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February 10, 2016

Ms. Karel Detterman
Alameda County
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Oakland, California 94502

Subject: Fuel Leak Case#RO0000346
Site Location: 3519 Castro Valley Boulevard, Castro Valley

Dear Ms. Detterman:

SOMA's "First Semi-Annual 2016 Groundwater Monitoring Report" for the subject site has been uploaded to the State's GeoTracker database and to the Alameda County FTP site for your review.

If you have any questions or comments, please do not hesitate to call me. Your time is greatly appreciated in reviewing our report.

Sincerely,

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist


cc: Mr. Mirazim Shakoori w/enclosure
Ms. Dilan Roe, PE-Alameda County Env. Health Services

# First Semi-Annual 2016
# Groundwater Monitoring Report

## Castro Valley Chevron
## 3519 Castro Valley Boulevard
## Castro Valley, California

**February 10, 2016**

**Project 2761**

**Prepared for**
**Mr. Mirazim Shakoori**
**4313 Mansfield Drive**
**Danville, California 94506**

SOMA ENVIRONMENTAL ENGINEERING, INC.
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# PERJURY STATEMENT

Site Location: 3519 Castro Valley Boulevard, Castro Valley, CA

"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".

Mirazim Shakoori
4313 Mansfield Drive
Danville, California 94506
Responsible Party

## CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Mirazim Shakoori, property owner of 3519 Castro Valley Boulevard, Castro Valley, California to comply with requirements of Alameda County Environmental Health Services for the First Semi-Annual 2016 groundwater monitoring event.

Mansour Sepehr, PhD, PE
Principal Hydrogeologist

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# 1. INTRODUCTION

## 1.1 Overview

SOMA Environmental Engineering, Inc. (SOMA) has prepared this report on behalf of Mr. Mirazim Shakoori, property owner of the former BP gasoline service station located at 3519 Castro Valley Boulevard, Castro Valley, California. The site is located in an area of primarily residential and commercial properties (Figure 1).

This report summarizes results of the First Semi-Annual 2016 groundwater monitoring event conducted at the site on January 18 and 19, 2016. Included are laboratory analytical results for groundwater samples and physical and chemical properties measured in the field for each groundwater sample including pH, temperature, and electrical conductivity (EC).

A joint monitoring event was conducted in coordination with the neighboring service station at 3459 Castro Valley Boulevard.

## 1.2 Summary of Field Activities and Laboratory Analysis

### 1.2.1 Field Activities

On January 18, 2016, ten on-site monitoring wells (five in Semi-Confined water-bearing zone [WBZ] including ESE-1R, ESE-2R, ESE-5R, MW-6R, SOMA-1; five in the Shallow WBZ including SOMA-5, SOMA-7, SOMA-8, OB-1, OB-2) and four off-site monitoring wells (two in the Semi-Confined WBZ including MW-7R, SOMA-4 and two in the Shallow WBZ including SOMA-2, SOMA-3) were measured for depth to groundwater. On January 18 and 19, 2016 additional field measurements and groundwater samples were collected from all monitoring wells. Figure 2 shows well locations.

Top of casing elevation data and depth to groundwater in each monitoring well were used to calculate groundwater elevation. The top of casing elevation was based on an elevation datum of 56.33 feet NAVD88. Appendix B includes survey data.

Activities were performed in accordance with general guidelines of California Regional Water Quality Control Board (CRWQCB) and Alameda County Environmental Health Services (ACEHS). Appendix A details standard procedures followed by SOMA during this monitoring event.

Purged groundwater from each well was temporarily stored on-site in two 55-gallon drums. On February 5, 2016 two drums were transported to an appropriate disposal facility. Appendix D includes the non-hazardous waste manifest for removal of purged groundwater.

### 1.2.2 Laboratory Analysis

Curtis and Tompkins Laboratories, a California state-certified environmental 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); gasoline oxygenates, and lead scavengers. All samples were analyzed using EPA Method 8260B.

# 2. RESULTS

Following are results of field measurements and laboratory analysis for the First Semi-Annual 2016 groundwater monitoring event.

## 2.1 Field Measurements for Shallow WBZ wells

Table 1 presents calculated groundwater elevation and depth to groundwater in each monitoring well. Depths to groundwater ranged from 6.32 feet in SOMA-7 to 9.49 feet in SOMA-5. Groundwater elevations ranged from 168.66 feet in SOMA-3 to 172.51 feet in SOMA-8. Table 1 also presents historical groundwater elevations in monitoring wells.

The groundwater elevation contour map is displayed in Figure 3. Groundwater flows south easterly in the Shallow WBZ at an approximate gradient of 0.011 feet/feet. Groundwater gradient calculations are attached in Appendix B.

Since the previous monitoring event (July 2015), the groundwater flow direction has become southeasterly from southerly and the gradient has decreased. Refer to Table 1 for detailed historical groundwater elevation trends.

## 2.2 Laboratory Analyses for Shallow WBZ Wells

Table 1 presents laboratory analytical results of groundwater samples for TPH-g, BTEX, and MtBE. Table 2 presents laboratory analytical results of groundwater samples for gasoline oxygenates and lead scavengers.

TPH-g was below the laboratory-reporting limit in groundwater samples from SOMA-2, SOMA-3, and SOMA-8. TPH-g was detected in other wells in concentrations ranging from 4,500 µg/L in OB-1 to 19,000 µg/L in OB-2. Figure 4 displays the contour map of TPH-g concentrations in groundwater. The highest TPH-g concentration was observed in the vicinity of the former UST cavity at OB-2.

Since the previous monitoring event (July 2015), TPH-g increased in SOMA-7, OB-1 and most significantly in SOMA-5 and remained constant in OB-2.

The following BTEX analytes were observed during this monitoring event:

- In SOMA-2, SOMA-3, and SOMA-8, all BTEX analytes were below laboratory-reporting limits.
- Toluene was below laboratory-reporting limits in all shallow wells except SOMA-7 where it was detected at 10 µg/L.
- Detectable concentrations of benzene ranged from 7.5 µg/L in OB-1 to 680 µg/L in SOMA-7. Detectable concentrations of ethylbenzene ranged from 39 µg/L in SOMA-7 to 850 µg/L in OB-2. Detectable concentrations of total xylenes ranged from 11 µg/L in SOMA-7 to 96 µg/L in OB-2.

Figure 5 displays the contour map of benzene concentrations in groundwater. As illustrated, the highest benzene concentration was observed in the vicinity of the former pump islands at SOMA-7. Since the previous monitoring event (July 2015), benzene increased in SOMA-5, SOMA-7, and OB-1 and decreased in OB-2. All BTEX analytes increased significantly in SOMA-5 since July 2015.

MtBE was below the laboratory-reporting limit in SOMA-2 and SOMA-8. Detectable MtBE concentrations ranged from 0.81 µg/L in SOMA-3 to 47 µg/L in OB-2. Figure 6 displays the contour map of MtBE concentrations in groundwater. Since the previous monitoring event (July 2015), MtBE increased in SOMA-3, SOMA-5, decreased in SOMA-7 and OB-2 and remained constant in OB-1.

Tertiary-butyl alcohol (TBA) was below the laboratory reporting limit in all shallow WBZ wells except OB-1 where it was detected at 16 µg/L. All other gasoline oxygenate and lead scavenger analytes [Isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tertiary-amyl methyl ether (TAME), ethanol, 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (EDB)] were below laboratory-reporting limits in all groundwater samples. Figure 6 shows a map of TBA concentrations in Shallow WBZ.

## 2.3 Field Measurements for Semi-Confined WBZ Wells

Table 1 presents calculated groundwater elevation and depth to groundwater in each monitoring well. Depths to groundwater ranged from 7.09 feet in ESE-5R to 9.40 feet in ESE-1R. Groundwater elevations ranged from 168.53 feet in SOMA-4 to 172.39 feet in MW-6R. Table 1 also presents historical groundwater elevations in monitoring wells. The groundwater elevation contour map is displayed in Figure 7. Groundwater flows south westerly across the site at an approximate gradient of 0.013 feet/feet.

Since the previous monitoring event (July 2015), the groundwater flow direction has changed from southerly to southwesterly and gradient has slightly increased. Refer to Table 1 for detailed historical groundwater elevation trends.

## 2.4 Laboratory Analyses for Semi-Confined WBZ Wells

Table 1 presents laboratory analytical results of groundwater samples for TPH-g, BTEX, and MtBE. Table 2 presents laboratory analytical results of groundwater samples for gasoline oxygenates and lead scavengers.

TPH-g was below the laboratory-reporting limit in groundwater samples from the Semi-Confined WBZ except at ESE-1R, where TPH-g was detected at 2,400 µg/L. Figure 8 displays the map of TPH-g concentrations in groundwater.

Since the previous monitoring event (July 2015), TPH-g has remained constant in ESE-1R and remained below the laboratory-reporting limit in other wells.

The following BTEX analytes were observed during this monitoring event:

- BTEX analytes were below laboratory-reporting limits in all semi-confined WBZ wells except ESE-1R.
- In ESE-1R, benzene, ethylbenzene, and total xylenes were detected at 11 µg/L, 2.10 µg/L, and 3.77 µg/L, respectively; toluene was below laboratory reporting-limit in this well.

Figure 8 displays a map of benzene concentrations in groundwater. As illustrated, benzene has only minimally impacted groundwater in the Semi-Confined WBZ. Since the previous monitoring event (July 2015), BTEX concentrations have slightly decreased in ESE-1R.

MtBE was below the laboratory-reporting limit in MW-6R and MW-7R. Detectable MtBE concentrations ranged from 0.72 µg/L in SOMA-1 to 14 µg/L in ESE-1R. Figure 9 displays the contour map of MtBE concentrations in groundwater. Since the previous monitoring event (July 2015), detectable MtBE concentrations increased slightly in ESE-5R and decreased in ESE-1R, ESE-2R, MW-7R, SOMA-1 and SOMA-4.

The following gasoline oxygenate and lead scavenger analytes were observed during this monitoring event.

- DIPE, ETBE, ethanol, 1,2-DCA, and EDB were below laboratory-reporting limits in all groundwater samples.
- TBA was detected in ESE-1R at 54 µg/L and was below the laboratory-reporting limit in other Semi-Confined WBZ wells.

- TAME was detected in ESE-1R at 1.30 µg/L and was below the laboratory-reporting limit in other Semi-Confined WBZ wells.

Figure 9 displays a map of TBA and TAME concentrations in groundwater. Since the previous monitoring event (July 2015), TBA has decreased and TAME has increased slightly in ESE-1R.

Refer to Tables 1 and 2 for detailed historical concentration trends. Appendix C includes the laboratory report and chain of custody form for the First Semi-Annual 2016 groundwater monitoring event.

# 3. CONCLUSIONS AND RECOMMENDATIONS

## 3.1 Conclusions

Conclusions based on the First Semi-Annual 2016 groundwater monitoring event are summarized as follows:

- Groundwater flow direction was southeasterly in the Shallow WBZ and southwesterly in the Semi-Confined WBZ.
- In the Shallow WBZ, TPH-g and MtBE plumes appear to be located in the vicinity of the former UST cavity, at OB-2; highest benzene concentrations were detected in the vicinity of former pump islands at SOMA-7. Since the previous monitoring event (July 2015), TPH-g increased in SOMA-7, OB-1 and most significantly in SOMA-5 and remained constant in OB-2; benzene in SOMA-5, SOMA-7, and OB-1 and decreased in OB-2; MtBE increased SOMA-3, SOMA-5, decreased in SOMA-7 and OB-2 and remained constant in OB-1. High TPH-g and benzene concentrations suggest that this WBZ is significantly impacted by petroleum hydrocarbons.
- Within the Semi-Confined WBZ, TPH-g, benzene, MtBE, and TBA contamination is present around the former UST cavity in the southern section of the site, around ESE-1R. Since the previous monitoring event (July 2015) TPH-g remained the same; BTEX, MtBE, and TBA have decreased and TAME has slightly increased in ESE-1R; MtBE concentrations increased slightly in ESE-5R and decreased in ESE-1R, ESE-2R, MW-7R, SOMA-1 and SOMA-4.
- In the northern section of the site, at MW-6R, all tested constituents were at non-detectable levels.

## 3.2 Recommendations

SOMA recommends the following:

- Continue semi-annual groundwater monitoring events at the site based on ACEHS directive dated June 14, 2013.
- Due to the presence of elevated TPH-g and benzene concentrations and the presence of sheen in shallow WBZ wells (OB-2, SOMA-5, and SOMA-7), SOMA proposes to excavate contaminated soil in three areas of the site as proposed previously in reports dated September 22, 2011 and January 10, 2013. Removal of smear zone and the upper portion of the saturated area via excavation will immediately discontinue the mass transfer from soil to groundwater. Alternatively, for cost saving purposes the contaminants from smear zone and remaining free-product can be removed using multi-phase extraction system as discussed with the Alameda County offices during our meeting on October 20, 2015.

