 0.50 | ND | 17.04 | 98.5 | 106 | 7.05 | 76.6 - 123 | 30 | |
| Chlorobenzene | 0.14 | 0.50 | ND | 17.04 | 94.0 | 100 | 6.45 | 73.9 - 137 | 30 | |
| (S) Dibromofluoromethane | | | ND | 11.36 | 109 | 110 | | 61.2 - 131 | | |
| (S) Toluene-d8 | | | ND | 11.36 | 106 | 106 | | 75.1 - 127 | | |
| (S) 4-Bromofluorobenzene | | | ND | 11.36 | 109 | 110 | | 64.1 - 120 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Work Order:** | 1112015 | **Prep Method:** | 5030 | **Prep Date:** | 12/08/11 | **Prep Batch:** | 4297 |
| **Matrix:** | Water | **Analytical Method:** | 8260TPH | **Analyzed Date:** | 12/08/11 | **Analytical Batch:** | 407735 |
| **Units:** | ug/L | | | | | | |

| Parameters | MDL | PQL | Method Blank Conc. | Spike Conc. | LCS % Recovery | LCSD % Recovery | LCS/LCSD % RPD | % Recovery Limits | % RPD Limits | Lab Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| TPH(Gasoline) | 22 | 50 | ND | 227.27 | 113 | 108 | 5.25 | 52.4 - 127 | 30 | |
| (S) 4-Bromofluorobenzene | | | 66.8 | 11.36 | 62.9 | 60.1 | | 41.5 - 125 | | |

# 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.: 1112015

Date and Time Received: 12/2/2011 17:19

Received By: RK

Physically Logged By: YB

Checklist Completed By: YB

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? | No |

**Sample Receipt Information**

| | |
|---|---|
| Custody seals intact on shipping container/cooler? | No |
| 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? | | Temperature: 10 | °C |
| Water-VOA vials have zero headspace? | No | | |
| Water-pH acceptable upon receipt? | N/A | | |

pH Checked by:

pH Adjusted by:

Torrent LABORATORY, INC.

# Login Summary Report

**Client ID:** TL5237 Soma Environmental
**Project Name:** 15101 Freedom Ave., San Leandro
**Project # :** 2551
**Report Due Date:** 12/9/2011

**QC Level:**
**TAT Requested:** 5+ day:0
**Date Received:** 12/2/2011
**Time Received:** 17:19

**Comments:**

**Work Order # :** ***1112015***

| WO Sample ID | Client Sample ID | Collection Date/Time | Matrix | Scheduled Disposal | Sample On Hold | Test On Hold | Requested Tests | Subbed |
|---|---|---|---|---|---|---|---|---|
| 1112015-001A | MW-1 | 12/02/11 9:54 | Water | 01/16/12 | | | EDF<br>W_GCMS-GRO<br>W_8260PetE | |
| **Sample Note:** | EDF. For PetrE analyze for full list except Naphthalene. | | | | | | | |
| 1112015-002A | MW-2 | 12/02/11 9:28 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-003A | MW-3 | 12/02/11 10:55 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-004A | MW-4 | 12/01/11 15:00 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-005A | MW-5 | 12/02/11 12:03 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-006A | MW-7 | 12/01/11 11:46 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-007A | MW-1D | 12/01/11 13:20 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-008A | MW-3D | 12/01/11 13:59 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-009A | MW-4D | 12/01/11 14:31 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-010A | EX-1 | 12/01/11 12:06 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-011A | EX-2 | 12/01/11 12:10 | Water | 01/16/12 | | | W_GCMS-GRO<br>W_8260PetE | |
| 1112015-012A | MPE-1 | 12/02/11 11:37 | Water | 01/16/12 | | | | |

# Login Summary Report

**Client ID:** TL5237 Soma Environmental

**Project Name:** 15101 Freedom Ave., San Leandro

**Project # :** 2551

**Report Due Date:** 12/9/2011

**QC Level:**

**TAT Requested:** 5+ day:0

**Date Received:** 12/2/2011

**Time Received:** 17:19

**Comments:**

**Work Order # :** ***1112015***

| WO Sample ID | Client Sample ID | Collection Date/Time | Matrix | Scheduled Disposal | Sample On Hold | Test On Hold | Requested Tests | Subbed |
|---|---|---|---|---|---|---|---|---|
| 1112015-013A | MPE-2 | 12/02/11 10:27 | Water | 01/16/12 | | | W_8260PetE<br>W_GCMS-GRO<br><br>W_GCMS-GRO<br>W_8260PetE | |

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: 11/2015

| | | |
|---|---|---|
| Company Name: SOMA Environmental Engineering, Inc. | | Location of Sampling: 15101 Freedom Ave., San Leandro |
| Address: 6620 Owens Drive, Suite A | | Purpose: Groundwater Monitoring |
| City: Pleasanton | State: CA Zip Code: 94588 | Special Instructions / Comments: |
| Telephone: 925-734-6400 | FAX: 925-734-6401 | |
| REPORT TO: Joyce Bobek | SAMPLER: Lizzie Hightower | P.O. #: 2551 EMAIL: jbobek@somaenv.com |

TURNAROUND TIME: Standard
☐ 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 | TPH-g 8260B | BTEX, MtBE 8260B | Gas Ox 8260B | Lead Scavengers 82 | Ethanol | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 001A | MW-1 | 12/2/11 09:54 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| 002A | MW-2 | 12/2/11 09:28 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| 003A | MW-3 | 12/2/11 10:55 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| 004A | MW-4 | 12/1/11 15:00 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| 005A | MW-5 | 12/2/11 12:03 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| | ~~MW-6~~ | | ~~W~~ | ~~3~~ | ~~VOAs~~ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | T-10°C |
| 006A | MW-7 | 12/1/11 11:46 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| 007A | MW-1D | 12/1/11 13:20 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| 008A | MW-3D | 12/1/11 13:59 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| 009A | MW-4D | 12/1/11 14:31 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |

| | Relinquished By: | Print: | Date: | Time: | Received By: | Print: | Date: | Time: |
|---|---|---|---|---|---|---|---|---|
| 1 | [signature] | E. Hightower | 12/2/11 | 17:19 | [signature] | Ray Kaur | 12/2/11 | 5:19 pm |
| 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 [signature] 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 2

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

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: 111205

| | |
|---|---|
| Company Name: SOMA Environmental Engineering, Inc. | Location of Sampling: 15101 Freedom Ave., San Leandro |
| Address: 6620 Owens Drive, Suite A | Purpose: Groundwater Monitoring |
| City: Pleasanton / State: CA / Zip Code: 94588 | Special Instructions / Comments: |
| Telephone: 925-734-6400 / FAX: 925-734-6401 | |
| REPORT TO: Joyce Bobek / SAMPLER: Lizzie Hightower | P.O. #: 2551 / EMAIL: jbobek@somaenv.com |

TURNAROUND TIME: Standard
☐ 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 | TPH-g 8260B | BTEX, MtBE 8260B | Gas Ox 8260B | Lead Scavengers 82 | Ethanol | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 010A | EX-1 | 12/1/11 12:06 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| 011A | EX-2 | 12/1/11 12:10 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| 012A | MPE-1 | 12/2/11 11:37 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | T-10°C |
| 013A | MPE-2 | 12/2/11 10:27 | W | 3 | VOAs | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| | Relinquished By: | Print: | Date: | Time: | Received By: | Print: | Date: | Time: |
|---|---|---|---|---|---|---|---|---|
| 1 | E. Hightower | E. Hightower | 12/2/11 | 17:19 | R Kaur | | 12/2/11 | 5:19pm |
| 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 2 of 2

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

# Appendix D

Laboratory Report and Chain of Custody
Form for the Treatment System

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

**Laboratory Job Number 232307**
**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 | 232307-001 |
| GAC-1 | 232307-002 |
| INFLUENT | 232307-003 |

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

Signature: _____ Date: 11/04/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

# CASE NARRATIVE

| | |
|---|---|
| Laboratory number: | **232307** |
| Client: | **SOMA Environmental Engineering Inc.** |
| Project: | **2553** |
| Location: | **15101 Freedom Ave, San Leandro** |
| Request Date: | **10/27/11** |
| Samples Received: | **10/27/11** |

This data package contains sample and QC results for three water samples, requested for the above referenced project on 10/27/11. 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.

**Total Suspended Solids (TSS) (SM2540D):**
High RPD was observed for total suspended solids in the BS/BSD for batch 180615. No other analytical problems were encountered.

**pH (EPA 9040C):**
No analytical problems were encountered.

**Chemical Oxygen Demand (SM5220D):**
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 # 232307

**Sampler:** MASOUD-SEPEHR

**Project No:** 2553

**Report To:** Joyce Bobek

**Project Name:** 15101 Freedom Ave, San Leandr

**Company :** SOMA Environmental

**Turnaround Time:** Standard

**Telephone:** 925-734-6400

**Fax:** 925-734-6401

| Lab No. | Sample ID. | Sampling Date Time | Matrix: Soil | Water | Waste | # of Containers | Preservative: HCL | $H_2SO_4$ | $HNO_3$ | ICE | Analyses: TPH-g 8015 | TPH-d, TPH-mo 8015 | BTEX 8020 | COD | pH, TSS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EFFLUENT | 10/27/11-14 | | * | | 6 VOAs | * | | | * | * | | * | | |
| | | | | * | | 2-500mL Amber | | | | * | | * | | | |
| | | | | * | | 250 mL Poly | | * | | * | | | | * | |
| | | | | * | | 500 mL Poly | | | | * | | | | | * |
| | | | | | | | | | | | | | | | |
| 2 | GAC-1 | | | * | | 6 VOAs | * | | | * | * | | * | | |
| | | | | | | | | | | | | | | | |
| 3 | INFLUENT | | | * | | 6 VOAs | * | | | * | * | | * | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

**Notes:** EDF OUTPUT REQUIRED

ON ICE 11

| RELINQUISHED BY: | RECEIVED BY: |
|---|---|
| 10/27/11 DATE/TIME | 10/28/11 DATE/TIME |
| 16.20 DATE/TIME | DATE/TIME |
| DATE/TIME | DATE/TIME |

4.2c

**COOLER RECEIPT CHECKLIST**

Curtis & Tompkins, Ltd.

Login # 232307 Date Received 10/27/11 Number of coolers 1
Client MMA Project 2553

Date Opened 10/27/11 By (print) I. CHOY (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 18C
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 Sample Preservation for 232307

| Sample | pH: <2 | >12 | Other |
|---|---|---|---|
| -001a | [ ] | [ ] | _____ |
| b | [ ] | [ ] | _____ |
| c | [ ] | [ ] | _____ |
| d | [ ] | [ ] | _____ |
| e | [ ] | [ ] | _____ |
| f | [ ] | [ ] | _____ |
| g | [✓] | [ ] | _____ |
| h | [ ] | [ ] | _____ |
| i | [ ] | [ ] | _____ |
| j | [ ] | [ ] | _____ |

Analyst: DD Ely
Date: 10/27/11

Page 1 of 1

Curtis & Tompkins, Ltd.

# Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Matrix: | Water | Batch#: | 180789 |
| Units: | ug/L | Sampled: | 10/27/11 |
| Diln Fac: | 1.000 | Received: | 10/27/11 |

Field ID: EFFLUENT
Type: SAMPLE
Lab ID: 232307-001
Analyzed: 11/02/11

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

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 97 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 100 | 80-120 | EPA 8021B |

Field ID: GAC-1
Type: SAMPLE
Lab ID: 232307-002
Analyzed: 11/02/11

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

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 97 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 99 | 80-120 | EPA 8021B |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Matrix: | Water | Batch#: | 180789 |
| Units: | ug/L | Sampled: | 10/27/11 |
| Diln Fac: | 1.000 | Received: | 10/27/11 |

Field ID: INFLUENT
Type: SAMPLE
Lab ID: 232307-003
Analyzed: 11/02/11

| Analyte | Result | RL | Analysis |
|---|---|---|---|
| Gasoline C7-C12 | ND | 50 | EPA 8015B |
| Benzene | 1.5 | 0.50 | EPA 8021B |
| Toluene | ND | 0.50 | EPA 8021B |
| Ethylbenzene | ND | 0.50 | EPA 8021B |
| m,p-Xylenes | 1.8 | 0.50 | EPA 8021B |
| o-Xylene | 1.1 | 0.50 | EPA 8021B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 96 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 98 | 80-120 | EPA 8021B |

Type: BLANK
Lab ID: QC616619
Analyzed: 11/01/11

| 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) | 90 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 93 | 80-120 | EPA 8021B |

ND= Not Detected
RL= Reporting Limit

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Matrix: | Water | Batch#: | 180789 |
| Units: | ug/L | Analyzed: | 11/01/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC616616

| Analyte | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|
| Benzene | 10.00 | 9.358 | 94 | 80-120 | EPA 8021B |
| Toluene | 10.00 | 8.923 | 89 | 80-120 | EPA 8021B |
| Ethylbenzene | 10.00 | 9.245 | 92 | 80-120 | EPA 8021B |
| m,p-Xylenes | 10.00 | 9.180 | 92 | 80-120 | EPA 8021B |
| o-Xylene | 10.00 | 9.428 | 94 | 80-120 | EPA 8021B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 89 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 94 | 80-120 | EPA 8021B |

Type: BSD Lab ID: QC616617

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim | Analysis |
|---|---|---|---|---|---|---|---|
| Benzene | 10.00 | 10.33 | 103 | 80-120 | 10 | 20 | EPA 8021B |
| Toluene | 10.00 | 9.228 | 92 | 80-120 | 3 | 20 | EPA 8021B |
| Ethylbenzene | 10.00 | 9.546 | 95 | 80-120 | 3 | 20 | EPA 8021B |
| m,p-Xylenes | 10.00 | 9.038 | 90 | 80-120 | 2 | 20 | EPA 8021B |
| o-Xylene | 10.00 | 9.750 | 97 | 80-120 | 3 | 20 | EPA 8021B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 90 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 92 | 80-120 | EPA 8021B |

RPD= Relative Percent Difference

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Type: | LCS | Diln Fac: | 1.000 |
| Lab ID: | QC616618 | Batch#: | 180789 |
| Matrix: | Water | Analyzed: | 11/01/11 |
| Units: | ug/L | | |

| Analyte | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,025 | 103 | 80-120 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 96 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 87 | 80-120 | EPA 8021B |

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Field ID: | ZZZZZZZZZZ | Batch#: | 180789 |
| MSS Lab ID: | 232321-002 | Sampled: | 10/27/11 |
| Matrix: | Water | Received: | 10/28/11 |
| Units: | ug/L | Analyzed: | 11/02/11 |
| Diln Fac: | 1.000 | | |

Type: MS Lab ID: QC616620

| Analyte | MSS Result | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 15.18 | 2,000 | 2,160 | 107 | 66-120 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 96 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 96 | 80-120 | EPA 8021B |

Type: MSD Lab ID: QC616621

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim | Analysis |
|---|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 2,000 | 2,104 | 104 | 66-120 | 3 | 25 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 97 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 97 | 80-120 | EPA 8021B |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# Total Extractable Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 3520C |
| Project#: | 2553 | Analysis: | EPA 8015B |
| Field ID: | EFFLUENT | Sampled: | 10/27/11 |
| Matrix: | Water | Received: | 10/27/11 |
| Units: | ug/L | Prepared: | 10/28/11 |
| Diln Fac: | 1.000 | Analyzed: | 11/01/11 |
| Batch#: | 180669 | | |

Type: SAMPLE Lab ID: 232307-001

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

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 98 | 68-120 |

Type: BLANK Lab ID: QC616122

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

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 106 | 68-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Total Extractable Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 3520C |
| Project#: | 2553 | Analysis: | EPA 8015B |
| Matrix: | Water | Batch#: | 180669 |
| Units: | ug/L | Prepared: | 10/28/11 |
| Diln Fac: | 1.000 | Analyzed: | 11/01/11 |

Type: BS
Lab ID: QC616123
Cleanup Method: EPA 3630C

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Diesel C10-C24 | 2,500 | 2,075 | 83 | 61-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 97 | 68-120 |