# Tables

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semi-Confined WBZ Wells** | | | | | | | | | | | |
| **ESE-1** | 10/5/1992 | 177.69 | 11.22 | 166.47 | - | 2,100 | 370 | 150 | 17 | 110 | NA |
| | 10/5/1992 | 177.69 | NM | NM | - | 2,300 | 370 | 160 | 16 | 110 | NA |
| | 4/1/1993 | 177.69 | 8.79 | 168.90 | - | 5,900 | 1500 | 410 | 110 | 390 | NA |
| | 6/29/1993 | 177.69 | 10.34 | 167.35 | - | 7,600 | 2900 | 390 | 130 | 460 | NA |
| | 9/23/1993 | 177.69 | 10.91 | 166.78 | - | 2,000 | 490 | 40 | 20 | 56 | 600 |
| | 9/23/1993 | 177.69 | NM | NM | - | 1,500 | 420 | 39 | 19 | 56 | 550 |
| | 12/10/1993 | 177.69 | 9.93 | 167.76 | - | 1,800 | 480 | 42 | 19 | 66 | 921 |
| | 12/10/1993 | 177.69 | NM | NM | - | 1,500 | 380 | 38 | 17 | 55 | 770 |
| | 2/17/1994 | 177.69 | 9.64 | 168.05 | - | 1,900 | 380 | 48 | 24 | 80 | 585 |
| | 2/17/1994 | 177.69 | NM | NM | - | 2,200 | 430 | 42 | 19 | 65 | 491 |
| | 8/8/1994 | 177.69 | 11.72 | 165.97 | - | 2,100 | 450 | 46 | 16 | 50 | 760 |
| | 10/12/1994 | 177.69 | 10.48 | 167.21 | - | 760 | 240 | 16 | 51 | 39 | 230 |
| | 1/19/1995 | 177.69 | 7.77 | 169.92 | - | 840 | 600 | 120 | 22 | 58 | NA |
| | 5/2/1995 | 177.69 | 8.69 | 169.00 | - | 2,000 | 640 | 67 | 24 | 98 | NA |
| | 7/28/1995 | 177.69 | 10.12 | 167.57 | - | 190 | <0.50 | <0.50 | <0.50 | <1.0 | NA |
| | 11/17/1995 | 177.69 | 10.57 | 167.12 | - | 200 | 3.4 | <1.0 | 1 | <2.0 | 600 |
| | 2/7/1996 | 177.69 | 7.41 | 170.28 | - | 750 | 370 | 23 | 21 | 64 | 680 |
| | 4/23/1996 | 177.69 | 9.12 | 168.57 | - | 310 | 100 | <1.0 | <1.0 | <1.0 | 1500 |
| | 7/9/1996 | 177.69 | 10.12 | 167.57 | - | 730 | 230 | 74 | 13 | 63 | 750 |
| | 10/10/1996 | 177.69 | 10.80 | 166.89 | - | 420 | 26 | 1.6 | 7.3 | 12 | 430 |
| | 1/20/1997 | 177.69 | 10.52 | 167.17 | - | 660 | 290 | 4.2 | 13 | 36 | 450 |
| | 4/25/1997 | 177.69 | 9.77 | 167.92 | - | 410 | <0.5 | <1.0 | <1.0 | <1.0 | 580 |
| | 7/18/1997 | 177.69 | 10.55 | 167.14 | - | 420 | <0.5 | <1.0 | <1.0 | <1.0 | 370 |
| | 10/27/1997 | 177.69 | 10.36 | 167.33 | - | 300 | 56 | <1.0 | 6.5 | <1.0 | 220 |
| | 1/22/1998 | 177.69 | 7.52 | 170.17 | - | 4,200 | 440 | 9 | 15 | 17.7 | 1300 |
| | 4/23/1998 | 177.69 | 8.80 | 168.89 | - | 15,000 | 3400 | 190 | 910 | 900 | 4900 |
| | 4/23/1998 | 177.69 | NM | NM | - | 15,000 | 2800 | 140 | 730 | 730 | 4400 |
| | 7/29/1998 | 177.69 | 9.73 | 167.96 | - | NA | NA | NA | NA | NA | NA |
| | 7/30/1998 | 177.69 | NM | NM | - | 15,000 | <2.5 | <5.0 | <5.0 | <5.0 | 15000 |
| | 12/17/1998 | 177.69 | 9.51 | 168.18 | - | 2,400 | 73 | 1 | 2.8 | 4.6 | 2000 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-1** cont. | 3/19/1999 | 177.69 | 8.65 | 169.04 | - | 4,700 | 58 | <1.0 | <1.0 | <1.0 | 4700 |
| | 6/23/1999 | 177.69 | 10.51 | 167.18 | - | 600 | 170 | <1.0 | 7.2 | 5 | 3900 |
| | 9/27/1999 | 177.69 | 10.32 | 167.37 | - | 920 | 200 | <25 | <25 | <25 | 4900 |
| | 12/9/1999 | 177.69 | 10.24 | 167.45 | - | 460 | 130 | 1.2 | 5.2 | 1.5 | 5100 |
| | 3/9/2000 | 177.69 | 7.72 | 169.97 | - | 3,000 | 1300 | 120 | 80 | 140 | 7300 |
| | 6/8/2000 | 177.69 | 9.40 | 168.29 | - | 2,900 | 540 | 9.7 | 20 | 17 | 5200 |
| | 9/18/2000 | 177.69 | 10.05 | 167.64 | - | 890 | 3.4 | <0.5 | 1.4 | <0.5 | 2800 |
| | 12/14/2000 | 177.69 | 8.20 | 169.49 | - | 1,600 | 11.1 | <0.5 | <0.5 | <0.5 | 2730 |
| | 3/21/2001 | 177.69 | 9.75 | 167.94 | - | 5,700 | 2.28 | <0.5 | 0.51 | <1.5 | 6810 |
| | 6/18/2001 | 177.69 | 10.21 | 167.48 | - | 2,000 | 152 | 0.669 | 3.62 | 2.34 | 1980 |
| | 9/18/2001 | 177.69 | 10.30 | 167.39 | - | 2,500 | 57.1 | <5.0 | 6.25 | <15 | 2090 |
| | 12/13/2001 | 177.69 | 9.82 | 167.87 | - | 2,800 | 208 | 6.05 | 8.54 | 9.66 | 2030 |
| | 3/14/2002 | 177.69 | 9.10 | 168.59 | - | 1,800 | 140 | 6.31 | 4.5 | 9.41 | 1970 |
| | 6/19/2002 | 177.69 | 9.92 | 167.77 | - | 1,100 | 220 | 2.02 | 4.23 | 3.8 | 1280 |
| | 9/10/2002 | 177.69 | 10.21 | 167.48 | - | 490 | 39 | 2.9 | <2.0 | 4.9 | 670 |
| | 12/16/2002 | 177.69 | 8.56 | 169.13 | - | 730 | 140 | 6 | 3.2 | 9.1 | 670 |
| | 3/11/2003 | 177.69 | 9.40 | 168.29 | - | 1,700 | 490 | 21 | 22 | 41 | 530 |
| | 6/17/2003 | 177.69 | 9.86 | 167.83 | - | 1,300 | 140 | <10 | <10 | <10 | 480 |
| | 12/9/2003 | 177.69 | 9.32 | 168.37 | - | 1,400 | 390 | 12 | 14 | 26.1 | 260 |
| | 2/26/2004 | 177.69 | 7.71 | 169.98 | - | 3,200 | 880 | 50 | 44 | 89 | 200 |
| | 5/21/2004 | 177.69 | 10.19 | 167.50 | - | 1,500 | 370 | 10 | 14 | 25.2 | 140 |
| | 8/10/2004 | 180.24 | 10.41 | 169.83 | - | 460 | 390 | 7 | 8.1 | 15.4 | 110 |
| | 10/19/2004 | 180.24 | 10.40 | 169.84 | - | 1,600 | 490 | 13 | 12 | 25.3 | 110 |
| | 1/14/2005 | 180.24 | 8.26 | 171.98 | - | 790 Z | 420 | 26 | 19 | 52 | 91 |
| | 4/14/2005 | 180.24 | 8.77 | 171.47 | - | 3,020 | 766 | 25.6 | 21.3 | 25.26 | 88.2 |
| | 7/7/2005 | 180.24 | 9.94 | 170.30 | - | 1,940 | 440 | 15.5 | 15.7 | 21 | 80.6 |
| | 11/15/2005 | 180.24 | 10.21 | 170.03 | - | 1,260 | 259 | 6.2 | 8.2 | 10.81 | 45.8 |
| | 2/8/2006 | 180.24 | 9.01 | 171.23 | - | 1,430 | 332 | 13.6 | 18.1 | 25.03 | 43 |
| | 4/27/2006 | 180.24 | 9.14 | 171.10 | - | 1,600 | 519 | 23.2 | 32.4 | 40.20 | 63.4 |
| | 8/1/2006 | 180.24 | 9.92 | 170.32 | - | 1,530 | 395 | 11.8 | 25.4 | 28.01 | 40 |
| | 10/19/2006 | 180.24 | 10.34 | 169.90 | - | 1,230 | 327 | 10.2 | 21.6 | 21.19 | 29.6 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-1** cont. | 1/12/2007 | 180.24 | 9.84 | 170.40 | - | 561 | 153 | 7.18 | 14.4 | 14.95 | 30.9 |
| | 4/17/2007 | 180.24 | 9.78 | 170.46 | - | 467 | 192 | 7.59 | 13.8 | 16.42 | 30.4 |
| | 7/17/2007 | 180.24 | 9.82 | 170.42 | - | 755 | 271 | 8.6 | 17.8 | 22.06 | 26.7 |
| | 10/16/2007 | 180.24 | 8.99 | 171.25 | - | 164 | 80.2 | <2.0 | 5.24 | 2.47 | 16.6 |
| | 1/17/2008 | 180.24 | 9.35 | 170.89 | - | 70 | 10.8 | <2.0 | <0.5 | <2.0 | 19.3 |
| | 4/17/2008 | 180.24 | 9.80 | 170.44 | - | 687 | 89.7 | <2.0 | 4.01 | 5.30 | 8.79 |
| | 7/16/2008 | 180.24 | 10.17 | 170.07 | - | 1,400 | 223 | 3.88 | 12.6 | 17.88 | 18.1 |
| | 10/14/2008 | 180.24 | 10.86 | 169.38 | - | 540 | 95 | 2.7 | 7.7 | 18 | 15 |
| | 1/6/2009 | 180.24 | 10.10 | 170.14 | - | 500 [Y] | 130 | 3 | 8.8 | 17.1 | 13 |
| | 4/6/2009 | 180.24 | 10.05 | 170.19 | - | 910 [Y] | 230 | 2.4 | 11 | 12.1 | 17 |
| | 7/7/2009 | 180.24 | 10.42 | 169.82 | - | 850 [Y] | 89 | 1.9 | 7.8 | 15.1 | 15 |
| | 1/27/2010 | 180.24 | 7.94 | 172.30 | - | 1,600 | 250 | 8.8 | 30 | 69 | 23 |
| | 7/26/2010 | 180.24 | 9.95 | 170.29 | - | 1,000 | 96 | 1.2 | 4.2 | 6 | 17 |
| **ESE-1R** | 8/30/2010 | 180.20 | 10.17 | 170.03 | - | 2,100 | 110 | 5.2 | 19 | 151 | 15 |
| | 11/16/2010 | 180.20 | 9.94 | 170.26 | - | 100 | 5.8 | <0.5 | 1 | <0.5 | 16 |
| | 2/15/2011 | 180.20 | 10.12 | 170.08 | - | 1,400 | 96 | 1.7 | 14 | 7.9 | 22 |
| | 7/19/2011 | 180.20 | 10.37 | 169.83 | - | 620 | 30 | 0.76 | 4.4 | 0.96 | 21 |
| | 1/18/2012 | 180.20 | 10.78 | 169.42 | - | 1,800 [Y] | 18 | <0.19 | 11 | 3.53 | 14 |
| | 7/10/2012 | 180.20 | 10.87 | 169.33 | - | 1,100 [Y] | 16 | 1.1 | 9.8 | 1.70 | 23 |
| | 1/10/2013 | 180.20 | 9.59 | 170.61 | No Sheen | 69 | 1.1 | <0.5 | <0.5 | <0.5 | 1.6 |
| | 7/9/2013 | 180.20 | 11.26 | 168.94 | No Sheen | 1,300 | 76 | 2.6 | 23 | 47.50 | 15 |
| | 1/30/2014 | 180.20 | 11.62 | 168.58 | No Sheen | 1,800 | 14 | 0.91 | 3.2 | 6.30 | 18 |
| | 7/25/2014 | 180.20 | 11.71 | 168.49 | No Sheen | 760 | 25 | 0.79 | 5.4 | 11.80 | 15 |
| | 1/19/2015 | 180.20 | 10.73 | 169.47 | No Sheen | 410 | 4.2 | <0.5 | <0.5 | 1.20 | 13 |
| | 7/21/2015 | 180.20 | 11.69 | 168.51 | No Sheen | 2,400 | 16 | 0.63 | 2.4 | 3.85 | 24 |
| | **1/18/2016** | **180.20** | **9.40** | **170.80** | **No Sheen** | **2,400** | **11** | **<0.5** | **2.1** | **3.77** | **14** |
| | | | | | | | | | | | |
| **ESE-2** | 10/5/1992 | 178.23 | 11.68 | 166.55 | - | 300 | 5.4 | 16 | 3.9 | 45 | NA |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-2** cont. | 4/1/1993 | 178.23 | 9.17 | 169.06 | - | 240 | 27 | <0.5 | 17 | 2.6 | 123 |
| | 6/29/1993 | 178.23 | 10.88 | 167.35 | - | 1,700 | 260 | 24 | 110 | 23 | NA |
| | 6/29/1993 | 178.23 | NM | NM | - | 1,300 | 240 | 17 | 110 | 25 | NA |
| | 9/23/1993 | 178.23 | 11.56 | 166.67 | - | 240 | 3.1 | 0.5 | 0.6 | 2.5 | 643 |
| | 12/10/1993 | 178.23 | 10.48 | 167.75 | - | 250 | 2.4 | 2.4 | 1.5 | 11 | 940 |
| | 2/17/1994 | 178.23 | 10.06 | 168.17 | - | 900 | <0.5 | <0.5 | <0.5 | <0.5 | 930 |
| | 8/8/1994 | 178.23 | 11.11 | 167.12 | - | 750 | <0.5 | <0.5 | <0.5 | <0.5 | 1400 |
| | 10/12/1994 | 178.23 | 11.31 | 166.92 | - | 1,700 | <0.5 | <0.5 | <0.5 | <0.5 | 3000 |
| | 1/19/1995 | 178.23 | 8.25 | 169.98 | - | 300 | 2 | 0.9 | 0.7 | 1 | NA |
| | 5/2/1995 | 178.23 | 9.21 | 169.02 | - | 1,200 | 4 | <2.5 | <2.5 | <5 | NA |
| | 7/28/1995 | 178.23 | 10.64 | 167.59 | - | 2,000 | <2.5 | <2.5 | <2.5 | <5 | NA |
| | 11/17/1995 | 178.23 | 11.13 | 167.10 | - | 3,600 | <25 | <25 | <25 | <50 | 12000 |
| | 11/17/1995 | 178.23 | NM | NM | - | 3,400 | <25 | <25 | <25 | <50 | 12000 |
| | 2/7/1996 | 178.23 | 7.94 | 170.29 | - | 450 | <0.5 | <1 | <1 | <1 | 2300 |
| | 4/23/1996 | 178.23 | 9.73 | 168.50 | - | 260 | 0.9 | <1 | <1 | <1 | 8600 |
| | 7/9/1996 | 178.23 | 10.70 | 167.53 | - | 780 | <2.5 | <5 | <5 | <5 | 13393 |
| | 10/10/1996 | 178.23 | 11.39 | 166.84 | - | 2,900 | <0.5 | <1 | <1 | <1 | 12000 |
| | 1/20/1997 | 178.23 | 9.04 | 169.19 | - | <250 | <2.5 | <5 | <5 | <5 | 13000 |
| | 4/25/1997 | 178.23 | 10.31 | 167.92 | - | 2,700 | <0.5 | <1 | <1 | <1 | 15000 |
| | 7/18/1997 | 178.23 | 11.02 | 167.21 | - | 11,000 | <5 | <10 | <10 | <10 | 11000 |
| | 10/27/1997 | 178.23 | 10.93 | 167.30 | - | 6,100 | <2.5 | <5.0 | <5.0 | <5.0 | 7100 |
| | 10/27/1997 | 178.23 | NM | NM | - | 6,600 | <2.5 | <5.0 | <5.0 | <5.0 | 7400 |
| | 1/22/1998 | 178.23 | 7.93 | 170.30 | - | 13,000 | <0.5 | <1 | <1 | <1 | 10000 |
| | 1/22/1998 | 178.23 | NM | NM | - | 13,000 | <0.5 | <1 | <1 | <1 | 10000 |
| | 4/23/1998 | 178.23 | 9.34 | 168.89 | - | 19,000 | <5 | <10 | <10 | <10 | 36000 |
| | 7/29/1998 | 178.23 | 10.29 | 167.94 | - | NA | NA | NA | NA | NA | NA |
| | 7/30/1998 | 178.23 | NM | NM | - | 19,000 | <5 | <10 | <10 | <10 | 36000 |
| | 12/17/1998 | 178.23 | 10.20 | 168.03 | - | 12,000 | <5 | <5 | <5 | <5 | 13000 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-2** cont | 3/19/1999 | 178.23 | 9.02 | 169.21 | - | 18,000 | 160 | <1 | <1 | <1 | 18000 |
| | 6/23/1999 | 178.23 | 9.99 | 168.24 | - | 280 | <1 | <1 | <1 | <1 | 16000 |
| | 9/27/1999 | 178.23 | 10.69 | 167.54 | - | <500 | <25 | <25 | <25 | <25 | 12000 |
| | 12/9/1999 | 178.23 | 11.26 | 166.97 | - | <50 | <0.3 | <0.3 | <0.3 | <0.6 | 12000 |
| | 3/9/2000 | 178.23 | 7.95 | 170.28 | - | <50 | 1.6 | <0.5 | <0.5 | <0.5 | 7900 |
| | 6/8/2000 | 178.23 | 9.66 | 168.57 | - | 1,600 | <0.5 | 0.73 | <0.5 | 2.2 | 9400 |
| | 12/14/2000 | 178.23 | 11.15 | 167.08 | - | 6,000 | 0.75 | <0.5 | <0.5 | <0.5 | 11200 |
| | 3/21/2001 | 178.23 | 10.35 | 167.88 | - | 6,900 | 786 | 45.7 | 37.7 | 71.5 | 3790 |
| | 6/18/2001 | 178.23 | 11.24 | 166.99 | - | 6,400 | <2.5 | <2.5 | <2.5 | <7.5 | 9320 |
| | 9/18/2001 | 178.23 | 11.35 | 166.88 | - | 4,800 | <12.5 | <12.5 | <12.5 | <37.5 | 6960 |
| | 12/13/2001 | 178.23 | 10.97 | 167.26 | - | 59,000 | 0.592 | <0.5 | <0.5 | <1 | 5940 |
| | 3/14/2002 | 178.23 | 10.13 | 168.10 | - | 4,500 | 76 | <0.5 | <0.5 | <1 | 6660 |
| | 6/19/2002 | 178.23 | 10.91 | 167.32 | - | 250 | <12.5 | <12.5 | <12.5 | <25 | 4900 |
| | 9/10/2002 | 178.23 | 10.82 | 167.41 | - | 1,500 | <5 | <5 | <5 | 6.3 | 3100 |
| | 12/16/2002 | 178.23 | 7.87 | 170.36 | - | 1,400 | <5 | <5 | <5 | <5 | 2400 |
| | 3/11/2003 | 178.23 | 10.24 | 167.99 | - | 2,800 | <10 | <10 | <10 | <10 | 4800 |
| | 6/17/2003 | 178.23 | 10.19 | 168.04 | - | 10,000 | <100 | <100 | <100 | <100 | 4400 |
| | 12/9/2003 | 178.23 | 9.97 | 168.26 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 3400 |
| | 2/26/2004 | 178.23 | 7.89 | 170.34 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 3000 |
| | 5/21/2004 | 178.23 | 10.70 | 167.53 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1100 |
| | 8/10/2004 | 180.79 | 10.99 | 169.80 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 550 |
| | 10/19/2004 | 180.79 | 10.46 | 170.33 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 410 |
| | 1/14/2005 | 180.79 | 8.66 | 172.13 | - | <50 | <8.3 | <8.3 | <8.3 | <8.3 | 1200 |
| | 4/14/2005 | 180.79 | 9.38 | 171.41 | - | <860 | <2.15 | <2.15 | <2.15 | <4.30 | 1020 |
| | 7/7/2005 | 180.79 | 10.46 | 170.33 | - | <860 | <2.15 | <8.60 | <2.15 | <4.30 | 378 |
| | 11/15/2005 | 180.79 | 10.55 | 170.24 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 210 |
| | 2/8/2006 | 180.79 | 9.46 | 171.33 | - | <215 | <2.15 | <8.6 | <2.15 | <4.3 | 419 |
| | 4/27/2006 | 180.79 | 10.67 | 170.12 | - | <100 | 1.71 | <4.0 | <1.0 | <2.0 | 432 |
| | 8/1/2006 | 180.79 | 10.29 | 170.50 | - | <100 | 2.83 | <4.0 | <1.0 | <2.0 | 222 |
| | 10/19/2006 | 180.79 | 10.65 | 170.14 | - | <50 | 0.8 | <2.0 | <0.5 | <1.0 | 221 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-2** cont | 1/12/2007 | 180.79 | NM | NM | - | NA | NA | NA | NA | NA | NA |
| | 4/17/2007 | 180.79 | 10.20 | 170.59 | - | <50 | 3.17 | <2.0 | 4.49 | <2.0 | 158 |
| | 7/17/2007 | 180.79 | 10.31 | 170.48 | - | <50 | 1.65 | <2.0 | <0.5 | <2.0 | 105 |
| | 10/16/2007 | 180.79 | 9.22 | 171.57 | - | <50 | 5.67 | <2.0 | <0.5 | <2.0 | 73.9 |
| | 1/17/2008 | 180.79 | 9.88 | 170.91 | - | <50.0 | <0.50 | <2.0 | <0.50 | <2.0 | 80.2 |
| | 4/17/2008 | 180.79 | 10.29 | 170.50 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 45 |
| | 7/16/2008 | 180.79 | 10.64 | 170.15 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 54 |
| | 10/14/2008 | 180.79 | 11.41 | 169.38 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 41 |
| | 1/6/2009 | 180.79 | 10.60 | 170.19 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 36 |
| | 4/6/2009 | 180.79 | 10.62 | 170.17 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 30 |
| | 7/7/2009 | 180.79 | 10.92 | 169.87 | - | <50 | 2.4 | <0.5 | <0.5 | <0.5 | 32 |
| | 1/27/2010 | 180.79 | 8.36 | 172.43 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 26 |
| | 7/26/2010 | 180.79 | 10.44 | 170.35 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 13 |
| **ESE-2R** | 8/30/2010 | 180.70 | 10.61 | 170.09 | - | 200 | 0.93 | <0.5 | 1.3 | 13.5 | 16 |
| | 11/16/2010 | 180.70 | 10.33 | 170.37 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 18 |
| | 2/14/2011 | 180.70 | 10.50 | 170.20 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 12 |
| | 7/19/2011 | 180.70 | 10.62 | 170.08 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 8.3 |
| | 1/18/2012 | 180.70 | 10.92 | 169.78 | - | <22 | <0.33 | <0.19 | <0.15 | <0.20 | 1.1 |
| | 7/10/2012 | 180.70 | 11.17 | 169.53 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.1 |
| | 1/10/2013 | 180.70 | 10.00 | 170.70 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/9/2013 | 180.70 | 11.55 | 169.15 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.9 |
| | 1/29/2014 | 180.70 | 12.00 | 168.70 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.89 |
| | 7/25/2014 | 180.70 | 12.02 | 168.68 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.6 |
| | 1/19/2015 | 180.70 | 11.14 | 169.56 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/21/2015 | 180.70 | 12.00 | 168.70 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.6 |
| | **1/18/2016** | **180.70** | **9.30** | **171.40** | **No Sheen** | **<50** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **1.2** |
| | | | | | | | | | | | |
| **ESE-3** | 10/5/1992 | 178.20 | 10.58 | 167.62 | - | 430 | 57 | 31 | 3.6 | 34 | NA |
| | 4/1/1993 | 178.20 | 8.14 | 170.06 | - | 2,400 | 460 | 220 | 74 | 210 | NA |
| | 6/29/1993 | 178.20 | 9.72 | 168.48 | - | 280 | 56 | 14 | 15 | 13 | NA |
| | 9/23/1993 | 178.20 | 10.46 | 167.74 | - | 72 | 13 | 3.5 | 1.7 | 4.1 | NA |
| | 12/10/1993 | 178.20 | 9.30 | 168.90 | - | 270 | 71 | 32 | 6.1 | 33 | NA |
| | 2/17/1994 | 178.20 | 8.97 | 169.23 | - | 520 | 140 | 10 | 20 | 33 | 5.74 |
| | 8/8/1994 | 178.20 | 10.02 | 168.18 | - | <50 | 8.8 | 1.6 | 1.6 | 2.3 | <5.0 |
| | 10/12/1994 | 178.20 | 10.32 | 167.88 | - | 470 | 190 | 6.4 | 15 | 18 | <5.0 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-3** cont. | 1/19/1995 | 178.20 | 7.40 | 170.80 | - | 330 | 260 | 27 | 21 | 20 | NA |
| | 5/2/1995 | 178.20 | 8.26 | 169.94 | - | 530 | 180 | 30 | 23 | 44 | NA |
| | 7/28/1995 | 178.20 | 9.54 | 168.66 | - | <50 | <0.50 | <0.50 | <0.50 | <1 | NA |
| | 11/17/1995 | 178.20 | 10.04 | 168.16 | - | <50 | 1.7 | <0.50 | <0.50 | <1 | <5.0 |
| | 2/7/1996 | 178.20 | 7.08 | 171.12 | - | <50 | 8.6 | <1 | <1 | <1 | <10 |
| | 4/1/2396 | 178.20 | 8.79 | 169.41 | - | <50 | 7.6 | <1 | <1 | <1 | 65 |
| | 7/9/1996 | 178.20 | 10.09 | 168.11 | - | <50 | 12 | 2.6 | 2 | 3.9 | 26 |
| | 10/10/1996 | 178.20 | 10.48 | 167.72 | - | NA | NA | NA | NA | NA | NA |
| | 10/11/1996 | 178.20 | NM | NM | - | 260 | 140 | <1 | <1 | 2.6 | <10 |
| | 1/20/1997 | 178.20 | 8.65 | 169.55 | - | <50 | 1.5 | 1.7 | <1 | <1 | 14 |
| | 4/25/1997 | 178.20 | 10.02 | 168.18 | - | <50 | <0.5 | <1 | <1 | <1 | 14 |
| | 7/18/1997 | 178.20 | 10.66 | 167.54 | - | 10,000 | 1400 | 1400 | 300 | 1280 | <250 |
| | 10/27/1997 | 178.20 | 9.83 | 168.37 | - | <250 | <2.5 | <5.0 | <5.0 | 36 | <50 |
| | 1/22/1998 | 178.20 | 7.06 | 171.14 | - | 130 | <0.5 | <1.0 | <1.0 | <1.0 | 120 |
| | 4/23/1998 | 178.20 | 8.44 | 169.76 | - | 4,800 | 560 | <10 | 15 | <10 | 4000 |
| | 7/29/1998 | 178.20 | 9.27 | 168.93 | - | NA | NA | NA | NA | NA | NA |
| | 7/30/1998 | 178.20 | NM | NM | - | 1,800 | 6.2 | <5.0 | <5.0 | <5.0 | 1700 |
| | 12/17/1998 | 178.20 | 9.15 | 169.05 | - | 600 | 54 | <1.0 | 2.1 | 4.9 | 340/480 |
| | 3/19/1999 | 178.20 | 8.14 | 170.06 | - | 2,000 | 260 | 4.4 | 13 | 28 | 870 |
| | 6/23/1999 | 178.20 | 9.44 | 168.76 | - | 290 | 91 | <1.0 | 8.3 | 16 | 240 |
| | 9/27/1999 | 178.20 | 9.69 | 168.51 | - | 130 | 35 | <1.0 | 2.7 | 3.8 | 100 |
| | 12/9/1999 | 178.20 | 10.99 | 167.21 | - | 380 | 84 | 1.7 | 8.7 | 6.3 | 160 |
| | 3/9/2000 | 178.20 | 7.12 | 171.08 | - | 950 | 190 | 4.6 | 39 | 62 | 350 |
| | 6/8/2000 | 178.20 | 10.92 | 167.28 | - | 300 | 37 | <0.5 | 2.3 | 1.3 | 400 |
| | 9/18/2000 | 178.20 | 11.12 | 167.08 | - | 920 | 140 | 1.3 | 15 | 4.8 | 170 |
| | 12/14/2000 | 178.20 | 9.70 | 168.50 | - | 320 | 64 | <0.5 | 6.24 | 1.76 | 201 |
| | 3/21/2001 | 178.20 | 10.07 | 168.13 | - | 680 | 80.5 | 0.546 | 21.1 | 18.2 | 398 |
| | 6/18/2001 | 178.20 | 11.42 | 166.78 | - | 380 | 47 | <0.5 | 3.11 | <1.5 | 242 |
| | 9/18/2001 | 178.20 | 11.55 | 166.65 | - | 340 | 54.8 | <0.5 | 4.36 | <1.5 | 79.7 |
| | 12/13/2001 | 178.20 | 10.12 | 168.08 | - | 270 | 31.4 | <0.5 | 1.31 | 2.24 | 129 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-3** cont. | 3/14/2002 | 178.20 | 9.84 | 168.36 | - | 670 | 89.8 | 0.769 | 23.4 | 30.4 | 413 |
| | 6/19/2002 | 178.20 | 10.57 | 167.63 | - | 130 | 18.6 | <0.5 | <0.5 | <1 | 166 |
| | 9/10/2002 | 178.20 | 9.90 | 168.30 | - | 88 | 12 | <0.5 | <0.5 | <0.5 | 93 |
| | 12/16/2002 | 178.20 | 9.23 | 168.97 | - | 290 | 55 | 17 | 3.7 | 14 | 78 |
| | 3/11/2003 | 178.20 | 9.05 | 169.15 | - | 100 | 3.4 | <0.5 | 0.54 | <0.50 | 140 |
| | 6/17/2003 | 178.20 | 9.30 | 168.90 | - | 520 | 17 | <5 | 5.3 | <5 | 130 |
| | | | | | | | | | | | |
| **ESE-4** | 10/5/1992 | 177.73 | 10.33 | 167.40 | - | 98 | 7.2 | 1.3 | 1.1 | 6.1 | NA |
| | 4/1/1993 | 177.73 | 7.88 | 169.85 | - | 550 | 93 | 20 | 23 | 33 | NA |
| | 6/29/1993 | 177.66 | 8.33 | 169.33 | - | 150 | 23 | 0.6 | 5.4 | 0.5 | 54 |
| | 9/23/1993 | 177.66 | 10.05 | 167.61 | - | 110 | 14 | 1.7 | 3.2 | 4.6 | NA |
| | 12/10/1993 | 177.66 | 8.95 | 168.71 | - | 110 | 21 | 7.2 | 4.2 | 10 | 28.75 |
| | 2/17/1994 | 177.66 | 8.65 | 169.01 | | 210 | 26 | 1.2 | 4.7 | 11 | 113 |
| | 8/8/1994 | 177.66 | 9.76 | 167.90 | - | 76 | 9.6 | <0.5 | 2 | <0.5 | 62 |
| | 10/12/1994 | 177.66 | 9.62 | 168.04 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 44 |
| | 1/19/1995 | 177.66 | 6.97 | 170.69 | - | 140 | 56 | 14 | 24 | 23 | NA |
| | 5/2/1995 | 177.66 | 7.85 | 169.81 | - | 130 | 21 | 2.8 | 8.6 | 8.2 | NA |
| | 7/28/1995 | 177.66 | 9.20 | 168.46 | - | <50 | <0.5 | <0.5 | <0.5 | <1 | NA |
| | 11/17/1995 | 177.66 | 9.68 | 167.98 | - | <50 | <0.5 | 0.6 | <0.5 | <1 | 18 |
| | 2/7/1996 | 177.66 | 6.59 | 171.07 | - | 100 | 2.6 | <1 | 1.6 | 4.1 | 42 |
| | 4/23/1996 | 177.66 | 8.30 | 169.36 | - | 160 | 37 | 15 | 16 | 31 | 43 |
| | 7/9/1996 | 177.66 | 9.21 | 168.45 | - | 60 | 17 | 1.5 | 6.8 | 11.6 | 27 |
| | 10/10/1996 | 177.66 | 9.97 | 167.69 | - | NA | NA | NA | NA | NA | NA |
| | 10/11/1996 | 177.66 | NM | NM | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | 18 |
| | 1/20/1997 | 177.66 | 7.68 | 169.98 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | 130 |
| | 4/25/1997 | 177.66 | 9.15 | 168.51 | - | <250 | <2.5 | <5.0 | <5.0 | <5.0 | <50 |
| | 7/18/1997 | 177.66 | 9.71 | 167.95 | - | <50 | 15 | <10 | <10 | <10 | <100 |
| | 10/27/1997 | 177.66 | 9.38 | 168.28 | - | <250 | <2.5 | <5.0 | <5.0 | <5.0 | <50 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-4** cont. | 1/22/1998 | 177.66 | 6.59 | 171.07 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 4/23/1998 | 177.66 | 7.90 | 169.76 | - | <250 | <2.5 | <5.0 | <5.0 | <5.0 | <50 |
| | 7/29/1998 | 177.66 | 8.96 | 168.70 | - | NA | NA | NA | NA | NA | NA |
| | 7/30/1998 | 177.66 | NM | NM | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 12/17/1998 | 177.66 | 8.32 | 169.34 | - | NA | NA | NA | NA | NA | NA |
| | 3/19/1999 | 177.66 | 7.71 | 169.95 | - | NA | NA | NA | NA | NA | NA |
| | 6/23/1999 | 177.66 | 8.78 | 168.88 | - | NA | NA | NA | NA | NA | NA |
| | 9/27/1999 | 177.66 | 9.27 | 168.39 | - | NA | NA | NA | NA | NA | NA |
| | 12/9/1999 | 177.66 | 9.21 | 168.45 | - | NA | NA | NA | NA | NA | NA |
| | 3/9/2000 | 177.66 | 6.82 | 170.84 | - | NA | NA | NA | NA | NA | NA |
| | 6/8/2000 | 177.66 | 8.72 | 168.94 | - | NA | NA | NA | NA | NA | NA |
| | 9/18/2000 | 177.66 | 8.72 | 168.94 | - | NA | NA | NA | NA | NA | NA |
| | 12/14/2000 | 177.66 | 8.61 | 169.05 | - | NA | NA | NA | NA | NA | NA |
| | 3/21/2001 | 177.66 | 8.61 | 169.05 | - | NA | NA | NA | NA | NA | NA |
| | 6/18/2001 | 177.66 | 9.24 | 168.42 | - | NA | NA | NA | NA | NA | NA |
| | 9/18/2001 | 177.66 | 9.35 | 168.31 | - | NA | NA | NA | NA | NA | NA |
| | 12/13/2001 | 177.66 | 8.53 | 169.13 | - | NA | NA | NA | NA | NA | NA |
| | 3/14/2002 | 177.66 | 8.44 | 169.22 | - | NA | NA | NA | NA | NA | NA |
| | 6/19/2002 | 177.66 | 10.97 | 166.69 | - | NA | NA | NA | NA | NA | NA |
| | 9/10/2002 | 177.66 | 9.27 | 168.39 | - | NA | NA | NA | NA | NA | NA |
| | 12/16/2002 | 177.66 | 6.90 | 170.76 | - | NA | NA | NA | NA | NA | NA |
| | 3/11/2003 | 177.66 | 8.83 | 168.83 | - | NA | NA | NA | NA | NA | NA |
| | 6/17/2003 | 177.66 | 8.84 | 168.82 | - | NA | NA | NA | NA | NA | NA |
| | | | | | | | | | | | |
| **ESE-5** | 10/5/1992 | 176.08 | 9.22 | 166.86 | - | 1,300 | 200 | 3.8 | 1.2 | 18 | NA |
| | 4/1/1993 | 176.08 | 7.02 | 169.06 | - | 13,000 | 2200 | 26 | 730 | 1000 | NA |
| | 4/1/1993 | 176.08 | NM | NM | - | 13,000 | 2500 | 25 | 740 | 1100 | NA |
| | 6/29/1993 | 176.08 | 10.21 | 165.87 | - | 7,600 | 1500 | 9.3 | 170 | 100 | NA |
| | 9/23/1993 | 176.08 | 10.64 | 165.44 | - | 560 | 19 | 1.2 | 0.9 | 1.8 | NA |
| | 12/10/1993 | 176.08 | 9.42 | 166.66 | - | 1,700 | 300 | 3 | 76 | 110 | 14.07 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-5** cont. | 2/7/1994 | 176.08 | 9.35 | 166.73 | - | 3,500 | 640 | 7.8 | 90 | 130 | 45.13 |
| | 8/8/1994 | 176.08 | 8.76 | 167.32 | - | 2,600 | 210 | 4.6 | 9.4 | 4.4 | 33 |
| | 8/8/1994 | 176.08 | NM | NM | - | 2,500 | 230 | 4.6 | 13 | 4.8 | 32 |
| | 10/12/1994 | 176.08 | 8.95 | 167.13 | - | 5,600 | 560 | 9.5 | 75 | 21 | 79.2 |
| | 10/12/1994 | 176.08 | NM | NM | - | 6,000 | 550 | 10 | 78 | 22 | 77 |
| | 1/19/1995 | 176.08 | 5.40 | 170.68 | - | 1,900 | 620 | <5 | 95 | 15 | NA |
| | 1/19/1995 | 176.08 | NM | NM | - | 1,600 | 620 | <5 | 93 | 17 | NA |
| | 5/2/1995 | 176.08 | 6.48 | 169.60 | - | 5,700 | 1100 | <10 | 180 | 58 | NA |
| | 5/2/1995 | 176.08 | NM | NM | - | 5,300 | 1100 | <10 | 180 | 58 | NA |
| | 7/28/1995 | 176.08 | 7.97 | 168.11 | - | 520 | 15 | <0.50 | 1.7 | 1.3 | NA |
| | 7/28/1995 | 176.08 | NM | NM | - | 460 | 7.2 | <0.50 | 1.9 | 1.5 | NA |
| | 11/17/1995 | 176.08 | 8.39 | 167.69 | - | 850 | 39 | 1.8 | 7.6 | 2.7 | 24 |
| | 2/7/1996 | 176.08 | 4.71 | 171.37 | - | 4,100 | 670 | 6 | 190 | 140 | <50 |
| | 4/23/1996 | 176.08 | 7.35 | 168.73 | - | 3,000 | 570 | <5 | 79 | 100 | 84 |
| | 7/9/1996 | 176.08 | 9.40 | 166.68 | - | 620 | 150 | 1.7 | 9.3 | 6.4 | 25 |
| | 10/10/1996 | 176.08 | 9.04 | 167.04 | - | 1,100 | 29 | <5 | <5 | <5 | <50 |
| | 10/10/1996 | 176.08 | NM | NM | - | 1,100 | 31 | <5 | <5 | <5 | <50 |
| | 1/20/1997 | 176.08 | 5.82 | 170.26 | - | 2,100 | 980 | <25 | 280 | 80 | <250 |
| | 1/20/1997 | 176.08 | NM | NM | - | 2,700 | 910 | 8.8 | 280 | 84 | 180 |
| | 4/25/1997 | 176.08 | 7.24 | 168.84 | - | NA | NA | NA | NA | NA | NA |
| | 4/28/1997 | 176.08 | NM | NM | - | <250 | 7.9 | <5.0 | <5.0 | <5.0 | <50 |
| | 7/18/1997 | 176.08 | 7.86 | 168.22 | - | 1200 | <5 | <10 | <10 | <10 | <100 |
| | 7/18/1997 | 176.08 | NM | NM | - | 630 | 31 | <5.0 | <5.0 | <5.0 | 130 |
| | 10/27/1997 | 176.08 | 7.91 | 168.17 | - | <250 | 5.4 | <5.0 | <5.0 | <5.0 | <50 |
| | 1/22/1998 | 176.08 | 4.64 | 171.44 | - | 170 | 7.7 | <1.0 | <1.0 | <1.0 | 130 |
| | 4/23/1998 | 176.08 | 6.31 | 169.77 | - | 720 | 79 | <5.0 | 9 | <5.0 | 180 |
| | 7/29/1998 | 176.08 | 7.43 | 168.65 | - | NA | NA | NA | NA | NA | NA |
| | 7/30/1998 | 176.08 | NM | NM | - | 840 | 9.8 | <1.0 | 4 | <1.0 | 710 |
| | 12/17/1998 | 176.08 | 7.05 | 169.03 | - | NA | NA | NA | NA | NA | NA |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-5** cont. | 3/19/1999 | 176.08 | 5.00 | 171.08 | - | <250 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| | 6/23/1999 | 176.08 | 7.77 | 168.31 | - | NA | NA | NA | NA | NA | NA |
| | 9/27/1999 | 176.08 | 8.11 | 167.97 | - | 450 | 10 | <5.0 | 6.3 | <5.0 | 220 |
| | 12/9/1999 | 176.08 | 7.66 | 168.42 | - | NA | NA | NA | NA | NA | NA |
| | 3/9/2000 | 176.08 | 5.08 | 171.00 | - | 1,700 | 170 | 2.5 | 45 | 6.4 | 140 |
| | 6/8/2000 | 176.08 | 7.36 | 168.72 | - | NA | NA | NA | NA | NA | NA |
| | 9/18/2000 | 176.08 | 7.71 | 168.37 | - | 130 | 0.65 | <0.50 | 0.71 | <0.50 | 51 |
| | 12/14/2000 | 176.08 | 2.36 | 173.72 | - | NA | NA | NA | NA | NA | NA |
| | 3/21/2001 | 176.08 | 7.42 | 168.66 | - | 1,000 | 10.3 | <2.5 | 11 | <7.5 | 70.8 |
| | 6/18/2001 | 176.08 | 7.92 | 168.16 | - | NA | NA | NA | NA | NA | NA |
| | 9/18/2001 | 176.26 | 8.23 | 168.03 | - | 200 | 0.868 | <0.50 | 0.55 | <1.5 | 57.5 |
| | 12/13/2001 | 176.26 | 7.80 | 168.46 | - | NA | NA | NA | NA | NA | NA |
| | 3/14/2002 | 176.26 | 6.55 | 169.71 | - | 1,300 | 17.1 | 1.35 | 15.4 | 1.42 | 37.4 |
| | 6/19/2002 | 176.26 | 7.83 | 168.43 | - | NA | NA | NA | NA | NA | NA |
| | 9/10/2002 | 176.26 | 8.22 | 168.04 | - | 680 | 9.9 | <5.0 | <5.0 | <5.0 | 44 |
| | 12/16/2002 | 176.26 | 6.58 | 169.68 | - | NA | NA | NA | NA | NA | NA |
| | 3/11/2003 | 176.26 | 6.77 | 169.49 | - | 2,100 | 14 | <2.5 | 15 | 3 | 80 |
| | 6/17/2003 | 176.26 | 6.75 | 169.51 | - | NA | NA | NA | NA | NA | NA |
| | 9/17/2003 | 176.26 | 8.48 | 167.78 | - | 970 | 10 C | <0.5 | <0.5 | 5.3 | 34 |
| | 12/9/2003 | 176.26 | 7.32 | 168.94 | - | 700 | 6.5 | <0.5 | 3.1 | 2.7 C | 34 |
| | 2/26/2004 | 176.26 | 5.21 | 171.05 | - | 2,400 H | 41 | 2.8 C | 18 | 2.4 C | 29 |
| | 5/21/2004 | 176.26 | 7.50 | 168.76 | - | 1,500 | 2.6 C | <0.5 | 2.1 C | 2.1 C | 25 |
| | 8/10/2004 | 178.80 | 8.28 | 170.52 | - | 680 | <0.5 | <0.5 | <0.5 | <0.5 | 33 |
| | 10/19/2004 | 178.80 | 8.26 | 170.54 | - | 380 | <0.5 | <0.5 | <0.5 | 1.4 | 39 |
| | 1/14/2005 | 178.80 | 5.16 | 173.64 | - | 2,400 | 18 | 1.4 | 22 | 2.1 | 26 |
| | 4/14/2005 | 178.80 | 6.13 | 172.67 | - | 4,800 | 7.75 | 1.26 | 14.3 | <1.0 | 23.1 |
| | 7/7/2005 | 178.80 | 7.52 | 171.28 | - | 3,240 | 0.78 | <2.0 | 1.18 | <1.0 | 36.6 |
| | 11/15/2005 | 178.80 | 7.85 | 170.95 | - | 1,190 | 0.51 | <2.0 | <0.5 | <1.0 | 30 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-5** cont. | 2/8/2006 | 178.80 | 5.83 | 172.97 | - | 2,510 | 1.91 | <2.0 | 2.82 | <1.0 | 20.7 |
| | 4/27/2006 | 178.80 | 5.71 | 173.09 | - | 4,700 | 2.76 | <2.0 | 4.77 | <1.0 | 28.3 |
| | 8/1/2006 | 178.80 | 7.71 | 171.09 | - | 1,890 | 0.7 | <2.0 | 0.75 | <1.0 | 24.7 |
| | 10/19/2006 | 178.80 | 8.00 | 170.80 | - | 474 | <0.5 | <2.0 | 3.39 | <1.0 | 29 |
| | 1/12/2007 | 178.80 | 7.41 | 171.39 | - | 868 | 2.18 | <2.0 | 2.66 | <2.0 | 16.3 |
| | 4/17/2007 | 178.80 | 7.51 | 171.29 | - | 1,240 | 10.2 | <2.0 | 10.4 | 2.37 | 17.2 |
| | 7/17/2007 | 178.80 | 7.47 | 171.33 | - | 836 | 3.1 | <2.0 | 4.91 | 2.35 | 25.8 |
| | 10/16/2007 | 178.80 | 6.26 | 172.54 | - | 2,120 | 2.5 | <2.0 | 6.19 | 2.61 | 17.5 |
| | 1/17/2008 | 178.80 | 6.59 | 172.21 | - | 2,730 | 5.74 | <2.0 | 14.3 | <2.0 | 13.1 |
| | 4/17/2008 | 178.80 | 6.81 | 171.99 | - | 2,770 | 4.7 | <2.0 | 15.9 | <2.0 | <0.5 |
| | 7/16/2008 | 178.80 | 7.76 | 171.04 | - | 2,160 | 0.9 | <2.0 | 1.1 | <2.0 | 6.28 |
| | 10/14/2008 | 178.80 | 8.40 | 170.40 | - | 1,300 | <0.5 | <0.5 | 0.6 | <0.5 | 9.9 |
| | 1/6/2009 | 178.80 | 7.66 | 171.14 | - | 1,100 [Y] | 0.61 | <0.5 | 1.6 | <0.5 | 8 |
| | 4/6/2009 | 178.80 | 7.79 | 171.01 | - | 1,900 [Y] | 4.6 | <0.5 | 9.3 | 0.59 | 5.3 |
| | 7/7/2009 | 178.80 | 7.84 | 170.96 | - | 2,700 [Y] | 3.0 | <0.5 | 2.3 | <0.5 | 6.6 |
| | 1/27/2010 | 178.80 | 4.82 | 173.98 | - | 1,300 [Y] | 0.76 | <0.5 | 1.0 | <0.5 | 3.5 |
| | 7/26/2010 | 178.80 | 7.01 | 171.79 | - | 1,800 | 0.75 | <0.5 | 1.8 | <0.5 | 2 |
| **ESE-5R** | 8/30/2010 | 178.64 | 8.97 | 169.67 | - | 75 | <0.5 | <0.5 | <0.5 | <0.5 | 7.3 |
| | 11/16/2010 | 178.64 | 10.46 | 168.18 | - | 74 | <0.5 | <0.5 | <0.5 | <0.5 | 12 |
| | 2/15/2011 | 178.64 | 11.19 | 167.45 | - | 140 | <0.5 | <0.5 | <0.5 | <0.5 | 9.6 |
| | 7/19/2011 | 178.64 | 7.92 | 170.72 | - | 140 | <0.5 | <0.5 | <0.5 | <0.5 | 6.7 |
| | 1/18/2012 | 178.64 | 8.84 | 169.80 | - | 68 [Y] | <0.33 | <0.19 | <0.15 | <0.2 | 7.3 |
| | 7/11/2012 | 178.64 | 8.85 | 169.79 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6.1 |
| | 1/10/2013 | 178.64 | 8.06 | 170.58 | No Sheen | 74 | <0.5 | <0.5 | <0.5 | <0.5 | 6.3 |
| | 7/9/2013 | 178.64 | 11.25 | 167.39 | No Sheen | 1,800 | 41.00 | 0.72 | 67.0 | 54.30 | 14 |
| | 1/30/2014 | 178.64 | 9.55 | 169.09 | No Sheen | <50 | <0.5 | <0.5 | <05 | <0.5 | 6.8 |
| | 7/24/2014 | 178.64 | 9.56 | 169.08 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6.3 |
| | 1/20/2015 | 178.64 | 8.11 | 170.53 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.9 |
| | 7/21/2015 | 178.64 | 9.67 | 168.97 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 4.4 |
| | **1/19/2016** | **178.64** | **7.09** | **171.55** | **No Sheen** | **<50** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **5.8** |
| | | | | | | | | | | | |
| **MW-6** | 7/28/1995 | 179.24 | 10.00 | 169.24 | - | <50 | <0.50 | <0.50 | <0.50 | <1.0 | NA |
| | 11/17/1995 | 179.24 | 10.44 | 168.80 | - | <50 | <0.50 | <0.50 | <0.50 | <1.0 | <5.0 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-6** cont | 2/7/1996 | 179.24 | 7.68 | 171.56 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 4/23/1996 | 179.24 | 9.33 | 169.91 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 7/9/1996 | 179.24 | 10.10 | 169.14 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 10/10/1996 | 179.24 | 11.00 | 168.24 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 1/20/1997 | 179.24 | 8.70 | 170.54 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 4/25/1997 | 179.24 | 10.16 | 169.08 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 7/18/1997 | 179.24 | 10.66 | 168.58 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 10/27/1997 | 179.24 | 10.25 | 168.99 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 1/22/1998 | 179.24 | 7.76 | 171.48 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 4/23/1998 | 179.24 | 9.10 | 170.14 | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 7/29/1998 | 179.24 | 10.40 | 168.84 | - | NA | NA | NA | NA | NA | NA |
| | 7/30/1998 | 179.24 | NM | NM | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 12/17/1998 | 179.24 | 9.40 | 169.84 | - | NA | NA | NA | NA | NA | NA |
| | 3/19/1999 | 179.24 | 9.10 | 170.14 | - | NA | NA | NA | NA | NA | NA |
| | 6/23/1999 | 179.24 | 9.79 | 169.45 | - | NA | NA | NA | NA | NA | NA |
| | 9/27/1999 | 179.24 | 10.10 | 169.14 | - | NA | NA | NA | NA | NA | NA |
| | 12/9/1999 | 179.24 | 9.97 | 169.27 | - | NA | NA | NA | NA | NA | NA |
| | 3/9/2000 | 179.24 | 8.56 | 170.68 | - | NA | NA | NA | NA | NA | NA |
| | 6/8/2000 | 179.24 | 9.11 | 170.13 | - | NA | NA | NA | NA | NA | NA |
| | 9/18/2000 | 179.24 | 9.77 | 169.47 | - | NA | NA | NA | NA | NA | NA |
| | 12/14/2000 | 179.24 | 9.17 | 170.07 | - | NA | NA | NA | NA | NA | NA |
| | 3/21/2001 | 179.24 | 9.82 | 169.42 | - | NA | NA | NA | NA | NA | NA |
| | 6/18/2001 | 179.24 | 10.19 | 169.05 | - | NA | NA | NA | NA | NA | NA |