Type: BSD
Lab ID: QC616124
Cleanup Method: EPA 3630C

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Diesel C10-C24 | 2,500 | 1,854 | 74 | 61-120 | 11 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 89 | 68-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# Chemical Oxygen Demand

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM5220D |
| Analyte: | Chemical Oxygen Demand | Batch#: | 180858 |
| Field ID: | EFFLUENT | Sampled: | 10/27/11 14:00 |
| Matrix: | Water | Received: | 10/27/11 |
| Units: | mg/L | Prepared: | 11/03/11 12:30 |
| Diln Fac: | 1.000 | Analyzed: | 11/03/11 14:30 |

| Type | Lab ID | Result | RL |
|---|---|---|---|
| SAMPLE | 232307-001 | ND | 10 |
| BLANK | QC616894 | ND | 10 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Chemical Oxygen Demand

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM5220D |
| Analyte: | Chemical Oxygen Demand | Batch#: | 180858 |
| Field ID: | ZZZZZZZZZZ | Sampled: | 11/01/11 16:00 |
| MSS Lab ID: | 232410-001 | Received: | 11/02/11 |
| Matrix: | Water | Prepared: | 11/03/11 12:30 |
| Units: | mg/L | Analyzed: | 11/03/11 14:30 |

| Type | Lab ID | MSS Result | Spiked | Result | %REC | Limits | RPD | Lim | Diln Fac |
|---|---|---|---|---|---|---|---|---|---|
| LCS | QC616895 | | 75.00 | 67.97 | 91 | 90-110 | | | 1.000 |
| MS | QC616896 | <10.00 | 150.0 | 149.3 | 100 | 61-127 | | | 2.000 |
| MSD | QC616897 | | 150.0 | 140.6 | 94 | 61-127 | 6 | 20 | 2.000 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# pH

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | EPA 9040C |
| Analyte: | pH | Batch#: | 180604 |
| Field ID: | EFFLUENT | Sampled: | 10/27/11 14:00 |
| Lab ID: | 232307-001 | Received: | 10/27/11 |
| Matrix: | Water | Prepared: | 10/27/11 12:10 |
| Units: | SU | Analyzed: | 10/27/11 19:00 |
| Diln Fac: | 1.000 | | |

| Result | RL |
|---|---|
| 7.1 | 1.0 |

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## pH

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | EPA 9040C |
| Analyte: | pH | Diln Fac: | 1.000 |
| Field ID: | ZZZZZZZZZZ | Batch#: | 180604 |
| Type: | SDUP | Sampled: | 10/27/11 07:30 |
| MSS Lab ID: | 232282-001 | Received: | 10/27/11 |
| Lab ID: | QC615841 | Prepared: | 10/27/11 12:10 |
| Matrix: | Water | Analyzed: | 10/27/11 19:00 |
| Units: | SU | | |

| MSS Result | Result | RL | RPD | Lim |
|---|---|---|---|---|
| 7.750 | 7.700 | 1.000 | 1 | 20 |

RL= Reporting Limit
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# Total Suspended Solids (TSS)

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM2540D |
| Analyte: | Total Suspended Solids | Batch#: | 180615 |
| Field ID: | EFFLUENT | Sampled: | 10/27/11 |
| Matrix: | Water | Received: | 10/27/11 |
| Units: | mg/L | Prepared: | 10/27/11 |
| Diln Fac: | 1.000 | Analyzed: | 10/28/11 |

| Type | Lab ID | Result | RL |
|---|---|---|---|
| SAMPLE | 232307-001 | 7 | 5 |
| BLANK | QC615890 | ND | 5 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Total Suspended Solids (TSS)

| | | | |
|---|---|---|---|
| Lab #: | 232307 | Location: | 15101 Freedom Ave, San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM2540D |
| Analyte: | Total Suspended Solids | Batch#: | 180615 |
| Field ID: | ZZZZZZZZZZ | Sampled: | 10/26/11 |
| MSS Lab ID: | 232260-001 | Received: | 10/26/11 |
| Matrix: | Water | Prepared: | 10/27/11 |
| Units: | mg/L | Analyzed: | 10/28/11 |
| Diln Fac: | 1.000 | | |

| Type | Lab ID | MSS Result | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|---|---|
| BS | QC615891 | | 50.00 | 53.00 | 106 | 80-120 | | |
| BSD | QC615892 | | 50.00 | 56.00 | 112 | 80-120 | 6 * | 5 |
| MS | QC615893 | 51.00 | 50.00 | 111.0 | 120 | 62-127 | | |
| MSD | QC615894 | | 50.00 | 107.0 | 112 | 62-127 | 4 | 5 |

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

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

**Laboratory Job Number 232902**
**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 | 232902-001 |

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

Signature: _____ Date: 12/06/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

# CASE NARRATIVE

| | |
|---|---|
| Laboratory number: | **232902** |
| Client: | **SOMA Environmental Engineering Inc.** |
| Project: | **2553** |
| Location: | **15101 Freedom Ave. San Leandro** |
| Request Date: | **11/18/11** |
| Samples Received: | **11/18/11** |

This data package contains sample and QC results for one water sample, requested for the above referenced project on 11/18/11. 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.

**Total Suspended Solids (TSS) (SM2540D):**
High RPD was observed for total suspended solids in the BS/BSD for batch 181610; this analyte was not detected at or above the RL in the associated sample. No other analytical problems were encountered.

**Chemical Oxygen Demand (SM5220D):**
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 # 232902

**Sampler:** MASOUD-SEPEHR

**Project No: 2553**

**Report To: Joyce Bobek**

**Project Name:15101 Freedom Ave, San Leandr**

**Company :** SOMA Environmental

**Turnaround Time: Standard**

**Telephone:** 925-734-6400

**Fax:** 925-734-6401

| Lab No. | Sample ID. | Sampling Date Time | Matrix: Soil | Matrix: Water | Matrix: Waste | # of Containers | Preservative: HCL | Preservative: $H_2SO_4$ | Preservative: $HNO_3$ | Preservative: ICE | Analyses: TPH-g, TPH-d, TPH-mo 8015 | Analyses: BTEX 8020 | Analyses: COD | Analyses: TSS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Effluent | 11/18/11 – 12 | | * | | 6 VOAs | * | | | * | * | * | | |
| | | | | * | | 2 ~~500 mL~~ 1 L Ambers | | | | * | * | | | |
| | | | | * | | 250 mL Poly | | * | | * | | | * | |
| | | | | * | | 500 mL Poly | | | | * | | | | * |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Notes:** EDF OUTPUT REQUIRED

On Blue ice. P.O.

| RELINQUISHED BY: | RECEIVED BY: |
|---|---|
| DATE/TIME | DATE/TIME |
| 13:14 DATE/TIME | 11/18/11 13:14 DATE/TIME |
| 11/18/11 DATE/TIME | DATE/TIME |

**COOLER RECEIPT CHECKLIST**

Curtis & Tompkins, Ltd.

Login # _____ Date Received 11/8/11 Number of coolers 1
Client Soma environmental Project 2553

Date Opened 11/8/11 By (print) I. CHOY (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) _____

☒ 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 Sample Preservation for 232902

| Sample | pH: <2 | >12 | Other |
|---|---|---|---|
| -001a | [ ] | [ ] | _____ |
| b | [ ] | [ ] | _____ |
| c | [ ] | [ ] | _____ |
| d | [ ] | [ ] | _____ |
| e | [ ] | [ ] | _____ |
| f | [ ] | [ ] | _____ |
| g | [X] | [ ] | _____ |
| h | [ ] | [ ] | _____ |
| i | [ ] | [ ] | _____ |

Analyst: _____

Date: 11/8/11

Page 1 of 1

Curtis & Tompkins, Ltd.

# Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Field ID: | EFFLUENT | Batch#: | 181629 |
| Matrix: | Water | Sampled: | 11/18/11 |
| Units: | ug/L | Received: | 11/18/11 |
| Diln Fac: | 1.000 | | |

Type: SAMPLE Analyzed: 11/24/11
Lab ID: 232902-001

| 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) | 91 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 106 | 80-120 | EPA 8021B |

Type: BLANK Analyzed: 11/23/11
Lab ID: QC620156

| 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) | 85 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 98 | 80-120 | EPA 8021B |

ND= Not Detected
RL= Reporting Limit

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Matrix: | Water | Batch#: | 181629 |
| Units: | ug/L | Analyzed: | 11/23/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC620153

| Analyte | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|
| Benzene | 10.00 | 9.789 | 98 | 80-120 | EPA 8021B |
| Toluene | 10.00 | 9.966 | 100 | 80-120 | EPA 8021B |
| Ethylbenzene | 10.00 | 9.683 | 97 | 80-120 | EPA 8021B |
| m,p-Xylenes | 10.00 | 10.19 | 102 | 80-120 | EPA 8021B |
| o-Xylene | 10.00 | 10.00 | 100 | 80-120 | EPA 8021B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 86 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 103 | 80-120 | EPA 8021B |

Type: BSD Lab ID: QC620154

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim | Analysis |
|---|---|---|---|---|---|---|---|
| Benzene | 10.00 | 10.13 | 101 | 80-120 | 3 | 20 | EPA 8021B |
| Toluene | 10.00 | 10.23 | 102 | 80-120 | 3 | 20 | EPA 8021B |
| Ethylbenzene | 10.00 | 10.02 | 100 | 80-120 | 3 | 20 | EPA 8021B |
| m,p-Xylenes | 10.00 | 10.50 | 105 | 80-120 | 3 | 20 | EPA 8021B |
| o-Xylene | 10.00 | 10.32 | 103 | 80-120 | 3 | 20 | EPA 8021B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 86 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 103 | 80-120 | EPA 8021B |

RPD= Relative Percent Difference

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Type: | LCS | Diln Fac: | 1.000 |
| Lab ID: | QC620155 | Batch#: | 181629 |
| Matrix: | Water | Analyzed: | 11/23/11 |
| Units: | ug/L | | |

| Analyte | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 962.9 | 96 | 80-120 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 93 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 109 | 80-120 | EPA 8021B |

Curtis & Tompkins, Ltd.