| | 9/18/2001 | 179.24 | 10.25 | 168.99 | - | NA | NA | NA | NA | NA | NA |
| | 12/13/2001 | 179.24 | 9.75 | 169.49 | - | NA | NA | NA | NA | NA | NA |
| | 3/14/2002 | 179.24 | 9.53 | 169.71 | - | NA | NA | NA | NA | NA | NA |
| | 6/19/2002 | 179.24 | 9.87 | 169.37 | - | NA | NA | NA | NA | NA | NA |
| | 9/10/2002 | 179.24 | 9.49 | 169.75 | - | NA | NA | NA | NA | NA | NA |
| | 12/16/2002 | 179.24 | 8.39 | 170.85 | - | NA | NA | NA | NA | NA | NA |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-6** cont | 3/11/2003 | 179.24 | 9.40 | 169.84 | - | NA | NA | NA | NA | NA | NA |
| | 6/17/2003 | 179.24 | 9.71 | 169.53 | - | NA | NA | NA | NA | NA | NA |
| | 9/17/2003 | 179.24 | 10.21 | 169.03 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.0 |
| | 12/9/2003 | 179.24 | 9.66 | 169.58 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 2/26/2004 | 179.24 | 7.83 | 171.41 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 5/21/2004 | 179.24 | 9.75 | 169.49 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 8/10/2004 | 181.80 | 10.28 | 171.52 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/19/2004 | 181.80 | 9.91 | 171.89 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/14/2005 | 181.80 | 8.40 | 173.40 | - | <50 | 0.6 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 4/14/2005 | 181.80 | 9.04 | 172.76 | - | <200 | <0.5 | <0.5 | <0.5 | <1.0 | <0.5 |
| | 7/7/2005 | 181.80 | 9.94 | 171.86 | - | <200 | <0.5 | <2.00 | <0.5 | <1.00 | <0.5 |
| | 11/15/2005 | 181.80 | 9.98 | 171.82 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | <0.5 |
| | 2/8/2006 | 181.80 | 9.91 | 171.89 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | <0.5 |
| | 4/27/2006 | 181.80 | 9.54 | 172.26 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | <0.5 |
| | 8/1/2006 | 181.80 | 9.61 | 172.19 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 0.51 |
| | 10/19/2006 | 181.80 | 10.23 | 171.57 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 0.63 |
| | 1/12/2007 | 181.80 | 10.13 | 171.67 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 4/17/2007 | 181.80 | 10.22 | 171.58 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 7/17/2007 | 181.80 | 9.76 | 172.04 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 10/16/2007 | 181.80 | 9.82 | 171.98 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 1/17/2008 | 181.80 | 9.43 | 172.37 | - | <50 | <0.50 | <2.0 | <0.50 | <2.0 | <0.5 |
| | 4/17/2008 | 181.80 | 9.54 | 172.26 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 7/16/2008 | 181.80 | 9.80 | 172.00 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 10/14/2008 | 181.80 | 10.48 | 171.32 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/6/2009 | 181.80 | 10.01 | 171.79 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 4/6/2009 | 181.80 | 10.15 | 171.65 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/7/2009 | 181.80 | 10.28 | 171.52 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/27/2010 | 181.80 | 8.28 | 173.52 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/26/2010 | 181.80 | 9.64 | 172.16 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-6R** | 8/30/2010 | 181.34 | 9.55 | 171.79 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 11/15/2010 | 181.34 | 9.32 | 172.02 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 2/14/2011 | 181.34 | 9.79 | 171.55 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/19/2011 | 181.34 | 9.60 | 171.74 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/18/2012 | 181.34 | 10.08 | 171.26 | - | <22 | <0.33 | <0.19 | <0.15 | <0.2 | <0.38 |
| | 7/10/2012 | 181.34 | 10.30 | 171.04 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/9/2013 | 181.34 | 9.50 | 171.84 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/8/2013 | 181.34 | 10.29 | 171.05 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/29/2014 | 181.34 | 11.01 | 170.33 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/24/2014 | 181.34 | 11.00 | 170.34 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/19/2015 | 181.34 | 10.39 | 170.95 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/20/2015 | 181.34 | 10.98 | 170.36 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | **1/18/2016** | **181.34** | **8.95** | **172.39** | **No Sheen** | **<50** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **<0.5** |
| | | | | | | | | | | | |
| **MW-7** | 7/28/1995 | 176.55 | 9.25 | 167.30 | - | <50 | 0.54 | 0.54 | <0.50 | <1.0 | NA |
| | 11/17/1995 | 176.55 | 9.73 | 166.82 | - | 1100 | <10 | <10 | <10 | <20 | 4000 |
| | 2/7/1996 | 176.55 | 6.48 | 170.07 | - | 610 | <0.50 | <1.0 | <1.0 | <1.0 | 2500 |
| | 2/7/1996 | 176.55 | NM | NM | - | 280 | <0.50 | <1.0 | <1.0 | <1.0 | 2600 |
| | 4/23/1996 | 176.55 | 8.37 | 168.18 | - | 110 | <0.50 | <1.0 | <1.0 | <1.0 | 3500 |
| | 4/23/1996 | 176.55 | NM | NM | - | 230 | <0.50 | <1.0 | <1.0 | <1.0 | 3500 |
| | 7/9/1996 | 176.55 | 9.24 | 167.31 | - | 230 | <0.50 | <1.0 | <1.0 | <1.0 | 4296 |
| | 7/9/1996 | 176.55 | NM | NM | - | 220 | <0.50 | <1.0 | <1.0 | <1.0 | 4400 |
| | 10/10/1996 | 176.55 | 10.05 | 166.50 | - | NA | NA | NA | NA | NA | NA |
| | 10/11/1996 | 176.55 | NM | NM | - | 1600 | <0.50 | <1.0 | <1.0 | <1.0 | 3000 |
| | 1/20/1997 | 176.55 | 7.51 | 169.04 | - | <50 | 0.63 | <1.0 | <1.0 | <1.0 | 2600 |
| | 4/25/1997 | 176.55 | 8.79 | 167.76 | - | NA | NA | NA | NA | NA | NA |
| | 4/28/1997 | 176.55 | NM | NM | - | 1500 | <0.50 | <1.0 | <1.0 | <1.0 | 3600 |
| | 4/28/1997 | 176.55 | NM | NM | - | 7700 | 3500 | <25 | 74 | 37 | <250 |
| | 7/18/1997 | 176.55 | 9.50 | 167.05 | - | 1400 | <0.50 | <1.0 | <1.0 | <1.0 | 2600 |
| | 10/27/1997 | 176.55 | 9.19 | 167.36 | - | 420 | <0.50 | <1.0 | <1.0 | <1.0 | 560 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-7** cont. | 1/22/1998 | 176.55 | 6.45 | 170.10 | - | 3100 | <0.50 | <1.0 | <1.0 | 1.4 | 2300 |
| | 4/23/1998 | 176.55 | 8.02 | 168.53 | - | 3800 | <0.50 | <1.0 | <1.0 | <1.0 | 3800 |
| | 7/29/1998 | 176.55 | 8.88 | 167.67 | - | NA | NA | NA | NA | NA | NA |
| | 7/30/1998 | 176.55 | NM | NM | - | 500 | <2.5 | <5.0 | <5.0 | <5.0 | <50 |
| | 7/30/1998 | 176.55 | NM | NM | - | 4700 | <12 | <25 | <25 | <25 | 4700 |
| | 12/17/1998 | 176.55 | 8.62 | 167.93 | - | NA | NA | NA | NA | NA | NA |
| | 3/19/1999 | 176.55 | 7.52 | 169.03 | - | 3800 | <1.0 | <1.0 | <1.0 | <1.0 | 3800 |
| | 6/23/1999 | 176.55 | 9.63 | 166.92 | - | NA | NA | NA | NA | NA | NA |
| | 9/27/1999 | 176.55 | 9.39 | 167.16 | - | 140 | <10 | <10 | <10 | <10 | 3800 |
| | 12/9/1999 | 176.55 | 9.94 | 166.61 | - | NA | NA | NA | NA | NA | NA |
| | 3/9/2000 | 176.55 | 6.72 | 169.83 | - | <50 | <0.50 | <0.50 | <0.50 | <0.50 | 1400 |
| | 6/8/2000 | 176.55 | 7.38 | 169.17 | - | NA | NA | NA | NA | NA | NA |
| | 9/18/2000 | 176.55 | 9.18 | 167.37 | - | 190 | <0.50 | <0.50 | <0.50 | <0.50 | 580 |
| | 12/14/2000 | 176.55 | 8.13 | 168.42 | - | NA | NA | NA | NA | NA | NA |
| | 3/21/2001 | 176.55 | 8.98 | 167.57 | - | 1300 | <0.50 | <0.50 | <0.50 | <1.5 | 1460 |
| | 6/18/2001 | 176.55 | 9.68 | 166.87 | - | NA | NA | NA | NA | NA | NA |
| | 9/18/2001 | 176.55 | 9.80 | 166.75 | - | <0.50 | <0.50 | <0.50 | <0.50 | <1.5 | 94.9 |
| | 12/13/2001 | 176.55 | 9.26 | 167.29 | - | NA | NA | NA | NA | NA | NA |
| | 3/14/2002 | 176.55 | 8.69 | 167.86 | - | 800 | <0.50 | <0.50 | <0.50 | <1.0 | 952 |
| | 6/19/2002 | 176.55 | 9.06 | 167.49 | - | NA | NA | NA | NA | NA | NA |
| | 9/10/2002 | 176.55 | 9.23 | 167.32 | - | 260 | <2.0 | <2.0 | <2.0 | <2.0 | 580 |
| | 12/16/2002 | 176.55 | 7.77 | 168.78 | - | NA | NA | NA | NA | NA | NA |
| | 3/11/2003 | 176.55 | 8.30 | 168.25 | - | 620 | <2.5 | <2.5 | <2.5 | <2.5 | 1100 |
| | 6/17/2003 | 176.55 | 9.51 | 167.04 | - | NA | NA | NA | NA | NA | NA |
| | 9/17/2003 | 176.55 | 9.52 | 167.03 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 460 |
| | 12/9/2003 | 176.55 | 8.99 | 167.56 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 420 |
| | 2/26/2004 | 176.55 | 6.55 | 170.00 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 330 |
| | 5/21/2004 | 176.55 | 8.90 | 167.65 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 630 |
| | 8/10/2004 | 179.11 | 9.58 | 169.53 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 750 |
| | 10/19/2004 | 179.11 | 9.20 | 169.91 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 550 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-7** cont. | 1/14/2005 | 179.11 | 7.25 | 171.86 | - | <50 | <2.0 | <2.0 | <2.0 | <2.0 | 250 |
| | 4/14/2005 | 179.11 | 7.94 | 171.17 | - | <200 | <0.5 | <0.5 | <0.5 | <1.0 | 285 |
| | 7/7/2005 | 179.11 | 9.08 | 170.03 | - | <400 | <1.0 | <4.0 | <1.0 | <2.0 | 452 |
| | 11/15/2005 | 179.11 | 9.14 | 169.97 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 110 |
| | 2/8/2006 | 179.11 | 7.93 | 171.18 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 101 |
| | 4/27/2006 | 179.11 | 8.40 | 170.71 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 131 |
| | 8/1/2006 | 179.11 | 8.89 | 170.22 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 68.6 |
| | 10/19/2006 | 179.11 | 9.44 | 169.67 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 65.5 |
| | 1/12/2007 | 179.11 | 8.91 | 170.20 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 38 |
| | 4/17/2007 | 179.11 | 8.58 | 170.53 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 24.7 |
| | 7/17/2007 | 179.11 | 9.04 | 170.07 | - | <50 | 2.07 | <2.0 | <0.5 | <2.0 | 29.3 |
| | 10/6/2007 | 179.11 | 7.88 | 171.23 | - | <50 | 0.88 | <2.0 | <0.5 | <2.0 | 5.26 |
| | 1/17/2008 | 179.11 | NM | NM | - | NA | NA | NA | NA | NA | NA |
| | 4/17/2008 | 179.11 | 8.85 | 170.26 | - | <50 | 1.87 | <2.0 | <0.5 | <2.0 | 21.6 |
| | 7/16/2008 | 179.11 | 9.34 | 169.77 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 11.4 |
| | 10/14/2008 | 179.11 | 10.06 | 169.05 | - | <50 | 0.78 | <0.5 | <0.5 | <0.5 | 12 |
| | 1/6/2009 | 179.11 | 9.12 | 169.99 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 14 |
| | 4/6/2009 | 179.11 | 9.28 | 169.83 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 13 |
| | 7/7/2009 | 179.11 | 9.59 | 169.52 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 15 |
| | 1/27/2010 | 179.11 | 6.98 | 172.13 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6.3 |
| | 7/26/2010 | 179.11 | 9.11 | 170.00 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6 |
| **MW-7R** | 8/30/2010 | 179.14 | 9.39 | 169.75 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 24 |
| | 11/16/2010 | 179.14 | 9.10 | 170.04 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 4.9 |
| | 2/14/2011 | 179.14 | 9.26 | 169.88 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.3 |
| | 7/19/2011 | 179.14 | 9.38 | 169.76 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.8 |
| | 1/18/2012 | 179.14 | 9.70 | 169.44 | - | <22 | <0.33 | <0.19 | <0.15 | <0.2 | 0.93 |
| | 7/10/2012 | 179.14 | 9.92 | 169.22 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 3.4 |
| | 1/9/2013 | 179.14 | 8.75 | 170.39 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/8/2013 | 179.14 | 11.31 | 167.83 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.6 |
| | 1/29/2014 | 179.14 | 10.70 | 168.44 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.0 |
| | 7/25/2014 | 179.14 | 10.78 | 168.36 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.2 |
| | 1/19/2015 | 179.14 | 9.70 | 169.44 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/20/2015 | 179.14 | 10.55 | 168.59 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.9 |
| | **1/18/2016** | **179.14** | **7.75** | **171.39** | **No Sheen** | **<50** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **<0.5** |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-8** | 7/28/1995 | 176.34 | 7.80 | 168.54 | - | 1,100 | <2.5 | <2.5 | <2.5 | <5.0 | NA |
| | 11/17/1995 | 176.34 | 8.29 | 168.05 | - | 8,300 | 75 | 5.3 | 670 | 240 | 140 |
| | 2/7/1996 | 176.34 | 4.99 | 171.35 | - | 2,300 | 33 | <10 | 190 | 216 | <100 |
| | 4/23/1996 | 176.34 | 6.09 | 170.25 | - | 2,000 | 390 | <10 | 150 | 26 | <250 |
| **QC-2** | 4/1/1993 | NM | NM | NM | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA |
| | 6/29/1993 | NM | NM | NM | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA |
| | 9/23/1993 | NM | NM | NM | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA |
| | 12/10/1993 | NM | NM | NM | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 2/17/1994 | NM | NM | NM | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA |
| | 8/8/1994 | NM | NM | NM | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA |
| | 10/12/1994 | NM | NM | NM | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA |
| | 1/19/1995 | NM | NM | NM | - | <50 | <0.5 | <0.5 | <0.5 | <1.0 | NA |
| | 5/2/1995 | NM | NM | NM | - | <50 | <0.50 | <0.50 | <0.50 | <1.0 | NA |
| | 7/28/1995 | NM | NM | NM | - | <50 | <0.50 | <0.50 | <0.50 | <1.0 | NA |
| | 11/17/1995 | NM | NM | NM | - | <50 | <0.50 | <0.50 | <0.50 | <1.0 | <5.0 |
| | 2/7/1996 | NM | NM | NM | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 4/23/1996 | NM | NM | NM | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| | 7/9/1996 | NM | NM | NM | - | <50 | <0.5 | <1.0 | <1.0 | <1.0 | <10 |
| **SOMA-1** | 8/10/2004 | 180.95 | 11.53 | 169.42 | - | 84 | <0.5 | <0.5 | 1.5 C | 2.2 | 2100 |
| | 10/19/2004 | 180.95 | 10.41 | 170.54 | - | 56 | <0.5 | <0.5 | 1.3 C | 1.4 C | 1600 |
| | 1/14/2005 | 180.95 | 9.68 | 171.27 | - | 58 | <3.1 | <3.1 | <3.1 | <3.1 | 330 |
| | 4/14/2005 | 180.95 | 9.37 | 171.58 | - | <2200 | <5.5 | <5.5 | <5.5 | <11 | 668 |
| | 7/7/2005 | 180.95 | 10.21 | 170.74 | - | <860 | <2.15 | <8.6 | <2.15 | <4.3 | 591 |
| | 11/15/2005 | 180.95 | 10.70 | 170.25 | - | <50 | <0.5 | <2.0 | 1.1 | <1.0 | 256 |
| | 2/8/2006 | 180.95 | 9.30 | 171.65 | - | 127 | 1.56 | <2.0 | 3.23 | 3.12 | 176 |
| | 4/27/2006 | 180.95 | 9.64 | 171.31 | - | 81.6 | 1.14 | <2.0 | 2.8 | <1.0 | 189 |
| | 8/1/2006 | 180.95 | 10.25 | 170.70 | - | <50 | 1.07 | <2.0 | 1.46 | <1.0 | 122 |
| | 10/19/2006 | 180.95 | 10.73 | 170.22 | - | <50 | 0.68 | <2.0 | 4.17 | <1.0 | 116 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-1** cont. | 1/12/2007 | 180.95 | 10.38 | 170.57 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 68.7 |
| | 4/17/2007 | 180.95 | 10.09 | 170.86 | - | <50 | 5.76 | <2.0 | 4.33 | 2.59 | 33.4 |
| | 7/17/2007 | 180.95 | 10.35 | 170.60 | - | <50 | 14.8 | <2.0 | 4.63 | 3.32 | 39.4 |
| | 10/16/2007 | 180.95 | 9.71 | 171.24 | - | <50 | 5.7 | <2.0 | <0.5 | <2.0 | 14.2 |
| | 1/17/2008 | 180.95 | 10.01 | 170.94 | - | <50 | 1.02 | <2.0 | <0.5 | <2.0 | 12.8 |
| | 4/17/2008 | 180.95 | 10.17 | 170.78 | - | <50 | 3.13 | <2.0 | <0.5 | <2.0 | 12.8 |
| | 7/16/2008 | 180.95 | 10.63 | 170.32 | - | <50 | 10.6 | <2.0 | <0.5 | <2.0 | 15.8 |
| | 10/14/2008 | 180.95 | 11.36 | 169.59 | - | <50 | 1.1 | <0.5 | <0.5 | <0.5 | 15 |
| | 1/6/2009 | 180.95 | 10.81 | 170.14 | - | <50 | 0.6 | <0.5 | <0.5 | <0.5 | 14 |
| | 4/6/2009 | 180.95 | 10.69 | 170.26 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 12 |
| | 7/7/2009 | 180.95 | 11.01 | 169.94 | - | <50 | 0.57 | <0.5 | 1.2 | 0.91 | 12 |
| | 1/27/2010 | 180.95 | 8.81 | 172.14 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 9.9 |
| | 7/26/2010 | 180.95 | 10.49 | 170.46 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.9 |
| | 11/16/2010 | 180.95 | 10.49 | 170.46 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 7.0 |
| | 2/15/2011 | 180.95 | 10.64 | 170.31 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.3 |
| | 7/19/2011 | 180.95 | 10.70 | 170.25 | - | <50 | 2.3 | <0.5 | <0.5 | <0.5 | 5.2 |
| | 1/18/2012 | 180.95 | 10.90 | 170.05 | - | 77 [Y] | <0.33 | <0.19 | <0.15 | <0.2 | 4.0 |
| | 7/10/2012 | 180.95 | 11.25 | 169.70 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 3.7 |
| | 1/10/2013 | 180.95 | 10.10 | 170.85 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.2 |
| | 7/8/2013 | 180.95 | 11.72 | 169.23 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.7 |
| | 1/29/2014 | 180.95 | 12.15 | 168.80 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.7 |
| | 7/25/2014 | 180.95 | 12.21 | 168.74 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.4 |
| | 1/19/2014 | 180.95 | 11.33 | 169.62 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.1 |
| | 7/20/2015 | 180.95 | 12.15 | 168.80 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.4 |
| | **1/18/2016** | **180.95** | **9.29** | **171.66** | **No Sheen** | **<50** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **0.72** |
| | | | | | | | | | | | |
| **SOMA-4** | 8/10/2004 | 176.94 | 9.44 | 167.50 | - | 140 | 0.98 | <0.5 | 7.8 | <0.5 | 11 |
| | 10/19/2004 | 176.94 | 9.91 | 167.03 | - | 150 | <0.5 | <0.5 | 10 | <0.5 | 8.8 |
| | 1/14/2005 | 176.94 | 8.36 | 168.58 | - | 500 | 3.7 | <0.5 | 53 | <0.5 | 7.6 |
| | 4/14/2005 | 176.94 | 7.89 | 169.05 | - | <200 | 0.74 | <0.5 | 3.21 | <1.0 | 5.65 |
| | 7/7/2005 | 176.94 | 11.62 | 165.32 | - | <200 | <0.5 | <2.0 | 0.56 | <1.0 | 7.09 |
| | 11/15/2005 | 176.94 | 9.33 | 167.61 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 8.6 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-4** cont | 2/8/2006 | 176.94 | 9.18 | 167.76 | - | 55.8 | <0.5 | <2.0 | 0.85 | <1.0 | 10.4 |
| | 4/27/2006 | 176.94 | 8.75 | 168.19 | - | 172 | 1.35 | <2.0 | 8.83 | <1.0 | 11.7 |
| | 8/1/2006 | 176.94 | 9.52 | 167.42 | - | <50 | 0.52 | <2.0 | 1.53 | <1.0 | 14.1 |
| | 10/19/2006 | 176.94 | 9.51 | 167.43 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 19.2 |
| | 1/12/2007 | 176.94 | 8.98 | 167.96 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 20.4 |
| | 4/17/2007 | 176.94 | 8.96 | 167.98 | - | <50 | <0.5 | <2.0 | 4.33 | <2.0 | 15.8 |
| | 7/17/2007 | 176.94 | 9.31 | 167.63 | - | <50 | <0.5 | <2.0 | 4.47 | <2.0 | 13.3 |
| | 10/16/2007 | 176.94 | 8.96 | 167.98 | - | <50 | <0.5 | <2.0 | 4.5 | <2.0 | 8.57 |
| | 1/17/2008 | 176.94 | 8.84 | 168.10 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 8.87 |
| | 4/17/2008 | 176.94 | 9.44 | 167.50 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 1.22 |
| | 7/16/2008 | 176.94 | 9.52 | 167.42 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 8.58 |
| | 10/14/2008 | 176.94 | 9.98 | 166.96 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 9.7 |
| | 1/6/2009 | 176.94 | 9.29 | 167.65 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 10 |
| | 4/6/2009 | 176.94 | 9.31 | 167.63 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.3 |
| | 7/7/2009 | 176.94 | 9.54 | 167.40 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 7 |
| | 1/27/2010 | 176.94 | 7.35 | 169.59 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.1 |
| | 7/26/2010 | 176.94 | 9.13 | 167.81 | - | 220 | <0.5 | <0.5 | <0.5 | <0.5 | 2.3 |
| | 11/15/2010 | 176.94 | 8.85 | 168.09 | - | 75 | <0.5 | <0.5 | <0.5 | <0.5 | 2.5 |
| | 2/14/2011 | 176.94 | 8.92 | 168.02 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.5 |
| | 7/19/2011 | 176.94 | 9.19 | 167.75 | - | 57 | <0.5 | <0.5 | <0.5 | <0.5 | 0.97 |
| | 1/18/2012 | 176.94 | 9.61 | 167.33 | - | <22 | <0.33 | <0.19 | <0.15 | <0.2 | 1.2 |
| | 7/10/2012 | 176.94 | 9.71 | 167.23 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/9/2013 | 176.94 | 8.52 | 168.42 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.77 |
| | 7/8/2013 | 176.94 | 9.89 | 167.05 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.4 |
| | 1/29/2014 | 176.94 | 10.35 | 166.59 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.74 |
| | 7/24/2014 | 176.94 | 10.40 | 166.54 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.3 |
| | 1/19/2015 | 176.94 | 9.39 | 167.55 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.61 |
| | 7/20/2015 | 176.94 | 10.51 | 166.43 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.93 |
| | **1/18/2016** | **176.94** | **8.41** | **168.53** | **No Sheen** | **<50** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **0.83** |
| **Shallow WBZ Wells** | | | | | | | | | | | |
| **SOMA-2** | 8/10/2004 | 178.99 | 10.69 | 168.30 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.8 |
| | 10/19/2004 | 178.99 | 10.75 | 168.24 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2.4 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-2** cont. | 1/14/2005 | 178.99 | 9.45 | 169.54 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.1 |
| | 4/14/2005 | 178.99 | 10.46 | 168.53 | - | <200 | <0.5 | <0.5 | <0.5 | <1.0 | <0.5 |
| | 7/7/2005 | 178.99 | 11.81 | 167.18 | - | <200 | <0.5 | <2.0 | <0.5 | <1.0 | <0.5 |
| | 11/15/2005 | 178.99 | 12.02 | 166.97 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 1.61 |
| | 2/8/2006 | 178.99 | 11.88 | 167.11 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | <0.5 |
| | 4/27/2006 | 178.99 | 10.95 | 168.04 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | <0.5 |
| | 8/1/2006 | 178.99 | 11.85 | 167.14 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 1.11 |
| | 10/19/2006 | 178.99 | 10.62 | 168.37 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 1.36 |
| | 1/12/2007 | 178.99 | 10.26 | 168.73 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 4/17/2007 | 178.99 | 11.88 | 167.11 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 0.87 |
| | 7/17/2007 | 178.99 | 10.84 | 168.15 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 10/16/2007 | 178.99 | 9.69 | 169.30 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 1/17/2008 | 178.99 | 9.62 | 169.37 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 4/17/2008 | 178.99 | 10.06 | 168.93 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 7/16/2008 | 178.99 | 10.63 | 168.36 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| | 10/14/2008 | 178.99 | 11.26 | 167.73 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/6/2009 | 178.99 | 10.22 | 168.77 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 4/6/2009 | 178.99 | 10.38 | 168.61 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/7/2009 | 178.99 | 10.40 | 168.59 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/27/2010 | 178.99 | 8.19 | 170.80 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/26/2010 | 178.99 | 10.24 | 168.75 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 11/15/2010 | 178.99 | 10.04 | 168.95 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 2/14/2011 | 178.99 | 9.95 | 169.04 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/19/2011 | 178.99 | 10.20 | 168.79 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/18/2012 | 178.99 | 10.56 | 168.43 | - | <22 | <0.33 | <0.19 | <0.15 | <0.2 | <0.38 |
| | 7/10/2012 | 178.99 | 10.45 | 168.54 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/9/2013 | 178.99 | 9.63 | 169.36 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/8/2013 | 178.99 | 10.36 | 168.63 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/29/2014 | 178.99 | 11.36 | 167.63 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/24/2014 | 178.99 | 11.90 | 167.09 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/19/2014 | 178.99 | 10.09 | 168.90 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/20/2015 | 178.99 | 11.73 | 167.26 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | **1/18/2016** | **178.99** | **8.92** | **170.07** | **No Sheen** | **<50** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **<0.5** |
| | | | | | | | | | | | |
| **SOMA-3** | 8/10/2004 | 176.81 | 9.97 | 166.84 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 10/19/2004 | 176.81 | 9.59 | 167.22 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-3** cont. | 1/14/2005 | 176.81 | 8.23 | 168.58 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 4/14/2005 | 176.81 | 8.64 | 168.17 | - | <200 | <0.5 | <0.5 | <0.5 | <1.0 | <0.5 |
| | 7/7/2005 | 176.81 | 9.60 | 167.21 | - | <200 | <0.5 | <2.0 | <0.5 | <1.0 | <0.5 |
| | 11/15/2005 | 176.81 | 10.01 | 166.80 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 5.1 |
| | 2/8/2006 | 176.81 | 8.80 | 168.01 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 7.16 |
| | 4/27/2006 | 176.81 | 9.00 | 167.81 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 14.2 |
| | 8/1/2006 | 176.81 | 9.91 | 166.90 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 7.29 |
| | 10/19/2006 | 176.81 | 10.21 | 166.60 | - | <50 | <0.5 | <2.0 | <0.5 | <1.0 | 41.4 |
| | 1/12/2007 | 176.81 | 9.73 | 167.08 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 20.9 |
| | 4/17/2007 | 176.81 | 9.81 | 167.00 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 32.1 |
| | 7/17/2007 | 176.81 | 10.06 | 166.75 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 23.6 |
| | 10/16/2007 | 176.81 | 9.54 | 167.27 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 22.3 |
| | 1/17/2008 | 176.81 | 9.06 | 167.75 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 11.1 |
| | 4/17/2008 | 176.81 | 9.57 | 167.24 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 23.7 |
| | 7/16/2008 | 176.81 | 10.25 | 166.56 | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | 10.6 |
| | 10/14/2008 | 176.81 | 10.76 | 166.05 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 19 |
| | 1/6/2009 | 176.81 | 9.53 | 167.28 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.1 |
| | 4/6/2009 | 176.81 | 9.65 | 167.16 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 5.7 |
| | 7/7/2009 | 176.81 | 10.19 | 166.62 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6 |
| | 1/27/2010 | 176.81 | 7.80 | 169.01 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 56 |
| | 7/26/2010 | 176.81 | 9.67 | 167.14 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 9.8 |
| | 11/15/2010 | 176.81 | 9.35 | 167.46 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 30 |
| | 2/14/2011 | 176.81 | 10.57 | 166.24 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 32 |
| | 7/19/2011 | 176.81 | 9.74 | 167.07 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 17 |
| | 1/18/2012 | 176.81 | 10.14 | 166.67 | - | <22 | <0.33 | <0.19 | <0.15 | <0.2 | 24 |
| | 7/10/2012 | 176.81 | 9.99 | 166.82 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 1.6 |
| | 1/9/2013 | 176.81 | 8.86 | 167.95 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 6.9 |
| | 7/8/2013 | 176.81 | 10.56 | 166.25 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 2 |
| | 1/29/2014 | 176.81 | 10.69 | 166.12 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 0.52 |
| | 7/24/2014 | 176.81 | 11.03 | 165.78 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/19/2015 | 176.81 | 9.90 | 166.91 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/20/2015 | 176.81 | 10.87 | 165.94 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | **1/18/2016** | **176.81** | **8.15** | **168.66** | **No Sheen** | **<50** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **0.81** |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-5** | 1/27/2010 | 180.31 | 7.94 | 172.37 | - | 14,000 | 2,600 | 1.5 | 800 | 914 | 190 |
| | 7/26/2010 | 180.31 | 9.99 | 170.32 | - | 14,000 | 3,300 | <20 | 1,100 | 1,340 | 150 |
| | 11/15/2010 | 180.31 | 10.01 | 170.30 | - | 11,000 | 2,400 | 3.3 | 920 | 733 | 130 |
| | 2/15/2011 | 180.31 | 10.22 | 170.09 | - | 4,900 | 1,600 | <13 | 430 | 84 | 94 |
| pre-MPE | 6/16/2011 | 180.31 | NM | NC | - | 6,400 | 2,500 | <20 | 670 | 160 | 150 |
| | 7/19/2011 | 180.31 | 9.95 | 170.36 | - | 1,300 | 470 | <3.6 | <3.6 | 212 | 8.8 |
| | 1/18/2012 | 180.31 | 10.16 | 170.15 | - | 600 [Y] | 160 | <0.19 | 27 | <0.2 | 6.5 |
| | 7/10/2012 | 180.31 | 10.16 | 170.15 | - | <50 | 3.6 | <0.5 | <0.5 | <0.5 | 4.6 |
| | 1/10/2013 | 180.31 | 9.21 | 171.10 | No Sheen | 180 | 25.0 | <0.5 | 28 | <0.5 | 3.9 |
| | 7/9/2013 | 180.31 | 10.98 | 169.33 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | 4.8 |
| | 1/30/2014 | 180.31 | 11.67 | 168.64 | No Sheen | <50 | 2.4 | <0.5 | <0.5 | <0.5 | 10 |
| | 7/25/2014 | 180.31 | 11.70 | 168.61 | No Sheen | 100 | 56 | <0.5 | 1.1 | 4.06 | 11 |
| | 1/20/2015 | 180.31 | 9.82 | 170.49 | No Sheen | 470 | 61 | <0.5 | 12 | 28 | 3.6 |
| | 7/21/2015 | 180.31 | 11.07 | 169.24 | No Sheen | 250 | 14 | <0.5 | 2.90 | 0.91 | 7.3 |
| | **1/19/2016** | **180.31** | **9.49** | **170.82** | **Rainbow Sheen** | **9,500** | **570** | **<5.0** | **80** | **81** | **8.8** |
| **SOMA-7** | 8/30/2010 | 178.54 | 7.63 | 170.91 | - | 2,900 | 190 | 3.7 | 74 | 19.80 | 8.4 |
| | 11/16/2010 | 178.54 | 7.89 | 170.65 | - | 1,500 | 190 | 2.1 | 41 | 8.30 | 5.7 |
| | 2/15/2011 | 178.54 | 7.33 | 171.21 | - | 1,900 | 380 | 4 | 27 | 5.50 | 5.2 |
| pre-MPE | 6/16/2011 | 178.54 | NM | NC | - | 1,900 | 330 | 4.3 | 24 | 5.20 | 4.7 |
| | 7/19/2011 | 178.54 | 7.89 | 170.65 | - | 7,600 | 1,100 | 15 | 200 | 61 | 12 |
| | 1/18/2012 | 178.54 | 8.74 | 169.80 | - | 1,300 [Y] | 190 | 2.2 | 29 | 5.2 | <1.7 |
| | 7/11/2012 | 178.54 | 8.66 | 169.88 | - | 5,600 | 390 | 5.5 | 45 | 9.1 | 5.2 |
| | 1/10/2013 | 178.54 | 6.72 | 171.82 | Rainbow Sheen | 4,400 | 500 | 8.9 | 66 | 11 | 4.1 |
| | 7/9/2013 | 178.54 | 9.05 | 169.49 | Rainbow Sheen | 2,800 | 420 | 6.5 | 51 | 6 | 4.5 |
| | 1/30/2014 | 178.54 | 9.44 | 169.10 | Rainbow Sheen | 2,400 | 270 | 5.1 | 21 | 4.3 | 4.4 |
| | 7/24/2014 | 178.54 | 9.57 | 168.97 | No Sheen | 3,000 | 310 | 6.3 | 13 | 5.1 | 4.1 |
| | 1/20/2015 | 178.54 | 8.43 | 170.11 | Rainbow Sheen | 3,400 | 410 | 7.4 | 35 | 6.7 | 4.9 |
| | 7/21/2015 | 178.54 | 9.61 | 168.93 | Rainbow Sheen | 2,900 | 230 | 5.4 | 6.4 | 2.9 | 3.9 |
| | **1/19/2016** | **178.54** | **6.32** | **172.22** | **Rainbow Sheen** | **6,900** | **680** | **10** | **39** | **11** | **2.9** |
| **SOMA-8** | 8/30/2010 | 181.57 | 9.89 | 171.68 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 11/15/2010 | 181.57 | 9.37 | 172.20 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-8** cont. | 2/14/2011 | 181.57 | 9.89 | 171.68 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/19/2011 | 181.57 | 9.67 | 171.90 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/18/2012 | 181.57 | 10.29 | 171.28 | - | <22 | <0.33 | <0.19 | <0.15 | <0.2 | <0.38 |
| | 7/10/2012 | 181.57 | 10.31 | 171.26 | - | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/9/2013 | 181.57 | 9.62 | 171.95 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/8/2013 | 181.57 | 10.09 | 171.48 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/29/2014 | 181.57 | 10.96 | 170.61 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/24/2014 | 181.57 | 11.04 | 170.53 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 1/19/2015 | 181.57 | 10.44 | 171.13 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | 7/20/2015 | 181.57 | 11.06 | 170.51 | No Sheen | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| | **1/18/2016** | **181.57** | **9.06** | **172.51** | **No Sheen** | **<50** | **<0.5** | **<0.5** | **<0.5** | **<0.5** | **<0.5** |
| | | | | | | | | | | | |
| **OB-1** pre-MPE | 6/16/2011 | 178.7 | NM | NC | - | 1,900 | 9.3 | <0.5 | 3.7 | 5.80 | 23 |
| | 7/19/2011 | 178.7 | 7.89 | 170.81 | - | 250 | 1.9 | <0.5 | 0.63 | 0.78 | 4.1 |
| | 1/18/2012 | 178.7 | 8.72 | 169.98 | - | 2,400 [Y] | 12 | <0.19 | 3.0 | 6.35 | 16 |
| | 7/11/2012 | 178.7 | 7.96 | 170.74 | - | 2,100 [Y] | 12 | 0.5 | 0.7 | 2.50 | 18 |
| | 1/10/2013 | 178.7 | 6.58 | 172.12 | No Sheen | 500 | <0.5 | <0.5 | 1.1 | 1.20 | 6.8 |
| | 7/9/2013 | 178.7 | 8.59 | 170.11 | No Sheen | 2,200 | 17 | <0.5 | 2.7 | 8.36 | 23 |
| | 1/30/2014 | 178.7 | 9.42 | 169.28 | No Sheen | 1,600 | 1.1 | <0.5 | <0.5 | 1.30 | 17 |
| | 7/24/2014 | 178.7 | 9.61 | 169.09 | No Sheen | 2,400 | 7.4 | <0.5 | <0.5 | 2.00 | 23 |
| | 1/20/2014 | 178.7 | 8.41 | 170.29 | No Sheen | 1,600 | 4.8 | <0.5 | 11 | 8.36 | 19 |
| | 7/21/2015 | 178.7 | 9.65 | 169.05 | No Sheen | 2,700 | 3.2 | <0.5 | <0.5 | 1.40 | 20 |
| | **1/19/2016** | **178.7** | **6.67** | **172.03** | **No Sheen** | **4,500** | **7.5** | **<0.5** | **40** | **19.84** | **20** |
| | | | | | | | | | | | |
| **OB-2** pre-MPE | 6/16/2011 | 180.23 | NM | NC | - | 12,000 | 870 | 18 | 590 | 1,140 | 310 |
| | 7/19/2011 | 180.23 | 9.76 | 170.47 | - | 30,000 | 1,000 | 31 | 1,300 | 3,020 | 310 |
| | 1/18/2012 | 180.23 | 9.92 | 170.31 | - | 22,000 [Y] | 930 | 13 | 1,300 | 2,100 | <3.3 |
| | 7/11/2012 | 180.23 | 10.34 | 169.89 | - | 46,000 | 580 | 11 | 1,300 | 2,130 | 94 |
| | 1/10/2013 | 180.23 | 9.18 | 171.05 | Rainbow Sheen | 21,000 | 530 | <7.1 | 980 | 1,258 | 79 |
| | 7/9/2013 | 180.23 | 10.65 | 169.58 | Rainbow Sheen | 1,600 | 42 | <0.5 | 68 | 73.1 | 7.4 |
| | 1/30/2014 | 180.23 | 11.21 | 169.02 | Rainbow Sheen | 22,000 | 750 | 5.6 | 1,300 | 1,144 | 130 |
| | 7/25/2014 | 180.23 | 11.21 | 169.02 | Rainbow Sheen | 21,000 | 940 | <10 | 1,300 | 848 | 120 |
| | 1/20/2015 | 180.23 | 9.10 | 171.13 | Rainbow Sheen | 14,000 | 540 | <7.1 | 1,000 | 370 | 62 |
| | 7/21/2015 | 180.23 | 11.15 | 169.08 | Rainbow Sheen | 19,000 | 660 | <7.1 | 1,000 | 390 | 79 |
| | **1/19/2016** | **180.23** | **9.08** | **171.15** | **Rainbow Sheen** | **19,000** | **370** | **<7.1** | **850** | **96** | **47** |