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Field ID: | ZZZZZZZZZZ | Diln Fac: | 1.000 |
| MSS Lab ID: | 232905-001 | Batch#: | 181629 |
| Matrix: | Water | Sampled: | 11/18/11 |
| Units: | ug/L | Received: | 11/18/11 |

Type: MS Analyzed: 11/23/11
Lab ID: QC620157

| Analyte | MSS Result | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 34.01 | 2,000 | 2,051 | 101 | 66-120 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 100 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 113 | 80-120 | EPA 8021B |

Type: MSD Analyzed: 11/24/11
Lab ID: QC620158

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim | Analysis |
|---|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 2,000 | 1,980 | 97 | 66-120 | 4 | 25 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 100 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 113 | 80-120 | EPA 8021B |

RPD= Relative Percent Difference

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Field ID: | ZZZZZZZZZZ | Batch#: | 181629 |
| MSS Lab ID: | 232869-003 | Sampled: | 11/17/11 |
| Matrix: | Water | Received: | 11/17/11 |
| Units: | ug/L | Analyzed: | 11/24/11 |
| Diln Fac: | 1.000 | | |

Type: MS Lab ID: QC620159

| Analyte | MSS Result | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 55.79 | 2,000 | 2,003 | 97 | 66-120 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 98 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 112 | 80-120 | EPA 8021B |

Type: MSD Lab ID: QC620160

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim | Analysis |
|---|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 2,000 | 1,948 | 95 | 66-120 | 3 | 25 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 96 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 110 | 80-120 | EPA 8021B |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# Total Extractable Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 3520C |
| Project#: | 2553 | Analysis: | EPA 8015B |
| Field ID: | EFFLUENT | Batch#: | 181695 |
| Matrix: | Water | Sampled: | 11/18/11 |
| Units: | ug/L | Received: | 11/18/11 |
| Diln Fac: | 1.000 | | |

| | | | |
|---|---|---|---|
| Type: | SAMPLE | Prepared: | 11/29/11 |
| Lab ID: | 232902-001 | Analyzed: | 12/02/11 |

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

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 108 | 68-120 |

| | | | |
|---|---|---|---|
| Type: | BLANK | Prepared: | 11/28/11 |
| Lab ID: | QC620399 | Analyzed: | 11/29/11 |

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

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 104 | 68-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Total Extractable Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 3520C |
| Project#: | 2553 | Analysis: | EPA 8015B |
| Matrix: | Water | Batch#: | 181695 |
| Units: | ug/L | Prepared: | 11/28/11 |
| Diln Fac: | 1.000 | Analyzed: | 11/29/11 |

Type: BS
Lab ID: QC620400
Cleanup Method: EPA 3630C

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Diesel C10-C24 | 2,500 | 1,981 | 79 | 61-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 93 | 68-120 |

Type: BSD
Lab ID: QC620401
Cleanup Method: EPA 3630C

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Diesel C10-C24 | 2,500 | 2,160 | 86 | 61-120 | 9 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 99 | 68-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# Chemical Oxygen Demand

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM5220D |
| Analyte: | Chemical Oxygen Demand | Batch#: | 181676 |
| Field ID: | EFFLUENT | Sampled: | 11/18/11 12:00 |
| Matrix: | Water | Received: | 11/18/11 |
| Units: | mg/L | Prepared: | 11/28/11 12:50 |
| Diln Fac: | 1.000 | Analyzed: | 11/28/11 14:50 |

| Type | Lab ID | Result | RL |
|---|---|---|---|
| SAMPLE | 232902-001 | ND | 10 |
| BLANK | QC620327 | ND | 10 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Chemical Oxygen Demand

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM5220D |
| Analyte: | Chemical Oxygen Demand | Batch#: | 181676 |
| Field ID: | ZZZZZZZZZZ | Sampled: | 11/14/11 09:20 |
| MSS Lab ID: | 232749-001 | Received: | 11/14/11 |
| Matrix: | Water | Prepared: | 11/28/11 12:50 |
| Units: | mg/L | Analyzed: | 11/28/11 14:50 |

| Type | Lab ID | MSS Result | Spiked | Result | %REC | Limits | RPD | Lim | Diln Fac |
|---|---|---|---|---|---|---|---|---|---|
| LCS | QC620328 | | 75.00 | 81.67 | 109 | 90-110 | | | 1.000 |
| MS | QC620329 | 28.63 | 300.0 | 315.2 | 96 | 61-127 | | | 2.000 |
| MSD | QC620330 | | 300.0 | 337.7 | 103 | 61-127 | 7 | 20 | 2.000 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# Total Suspended Solids (TSS)

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM2540D |
| Analyte: | Total Suspended Solids | Batch#: | 181610 |
| Field ID: | EFFLUENT | Sampled: | 11/18/11 |
| Matrix: | Water | Received: | 11/18/11 |
| Units: | mg/L | Analyzed: | 11/23/11 |
| Diln Fac: | 1.000 | | |

| Type | Lab ID | Result | RL |
|---|---|---|---|
| SAMPLE | 232902-001 | ND | 5 |
| BLANK | QC620068 | ND | 5 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Total Suspended Solids (TSS)

| | | | |
|---|---|---|---|
| Lab #: | 232902 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM2540D |
| Analyte: | Total Suspended Solids | Diln Fac: | 1.000 |
| Field ID: | ZZZZZZZZZZ | Batch#: | 181610 |
| MSS Lab ID: | 232963-001 | Sampled: | 11/18/11 |
| Matrix: | Water | Received: | 11/22/11 |
| Units: | mg/L | Analyzed: | 11/23/11 |

| Type | Lab ID | MSS Result | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|---|---|
| BS | QC620069 | | 50.00 | 52.00 | 104 | 80-120 | | |
| BSD | QC620070 | | 50.00 | 56.00 | 112 | 80-120 | 7 * | 5 |
| MS | QC620071 | 120.0 | 50.00 | 162.0 | 84 | 62-127 | | |
| MSD | QC620072 | | 50.00 | 164.0 | 88 | 62-127 | 1 | 5 |

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

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

**Laboratory Job Number 233064**
**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 | 233064-001 |

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

Signature: _____ Date: 12/07/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

# CASE NARRATIVE

| | |
|---|---|
| Laboratory number: | **233064** |
| Client: | **SOMA Environmental Engineering Inc.** |
| Project: | **2553** |
| Location: | **15101 Freedom Ave. San Leandro** |
| Request Date: | **12/01/11** |
| Samples Received: | **12/01/11** |

This data package contains sample and QC results for one water sample, requested for the above referenced project on 12/01/11. 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.

**Total Suspended Solids (TSS) (SM2540D):**
High RPD was observed for total suspended solids in the BS/BSD for batch 181820; this analyte was not detected at or above the RL in the associated sample. High RPD was observed for total suspended solids in the MS/MSD for batch 181820; the parent sample was not a project sample, and this analyte was not detected at or above the RL in the associated sample. No other analytical problems were encountered.

**Chemical Oxygen Demand (SM5220D):**
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 # 233064

**Sampler:** MASOUD - SEPEHER

**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, TPH-d, TPH-mo 8015 | Analyses: BTEX 8020 | Analyses: COD | Analyses: TSS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Effluent | 12/1/11 — 12 | | * | | | 6 VOAs | * | | | * | * | * | | |
| | | | | * | | | 1-1 L Amber | | | | * | * | | | |
| | | | | * | | | 250 mL Poly | | * | | * | | | * | |
| | | | | * | | | 500 mL Poly | | | | * | | | | * |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

**Notes:** EDF OUTPUT REQUIRED

| RELINQUISHED BY: | RECEIVED BY: |
|---|---|
| DATE/TIME | DATE/TIME |
| 12/1/11 - 13:35 DATE/TIME | 12/1/11 13:55 DATE/TIME |
| DATE/TIME | DATE/TIME |

**COOLER RECEIPT CHECKLIST**

Curtis & Tompkins, Ltd.

Login # 233064 Date Received 12/1/11 Number of coolers 1
Client Jima Environmental Project 2553

Date Opened 12/1/11 By (print) I. Chon (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) 18.9°C

☒ Samples Received on ice & cold without a temperature blank, temp taken w/ 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
20) -001 2 of 6 VOAs rec'd w/ bubbles

Rev 9, 10/11

Curtis & Tompkins Sample Preservation for 233064

| Sample | pH: <2 | >12 | Other |
|---|---|---|---|
| -001a | [ ] | [ ] | _____ |
| b | [ ] | [ ] | _____ |
| c | [ ] | [ ] | _____ |
| d | [ ] | [ ] | _____ |
| e | [ ] | [ ] | _____ |
| f | [ ] | [ ] | _____ |
| g | [X] | [ ] | _____ |
| h | [ ] | [ ] | _____ |
| i | [ ] | [ ] | _____ |

Analyst: _____

Date: 4/1/11

Page 1 of 1

Curtis & Tompkins, Ltd.

# Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Field ID: | EFFLUENT | Batch#: | 181829 |
| Matrix: | Water | Sampled: | 12/01/11 |
| Units: | ug/L | Received: | 12/01/11 |
| Diln Fac: | 1.000 | Analyzed: | 12/02/11 |

Type: SAMPLE Lab ID: 233064-001

| 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) | 93 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 109 | 80-120 | EPA 8021B |

Type: BLANK Lab ID: QC620961

| 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) | 90 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 106 | 80-120 | EPA 8021B |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Matrix: | Water | Batch#: | 181829 |
| Units: | ug/L | Analyzed: | 12/02/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC620958

| Analyte | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|
| Benzene | 10.00 | 8.815 | 88 | 80-120 | EPA 8021B |
| Toluene | 10.00 | 9.136 | 91 | 80-120 | EPA 8021B |
| Ethylbenzene | 10.00 | 9.244 | 92 | 80-120 | EPA 8021B |
| m,p-Xylenes | 10.00 | 9.508 | 95 | 80-120 | EPA 8021B |
| o-Xylene | 10.00 | 9.675 | 97 | 80-120 | EPA 8021B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 90 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 105 | 80-120 | EPA 8021B |

Type: BSD Lab ID: QC620959

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim | Analysis |
|---|---|---|---|---|---|---|---|
| Benzene | 10.00 | 9.088 | 91 | 80-120 | 3 | 20 | EPA 8021B |
| Toluene | 10.00 | 9.331 | 93 | 80-120 | 2 | 20 | EPA 8021B |
| Ethylbenzene | 10.00 | 9.308 | 93 | 80-120 | 1 | 20 | EPA 8021B |
| m,p-Xylenes | 10.00 | 9.880 | 99 | 80-120 | 4 | 20 | EPA 8021B |
| o-Xylene | 10.00 | 9.994 | 100 | 80-120 | 3 | 20 | EPA 8021B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 92 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 109 | 80-120 | EPA 8021B |

RPD= Relative Percent Difference

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Type: | LCS | Diln Fac: | 1.000 |
| Lab ID: | QC620960 | Batch#: | 181829 |
| Matrix: | Water | Analyzed: | 12/02/11 |
| Units: | ug/L | | |

| Analyte | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 965.5 | 97 | 80-120 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 97 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 111 | 80-120 | EPA 8021B |

Batch QC Report

## Curtis & Tompkins Laboratories Analytical Report

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2553 | | |
| Field ID: | EFFLUENT | Batch#: | 181829 |
| MSS Lab ID: | 233064-001 | Sampled: | 12/01/11 |
| Matrix: | Water | Received: | 12/01/11 |
| Units: | ug/L | Analyzed: | 12/02/11 |
| Diln Fac: | 1.000 | | |