# Table 1
## Historical Groundwater Elevations & Analytical Data
## TPH-g, BTEX, MtBE
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | Top of casing elevation [1] (feet) | Depth to Groundwater (feet) | Groundwater Elevation (feet) | Observed Sheen | TPH-g (µg/L) 8260B | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Equipment Blanks** | | | | | | | | | | | |
| EB-PMP | 1/17/2008 | NA | NA | NA | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| EB-PRB | 1/17/2008 | NA | NA | NA | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| EB-PMP2 | 1/17/2008 | NA | NA | NA | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |
| EB-PRB2 | 1/17/2008 | NA | NA | NA | - | <50 | <0.5 | <2.0 | <0.5 | <2.0 | <0.5 |

Notes:
< : Not detected above laboratory reporting limit.
1 Top of Casing Elevations were resurveyed by Kier & Wright Engineers Surveyors of Pleasanton, CA on June 21, 2004.

C: Presence confirmed, but RPD between columns exceeds 40%.
H: Heavier hydrocarbons contributed to the quantitation.
NA: Not Applicable/Not Analyzed. Due to construction activities in the Third Quarter 2003, which consisted of the replacement of the USTs and dispensers, wells ESE-1 & ESE-2 were inaccessible. Well ESE-2 also inaccessible during the First Quarter 2007. Well MW-7 had a car parked over it and was inaccessible during the First Quarter 2008 monitoring event
NM: Not Measured
Well ESE-2 was covered over with dirt during the First Quarter 2007 monitoring event.
Well MW-7 had a car parked over it and was inaccessible during the First Quarter 2008 monitoring event.
Equipment Blanks (EB-PRB & EB-PMP) were done to make sure decon efforts were adequate.
Z: Sample exhibits unknown single peak or peaks.
•The Third Quarter 2003 was the first time that SOMA analyzed groundwater samples at the site.
•The Third Quarter 2004 was the first time that SOMA analyzed groundwater samples at wells SOMA-1 to SOMA-4.
•August 2010, reconstruct ESE-1R, ESE-2R, ESE-5R, MW-6R, MW-7R; install SOMA-7, SOMA-8. 8/30/10 investigation sampling
•pre-MPE sampling condcuted on 6/16/2011 prior to start of MPE pilot testing from June 20 to July 1, 2011
•In July 2012, TPH-g was analyzed by method EPA 8015B due to laboratory error instead of EPA 8260B

# Table 2
## Historical Groundwater Analytical Data
## Gasoline Oxygenates & Lead Scavengers
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | ETHANOL (µg/L) | 1,2-DCA (µg/L) | EDB (µg/L) |
|---|---|---|---|---|---|---|---|---|
| **Semi-Confined WBZ Wells** | | | | | | | | |
| **ESE-1** | 6/17/2003 | <400 | <10 | <10 | 18 | NA | NA | NA |
| | 9/17/2003 | NA | NA | NA | NA | NA | NA | NA |
| | 12/9/2003 | 290 | <1.0 | <1.0 | 9.5 | <2,000 | <1.0 | <1.0 |
| | 2/26/2004 | 410 | <0.5 | <0.5 | 9.7 | <1000 | <0.5 | <0.5 |
| | 5/21/2004 | 190 | <0.5 | <0.5 | <0.5 | <1000 | <0.5 | <0.5 |
| | 8/10/2004 | 180 | <0.5 | <0.5 | <0.5 | <1000 | <0.5 | <0.5 |
| | 10/19/2004 | 270 | <0.7 | <0.7 | 4.4 | <1400 | 9.9 | <0.7 |
| | 1/14/2005 | 280 | <1.3 | <1.3 | <1.3 | <2,500 | <1.3 | <1.3 |
| | 4/14/2005 | 144 | <2.15 | <2.15 | <8.6 | <4300 | <2.15 | <2.15 |
| | 7/7/2005 | 119 | <2.15 | <2.15 | <8.6 | <4300 | <2.15 | <2.15 |
| | 11/15/2005 | 107 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |
| | 2/8/2006 | 181 | <2.15 | <2.15 | <8.6 | <4300 | <2.15 | <2.15 |
| | 4/27/2006 | 261 | <2.15 | <2.15 | <8.6 | <4300 | <2.15 | <2.15 |
| | 8/1/2006 | 165 | <1.0 | <1.0 | <4.0 | <2000 | <1.0 | <1.0 |
| | 10/19/2006 | 154 | <1.0 | <1.0 | <4.0 | <2000 | <1.0 | <1.0 |
| | 1/12/2007 | 103 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |
| | 4/17/2007 | 80.5 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |
| | 7/17/2007 | 128 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |
| | 10/16/2007 | 98.7 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |
| | 1/17/2008 | 61.5 | <0.5 | <0.5 | 2.52 | <1000 | <0.5 | <0.5 |
| | 4/17/2008 | 76.4 | <0.5 | <0.5 | <2.0 | <1000 | 59.2 | <0.5 |
| | 7/16/2008 | 179 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |
| | 10/14/2008 | 87 | <0.5 | <0.5 | 2.6 | <1000 | <0.5 | <0.5 |
| | 1/6/2009 | 93 | <1.0 | <1.0 | <1.0 | <2000 | <1.0 | <1.0 |
| | 4/6/2009 | 130 | <1.0 | <1.0 | <1.0 | <2000 | <1.0 | <1.0 |
| | 7/7/2009 | 100 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/27/2010 | 200 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/26/2010 | 110 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| **ESE-1R** | 8/30/2010 | 83 | <0.71 | <0.71 | 3.4 | <1,400 | <0.71 | <0.71 |
| | 11/16/2010 | 64 | <0.5 | <0.5 | 0.94 | <1,000 | <0.5 | <0.5 |
| | 2/15/2011 | 130 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | 82 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | 79 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | 110 | <0.5 | <0.5 | 1.6 | <1,000 | <0.5 | <0.5 |
| | 1/10/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/9/2013 | 51 | <0.5 | <0.5 | 0.95 | <1,000 | <0.5 | <0.5 |
| | 1/30/2014 | 120 | <0.5 | <0.5 | 1.7 | <1,000 | <0.5 | <0.5 |
| | 7/25/2014 | 66 | <0.5 | <0.5 | 1.3 | <1,000 | <0.5 | <0.5 |
| | 1/19/2015 | 49 | <0.5 | <0.5 | 0.81 | <1,000 | <0.5 | <0.5 |
| | 7/21/2015 | 77 | <0.5 | <0.5 | 0.56 | <1,000 | <0.5 | <0.5 |
| | **1/18/2016** | **54** | **<0.5** | **<0.5** | **1.3** | **<1,000** | **<0.5** | **<0.5** |
| | | | | | | | | |
| **ESE-2** | 6/17/2003 | <4000 | <100 | <100 | <100 | NA | NA | NA |
| | 9/17/2003 | NA | NA | NA | NA | NA | NA | NA |
| | 12/9/2003 | 500 | <13 | <13 | 77 | <25,000 | <13 | <13 |
| | 2/26/2004 | 1200 | <0.5 | <0.5 | 92 | <1,000 | <0.5 | <0.5 |
| | 5/21/2004 | 2400 | <10 | <10 | 25 | <20,000 | <10 | <10 |
| | 8/10/2004 | 2300 | <2.5 | <2.5 | 12 | <5,000 | <2.5 | <2.5 |
| | 10/19/2004 | 1800 | <3.6 | <3.6 | 8.6 | <7100 | <3.6 | <3.6 |
| | 1/14/2005 | 470 | <8.3 | <8.3 | 28 | <17,000 | <8.3 | <8.3 |
| | 4/14/2005 | <10.8 | <2.15 | <2.15 | 17.9 | <4,300 | <2.15 | <2.15 |
| | 7/7/2005 | 109 | <2.15 | <2.15 | 9.7 | <4,300 | <2.15 | <2.15 |
| | 11/15/2005 | 64.7 | <0.5 | <0.5 | 3.43 | <1,000 | <0.5 | <0.5 |

# Table 2
## Historical Groundwater Analytical Data
## Gasoline Oxygenates & Lead Scavengers
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | ETHANOL (µg/L) | 1,2-DCA (µg/L) | EDB (µg/L) |
|---|---|---|---|---|---|---|---|---|
| **ESE-2 cont.** | 2/8/2006 | 46.4 | <2.15 | <2.15 | 11 | <4,300 | <2.15 | <2.15 |
| | 4/27/2006 | 47.7 | <1.0 | <1.0 | 8.29 | <2,000 | <1.0 | <1.0 |
| | 8/1/2006 | 20.6 | <1.0 | <1.0 | 4.67 | <2,000 | <1.0 | <1.0 |
| | 10/19/2006 | 28.9 | <0.5 | <0.5 | 4.55 | <1,000 | <0.5 | <0.5 |
| | 1/12/2007 | NA | NA | NA | NA | NA | NA | NA |
| | 4/17/2007 | 60.8 | <0.5 | <0.5 | 3.85 | <1,000 | <0.5 | <0.5 |
| | 7/17/2007 | 62.3 | <0.5 | <0.5 | 2.95 | <1,000 | <0.5 | <0.5 |
| | 10/16/2007 | 46 | <0.5 | <0.5 | 2.21 | <1,000 | <0.5 | <0.5 |
| | 1/17/2008 | 18.8 | <0.5 | <0.5 | 3.38 | <1,000 | <0.5 | <0.5 |
| | 4/17/2008 | 18.8 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/16/2008 | 9.95 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/14/2008 | <10 | <0.5 | <0.5 | 0.85 | <1,000 | <0.5 | <0.5 |
| | 1/6/2009 | 27 | <0.5 | <0.5 | 0.83 | <1,000 | <0.5 | <0.5 |
| | 4/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/7/2009 | 18 | <0.5 | <0.5 | 0.56 | <1,000 | <0.5 | <0.5 |
| | 1/27/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/26/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| **ESE-2R** | 8/30/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 11/16/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/14/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | <1.5 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/10/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/9/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/29/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/25/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/19/2015 | 6.8 J | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/21/2015 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/18/2016** | **<10** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |
| | | | | | | | | |
| **ESE-3** | 6/17/2003 | <200 | <5.0 | <5.0 | <5.0 | NA | NA | NA |
| | | | | | | | | |
| **ESE-5** | 9/17/2003 | <10 | <0.5 | <0.5 | <0.5 | <1000 | <0.5 | <0.5 |
| | 12/9/2003 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/26/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 5/21/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 8/10/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 10/19/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/14/2005 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/14/2005 | 17 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/7/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 11/15/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 2/8/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/27/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 8/1/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/19/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/12/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2007 | 8.7 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/17/2007 | 15.4 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/16/2007 | 11.5 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |

# Table 2
## Historical Groundwater Analytical Data
## Gasoline Oxygenates & Lead Scavengers
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | ETHANOL (µg/L) | 1,2-DCA (µg/L) | EDB (µg/L) |
|---|---|---|---|---|---|---|---|---|
| **ESE-5** cont. | 1/17/2008 | 17.2 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | 5.44 | <0.5 |
| | 7/16/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/14/2008 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/7/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/27/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/26/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| **ESE-5R** | 8/30/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 11/16/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/15/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | <1.5 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/11/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/10/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/9/2013 | 18 | <0.5 | <0.5 | 1.0 | <1,000 | <0.5 | <0.5 |
| | 1/30/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/24/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/20/2015 | <2.2 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/21/2015 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/19/2016** | **<10** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |
| | | | | | | | | |
| **MW-6** | 9/17/2003 | <10 | <0.5 | <0.5 | <0.5 | <1000 | <0.5 | <0.5 |
| | 12/9/2003 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/26/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 5/21/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 8/10/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 10/19/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/14/2005 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/14/2005 | <2.5 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/7/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 11/15/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 2/8/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/27/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 8/1/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/19/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/12/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/17/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/16/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/16/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/14/2008 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/7/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/27/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/26/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |

# Table 2
## Historical Groundwater Analytical Data
## Gasoline Oxygenates & Lead Scavengers
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | ETHANOL (µg/L) | 1,2-DCA (µg/L) | EDB (µg/L) |
|---|---|---|---|---|---|---|---|---|
| **MW-6R** | 8/30/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 11/15/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/14/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | <1.5 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/9/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/8/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/29/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/24/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/19/2015 | <2.2 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/20/2015 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/18/2016** | **<10** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |
| | | | | | | | | |
| **MW-7** | 9/17/2003 | <10 | <0.5 | <0.5 | 9.8 | <1,000 | <0.5 | <0.5 |
| | 12/9/2003 | <25 | <1.3 | <1.3 | 8.1 | <2,500 | <1.3 | <1.3 |
| | 2/26/2004 | <10 | <0.5 | <0.5 | 9.9 | <1,000 | <0.5 | <0.5 |
| | 5/21/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 8/10/2004 | <25 | <1.3 | <1.3 | 19 | <2,500 | <1.3 | <1.3 |
| | 10/19/2004 | <100 | <5.0 | <5.0 | 11 | <10,000 | <5.0 | <5.0 |
| | 1/14/2005 | <40 | <2.0 | <2.0 | 5.1 | <4,000 | <2.0 | <2.0 |
| | 4/14/2005 | 2.62 | <0.5 | <0.5 | 4.57 | <1,000 | <0.5 | <0.5 |
| | 7/7/2005 | 55.6 | <1.0 | <1.0 | 10.2 | <2,000 | <1.0 | <1.0 |
| | 11/15/2005 | 10.6 | <0.5 | <0.5 | 2.07 | <1,000 | <0.5 | <0.5 |
| | 2/8/2006 | <10 | <0.5 | <0.5 | 2.19 | <1,000 | <0.5 | <0.5 |
| | 4/27/2006 | <10 | <0.5 | <0.5 | 2.63 | <1,000 | <0.5 | <0.5 |
| | 8/1/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/19/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/12/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2007 | 11.6 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/17/2007 | 13.3 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/16/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/17/2008 | NA | NA | NA | NA | NA | NA | NA |
| | 4/17/2008 | 8.63 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/16/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/14/2008 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/7/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/27/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/26/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| **MW-7R** | 8/30/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 11/16/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/14/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | <1.5 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/9/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/8/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/29/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/25/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/19/2015 | <2.2 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/20/2015 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/18/2016** | **<10** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |

# Table 2
## Historical Groundwater Analytical Data
## Gasoline Oxygenates & Lead Scavengers
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | ETHANOL (µg/L) | 1,2-DCA (µg/L) | EDB (µg/L) |
|---|---|---|---|---|---|---|---|---|
| **SOMA-1** | 8/10/2004 | 2300 | <6.3 | <6.3 | 53 | <13,000 | <6.3 | <6.3 |
| | 10/19/2004 | 2400 | <13 | <13 | 36 | <25,000 | <13 | <13 |
| | 1/14/2005 | 530 | <3.1 | <3.1 | 7.1 | <6,300 | <3.1 | <3.1 |
| | 4/14/2005 | <27.5 | <5.5 | <5.5 | <22 | <11,000 | <5.5 | <5.5 |
| | 7/7/2005 | 2180 | <2.15 | <2.15 | 12.9 | <4,300 | <2.15 | <2.15 |
| | 11/15/2005 | 792 | <0.5 | <0.5 | 5.01 | <1,000 | <0.5 | <0.5 |
| | 2/8/2006 | 618 | <0.5 | <0.5 | 3.67 | <1,000 | <0.5 | <0.5 |
| | 4/27/2006 | 983 | <0.5 | <0.5 | 3.48 | <1,000 | <0.5 | <0.5 |
| | 8/1/2006 | 639 | <0.5 | <0.5 | 2.27 | <1,000 | <0.5 | <0.5 |
| | 10/19/2006 | 603 | <0.5 | <0.5 | 2.25 | <1,000 | <0.5 | <0.5 |
| | 1/12/2007 | 396 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2007 | 148 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/17/2007 | 555 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/16/2007 | 65 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/17/2008 | 29.6 | <0.5 | <0.5 | 2.06 | <1,000 | <0.5 | <0.5 |
| | 4/17/2008 | 339 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/16/2008 | 264 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/14/2008 | 250 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/6/2009 | 180 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/6/2009 | 120 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/7/2009 | 250 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/27/2010 | 310 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/26/2010 | 68 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 11/16/2010 | 84 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/15/2011 | 120 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | 130 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | 150 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | 79 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/10/2013 | 22 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/8/2013 | 11 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/29/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/25/2014 | 11 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/19/2015 | 13 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/20/2015 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/18/2016** | **<10** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |
| **SOMA-4** | 8/10/2004 | <10 | <0.5 | <0.5 | <0.5 | <1000 | <0.5 | <0.5 |
| | 10/19/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/14/2005 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/14/2005 | <2.5 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/7/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 11/15/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 2/8/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/27/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 8/1/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/19/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/12/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2007 | 3.98 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/17/2007 | 6.31 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/16/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/16/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/14/2008 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |

# Table 2
## Historical Groundwater Analytical Data
## Gasoline Oxygenates & Lead Scavengers
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | ETHANOL (µg/L) | 1,2-DCA (µg/L) | EDB (µg/L) |
|---|---|---|---|---|---|---|---|---|
| **SOMA-4** contd | 1/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/7/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/27/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/26/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 11/15/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/14/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | <1.5 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/9/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/8/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/29/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/24/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/19/2015 | <2.2 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/20/2015 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/18/2016** | **<10** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |
| **Shallow WBZ Wells** | | | | | | | | |
| **SOMA-2** | 8/10/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 10/19/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/14/2005 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/14/2005 | <2.5 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/7/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 11/15/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 2/8/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/27/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 8/1/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/19/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/12/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2007 | 14.6 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/17/2007 | 2.58 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/16/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/16/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/14/2008 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/7/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/27/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/26/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 11/15/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/14/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | <1.5 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/9/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/8/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/29/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/24/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/19/2015 | 2.5 J | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/20/2015 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/18/2016** | **<10** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |
| | | | | | | | | |
| **SOMA-3** | 8/10/2004 | <10 | <0.5 | <0.5 | <0.5 | <1000 | <0.5 | <0.5 |
| | 10/19/2004 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |

# Table 2
## Historical Groundwater Analytical Data
## Gasoline Oxygenates & Lead Scavengers
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | ETHANOL (µg/L) | 1,2-DCA (µg/L) | EDB (µg/L) |
|---|---|---|---|---|---|---|---|---|
| **SOMA-3** cont. | 1/14/2005 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/14/2005 | <2.5 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/7/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 11/15/2005 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 2/8/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/27/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 8/1/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/19/2006 | <10 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/12/2007 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2007 | 6.72 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/17/2007 | 7.6 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/16/2007 | 9.96 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 1/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 4/17/2008 | 6.05 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 7/16/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1,000 | <0.5 | <0.5 |
| | 10/14/2008 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 4/6/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/7/2009 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/27/2010 | <10 | <0.5 | <0.5 | 0.8 | <1,000 | <0.5 | <0.5 |
| | 7/26/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 11/15/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/14/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | <1.5 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/9/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/8/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/29/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/24/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/19/2015 | <2.2 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/20/2015 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/18/2016** | **<10** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |
| | | | | | | | | |
| **SOMA-5** | 1/27/2010 | 500 | <13 | <13 | <13 | <25,000 | <13 | <13 |
| | 7/26/2010 | <400 | <20 | <20 | <20 | <40,000 | <20 | <20 |
| | 11/15/2010 | 480 | <2.0 | <2.0 | <2.0 | <4,000 | <2.0 | <2.0 |
| | 2/15/2011 | 390 | <13 | <13 | <13 | <25,000 | <13 | <13 |
| pre-MPE | 6/16/2011 | 450 | <20 | <20 | <20 | NA | <20 | <20 |
| | 7/19/2011 | <71 | <3.6 | <3.6 | <3.6 | <7,100 | <3.6 | <3.6 |
| | 1/18/2012 | 11 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/10/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/9/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/30/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/25/2014 | 16 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/20/2015 | 9.1 J | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/21/2015 | 11 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/19/2016** | **<100** | **<5.0** | **<5.0** | **<5.0** | **<10,000** | **<5.0** | **<5.0** |
| | | | | | | | | |
| **SOMA-7** | 8/30/2010 | <33 | <1.7 | <1.7 | <1.7 | <3,300 | <1.7 | <1.7 |
| | 11/16/2010 | <25 | <1.3 | <1.3 | <1.3 | <2,500 | <1.3 | <1.3 |
| | 2/15/2011 | <25 | <1.3 | <1.3 | <1.3 | <2,500 | <1.3 | <1.3 |
| pre-MPE | 6/16/2011 | <33 | <1.7 | <1.7 | <1.7 | NA | <1.7 | <1.7 |
| | 7/19/2011 | <25 | <1.3 | <1.3 | <1.3 | <2,500 | <1.3 | <1.3 |

# Table 2
## Historical Groundwater Analytical Data
## Gasoline Oxygenates & Lead Scavengers
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | ETHANOL (µg/L) | 1,2-DCA (µg/L) | EDB (µg/L) |
|---|---|---|---|---|---|---|---|---|
| **SOMA-7** cont. | 1/18/2012 | <6.6 | <1.6 | <1.7 | <1.4 | <440 | <1.2 | <0.86 |
| | 7/11/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/10/2013 | <71 | <3.6 | <3.6 | <3.6 | <7,100 | <3.6 | <3.6 |
| | 7/9/2013 | <83 | <4.2 | <4.2 | <4.2 | <8,300 | <4.2 | <4.2 |
| | 1/30/2014 | <40 | <2.0 | <2.0 | <2.0 | <4,000 | <2.0 | <2.0 |
| | 7/24/2014 | <50 | <2.5 | <2.5 | <2.5 | <5,000 | <2.5 | <2.5 |
| | 1/20/2015 | 14 J | <2.5 | <2.5 | <2.5 | <5,000 | <2.5 | <2.5 |
| | 7/21/2015 | <50 | <2.5 | <2.5 | <2.5 | <5,000 | <2.5 | <2.5 |
| | **1/19/2016** | **<50** | **<2.5** | **<2.5** | **<2.5** | **<5,000** | **<2.5** | **<2.5** |
| | | | | | | | | |
| **SOMA-8** | 8/30/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 11/15/2010 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 2/14/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/19/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | <1.5 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/10/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/9/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/8/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/29/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/24/2014 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/19/2015 | 2.6 J | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/20/2015 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/18/2016** | **<10** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |
| | | | | | | | | |
| **OB-1** pre-MPE | 6/16/2011 | 20 | <0.5 | <0.5 | <0.5 | NA | <0.5 | <0.5 |
| | 7/19/2011 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/18/2012 | <1.5 | <0.36 | <0.4 | <0.32 | <100 | <0.28 | <0.19 |
| | 7/11/2012 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/10/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/9/2013 | 11 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/30/2014 | 10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/24/2014 | 14 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/20/2015 | 18 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 7/21/2015 | 11 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | **1/19/2016** | **16** | **<0.5** | **<0.5** | **<0.5** | **<1,000** | **<0.5** | **<0.5** |
| | | | | | | | | |
| **OB-2** pre-MPE | 6/16/2011 | 220 | <5.0 | <5.0 | <5.0 | NA | <5.0 | <5.0 |
| | 7/19/2011 | 260 | <10 | <10 | <10 | <20,000 | <10 | <10 |
| | 1/18/2012 | 94 | <3.2 | <3.5 | <2.8 | <880 | <2.4 | <1.7 |
| | 7/11/2012 | 44 | <0.5 | <0.5 | 20 | <1,000 | 0.6 | <0.5 |
| | 1/10/2013 | <140 | <7.1 | <7.1 | <7.1 | <14,000 | <7.1 | <7.1 |
| | 7/9/2013 | <10 | <0.5 | <0.5 | <0.5 | <1,000 | <0.5 | <0.5 |
| | 1/30/2014 | <100 | <5.0 | <5.0 | <5.0 | <10,000 | <5.0 | <5.0 |
| | 7/25/2014 | <200 | <10 | <10 | <10 | <20,000 | <10 | <10 |
| | 1/20/2015 | 40 J | <7.1 | <7.1 | <7.1 | <14,000 | <7.1 | <7.1 |
| | 7/21/2015 | <140 | <7.1 | <7.1 | <7.1 | <14,000 | <7.1 | <7.1 |
| | **1/19/2016** | **<140** | **<7.1** | **<7.1** | **<7.1** | **<14,000** | **<7.1** | **<7.1** |
| **Equipment Blanks** | | | | | | | | |
| EB-PMP | 1/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |
| EB-PRB | 1/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |
| EB-PMP2 | 1/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |
| EB-PRB2 | 1/17/2008 | <2.0 | <0.5 | <0.5 | <2.0 | <1000 | <0.5 | <0.5 |

# Table 2
## Historical Groundwater Analytical Data
## Gasoline Oxygenates & Lead Scavengers
### 3519 Castro Valley Blvd, Castro Valley, CA

| Monitoring Well | Date | TBA (µg/L) | DIPE (µg/L) | ETBE (µg/L) | TAME (µg/L) | ETHANOL (µg/L) | 1,2-DCA (µg/L) | EDB (µg/L) |
|---|---|---|---|---|---|---|---|---|

Notes:
< : Not detected above laboratory reporting limit.
NA: Not Analyzed.
Well ESE-2 was inaccessible duirng the First Quarter 2007, dirt was covered over well
Well MW-7 had a car parked over it and was inaccessible during the First Quarter 2008 monitoring event.
The Third Quarter 2003 was the first time that SOMA analyzed groundwater samples
at the Site.
The Third Quarter 2004 was the first time that SOMA analyzed groundwater samples
at wells SOMA-1 to SOMA-4.

Gasoline Oxygenates:
TBA: tertiary butyl alcohol
DIPE: isopropyl ether
ETBE: ethyl tertiary butyl ether
TAME: methyl tertiary amyl ether
Ethanol

Lead Scavengers:
1,2-DCA: 1,2-Dichloroethane
EDB: 1,2-Dibromoethane

August 2010, reconstruct ESE-1R, ESE-2R, ESE-5R, MW-6R, MW-7R; install SOMA-7, SOMA-8. 8/30/10 investigation sampling

# Figures


N

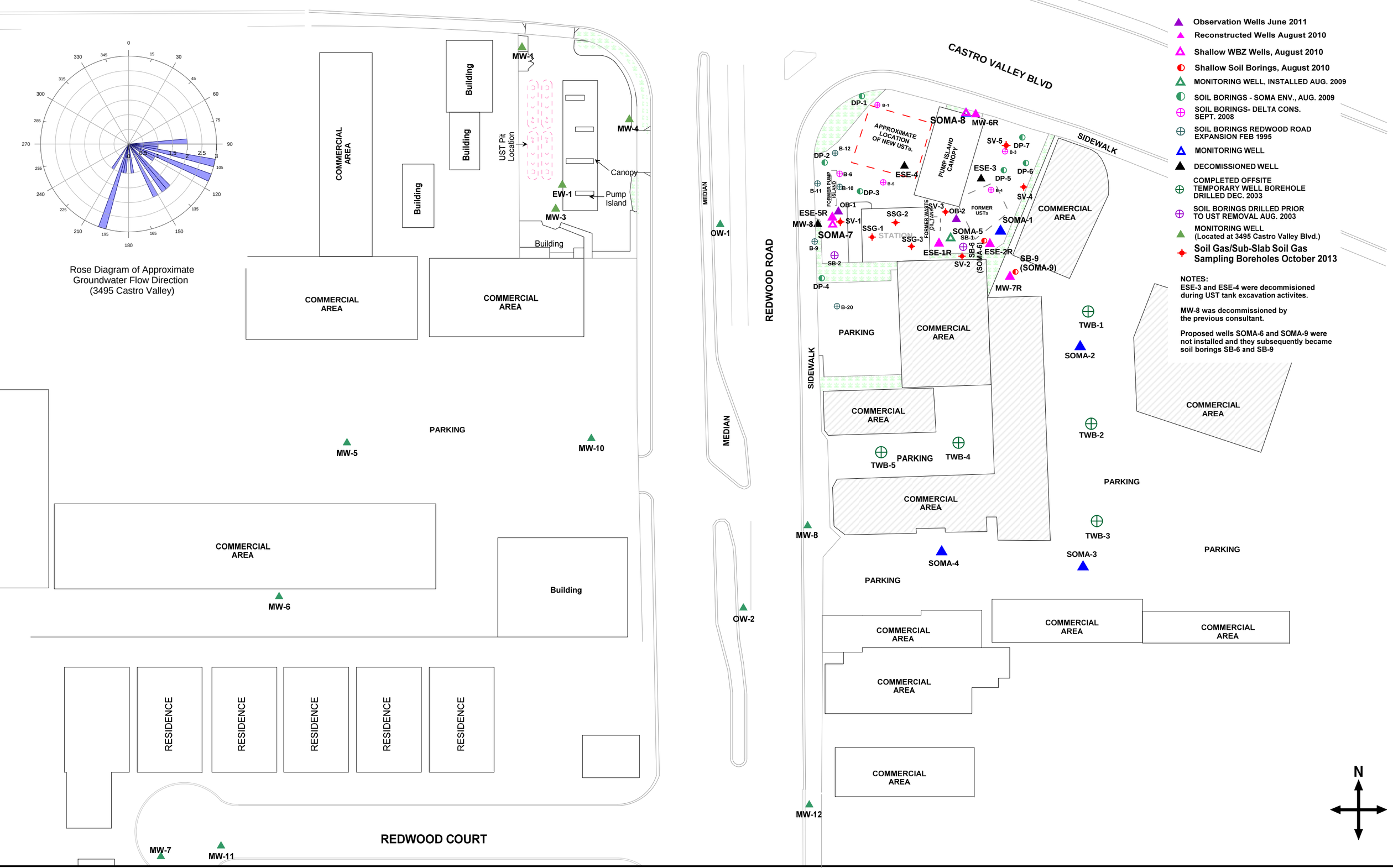
approximate scale in feet

0 60 120

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.

Rose Diagram of Approximate Groundwater Flow Direction (3495 Castro Valley)




- Observation Wells June 2011
- Reconstructed Wells August 2010
- Shallow WBZ Wells, August 2010
- Shallow Soil Borings, August 2010
- MONITORING WELL, INSTALLED AUG. 2009
- SOIL BORINGS - SOMA ENV., AUG. 2009
- SOIL BORINGS- DELTA CONS. SEPT. 2008
- SOIL BORINGS REDWOOD ROAD EXPANSION FEB 1995
- MONITORING WELL
- DECOMMISSIONED WELL
- COMPLETED OFFSITE TEMPORARY WELL BOREHOLE DRILLED DEC. 2003
- SOIL BORINGS DRILLED PRIOR TO UST REMOVAL AUG. 2003
- MONITORING WELL (Located at 3495 Castro Valley Blvd.)
- **Soil Gas/Sub-Slab Soil Gas Sampling Boreholes October 2013**

NOTES:
ESE-3 and ESE-4 were decommisioned during UST tank excavation activites.

MW-8 was decommissioned by the previous consultant.

Proposed wells SOMA-6 and SOMA-9 were not installed and they subsequently became soil borings SB-6 and SB-9

approximate scale in feet
0 60 120

Figure 2: Site map showing locations of existing monitoring wells, decommissioned wells, offsite temporary well boreholes, monitoring wells installed by SOMA, and monitoring wells located at neighboring service station.

SOMA ENVIRONMENTAL ENGINEERING, INC.

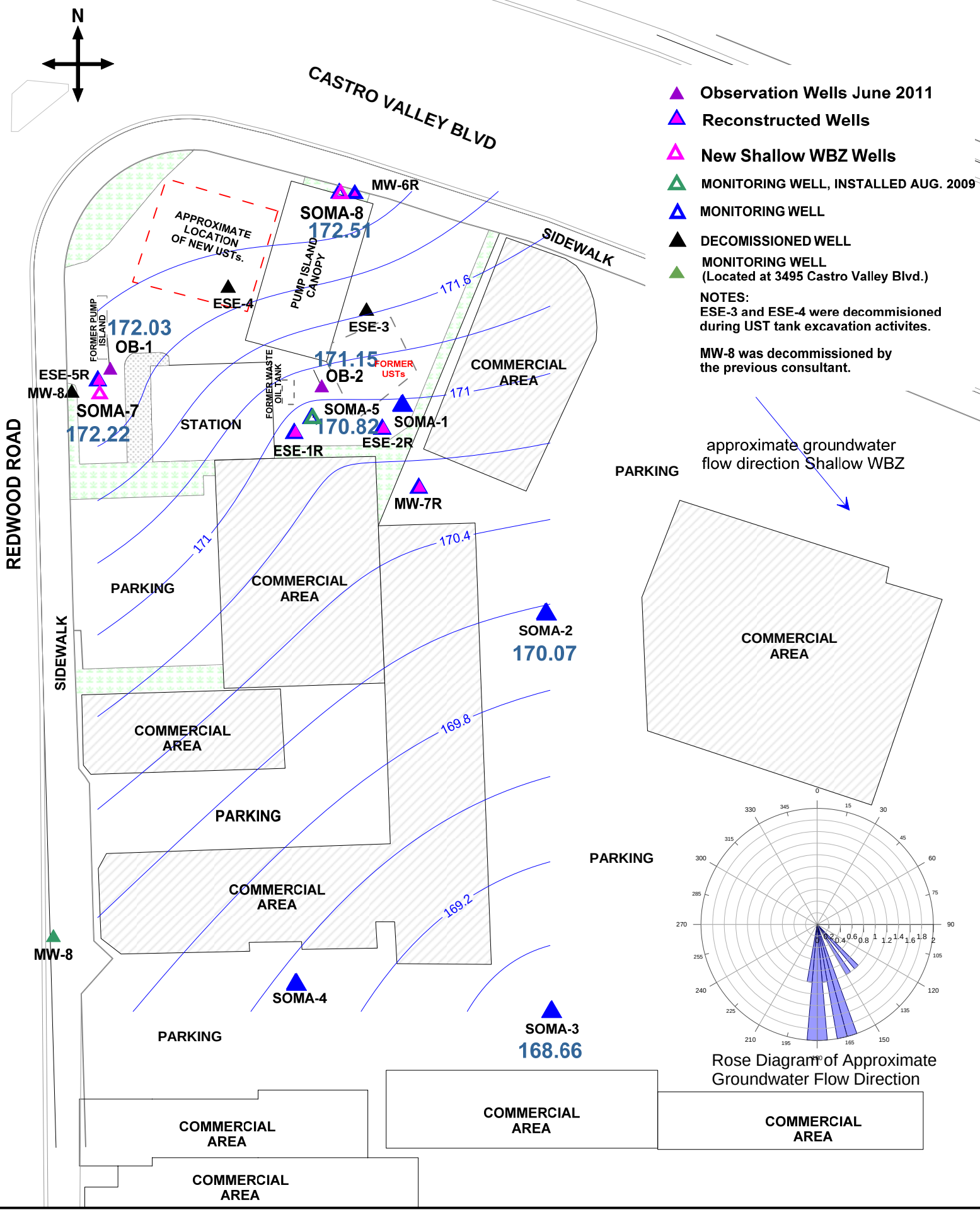



Figure 3: Groundwater Elevation Contour Map for Shallow WBZ Wells in Feet. January 18, 2016

ENVIRONMENTAL ENGINEERING, INC.

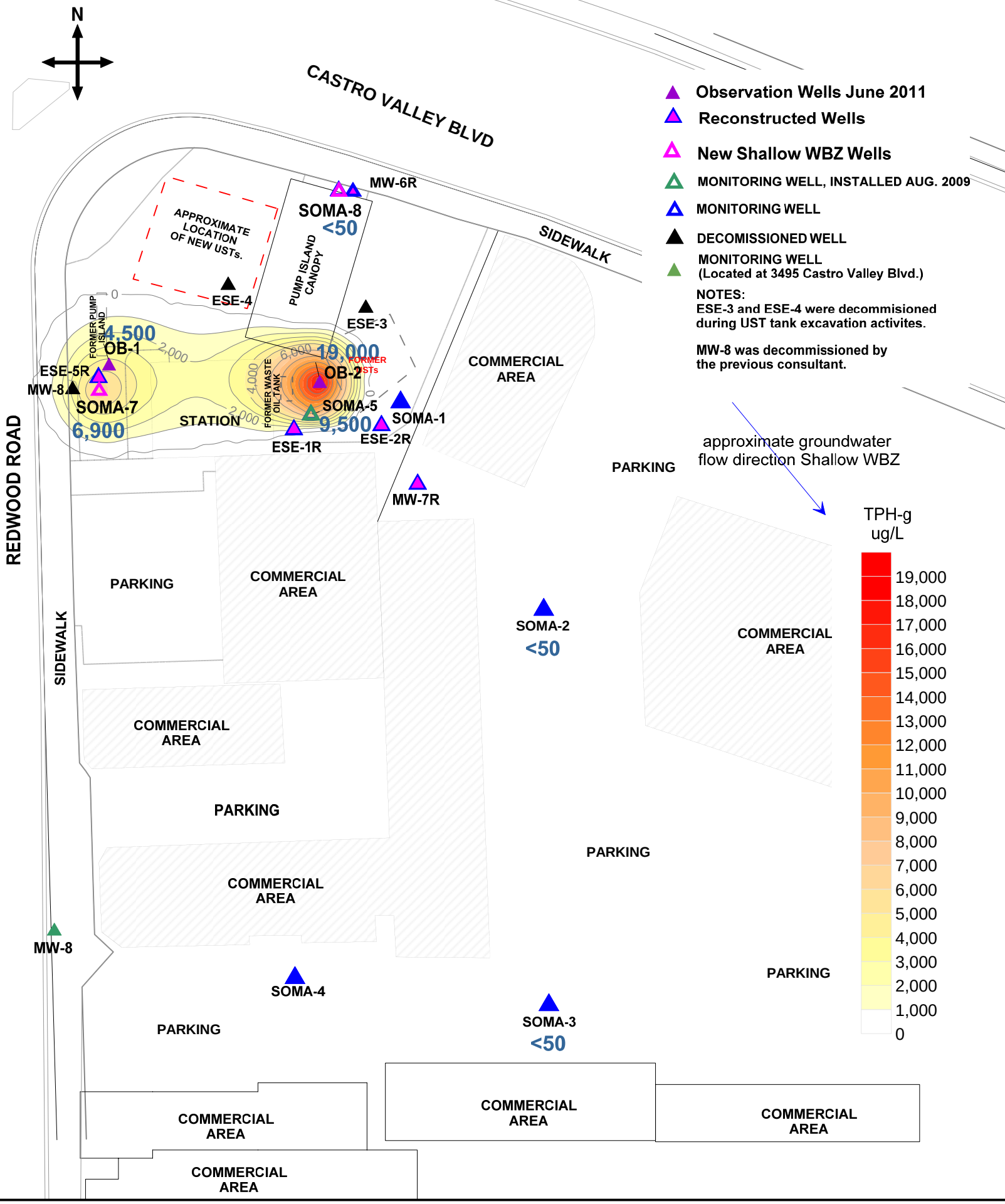



Figure 4: Contour Map of TPH-g Concentrations in Shallow WBZ Wells in Feet. January 18 and 19, 2016

ENVIRONMENTAL ENGINEERING, INC.

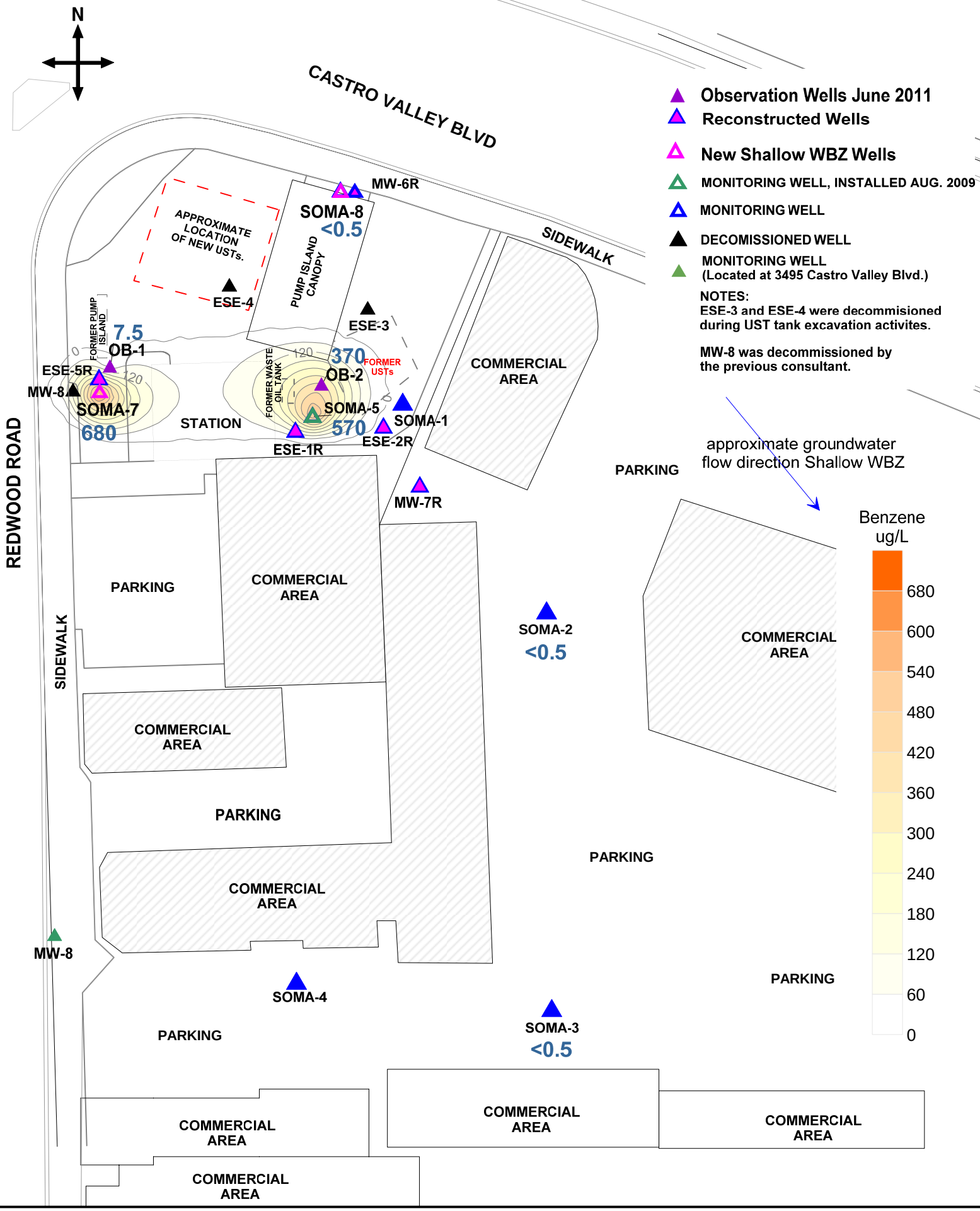



Figure 5: Contour Map of Benzene Concentrations in Shallow WBZ Wells in Feet. January 18 and 19, 2016

ENVIRONMENTAL ENGINEERING, INC.

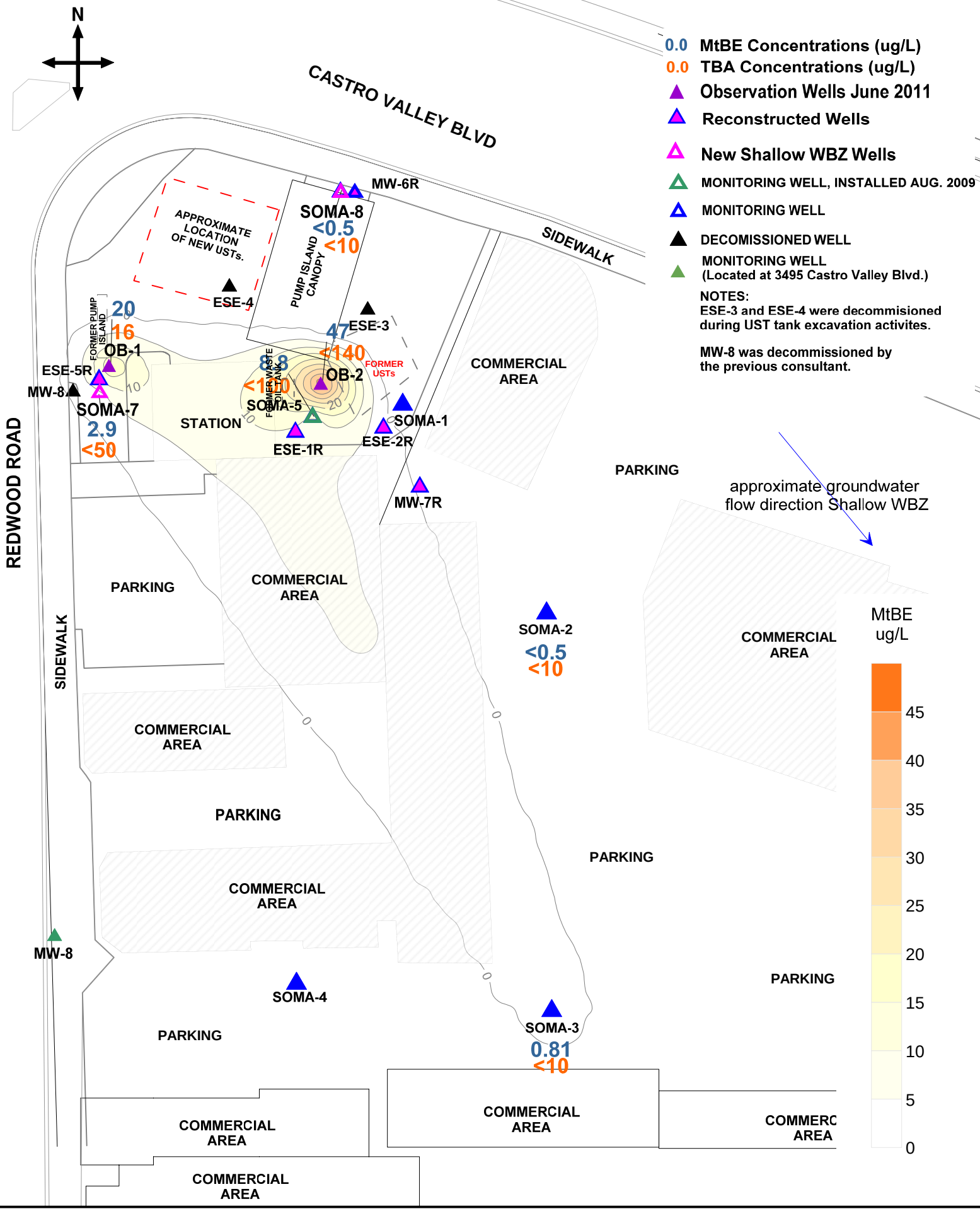
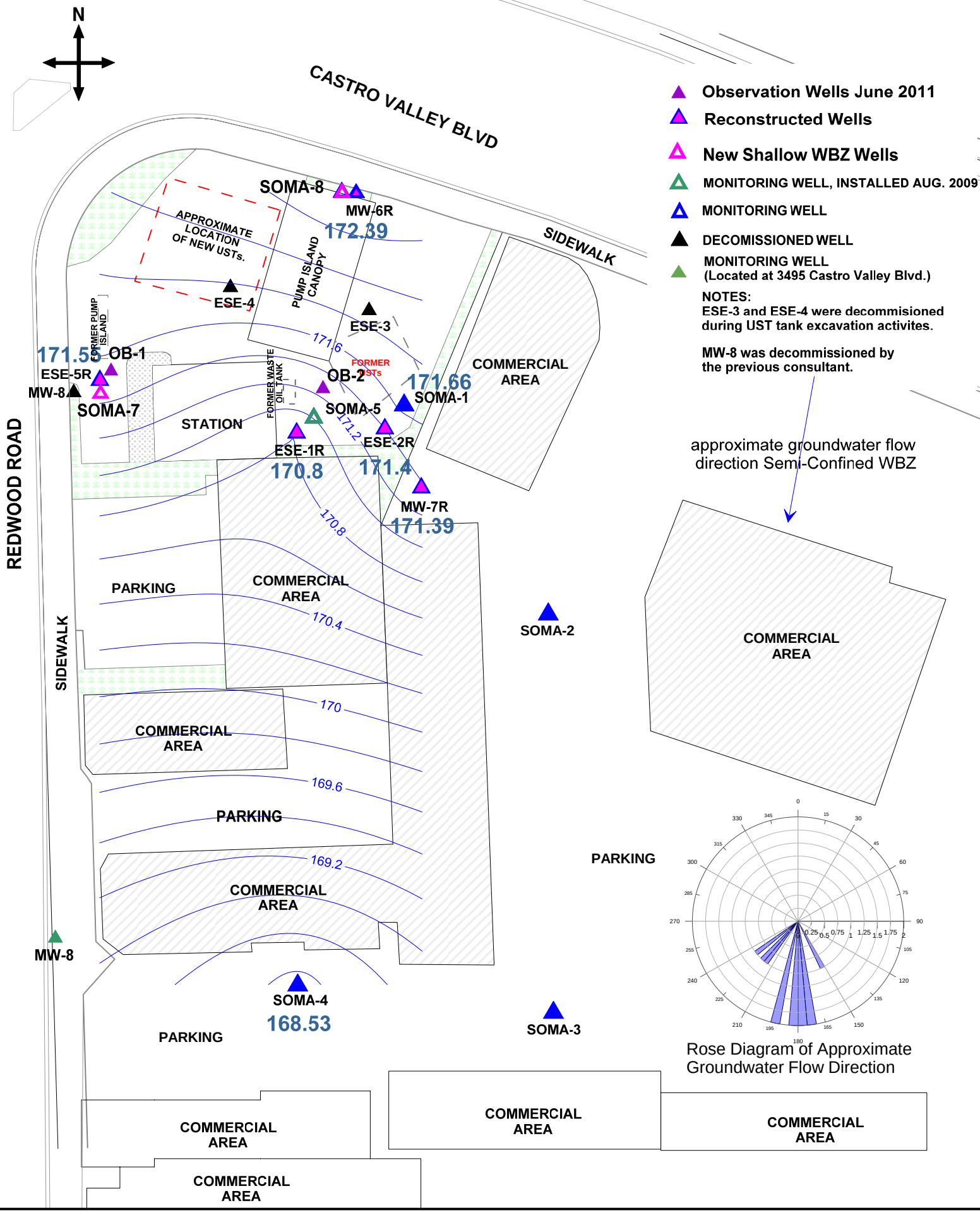



Figure 6: Contour Map of MtBE and Map of TBA Concentrations in Shallow WBZ Wells in Feet. January 18 and 19, 2016

ENVIRONMENTAL ENGINEERING, INC.




approximate scale in feet

0 40 80

Figure 7: Groundwater Elevation Contour Map for Semi-Confined WBZ Wells in Feet. January 18, 2016

SOMA ENVIRONMENTAL ENGINEERING, INC.

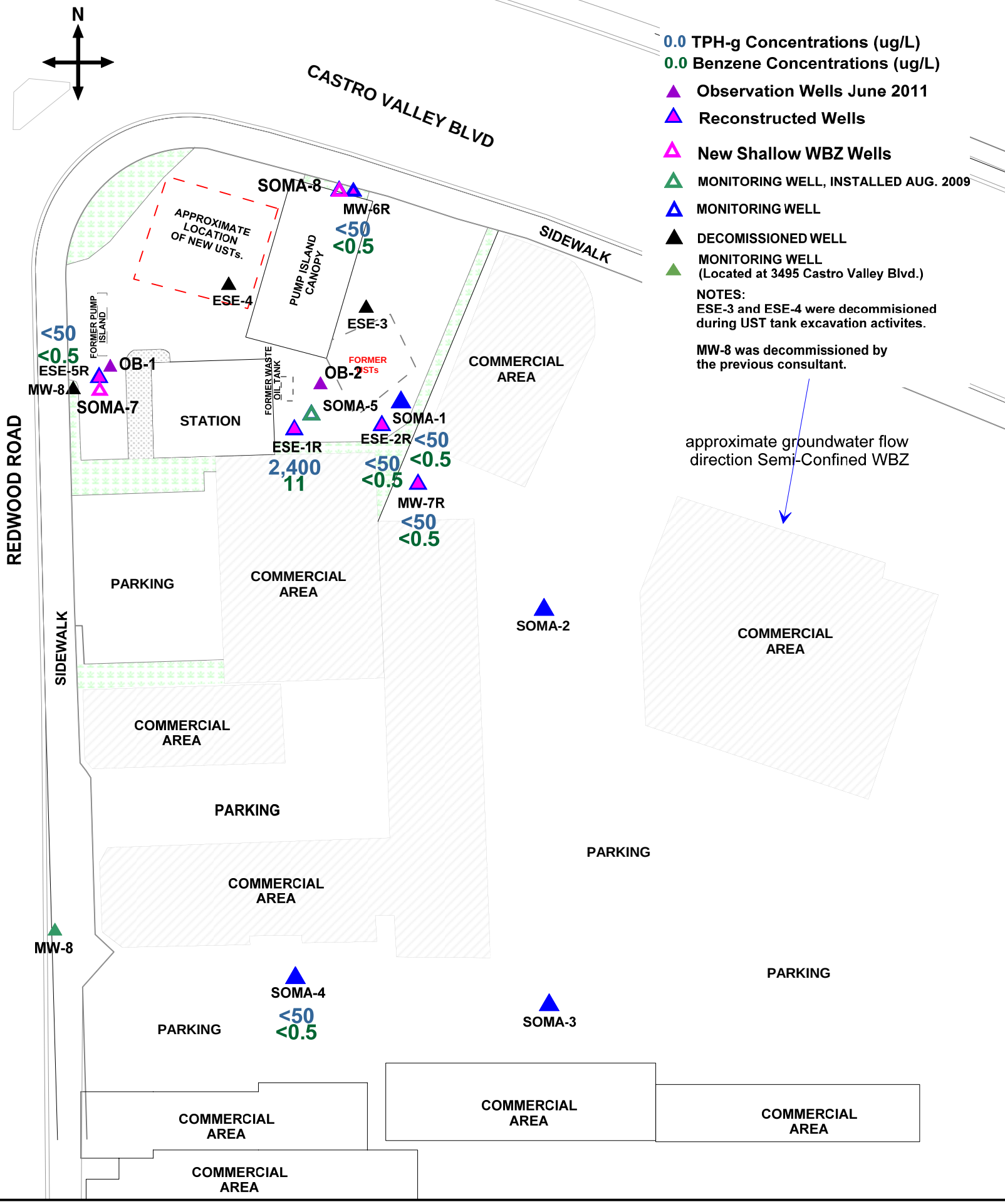



Figure 8: Map of TPH-g and Benzene Concentrations in Semi-Confined WBZ Wells. January 18 and 19, 2016

SOMA ENVIRONMENTAL ENGINEERING, INC.

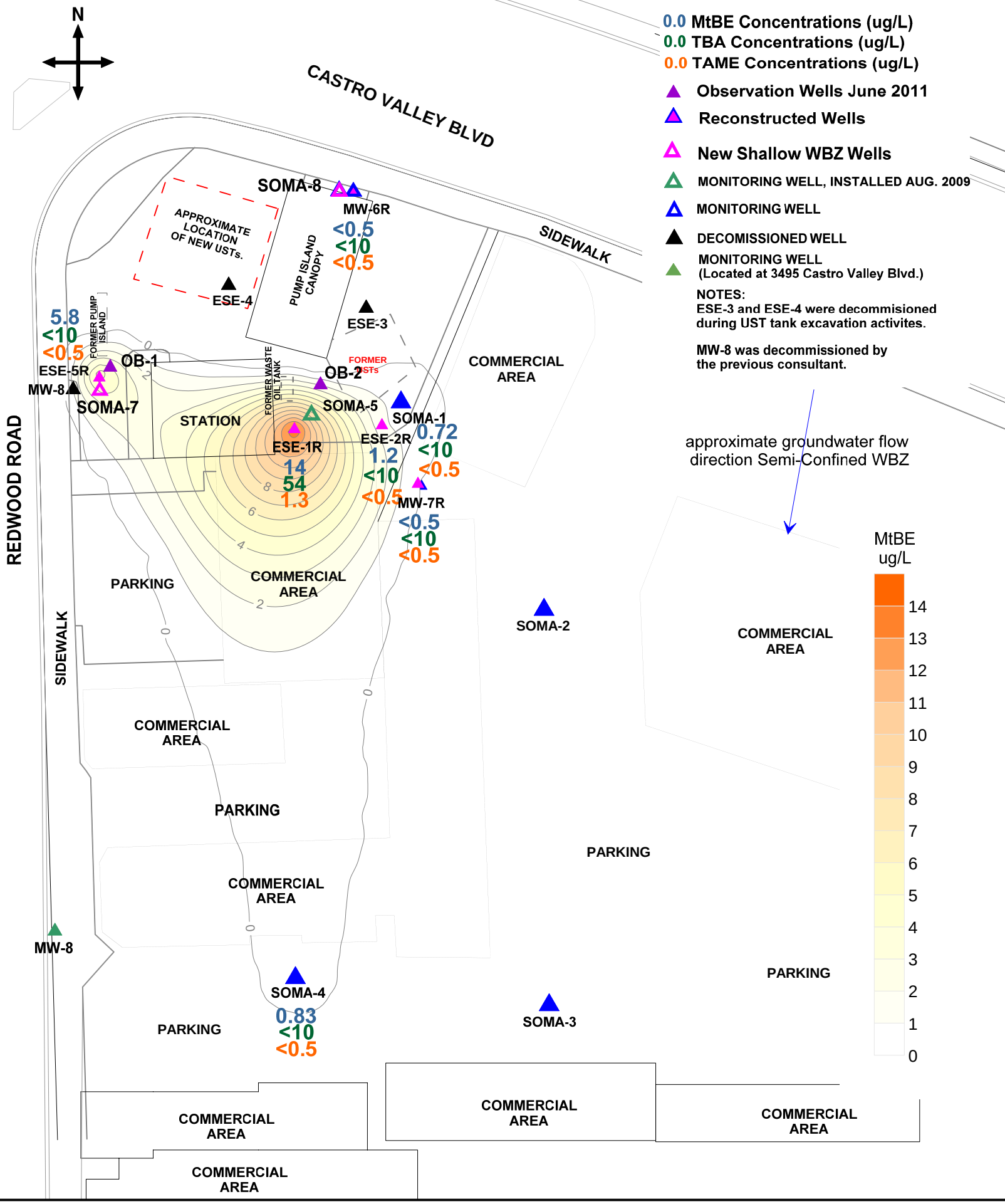



Figure 9: Contour Map of MtBE and Map of TBA and TAME Concentrations in Semi-Confined WBZ Wells.
January 18 and 19, 2016

ENVIRONMENTAL ENGINEERING, INC.

# 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 monitoring 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 in each monitoring well 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 monitoring well is purged using a battery-operated, 2-inch-diameter pump (Model ES-60 DC). To ensure that final samples are in equilibrium with, and representative of, the surrounding groundwater, during purging several samples are taken for field measurements of pH, temperature and electrical conductivity (EC). These parameters are measured with a Hanna pH, conductivity, and temperature meter. Equipment is calibrated on-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.

Purging continues until these parameters stabilize or three casing volumes are purged.

## 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 to 40-mL VOA vials and preserved with hydrochloric acid. The vials are sealed to prevent air bubbles from forming 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 for Monitoring Wells, Field Measurements of Groundwater Sample Properties, and Groundwater Gradient Calculations

DATE: 6/21/04
JOB# A0459

# TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL
3519 CASTRO VALLEY BLVD., CASTRO VALLEY

| WELL ID # | NORTHING (FT.) / LATITUDE (D.M.S.) | EASTING (FT.) / LONGITUDE (D.M.S.) | ELEVATION (FT.) | DESCRIPTION |
|---|---|---|---|---|
| ESE-1 | 2079361.15 | 6106465.13 | 180.24 | 2" PVC, NOTVH N. SIDE |
| | N 37° 41' 42.07112" | W 122° 04' 24.07899" | 180.71 | SET PUNCH NORTH SIDE RIM |
| | | | 180.69 | PAVEMENT NORTH SIDE |
| | | | | |
| ESE-2 | 2079361.30 | 6106501.97 | 180.79 | 2" PVC, NOTVH N. SIDE |
| | N 37° 41' 42.07873" | W 122° 04' 23.62071" | 181.16 | SET PUNCH NORTH SIDE RIM |
| | | | 181.14 | CONC. NORTH SIDE |
| | | | | |
| ESE-5 | 2079381.46 | 6106387.63 | 178.80 | 2" PVC, NOTVH N. SIDE |
| | N 37° 41' 42.25902" | W 122° 04' 25.04739" | 179.07 | FELT X ON NORTH SIDE RIM |
| | | | 179.10 | CONC. NORTH SIDE |
| | | | | |
| MW-6 | 2079451.94 | 6106492.77 | 181.80 | 2" PVC, NOTVH N. SIDE |
| | N 37° 41' 42.97323" | W 122° 04' 23.75412" | 181.97 | SET PUNCH NORTH SIDE RIM |
| | | | 181.88 | GROUND NORTH SIDE |
| | | | | |
| MW-7 | 2079337.18 | 6106516.12 | 179.11 | 2" PVC, NOTVH N. SIDE |
| | N 37° 41' 41.84264" | W 122° 04' 23.43963" | 179.55 | SET PUNCH NORTH SIDE RIM |
| | | | 179.49 | CONC. NORTH SIDE |
| | | | | |
| SOMA-1 | 2079370.39 | 6106506.79 | 180.95 | 2" PVC, NOTVH N. SIDE |
| | N 37° 41' 42.16939" | W 122° 04' 23.56265" | 181.25 | SET PUNCH NORTH SIDE RIM |
| | | | 181.22 | CONC. NORTH SIDE |
| | | | | |
| SOMA-2 | 2079297.44 | 6106567.02 | 178.99 | 2" PVC, NOTVH N. SIDE |
| | N 37° 41' 41.45825" | W 122° 04' 22.79809" | 179.29 | SET PUNCH NORTH SIDE RIM |
| | | | 179.28 | CONC. NORTH SIDE |
| | | | | |
| SOMA-3 | 2079130.83 | 6106567.48 | 176.81 | 2" PVC, NOTVH N. SIDE |
| | N 37° 41' 39.81129" | W 122° 04' 22.75752" | 177.18 | SET PUNCH NORTH SIDE RIM |
| | | | 177.12 | PAVEMENT NORTH SIDE |
| | | | | |
| SOMA-4 | 2079141.57 | 6106464.22 | 176.94 | 2" PVC, NOTVH N. SIDE |
| | N 37° 41' 39.9003" | W 122° 04' 24.04438" | 177.43 | SET PUNCH NORTH SIDE RIM |
| | | | 177.44 | PAVEMENT NORTH SIDE |
| | | | | |
| | | | | |



**Kier & Wright Engineers Surveyors, Inc.**
1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
Phone (925) 249-6555,
Fax (925) 249-6563

DATE: 6/21/04
JOB# A0459

# TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL
3519 CASTRO VALLEY BLVD., CASTRO VALLEY

## ADDITIONAL POINTS

| PT# | NORTHING (FT.) | EASTING (FT.) | ELEVATION (FT.) | DESCRIPTION |
|---|---|---|---|---|
| 320 | 2079386.87 | 6106408.85 | N/A | BL. INTX |
| 321 | 2079387.18 | 6106455.22 | N/A | BL. INTX |
| 331 | 2079351.06 | 6106409.27 | N/A | BL< |
| 318 | 2079384.55 | 6106369.10 | N/A | DWY |
| 329 | 2079106.74 | 6106368.58 | N/A | DWY |
| 330 | 2079148.74 | 6106368.66 | N/A | DWY |
| 317 | 2079424.72 | 6106369.39 | N/A | DWY E-C |
| 315 | 2079481.34 | 6106432.38 | N/A | DWY PCC |
| 310 | 2079415.57 | 6106624.48 | N/A | DWY POC |
| 311 | 2079423.23 | 6106606.56 | N/A | DWY POC |
| 312 | 2079447.91 | 6106542.76 | N/A | DWY POC |
| 313 | 2079461.36 | 6106504.01 | N/A | DWY POC |
| 314 | 2079472.67 | 6106468.07 | N/A | DWY POC |
| 316 | 2079466.76 | 6106389.18 | N/A | HCRMP POC |
| 319 | 2079237.38 | 6106368.78 | N/A | TC |

**BENCH MARK:** NGS Bench mark No.PID# HT0223

THE STATION IS LOCATED IN THE CITY OF HAYWARD AT THE RAILROAD CROSSING OF THE SOUTHERN PACIFIC RAIL-ROAD AND BLOSSOM WAY, IN THE TOP OF THE NORTHWEST CURB OF BLOSSOM WAY.

TO REACH THE STATION FROM THE JUNCTION OF U S HIGHWAY 880 ON WEST A STREET, GO SOUTHEAST ON WEST A STREET FOR 0.2 MILES TO A CROSSROAD, HATHAWAY AVE ON THE LEFT, SANTA CLARA STREET ON THE RIGHT. TURN LEFT, NORTH, ON HATHAWAY AVENUE AND CONTINUE FOR 0.7 MILES TO WEST BLOSSOM WAY. TURN RIGHT, NORTH, ON WEST BLOSSSOM WAY AND CONTINUE FOR 0.25 MILES TO THE STATION ON THE LEFT, JUST PAST THE RAIL-ROAD TRACKS.

THE STATION IS 48.95 M (160.6 FT) NORTHEAST OF THE NORTHEAST RAIL, 7.01 M NORTHWEST OF THE CENTER OF BLOSSOM WAY, 0.24 M (0.8 FT) NORTH OF THE NORTH CORNER OF A STEEL GRATE IN THE STREET, 5.6 M (18.5 FT) SOUTHWEST OF A POWER POLE AND 0.12 M (0.4 FT) HIGHER THAN THE STREET.

Elevation =56.33 FEET NAVD88 Datum ADJUSTED

**HORIZONTAL CONTROL:**

**PID - HT0223**
NORTHING =2,072,670.26 , EASTING = 6,095,650.79 FEET; EPOCH DATE = 1998.50

**PID - HT 2583**

DATE: 6/21/04
JOB# A0459

# TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

SOMA ENVIRONMENTAL
3519 CASTRO VALLEY BLVD., CASTRO VALLEY

NORTHING =2,082,510.30 , EASTING = 6,116,892.13 FEET; EPOCH DATE = 1991.35

Coordinate values are based on the California Coordinate System, Zone III NAD 83 Datum.



**Kier & Wright Engineers Surveyors, Inc.**
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# *Ben Harrington PLS*

*Land Surveying & Mapping*

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


**Soma Environmental Engineering**
**6620 Owens Dr**
**Suite A**
**Pleasanton Ca. 94588**

**Sept 04, 2009**

**Attn: Elena**
**Job # 2903**

**Ref: 3519 Castro Valley Blvd. Castro Valley Ca.**

**HORZONTAL CONTROL, NAD 88:**

**Survey based previous survey dated 6\21\04 by Kier & Wright Surveyors on California Coordinate System, Zone 3, NAD 83.**

**ESE-1 NOTCH IN TOP OF 2" PVC, NORTH 2,079,361.15 EAST 6,106,465.13 LAT. N37°41'42.17112" W122°04"24.07899", NAVD 88, ELEV.180.24.**

**ESE-2 NOTCH IN TOP OF 2" PVC, NORTH 2,079,361.30 EAST 6,106,501.97, LAT. N37°41'42.07873" W122°04'23.62071", NAVD 88, ELEV. 180.79.**

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

**EPOCH DATE 2007.00**

**OBSERVATION: EPOCH=180.**

**FIELD SURVEY: 9-04-09.**

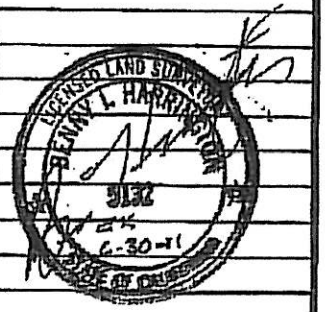
**Ben Harrington**
**PLS 5132**

**NEW MONITORING WELL**
**3519 CASTRO VALLEY BLVD.**
**CASTRO VALLEY CA.**

**BEN HARRINGTON PLS**
**2278 LARKEY LANE**
**WALNUT CREEK CA 94597**

**JOB # 2913**
**DATE: 09\04\09**

| PT# | NORTH | EAST | ELEV | DESC. | LATITUDE N.DMS | LONGTIDUDE W.DMS | LAT.N. DEC. DEG. | LONG.W.DEC.DEG. |
|---|---|---|---|---|---|---|---|---|
| 21 | 2079379.07 | 6106486.97 | 180.65 | SET X IN CONC. | N37°41'42.25136" | W122°04'23.62071" | N37°.695069822" | W122°073227975" |
| 2 | 2079361.30 | 6106501.97 | 180.79 | ESE-2 2" PVC | N37°41'42.25902" | W122°04'28.81106" | N37°.695071950" | W122°.074669739" |
| 1 | 2079361.15 | 6106465.13 | 180.24 | ESE-1 2" PVC | N37°41'42.17112" | W122°04'24.07899" | N37°.695047533" | W122°.073355275" |
| 22 | 2079365.14 | 6106472.19 | 180.31 | SOMA-5 2" PVC | N37°41'42.11178" | W122°04'23.99204" | N37°.695031050" | W122°.073331122" |
| 23 | 2079365.35 | 6106472.21 | 180.65 | SPMA-5 PUNCH | N37°41'42.11384" | W122°04'23.99185" | N37°.695031622" | W122°.073331069" |
| 24 | 2079364.24 | 6106472.19 | 180.66 | SOMA-5 CONC. | N37°41'42.39919" | W122°04'23.99187" | N37°.695110886" | W122°.073331075" |



DATE: 08/30/2010

JOB# 10022

# TABLE OF ELEVATIONS & COORDINATES ON MONITORING WELLS

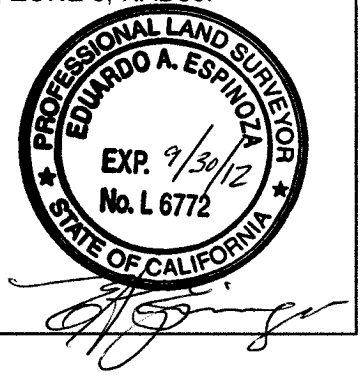
SOMA ENVIRONMENTAL ENGINEERING
3519 CASTRO VALLEY
CASTRO VALLEY, CA

| WELL ID # | NORTHING (FT.) / LATITUDE (D.DEG.) | EASTING (FT.) / LONGITUDE (D.DEG.) | ELEVATION (FT.) | DESCRIPTION |
|---|---|---|---|---|
| ESE-1R | 2079361.109 | 6106465.242 | 180.20 | 2" PVC NOTCH NORTH SIDE |
| | 37.695019649N | 122.073354886W | 180.72 | SET PUNCH NORTH SIDE RIM |
| | | | 180.69 | CONCRETE NORTH SIDE |
| ESE-2R | 2079361.241 | 6106502.129 | 180.70 | 2" PVC NOTCH NORTH SIDE |
| | 37.695021715N | 122.073227422W | 181.20 | SET PUNCH NORTH SIDE RIM |
| | | | 181.16 | CONCRETE NORTH SIDE |
| ESE-5R | 2079381.529 | 6106387.748 | 178.64 | 2" PVC NOTCH NORTH SIDE |
| | 37.695072144N | 122.073623872W | 179.14 | SET PUNCH NORTH SIDE RIM |
| | | | 179.12 | PAVEMENT NORTH SIDE |
| MW-6R | 2079451.45 | 6106492.729 | 181.34 | 2" PVC NOTCH NORTH SIDE |
| | 37.695268993N | 122.073265147W | 182.10 | SET PUNCH NORTH SIDE RIM |
| | | | 182.01 | GROUND NORTH SIDE |
| SOMA-7 | 2079374.578 | 6106387.784 | 178.54 | 2" PVC NOTCH NORTH SIDE |
| | 37.695053058N | 122.073623344W | 179.09 | SET PUNCH NORTH SIDE RIM |
| | | | 179.06 | PAVEMENT NORTH SIDE |
| MW-7R | 2079337.204 | 6106516.216 | 179.14 | 2" PVC NOTCH NORTH SIDE |
| | 37.694956360N | 122.073177344W | 179.71 | SET PUNCH NORTH SIDE RIM |
| | | | 179.70 | PAVEMENT NORTH SIDE |
| SOMA-8 | 2079453.231 | 6106488.22 | 181.57 | 2" PVC NOTCH NORTH SIDE |
| | 37.695273676N | 122.073280832W | 182.03 | SET PUNCH NORTH SIDE RIM |
| | | | 181.92 | GROUND NORTH SIDE |

HORIZONTAL AND VERTICAL CONTROL
SURVEY BASED ON PREVIOUS SURVEY BY KIER & WRIGHT ENGINEERS SURVEYORS, INC. DATED: 6/21/2005
COORDINATE VALUES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 3, NAD83.
ELEVATIONS ARE NAVD 88 DATUM.

SOMA-1, NOTCH
NORTHING 2,079,370.39, EASTING 6,106,506.79
ELEVATION 180.95

SOMA-2, NOTCH
NORTHING 2,079,297.44, EASTING 6,106,567.02
ELEVATION 178.99




**Eduardo A. Espinoza**
Land Surveying and Mapping
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email: edgis@aol.com

DATE: 06/22/2011

JOB#

# TABLE OF ELEVATIONS & COORDINATES

# ON MONITORING WELLS

SOMA ENVIRONMENTAL ENGINEERING

3519 CASTRO VALLEY BOULEVARD

CASTRO VALLEY, CA

| WELL ID # | NORTHING (FT.) / LATITUDE (D.DEG.) | EASTING (FT.) / LONGITUDE (D.DEG.) | ELEVATION (FT.) | DESCRIPTION |
|---|---|---|---|---|
| OB-1 | 2079384.618 | 6106391.986 | 178.698 | 2" PVC NOTCH NORTH SIDE |
| | 37.695080822 N | 122.073609406 W | 179.254 | PUNCH NORTH SIDE RIM |
| | | | 179.247 | PAVEMENT NORTH SIDE |
| | | | | |
| OB-2 | 2079378.94 | 6106477.954 | 180.227 | 2" PVC NOTCH NORTH SIDE |
| | 37.695069200 N | 122.073311993 W | 180.616 | PUNCH NORTH SIDE RIM |
| | | | 180.595 | PAVEMENT NORTH SIDE |

HORIZONTAL AND VERTICAL CONTROL
SURVEY BASED ON PREVIOUS SURVEY BY EDGIS LAND SURVEYING DATED: 8/30/2010
COORDINATE VALUES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 3, NAD83.
ELEVATIONS ARE NAVD 88 DATUM.

SOMA-1, NOTCH
NORTHING 2,079,370.39, EASTING 6,106,506.79, ELEVATION 180.95

SOMA-8, PUNCH
NORTHING 2,079,453.45, EASTING 6,106,488.28, ELEVATION 181.65

EQUIPMENT USED: TRIMBLE S6, TOPCON GT-3S

**Edgis Land Surveying**
Land Surveying and Mapping
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email: edgis@aol.com

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | ESE-1R | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 24.53 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 180.20 feet | **Date:** | January 18, 2016 |
| **Depth to Groundwater:** | 9.40 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.80 feet | | |
| **Water Column Height:** | 15.13 feet | | |
| **Purged Volume:** | 9 gallons | | |

| | | | | | |
|---|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☐ | **Pump** ☑ | | | |
| **Sampling Method:** | **Bailer** ☑ | **Pump** ☐ | | | |
| **Color:** | **No** ☐ | **Yes** ☑ | **Describe:** | Cloudy | |
| **Sheen:** | **No** ☑ | **Yes** ☐ | **Describe:** | | |
| **Odor:** | **No** ☐ | **Yes** ☑ | **Describe:** | Very Slight Petro | |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 15:44 | Started purging well | | | |
| 15:45 | 3 | 6.36 | 19.2 | 879 |
| 15:46 | 6 | 6.39 | 19.6 | 871 |
| 15:47 | 9 | 6.42 | 19.7 | 841 |
| 15:52 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | ESE-2R | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 27.54 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 180.70 feet | **Date:** | January 18 , 2016 |
| **Depth to Groundwater:** | 9.30 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 171.40 feet | | |
| **Water Column Height:** | 18.24 feet | | |
| **Purged Volume:** | 9 gallons | | |

| | | | | | |
|---|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☐ | | **Pump** ☑ | | |
| **Sampling Method:** | **Bailer** ☑ | | **Pump** ☐ | | |
| **Color:** | **No** ☑ | | **Yes** ☐ | **Describe:** | |
| **Sheen:** | **No** ☑ | | **Yes** ☐ | **Describe:** | |
| **Odor:** | **No** ☑ | | **Yes** ☐ | **Describe:** | |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 15:18 | started purging well | | | |
| 15:19 | 3 | 6.90 | 19.5 | 638 |
| 15:20 | 6 | 6.76 | 19.9 | 659 |
| 15:21 | 9 | 6.75 | 19.9 | 52 |
| 15:26 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | ESE-5R | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 23.54 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 178.64 feet | **Date:** | January 19 , 2016 |
| **Depth to Groundwater:** | 7.09 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 171.55 feet | | |
| **Water Column Height:** | 16.45 feet | | |
| **Purged Volume:** | 9 gallons | | |

| | | | | |
|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☐ | **Pump** ☑ | | |
| **Sampling Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Color:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Sheen:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Odor:** | **No** ☑ | **Yes** ☐ | **Describe:** | |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 12:05 | Started purging | | | |
| 12:06 | 3 | 6.92 | 20.8 | 789 |
| 12:07 | 6 | 6.75 | 20.9 | 852 |
| 12:08 | 9 | 6.76 | 20.0 | 857 |
| 12:13 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-6R | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 27.57 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 181.34 feet | **Date:** | January 18 , 2016 |
| **Depth to Groundwater:** | 8.95 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 172.39 feet | | |
| **Water Column Height:** | 18.62 feet | | |
| **Purged Volume:** | 9 gallons | | |

| | | | | |
|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☐ | **Pump** ☑ | | |
| **Sampling Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Color:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Sheen:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Odor:** | **No** ☑ | **Yes** ☐ | **Describe:** | |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 14:08 | Started purging well | | | |
| 14:09 | 3 | 6.60 | 20.4 | 500 |
| 14:10 | 6 | 6.49 | 20.5 | 517 |
| 14:11 | 9 | 6.48 | 20.4 | 532 |
| 14:16 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | MW-7R | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 29.59 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 179.14 feet | **Date:** | January 18 , 2016 |
| **Depth to Groundwater:** | 7.75 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 171.39 feet | | |
| **Water Column Height:** | 21.84 feet | | |
| **Purged Volume:** | 9 gallons | | |

| | | | | |
|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☐ | **Pump** ☑ | | |
| **Sampling Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Color:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Sheen:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Odor:** | **No** ☑ | **Yes** ☐ | **Describe:** | |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 13:05 | Started purging well | | | |
| 13:06 | 3 | 6.60 | 19.7 | 532 |
| 13:07 | 6 | 6.48 | 19.6 | 541 |
| 13:08 | 9 | 6.50 | 19.6 | 550 |
| 13:13 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | SOMA-1 | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 29.74 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 180.95 feet | **Date:** | January 18 , 2016 |
| **Depth to Groundwater:** | 9.29 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 171.66 feet | | |
| **Water Column Height:** | 20.45 feet | | |
| **Purged Volume:** | 9 gallons | | |

| | | | | |
|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☐ | **Pump** ☑ | | |
| **Sampling Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Color:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Sheen:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Odor:** | **No** ☑ | **Yes** ☐ | **Describe:** | |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 14:54 | Started purging well | | | |
| 14:55 | 3 | 6.64 | 19.6 | 600 |
| 14:56 | 6 | 6.51 | 20.1 | 612 |
| 14:57 | 9 | 6.50 | 20.2 | 613 |
| 15:02 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | SOMA-4 | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 22.65 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 176.94 feet | **Date:** | January 18 , 2016 |
| **Depth to Groundwater:** | 8.41 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 168.53 feet | | |
| **Water Column Height:** | 14.24 feet | | |
| **Purged Volume:** | 9 gallons | | |

| | | | | |
|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☐ | **Pump** ☑ | | |
| **Sampling Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Color:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Sheen:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **Odor:** | **No** ☑ | **Yes** ☐ | **Describe:** | |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 11:41 | Started purging well | | | |
| 11:42 | 3 | 6.46 | 21.8 | 538 |
| 11:43 | 6 | 6.28 | 22.8 | 532 |
| 11:44 | 9 | 6.27 | 23.0 | 551 |
| 11:49 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | SOMA-2 | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 14.70 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 178.99 feet | **Date:** | January 18 , 2016 |
| **Depth to Groundwater:** | 8.92 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.07 feet | | |
| **Water Column Height:** | 5.78 feet | | |
| **Purged Volume:** | 3 gallons | | |

| | | | | | |
|---|---|---|---|---|---|
| **Purging Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Sampling Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Color:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Cloudy |
| **Sheen:** | **No** | ☑ | **Yes** | ☐ | **Describe:** |
| **Odor:** | **No** | ☑ | **Yes** | ☐ | **Describe:** |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^{0}$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 12:36 | Started purging well | | | |
| 12:38 | 1 | 6.90 | 19.7 | 581 |
| 12:41 | 2 | 6.80 | 19.9 | 573 |
| 12:44 | 3 | 6.79 | 20.1 | 575 |
| 12:49 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | SOMW-3 | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 14.70 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 176.81 feet | **Date:** | January 18 , 2016 |
| **Depth to Groundwater:** | 8.15 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 168.66 feet | | |
| **Water Column Height:** | 6.55 feet | | |
| **Purged Volume:** | 3 gallons | | |

| | | | | | |
|---|---|---|---|---|---|
| **Purging Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Sampling Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Color:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Cloudy |
| **Sheen:** | **No** | ☑ | **Yes** | ☐ | **Describe:** |
| **Odor:** | **No** | ☑ | **Yes** | ☐ | **Describe:** |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 12:12 | Started purging well | | | |
| 12:13 | 1 | 6.48 | 22.4 | 670 |
| 12:16 | 2 | 6.54 | 21.9 | 660 |
| 12:18 | 3 | 6.56 | 21.6 | 662 |
| 12:23 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | SOMA-5 | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 14.87 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 180.31 feet | **Date:** | January 19 , 2016 |
| **Depth to Groundwater:** | 9.49 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.82 feet | | |
| **Water Column Height:** | 5.38 feet | | |
| **Purged Volume:** | 2.5 gallons | | |

| | | | | | |
|---|---|---|---|---|---|
| **Purging Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Sampling Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Color:** | **No** | ☑ | **Yes** | ☐ | **Describe:** |
| **Sheen:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Rainbow Sheen |
| **Odor:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Petro odor |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 13:09 | Started purging well | | | |
| 13:11 | 1 | 6.74 | 18.6 | 1223 |
| 13:15 | 2 | 6.71 | 18.7 | 1255 |
| 13:18 | 2.5 | 6.70 | 18.8 | 1250 |
| 13:23 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | SOMA-7 | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 14.89 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 178.54 feet | **Date:** | January 19 , 2016 |
| **Depth to Groundwater:** | 6.32 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 172.22 feet | | |
| **Water Column Height:** | 8.57 feet | | |
| **Purged Volume:** | 4 gallons | | |

| | | | | |
|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Sampling Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Color:** | **No** ☐ | **Yes** ☑ | **Describe:** | Cloudy/Gray |
| **Sheen:** | **No** ☐ | **Yes** ☑ | **Describe:** | Rainbow Sheen |
| **Odor:** | **No** ☐ | **Yes** ☑ | **Describe:** | Petro Odor |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp (°C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 11:29 | Started purging well | | | |
| 11:31 | 1 | 6.32 | 17.7 | 545 |
| 11:34 | 2 | 6.58 | 18.3 | 718 |
| 11:37 | 3 | 6.60 | 18.7 | 801 |
| 11:41 | 4 | 6.64 | 18.8 | 750 |
| 11:46 | Sampled | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | SOMA-8 | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 14.89 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 181.57 feet | **Date:** | January 18 , 2016 |
| **Depth to Groundwater:** | 9.06 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 172.51 feet | | |
| **Water Column Height:** | 5.83 feet | | |
| **Purged Volume:** | 3 gallons | | |

| | | | | | |
|---|---|---|---|---|---|
| **Purging Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Sampling Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Color:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Cloudy |
| **Sheen:** | **No** | ☑ | **Yes** | ☐ | **Describe:** |
| **Odor:** | **No** | ☑ | **Yes** | ☐ | **Describe:** |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 14:28 | Started purging well | | | |
| 14:30 | 1 | 6.62 | 19.1 | 693 |
| 14:33 | 2 | 6.64 | 19.2 | 702 |
| 14:36 | 3 | 6.67 | 19.6 | 673 |
| 14:41 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | OB-1 | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 15.59 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 178.10 feet | **Date:** | January 19, 2016 |
| **Depth to Groundwater:** | 6.67 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 172.03 feet | | |
| **Water Column Height:** | 8.92 feet | | |
| **Purged Volume:** | 4 gallons | | |

| | | | | | |
|---|---|---|---|---|---|
| **Purging Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Sampling Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Color:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Cloudy |
| **Sheen:** | **No** | ☑ | **Yes** | ☐ | **Describe:** |
| **Odor:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Very Slight Petro odor |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 12:33 | Started purging well | | | |
| 12:35 | 1 | 6.65 | 18.8 | 903 |
| 12:38 | 2 | 6.76 | 19.0 | 913 |
| 12:42 | 3 | 6.72 | 19.4 | 893 |
| 12:46 | 4 | 6.69 | 19. | 882 |
| 12:51 | Sampled | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | OB-2 | **Project No.:** | 2761 |
| **Casing Diameter:** | 2 inches | **Address:** | 3519 Castro Valley Blvd |
| **Depth of Well:** | 16.49 feet | | Castro Valley, CA |
| **Top of Casing Elevation:** | 180.23 feet | **Date:** | January 19, 2016 |
| **Depth to Groundwater:** | 9.08 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 171.15 feet | | |
| **Water Column Height:** | 7.41 feet | | |
| **Purged Volume:** | 3 gallons | | |

| | | | | | |
|---|---|---|---|---|---|
| **Purging Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Sampling Method:** | **Bailer** | ☑ | **Pump** | ☐ | |
| **Color:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Cloudy/Gray |
| **Sheen:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Rainbow Sheen |
| **Odor:** | **No** | ☐ | **Yes** | ☑ | **Describe:** Petro Odor |

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 13:45 | Started purging well | | | |
| 13:48 | 1 | 6.49 | 19.4 | 737 |
| 13:51 | 2 | 6.52 | 19.5 | 755 |
| 13:55 | 3 | 6.55 | 19.6 | 774 |
| 14:00 | Sampled | | | |
| | | | | |

EPA United States Environmental Protection Agency

# EPA On-line Tools for Site Assessment Calculation

**Hydraulic Gradient -- Magnitude and Direction**

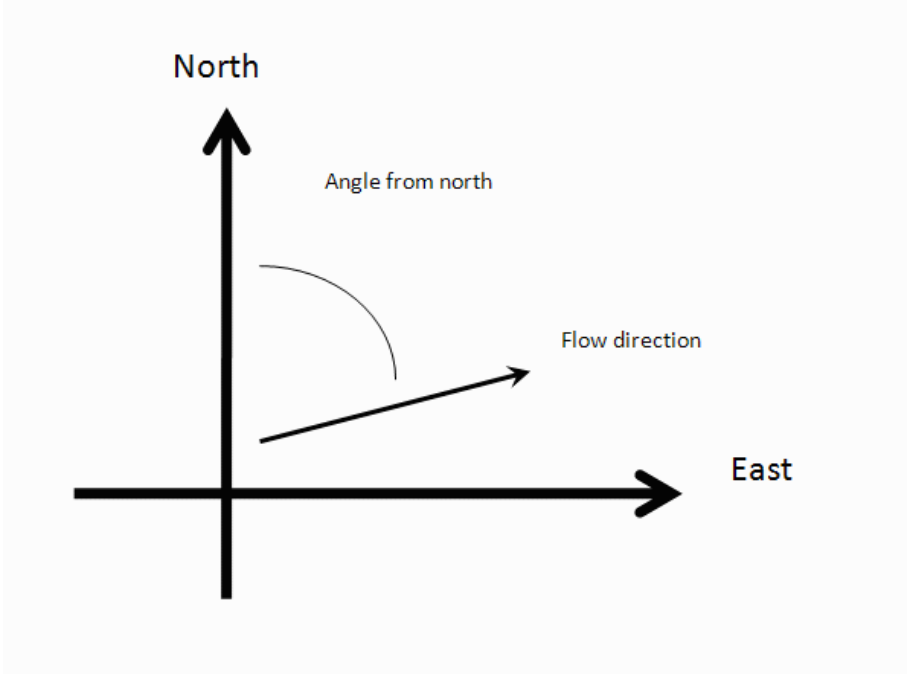
**Gradient Calculation** from fitting a plane to as many as thirty points

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

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

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

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




**Inputs**

Example Data Set 1 | Example Data Set 2 | Calculate | Clear
Save Data | Recall Data | Go Back
Site Name: 3519 Castro Valley Blvd., C
Date: January 18, 2016 | Current Date
Calculation basis: Head
Coordinates: ft

| I.D. | | x-coordinate | y-coordinate | head ft |
|---|---|---|---|---|
| 1) | SOMA-2 | 337.5997649 | 211.223775 | 170.07 |
| 2) | SOMA-3 | 339.7877931 | 53.66065088 | 168.66 |
| 3) | SOMA-5 | 245.7025814 | 289.2758782 | 170.82 |
| 4) | SOMA-7 | 160.3694824 | 298.0293851 | 172.22 |
| 5) | SOMA-8 | 256.6427223 | 378.9993239 | 172.51 |
| 6) | OB-1 | 165.0323759 | 308.9034515 | 172.03 |
| 7) | OB-2 | 248.9533418 | 301.9534748 | 171.15 |
| 8) | | | | |
| 9) | | | | |
| 10) | | | | |
| 11) | | | | |

| | | | | |
|---|---|---|---|---|
| 12) | | | | |
| 13) | | | | |
| 14) | | | | |
| 15) | | | | |
| 16) | | | | |
| 17) | | | | |
| 18) | | | | |
| 19) | | | | |
| 20) | | | | |
| 21) | | | | |
| 22) | | | | |
| 23) | | | | |
| 24) | | | | |
| 25) | | | | |
| 26) | | | | |
| 27) | | | | |
| 28) | | | | |
| 29) | | | | |
| 30) | | | | |

**Results**

| | |
|---|---|
| Number of Points Used in Calculation | 7 |
| Max. Difference Between Head Values | 1.173 |
| Gradient Magnitude (i) | 0.01135 |
| Flow direction as degrees from North (positive y axis) | 145.5 |
| Coefficient of Determination ($R^2$) | 0.947 |

WCMS

Last updated on 9/2/2015

EPA United States Environmental Protection Agency

# EPA On-line Tools for Site Assessment Calculation

**Hydraulic Gradient -- Magnitude and Direction**

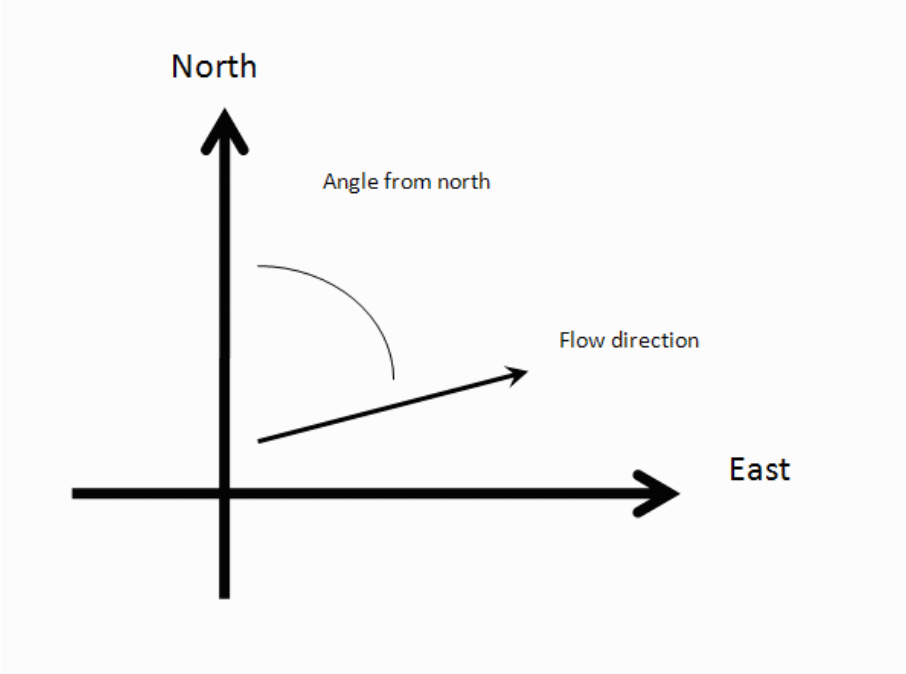
**Gradient Calculation** from fitting a plane to as many as thirty points

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

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

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

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




**Inputs**

Example Data Set 1 | Example Data Set 2 | Calculate | Clear
Save Data | Recall Data | Go Back
Site Name: 3519 Castro Valley Blvd., C
Date: January 18, 2016 | Current Date
Calculation basis: Head
Coordinates: ft

| I.D. | x-coordinate | y-coordinate | head ft |
|---|---|---|---|
| 1) ESE-1R | 238.4091541 | 283.4402069 | 170.8 |
| 2) ESE-2R | 273.417605 | 284.8991247 | 171.4 |
| 3) ESE-5R | 160.3694824 | 304.5945152 | 171.55 |
| 4) MW-6R | 261.7481214 | 378.269865 | 172.39 |
| 5) MW-7R | 288.0044595 | 261.5564397 | 171.39 |
| 6) SOMA-1 | 280.7110322 | 294.3820905 | 171.66 |
| 7) SOMA-4 | 239.1384968 | 64.6025345 | 168.53 |
| 8) | | | |
| 9) | | | |
| 10) | | | |
| 11) | | | |

| | | | | |
|---|---|---|---|---|
| 12) | | | | |
| 13) | | | | |
| 14) | | | | |
| 15) | | | | |
| 16) | | | | |
| 17) | | | | |
| 18) | | | | |
| 19) | | | | |
| 20) | | | | |
| 21) | | | | |
| 22) | | | | |
| 23) | | | | |
| 24) | | | | |
| 25) | | | | |
| 26) | | | | |
| 27) | | | | |
| 28) | | | | |
| 29) | | | | |
| 30) | | | | |

**Results**

| | |
|---|---|
| Number of Points Used in Calculation | 7 |
| Max. Difference Between Head Values | 1.177 |
| Gradient Magnitude (i) | 0.01260 |
| Flow direction as degrees from North (positive y axis) | 191.8 |
| Coefficient of Determination ($R^2$) | 0.959 |

WCMS

Last updated on 9/2/2015

# Appendix C

Chain of Custody Form and Laboratory Report
for the
First Semi-Annual 2016 Monitoring Event

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

**Laboratory Job Number 273488**
**ANALYTICAL REPORT**

| | |
|---|---|
| SOMA Environmental Engineering Inc. | Project : 2761 |
| 6620 Owens Dr. | Location : 3519 Castro Valley Blvd. |
| Pleasanton, CA 94588 | Level : II |

| Sample ID | Lab ID |
|---|---|
| ESE-1R | 273488-001 |
| ESE-2R | 273488-002 |
| ESE-5R | 273488-003 |
| MW-6R | 273488-004 |
| MW-7R | 273488-005 |
| SOMA-1 | 273488-006 |
| SOMA-2 | 273488-007 |
| SOMA-3 | 273488-008 |
| SOMA-4 | 273488-009 |
| SOMA-5 | 273488-010 |
| SOMA-7 | 273488-011 |
| SOMA-8 | 273488-012 |
| OB-1 | 273488-013 |
| OB-2 | 273488-014 |

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

Signature: Tracy Babjar Date: 01/27/2016

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

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

# CASE NARRATIVE

| | |
|---|---|
| Laboratory number: | **273488** |
| Client: | **SOMA Environmental Engineering Inc.** |
| Project: | **2761** |
| Location: | **3519 Castro Valley Blvd.** |
| Request Date: | **01/21/16** |
| Samples Received: | **01/21/16** |

This data package contains sample and QC results for fourteen water samples, requested for the above referenced project on 01/21/16. The samples were received cold and intact.

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

# CHAIN OF CUSTODY



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

C&T LOGIN # 273488

**Sampler:Lizzie Hightower**

**Project No: 2761**

**Report To:** Joyce Bobek

**Project Name: 3519 Castro Valley Blvd., Castro Valley**

**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: TPHg, BTEX, MtBE 8260B | | Gasoline Oxygenates & Lead Scavengers | Ethanol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ESE-1R | 1/18/16 | 15:52 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 2 | ESE-2R | 1/18/16 | 15:26 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 3 | ESE-5R | 1/19/16 | 12:13 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 4 | MW-6R | 1/18/16 | 14:16 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 5 | MW-7R | 1/18/16 | 13:13 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 6 | SOMA-1 | 1/18/16 | 15:02 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 7 | SOMA-2 | 1/18/16 | 12:49 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 8 | SOMA-3 | 1/18/16 | 12:23 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 9 | SOMA-4 | 1/18/16 | 11:49 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 10 | SOMA-5 | 1/19/16 | 13:23 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 11 | SOMA-7 | 1/19/16 | 11:46 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 12 | SOMA-8 | 1/18/16 | 14:41 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 13 | OB-1 | 1/19/16 | 12:51 | | * | | 3-VOAs | * | | | * | * | | * | * |
| 14 | OB-2 | 1/19/16 | 14:00 | | * | | 3-VOAs | * | | | * | * | | * | * |

**Notes: EDF OUTPUT REQUIRED**

Temp< 4.5° C

**RELINQUISHED BY:**

1/21/16 10:41 DATE/TIME

DATE/TIME

DATE/TIME

**RECEIVED BY:**

Pat Hamby 1/21/16 10:41 DATE/TIME

DATE/TIME

DATE/TIME

**COOLER RECEIPT CHECKLIST** Curtis & Tompkins, Ltd.

Login # 273488 Date Received 1/21/16 Number of coolers 1
Client SOMA Environmental Project 27601

Date Opened 1/21 By (print) SL (sign)
Date Logged in 1 By (print) CJN (sign)

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

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

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

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

Type of ice used: ☐ Wet ☒ Blue/Gel ☐ None Temp(°C) 4.5

☐ Temperature blank(s) included? ☐ Thermometer#_____ ☒ IR Gun# A

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

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

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 12, 12/01/15

Curtis & Tompkins, Ltd.

# Detections Summary for 273488

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

Client : SOMA Environmental Engineering Inc.
Project : 2761
Location : 3519 Castro Valley Blvd.

Client Sample ID : ESE-1R Laboratory Sample ID : 273488-001

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 2,400 | | 50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| tert-Butyl Alcohol (TBA) | 54 | | 10 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| Methyl tert-Amyl Ether (TAME) | 1.3 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| MTBE | 14 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| Benzene | 11 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| Ethylbenzene | 2.1 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| m,p-Xylenes | 3.2 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| o-Xylene | 0.57 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |

Client Sample ID : ESE-2R Laboratory Sample ID : 273488-002

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| MTBE | 1.2 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |

Client Sample ID : ESE-5R Laboratory Sample ID : 273488-003

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| MTBE | 5.8 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |

Client Sample ID : MW-6R Laboratory Sample ID : 273488-004

No Detections

Client Sample ID : MW-7R Laboratory Sample ID : 273488-005

No Detections

Client Sample ID : SOMA-1 Laboratory Sample ID : 273488-006

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| MTBE | 0.72 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |

Curtis & Tompkins, Ltd.

Client Sample ID : SOMA-2 Laboratory Sample ID : 273488-007

No Detections

Client Sample ID : SOMA-3 Laboratory Sample ID : 273488-008

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| MTBE | 0.81 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |

Client Sample ID : SOMA-4 Laboratory Sample ID : 273488-009

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| MTBE | 0.83 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |

Client Sample ID : SOMA-5 Laboratory Sample ID : 273488-010

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 9,500 | | 500 | ug/L | As Recd | 10.00 | EPA 8260B | EPA 5030B |
| MTBE | 8.8 | | 5.0 | ug/L | As Recd | 10.00 | EPA 8260B | EPA 5030B |
| Benzene | 570 | | 5.0 | ug/L | As Recd | 10.00 | EPA 8260B | EPA 5030B |
| Ethylbenzene | 80 | | 5.0 | ug/L | As Recd | 10.00 | EPA 8260B | EPA 5030B |
| m,p-Xylenes | 70 | | 5.0 | ug/L | As Recd | 10.00 | EPA 8260B | EPA 5030B |
| o-Xylene | 11 | | 5.0 | ug/L | As Recd | 10.00 | EPA 8260B | EPA 5030B |

Client Sample ID : SOMA-7 Laboratory Sample ID : 273488-011

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 6,900 | | 710 | ug/L | As Recd | 14.29 | EPA 8260B | EPA 5030B |
| MTBE | 2.9 | | 2.5 | ug/L | As Recd | 5.000 | EPA 8260B | EPA 5030B |
| Benzene | 680 | | 7.1 | ug/L | As Recd | 14.29 | EPA 8260B | EPA 5030B |
| Toluene | 10 | | 2.5 | ug/L | As Recd | 5.000 | EPA 8260B | EPA 5030B |
| Ethylbenzene | 39 | | 2.5 | ug/L | As Recd | 5.000 | EPA 8260B | EPA 5030B |
| m,p-Xylenes | 11 | | 2.5 | ug/L | As Recd | 5.000 | EPA 8260B | EPA 5030B |

Client Sample ID : SOMA-8 Laboratory Sample ID : 273488-012

No Detections

Curtis & Tompkins, Ltd.

Client Sample ID : OB-1 Laboratory Sample ID : 273488-013

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 4,500 | | 250 | ug/L | As Recd | 5.000 | EPA 8260B | EPA 5030B |
| tert-Butyl Alcohol (TBA) | 16 | | 10 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| MTBE | 20 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| Benzene | 7.5 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| Ethylbenzene | 40 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| m,p-Xylenes | 19 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |
| o-Xylene | 0.84 | | 0.50 | ug/L | As Recd | 1.000 | EPA 8260B | EPA 5030B |

Client Sample ID : OB-2 Laboratory Sample ID : 273488-014

| Analyte | Result | Flags | RL | Units | Basis | IDF | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 19,000 | | 710 | ug/L | As Recd | 14.29 | EPA 8260B | EPA 5030B |
| MTBE | 47 | | 7.1 | ug/L | As Recd | 14.29 | EPA 8260B | EPA 5030B |
| Benzene | 370 | | 7.1 | ug/L | As Recd | 14.29 | EPA 8260B | EPA 5030B |
| Ethylbenzene | 850 | | 7.1 | ug/L | As Recd | 14.29 | EPA 8260B | EPA 5030B |
| m,p-Xylenes | 96 | | 7.1 | ug/L | As Recd | 14.29 | EPA 8260B | EPA 5030B |

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | ESE-1R | Batch#: | 231385 |
| Lab ID: | 273488-001 | Sampled: | 01/18/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 2,400 | 50 |
| tert-Butyl Alcohol (TBA) | 54 | 10 |
| Isopropyl Ether (DIPE) | ND | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 0.50 |
| Methyl tert-Amyl Ether (TAME) | 1.3 | 0.50 |
| Ethanol | ND | 1,000 |
| MTBE | 14 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | 11 | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | 2.1 | 0.50 |
| m,p-Xylenes | 3.2 | 0.50 |
| o-Xylene | 0.57 | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 96 | 80-128 |
| 1,2-Dichloroethane-d4 | 96 | 75-139 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 97 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | ESE-2R | Batch#: | 231385 |
| Lab ID: | 273488-002 | Sampled: | 01/18/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | ND | 50 |
| tert-Butyl Alcohol (TBA) | ND | 10 |
| Isopropyl Ether (DIPE) | ND | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND | 0.50 |
| Ethanol | ND | 1,000 |
| MTBE | 1.2 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | ND | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | ND | 0.50 |
| m,p-Xylenes | ND | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 94 | 80-128 |
| 1,2-Dichloroethane-d4 | 96 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 106 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | ESE-5R | Batch#: | 231385 |
| Lab ID: | 273488-003 | Sampled: | 01/19/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | ND | 50 |
| tert-Butyl Alcohol (TBA) | ND | 10 |
| Isopropyl Ether (DIPE) | ND | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND | 0.50 |
| Ethanol | ND | 1,000 |
| MTBE | 5.8 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | ND | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | ND | 0.50 |
| m,p-Xylenes | ND | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 96 | 80-128 |
| 1,2-Dichloroethane-d4 | 97 | 75-139 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | MW-6R | Batch#: | 231385 |
| Lab ID: | 273488-004 | Sampled: | 01/18/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

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

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 97 | 80-128 |
| 1,2-Dichloroethane-d4 | 96 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 107 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | MW-7R | Batch#: | 231385 |
| Lab ID: | 273488-005 | Sampled: | 01/18/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

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

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 96 | 80-128 |
| 1,2-Dichloroethane-d4 | 97 | 75-139 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 104 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-1 | Batch#: | 231385 |
| Lab ID: | 273488-006 | Sampled: | 01/18/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | ND | 50 |
| tert-Butyl Alcohol (TBA) | ND | 10 |
| Isopropyl Ether (DIPE) | ND | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND | 0.50 |
| Ethanol | ND | 1,000 |
| MTBE | 0.72 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | ND | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | ND | 0.50 |
| m,p-Xylenes | ND | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 95 | 80-128 |
| 1,2-Dichloroethane-d4 | 95 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 103 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-2 | Batch#: | 231385 |
| Lab ID: | 273488-007 | Sampled: | 01/18/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

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

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 97 | 80-128 |
| 1,2-Dichloroethane-d4 | 93 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 102 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-3 | Batch#: | 231385 |
| Lab ID: | 273488-008 | Sampled: | 01/18/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | ND | 50 |
| tert-Butyl Alcohol (TBA) | ND | 10 |
| Isopropyl Ether (DIPE) | ND | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND | 0.50 |
| Ethanol | ND | 1,000 |
| MTBE | 0.81 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | ND | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | ND | 0.50 |
| m,p-Xylenes | ND | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 95 | 80-128 |
| 1,2-Dichloroethane-d4 | 94 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-4 | Batch#: | 231385 |
| Lab ID: | 273488-009 | Sampled: | 01/18/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | ND | 50 |
| tert-Butyl Alcohol (TBA) | ND | 10 |
| Isopropyl Ether (DIPE) | ND | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND | 0.50 |
| Ethanol | ND | 1,000 |
| MTBE | 0.83 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | ND | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | ND | 0.50 |
| m,p-Xylenes | ND | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 97 | 80-128 |
| 1,2-Dichloroethane-d4 | 94 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-5 | Batch#: | 231433 |
| Lab ID: | 273488-010 | Sampled: | 01/19/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/25/16 |
| Diln Fac: | 10.00 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 9,500 | 500 |
| tert-Butyl Alcohol (TBA) | ND | 100 |
| Isopropyl Ether (DIPE) | ND | 5.0 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 5.0 |
| Methyl tert-Amyl Ether (TAME) | ND | 5.0 |
| Ethanol | ND | 10,000 |
| MTBE | 8.8 | 5.0 |
| 1,2-Dichloroethane | ND | 5.0 |
| Benzene | 570 | 5.0 |
| Toluene | ND | 5.0 |
| 1,2-Dibromoethane | ND | 5.0 |
| Ethylbenzene | 80 | 5.0 |
| m,p-Xylenes | 70 | 5.0 |
| o-Xylene | 11 | 5.0 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 94 | 80-128 |
| 1,2-Dichloroethane-d4 | 93 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 98 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-7 | Units: | ug/L |
| Lab ID: | 273488-011 | Sampled: | 01/19/16 |
| Matrix: | Water | Received: | 01/21/16 |

| Analyte | Result | RL | Diln Fac | Batch# | Analyzed |
|---|---|---|---|---|---|
| Gasoline C7-C12 | 6,900 | 710 | 14.29 | 231433 | 01/25/16 |
| tert-Butyl Alcohol (TBA) | ND | 50 | 5.000 | 231385 | 01/22/16 |
| Isopropyl Ether (DIPE) | ND | 2.5 | 5.000 | 231385 | 01/22/16 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 2.5 | 5.000 | 231385 | 01/22/16 |
| Methyl tert-Amyl Ether (TAME) | ND | 2.5 | 5.000 | 231385 | 01/22/16 |
| Ethanol | ND | 5,000 | 5.000 | 231385 | 01/22/16 |
| MTBE | 2.9 | 2.5 | 5.000 | 231385 | 01/22/16 |
| 1,2-Dichloroethane | ND | 2.5 | 5.000 | 231385 | 01/22/16 |
| Benzene | 680 | 7.1 | 14.29 | 231433 | 01/25/16 |
| Toluene | 10 | 2.5 | 5.000 | 231385 | 01/22/16 |
| 1,2-Dibromoethane | ND | 2.5 | 5.000 | 231385 | 01/22/16 |
| Ethylbenzene | 39 | 2.5 | 5.000 | 231385 | 01/22/16 |
| m,p-Xylenes | 11 | 2.5 | 5.000 | 231385 | 01/22/16 |
| o-Xylene | ND | 2.5 | 5.000 | 231385 | 01/22/16 |

| Surrogate | %REC | Limits | Diln Fac | Batch# | Analyzed |
|---|---|---|---|---|---|
| Dibromofluoromethane | 97 | 80-128 | 5.000 | 231385 | 01/22/16 |
| 1,2-Dichloroethane-d4 | 90 | 75-139 | 5.000 | 231385 | 01/22/16 |
| Toluene-d8 | 98 | 80-120 | 5.000 | 231385 | 01/22/16 |
| Bromofluorobenzene | 99 | 80-120 | 5.000 | 231385 | 01/22/16 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-8 | Batch#: | 231433 |
| Lab ID: | 273488-012 | Sampled: | 01/18/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/25/16 |
| Diln Fac: | 1.000 | | |

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

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 94 | 80-128 |
| 1,2-Dichloroethane-d4 | 93 | 75-139 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 106 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | OB-1 | Units: | ug/L |
| Lab ID: | 273488-013 | Sampled: | 01/19/16 |
| Matrix: | Water | Received: | 01/21/16 |

| Analyte | Result | RL | Diln Fac | Batch# | Analyzed |
|---|---|---|---|---|---|
| Gasoline C7-C12 | 4,500 | 250 | 5.000 | 231433 | 01/25/16 |
| tert-Butyl Alcohol (TBA) | 16 | 10 | 1.000 | 231385 | 01/22/16 |
| Isopropyl Ether (DIPE) | ND | 0.50 | 1.000 | 231385 | 01/22/16 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 0.50 | 1.000 | 231385 | 01/22/16 |
| Methyl tert-Amyl Ether (TAME) | ND | 0.50 | 1.000 | 231385 | 01/22/16 |
| Ethanol | ND | 1,000 | 1.000 | 231385 | 01/22/16 |
| MTBE | 20 | 0.50 | 1.000 | 231385 | 01/22/16 |
| 1,2-Dichloroethane | ND | 0.50 | 1.000 | 231385 | 01/22/16 |
| Benzene | 7.5 | 0.50 | 1.000 | 231385 | 01/22/16 |
| Toluene | ND | 0.50 | 1.000 | 231385 | 01/22/16 |
| 1,2-Dibromoethane | ND | 0.50 | 1.000 | 231385 | 01/22/16 |
| Ethylbenzene | 40 | 0.50 | 1.000 | 231385 | 01/22/16 |
| m,p-Xylenes | 19 | 0.50 | 1.000 | 231385 | 01/22/16 |
| o-Xylene | 0.84 | 0.50 | 1.000 | 231385 | 01/22/16 |

| Surrogate | %REC | Limits | Diln Fac | Batch# | Analyzed |
|---|---|---|---|---|---|
| Dibromofluoromethane | 96 | 80-128 | 1.000 | 231385 | 01/22/16 |
| 1,2-Dichloroethane-d4 | 96 | 75-139 | 1.000 | 231385 | 01/22/16 |
| Toluene-d8 | 96 | 80-120 | 1.000 | 231385 | 01/22/16 |
| Bromofluorobenzene | 95 | 80-120 | 1.000 | 231385 | 01/22/16 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | OB-2 | Batch#: | 231385 |
| Lab ID: | 273488-014 | Sampled: | 01/19/16 |
| Matrix: | Water | Received: | 01/21/16 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 14.29 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 19,000 | 710 |
| tert-Butyl Alcohol (TBA) | ND | 140 |
| Isopropyl Ether (DIPE) | ND | 7.1 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 7.1 |
| Methyl tert-Amyl Ether (TAME) | ND | 7.1 |
| Ethanol | ND | 14,000 |
| MTBE | 47 | 7.1 |
| 1,2-Dichloroethane | ND | 7.1 |
| Benzene | 370 | 7.1 |
| Toluene | ND | 7.1 |
| 1,2-Dibromoethane | ND | 7.1 |
| Ethylbenzene | 850 | 7.1 |
| m,p-Xylenes | 96 | 7.1 |
| o-Xylene | ND | 7.1 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 96 | 80-128 |
| 1,2-Dichloroethane-d4 | 98 | 75-139 |
| Toluene-d8 | 98 | 80-120 |
| Bromofluorobenzene | 99 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 231385 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC820577

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 43.62 | 70 | 32-155 |
| Isopropyl Ether (DIPE) | 12.50 | 12.26 | 98 | 57-128 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 11.70 | 94 | 62-120 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 11.48 | 92 | 69-120 |
| MTBE | 12.50 | 10.94 | 88 | 65-120 |
| 1,2-Dichloroethane | 12.50 | 11.48 | 92 | 74-133 |
| Benzene | 12.50 | 12.08 | 97 | 80-123 |
| Toluene | 12.50 | 12.40 | 99 | 80-121 |
| 1,2-Dibromoethane | 12.50 | 11.04 | 88 | 80-120 |
| Ethylbenzene | 12.50 | 12.78 | 102 | 80-123 |
| m,p-Xylenes | 25.00 | 25.92 | 104 | 80-126 |
| o-Xylene | 12.50 | 12.23 | 98 | 80-126 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 100 | 80-128 |
| 1,2-Dichloroethane-d4 | 92 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

Type: BSD Lab ID: QC820578

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 46.23 | 74 | 32-155 | 6 | 33 |
| Isopropyl Ether (DIPE) | 12.50 | 12.42 | 99 | 57-128 | 1 | 20 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 11.95 | 96 | 62-120 | 2 | 20 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 11.84 | 95 | 69-120 | 3 | 20 |
| MTBE | 12.50 | 11.27 | 90 | 65-120 | 3 | 22 |
| 1,2-Dichloroethane | 12.50 | 11.70 | 94 | 74-133 | 2 | 20 |
| Benzene | 12.50 | 12.37 | 99 | 80-123 | 2 | 20 |
| Toluene | 12.50 | 12.44 | 100 | 80-121 | 0 | 20 |
| 1,2-Dibromoethane | 12.50 | 11.36 | 91 | 80-120 | 3 | 20 |
| Ethylbenzene | 12.50 | 13.12 | 105 | 80-123 | 3 | 21 |
| m,p-Xylenes | 25.00 | 26.48 | 106 | 80-126 | 2 | 21 |
| o-Xylene | 12.50 | 12.49 | 100 | 80-126 | 2 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 96 | 80-128 |
| 1,2-Dichloroethane-d4 | 91 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Type: | BLANK | Diln Fac: | 1.000 |
| Lab ID: | QC820579 | Batch#: | 231385 |
| Matrix: | Water | Analyzed: | 01/22/16 |
| Units: | ug/L | | |

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

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 96 | 80-128 |
| 1,2-Dichloroethane-d4 | 96 | 75-139 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 103 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 231385 |
| Units: | ug/L | Analyzed: | 01/22/16 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC820580

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,116 | 112 | 76-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 96 | 80-128 |
| 1,2-Dichloroethane-d4 | 95 | 75-139 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 99 | 80-120 |

Type: BSD Lab ID: QC820581

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,128 | 113 | 76-120 | 1 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 96 | 80-128 |
| 1,2-Dichloroethane-d4 | 95 | 75-139 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 98 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 231433 |
| Units: | ug/L | Analyzed: | 01/25/16 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC820762

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 47.57 | 76 | 32-155 |
| Isopropyl Ether (DIPE) | 12.50 | 12.71 | 102 | 57-128 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 12.39 | 99 | 62-120 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 12.08 | 97 | 69-120 |
| MTBE | 12.50 | 11.61 | 93 | 65-120 |
| 1,2-Dichloroethane | 12.50 | 12.47 | 100 | 74-133 |
| Benzene | 12.50 | 12.86 | 103 | 80-123 |
| Toluene | 12.50 | 13.06 | 104 | 80-121 |
| 1,2-Dibromoethane | 12.50 | 11.95 | 96 | 80-120 |
| Ethylbenzene | 12.50 | 13.81 | 110 | 80-123 |
| m,p-Xylenes | 25.00 | 27.53 | 110 | 80-126 |
| o-Xylene | 12.50 | 12.93 | 103 | 80-126 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 97 | 80-128 |
| 1,2-Dichloroethane-d4 | 93 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

Type: BSD Lab ID: QC820763

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 59.35 | 95 | 32-155 | 22 | 33 |
| Isopropyl Ether (DIPE) | 12.50 | 12.12 | 97 | 57-128 | 5 | 20 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 12.10 | 97 | 62-120 | 2 | 20 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 12.43 | 99 | 69-120 | 3 | 20 |
| MTBE | 12.50 | 11.58 | 93 | 65-120 | 0 | 22 |
| 1,2-Dichloroethane | 12.50 | 12.64 | 101 | 74-133 | 1 | 20 |
| Benzene | 12.50 | 12.54 | 100 | 80-123 | 3 | 20 |
| Toluene | 12.50 | 13.01 | 104 | 80-121 | 0 | 20 |
| 1,2-Dibromoethane | 12.50 | 12.42 | 99 | 80-120 | 4 | 20 |
| Ethylbenzene | 12.50 | 13.48 | 108 | 80-123 | 2 | 21 |
| m,p-Xylenes | 25.00 | 27.47 | 110 | 80-126 | 0 | 21 |
| o-Xylene | 12.50 | 12.96 | 104 | 80-126 | 0 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 94 | 80-128 |
| 1,2-Dichloroethane-d4 | 94 | 75-139 |
| Toluene-d8 | 98 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 231433 |
| Units: | ug/L | Analyzed: | 01/25/16 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC820764

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,154 | 115 | 76-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 95 | 80-128 |
| 1,2-Dichloroethane-d4 | 97 | 75-139 |
| Toluene-d8 | 98 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

Type: BSD Lab ID: QC820765

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,169 | 117 | 76-120 | 1 | 20 |

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

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Purgeable Organics by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 273488 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Type: | BLANK | Diln Fac: | 1.000 |
| Lab ID: | QC820766 | Batch#: | 231433 |
| Matrix: | Water | Analyzed: | 01/25/16 |
| Units: | ug/L | | |

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

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 97 | 80-128 |
| 1,2-Dichloroethane-d4 | 96 | 75-139 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 112 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Data File: \\gcmsserver\DD\chem\MSVOA10.i\012216.b\JAM10TVH.D



Date : 22-JAN-2016 12:37

Client ID: DYNA P&T

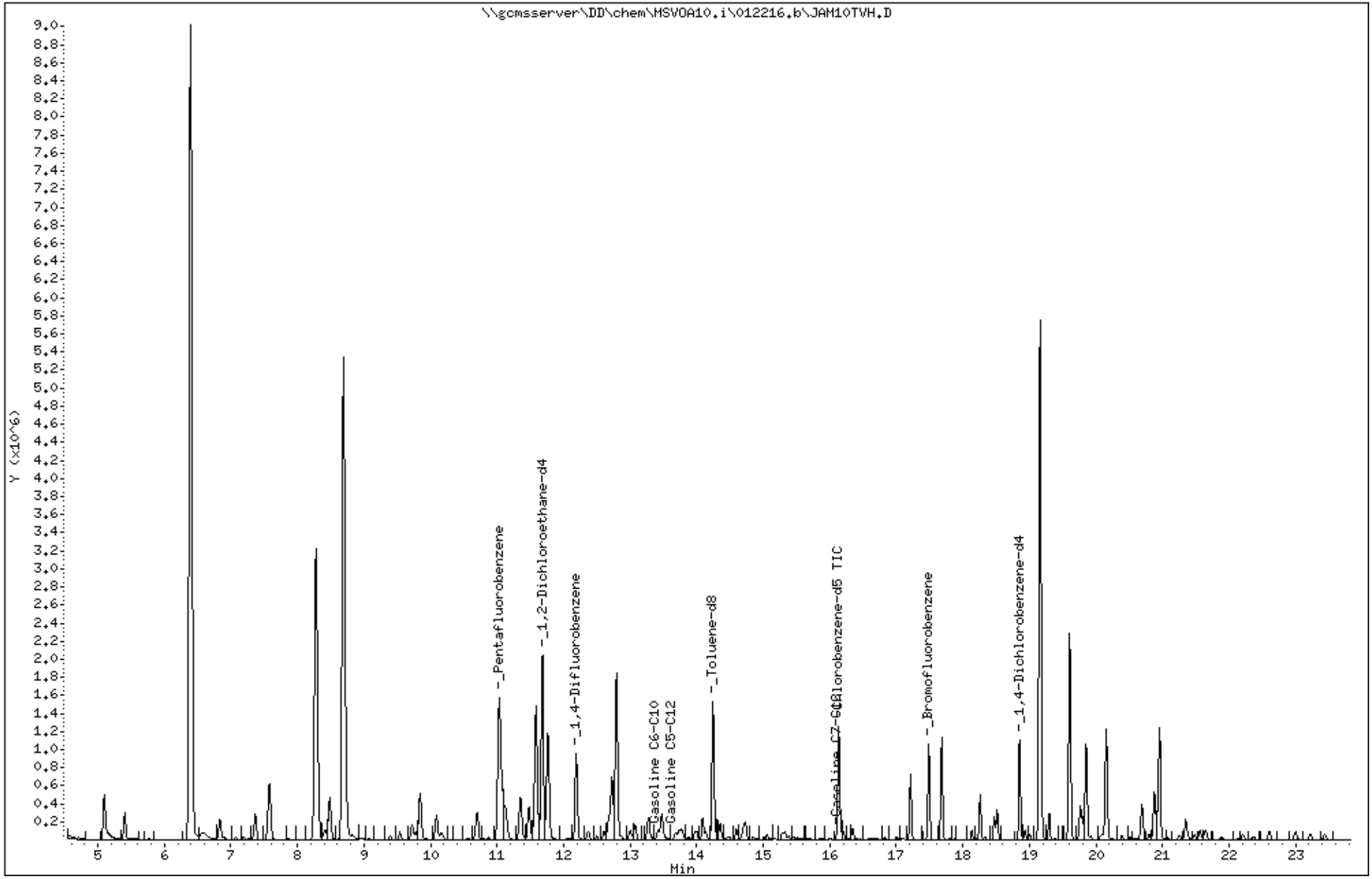
Instrument: MSVOA10.i

Sample Info: S,273488-001

Operator: VOA

Column phase:

Column diameter: 2.00



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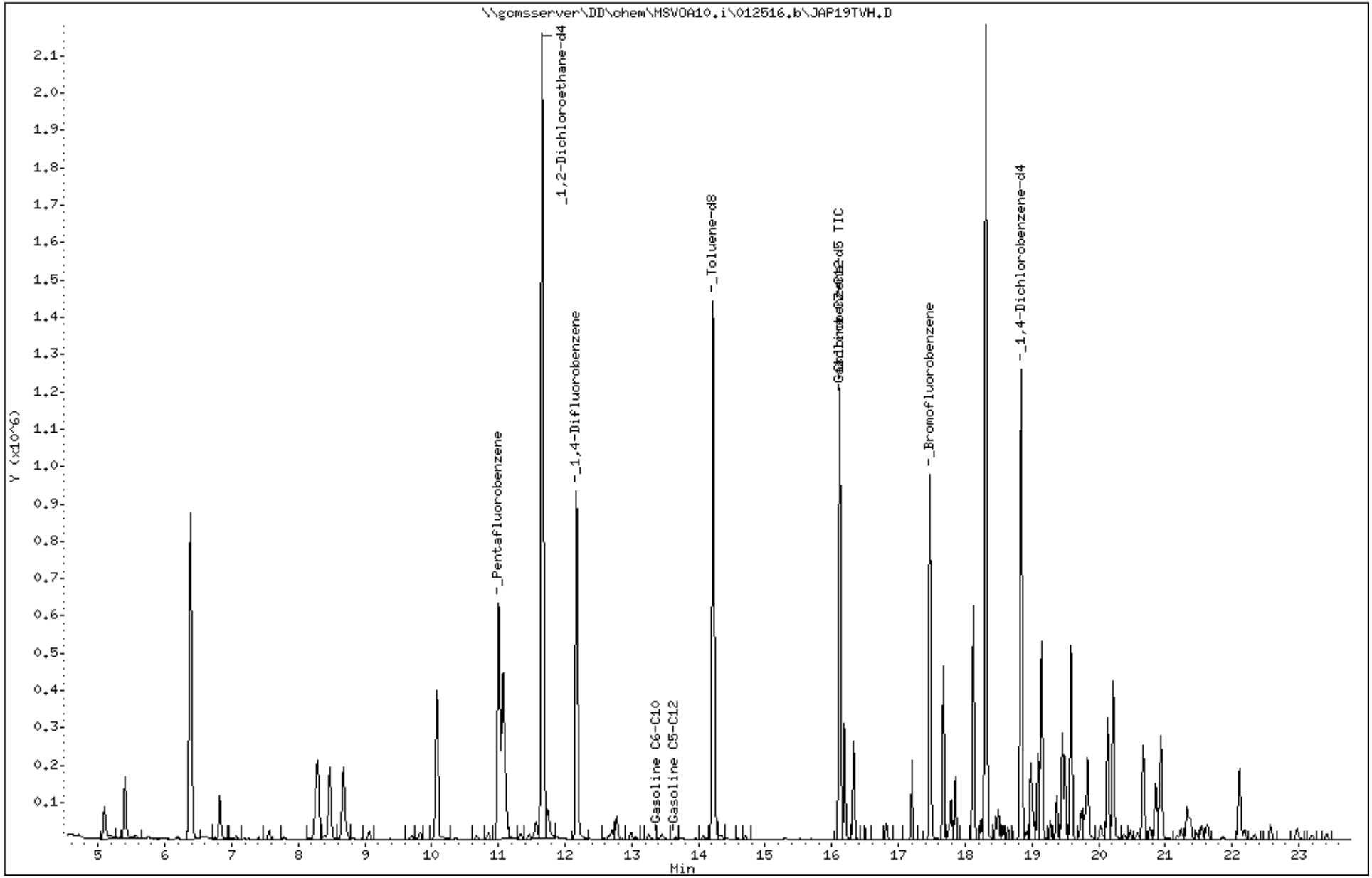
Instrument: MSVOA10.i

Sample Info: S,273488-010

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 25-JAN-2016 16:47

Client ID: DYNA P&T

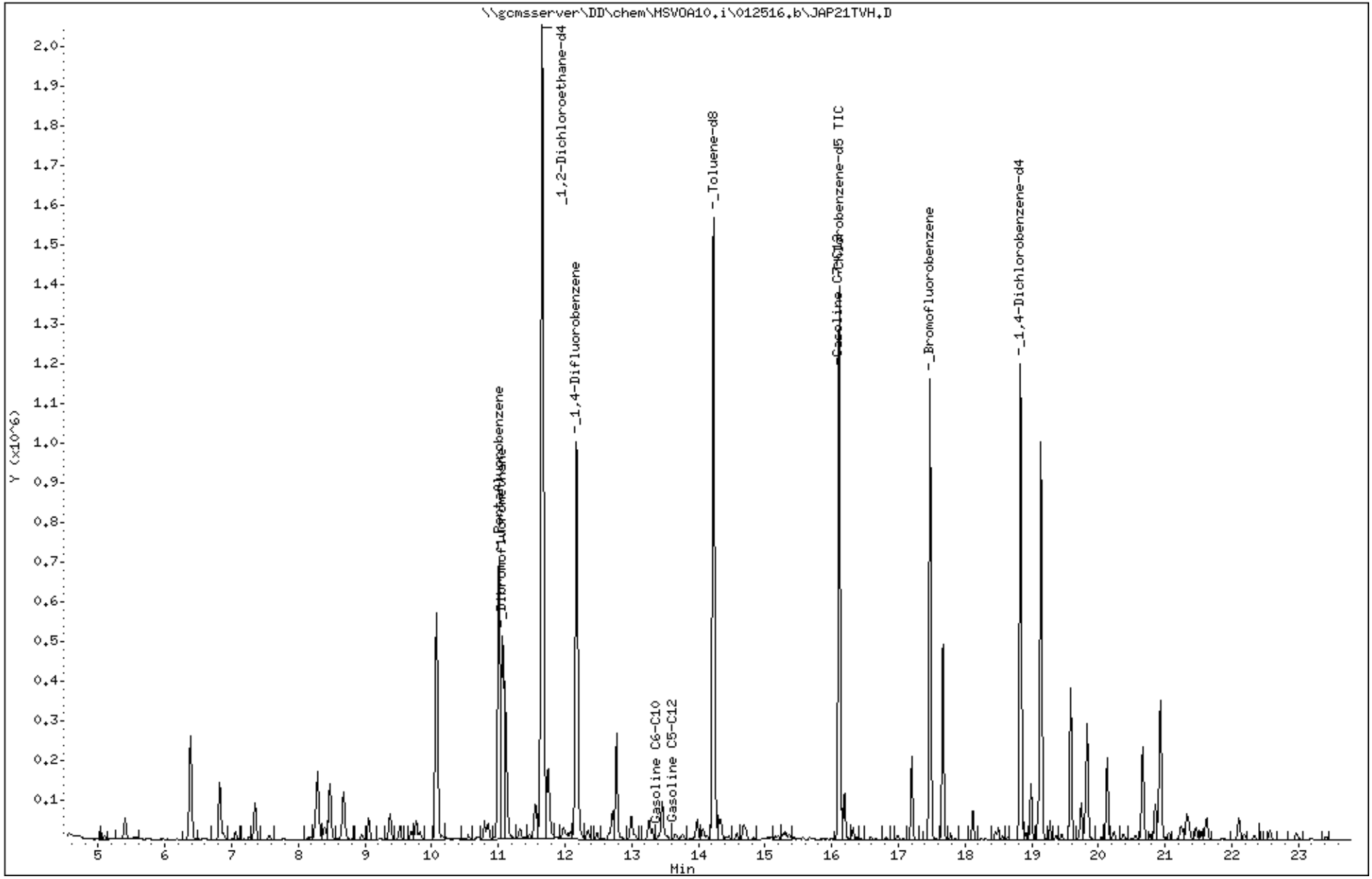
Instrument: MSVOA10.i

Sample Info: S,273488-011

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 25-JAN-2016 16:16

Client ID: DYNA P&T

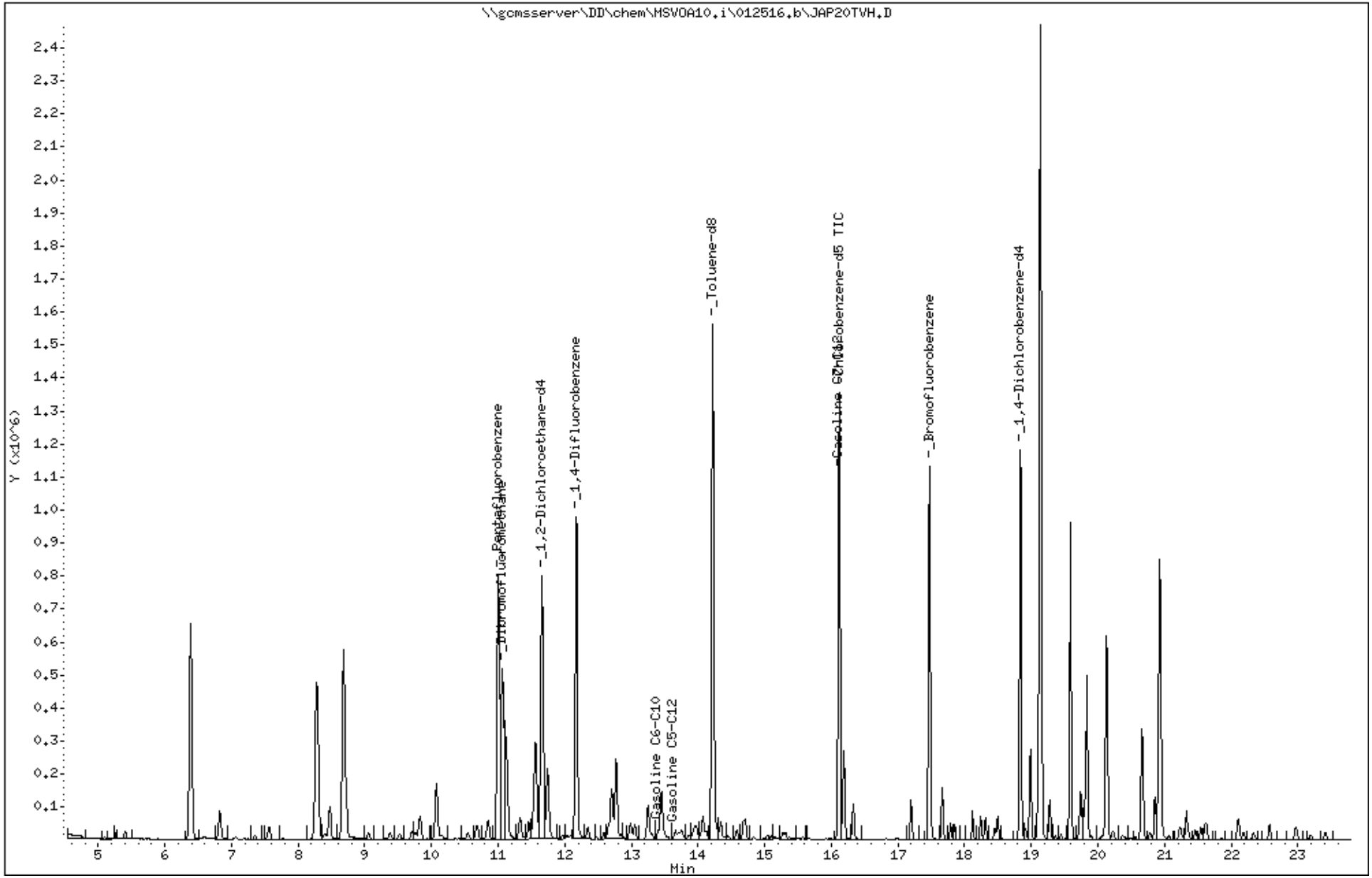
Instrument: MSVOA10.i

Sample Info: S,273488-013

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 22-JAN-2016 19:22

Client ID: DYNA P&T

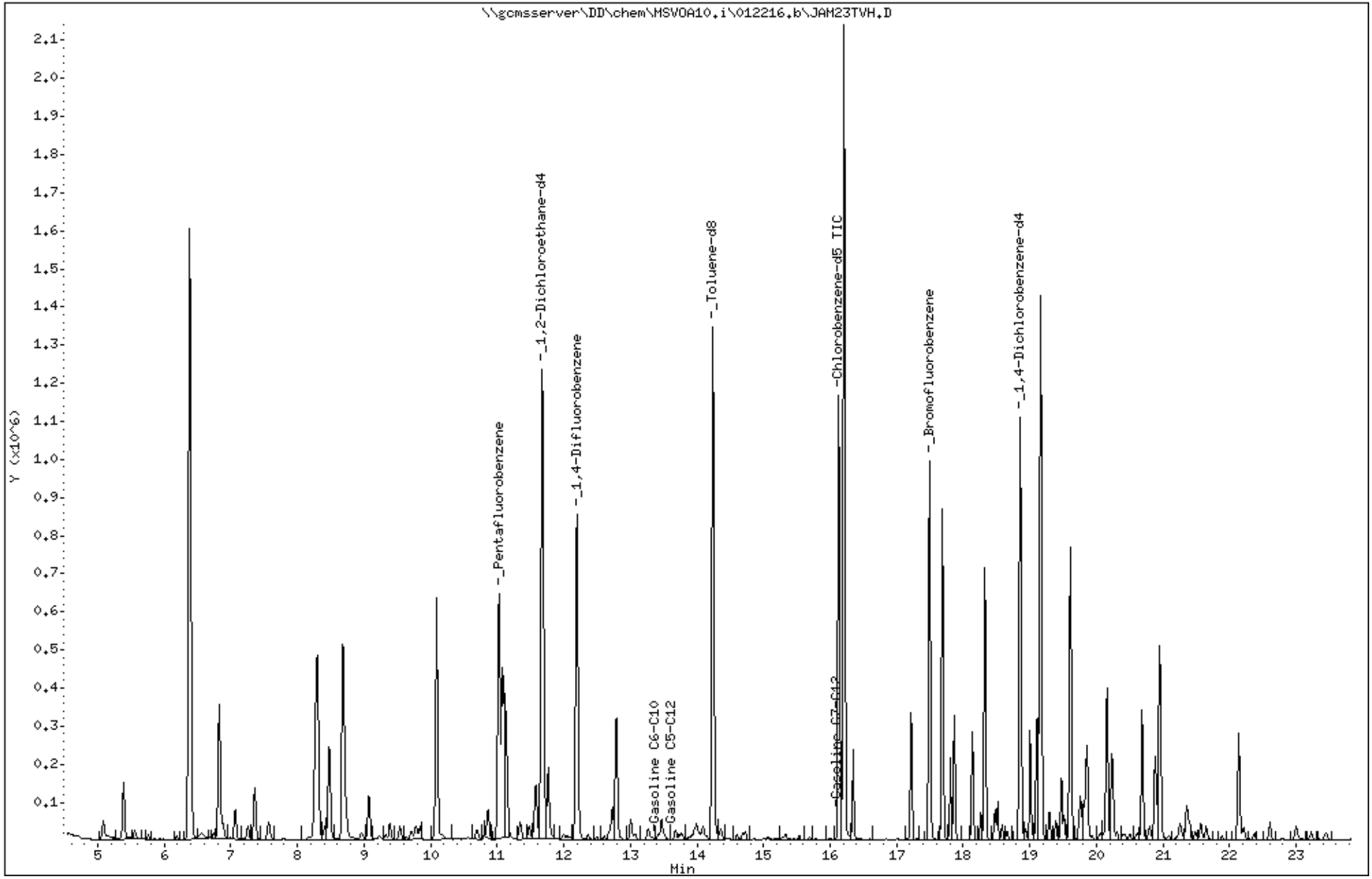
Instrument: MSVOA10.i

Sample Info: S,273488-014

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 22-JAN-2016 10:33

Client ID: DYNA P&T

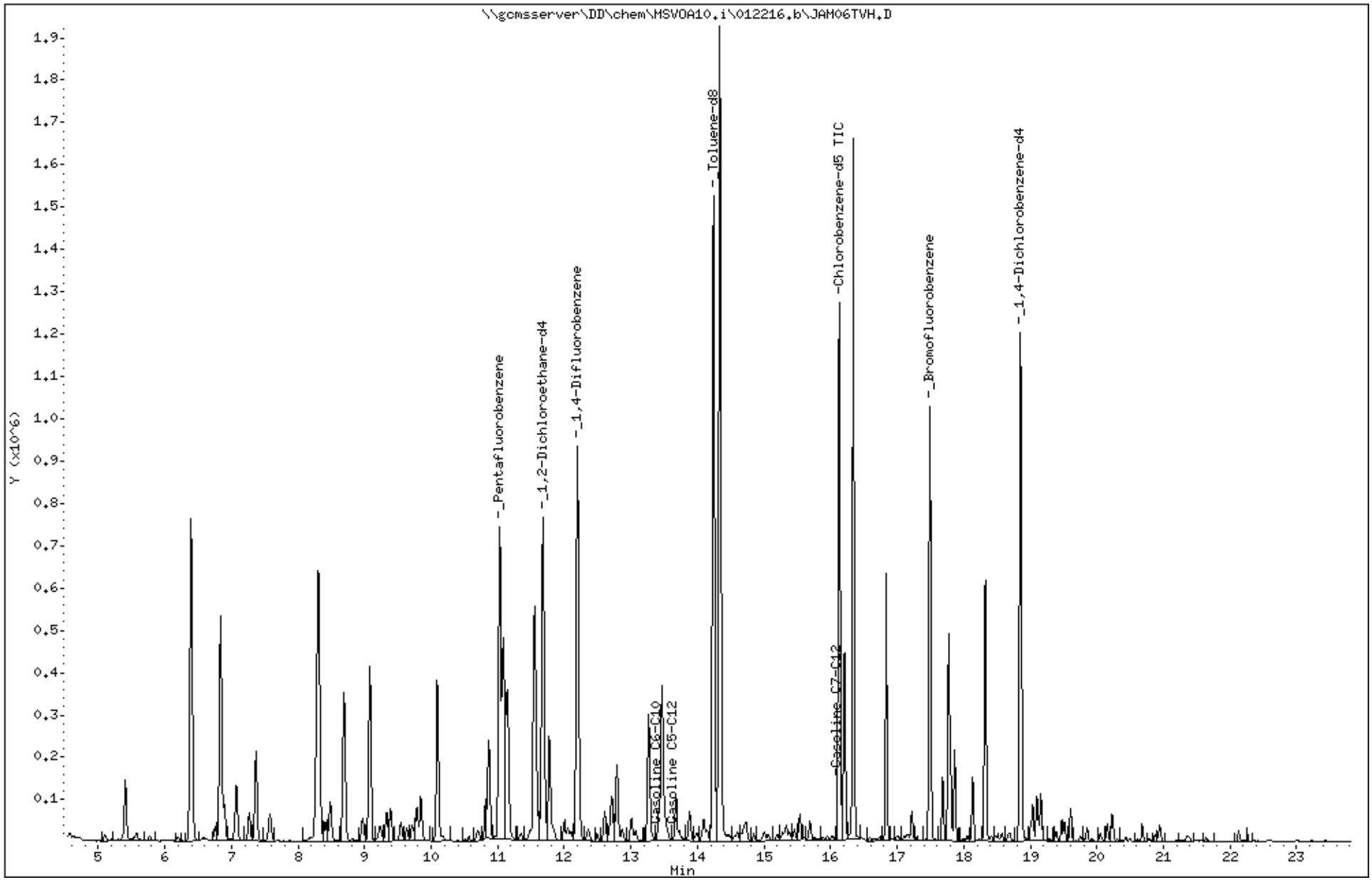
Instrument: MSVOA10.i

Sample Info: CCV/BS,qc820580,231385,s27677,.01/100,

Operator: VOA

Column phase:

Column diameter: 2.00



# Appendix D

## Non-Hazardous Waste Manifest

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE

**NON-HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of 1

3. Generator's Name and Mailing Address
SHELL #17
3519 CASTRO VALLEY BLVD.
CASTRO VALLEY, CA

SOMA

4. Generator's Phone ( )

5. Transporter 1 Company Name
INSTRAT INC

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
INSTRAT, INC.
1105 CAIRPORT RD.
RIO VISTA, CA 94571

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone (707) 374-6994

| 11. WASTE DESCRIPTION | 12. Containers No. | 12. Containers Type | 13. Total Quantity | 14. Unit Wt./Vol. |
|---|---|---|---|---|
| a. NON-HAZ MONITORING WELL WATER | 2 | DRM | 95 | GAL |
| b. | | | | |
| c. | | | | |
| d. | | | | |

G. Additional Descriptions for Materials Listed Above
BROWN, FINES, NO ODOR

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name | Signature | Date: Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Jason Noble | Signature | Date: Month 2 Day 5 Year 16

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19

Printed/Typed Name: MICHAEL WHITEHEAD | Signature | Date: Month 2 Day 5 Year 16