Type: MS Lab ID: QC620962

| Analyte | MSS Result | Spiked | Result | %REC | Limits | Analysis |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 22.38 | 2,000 | 1,830 | 90 | 66-120 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 99 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 118 | 80-120 | EPA 8021B |

Type: MSD Lab ID: QC620963

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim | Analysis |
|---|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 2,000 | 1,921 | 95 | 66-120 | 5 | 25 | EPA 8015B |

| Surrogate | %REC | Limits | Analysis |
|---|---|---|---|
| Bromofluorobenzene (FID) | 102 | 78-123 | EPA 8015B |
| Bromofluorobenzene (PID) | 118 | 80-120 | EPA 8021B |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# Total Extractable Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 3520C |
| Project#: | 2553 | Analysis: | EPA 8015B |
| Field ID: | EFFLUENT | Sampled: | 12/01/11 |
| Matrix: | Water | Received: | 12/01/11 |
| Units: | ug/L | Prepared: | 12/02/11 |
| Diln Fac: | 1.000 | Analyzed: | 12/05/11 |
| Batch#: | 181864 | | |

Type: SAMPLE Lab ID: 233064-001

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

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 114 | 68-120 |

Type: BLANK Lab ID: QC621111

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

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 102 | 68-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Total Extractable Hydrocarbons

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 3520C |
| Project#: | 2553 | Analysis: | EPA 8015B |
| Matrix: | Water | Batch#: | 181864 |
| Units: | ug/L | Prepared: | 12/02/11 |
| Diln Fac: | 1.000 | Analyzed: | 12/05/11 |

Type: BS
Lab ID: QC621112
Cleanup Method: EPA 3630C

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Diesel C10-C24 | 2,500 | 2,144 | 86 | 61-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 120 | 68-120 |

Type: BSD
Lab ID: QC621113
Cleanup Method: EPA 3630C

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Diesel C10-C24 | 2,500 | 2,009 | 80 | 61-120 | 7 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| o-Terphenyl | 112 | 68-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# Chemical Oxygen Demand

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM5220D |
| Analyte: | Chemical Oxygen Demand | Batch#: | 181987 |
| Field ID: | EFFLUENT | Sampled: | 12/01/11 12:00 |
| Matrix: | Water | Received: | 12/01/11 |
| Units: | mg/L | Prepared: | 12/07/11 12:52 |
| Diln Fac: | 1.000 | Analyzed: | 12/07/11 14:52 |

| Type | Lab ID | Result | RL |
|---|---|---|---|
| SAMPLE | 233064-001 | ND | 10 |
| BLANK | QC621615 | ND | 10 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Chemical Oxygen Demand

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM5220D |
| Analyte: | Chemical Oxygen Demand | Batch#: | 181987 |
| Field ID: | EFFLUENT | Sampled: | 12/01/11 12:00 |
| MSS Lab ID: | 233064-001 | Received: | 12/01/11 |
| Matrix: | Water | Prepared: | 12/07/11 12:52 |
| Units: | mg/L | Analyzed: | 12/07/11 14:52 |

| Type | Lab ID | MSS Result | Spiked | Result | %REC | Limits | RPD | Lim | Diln Fac |
|---|---|---|---|---|---|---|---|---|---|
| LCS | QC621616 | | 75.00 | 70.75 | 94 | 90-110 | | | 1.000 |
| MS | QC621617 | <10.00 | 300.0 | 297.8 | 99 | 61-127 | | | 2.000 |
| MSD | QC621618 | | 300.0 | 339.9 | 113 | 61-127 | 13 | 20 | 2.000 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

# Total Suspended Solids (TSS)

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM2540D |
| Analyte: | Total Suspended Solids | Batch#: | 181820 |
| Field ID: | EFFLUENT | Sampled: | 12/01/11 |
| Matrix: | Water | Received: | 12/01/11 |
| Units: | mg/L | Prepared: | 12/01/11 |
| Diln Fac: | 1.000 | Analyzed: | 12/02/11 |

| Type | Lab ID | Result | RL |
|---|---|---|---|
| SAMPLE | 233064-001 | ND | 5 |
| BLANK | QC620909 | ND | 5 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Total Suspended Solids (TSS)

| | | | |
|---|---|---|---|
| Lab #: | 233064 | Location: | 15101 Freedom Ave. San Leandro |
| Client: | SOMA Environmental Engineering Inc. | Prep: | METHOD |
| Project#: | 2553 | Analysis: | SM2540D |
| Analyte: | Total Suspended Solids | Batch#: | 181820 |
| Field ID: | ZZZZZZZZZZ | Sampled: | 11/30/11 |
| MSS Lab ID: | 233040-001 | Received: | 11/30/11 |
| Matrix: | Water | Prepared: | 12/01/11 |
| Units: | mg/L | Analyzed: | 12/02/11 |
| Diln Fac: | 1.000 | | |

| Type | Lab ID | MSS Result | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|---|---|
| BS | QC620910 | | 50.00 | 51.00 | 102 | 80-120 | | |
| BSD | QC620911 | | 50.00 | 55.00 | 110 | 80-120 | 8 * | 5 |
| MS | QC620912 | 30.00 | 50.00 | 85.00 | 110 | 62-127 | | |
| MSD | QC620913 | | 50.00 | 90.00 | 120 | 62-127 | 6 * | 5 |

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference