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August 17, 2011

Mr. Paresh C. Khatri
Alameda County Env. 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 Paresh:

SOMA's "Second Semi-Annual 2011 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

Enclosure

cc: Mr. Mirazim Shakoori w/enclosure

# Second Semi-Annual 2011
# Groundwater Monitoring Report

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

**August 17, 2011**

**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 Second Semi-Annual 2011 groundwater monitoring event.

Mansour Sepehr, PhD, PE
Principal Hydrogeologist

# TABLE OF CONTENTS

## LIST OF TABLES



## LIST OF FIGURES

## LIST OF APPENDICES

# 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 Second Semi-Annual 2011 groundwater monitoring event conducted at the site on July 19, 2011. 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). This monitoring event was conducted approximately two weeks after the completion of the multi-phase extraction (MPE) event at the site.

A joint monitoring event was conducted in coordination with the neighboring service station at 3459 Castro Valley Boulevard. However, this report does not include groundwater monitoring data and analytical results for the neighboring site as per correspondence from P&D Environmental Inc., dated September 24, 2008.

## 1.2 Summary of Field Activities and Laboratory Analysis

### 1.2.1 Field Activities

On July 19, 2011, 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 July 19, 2011 additional field measurements and grab 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 March 22, 2011, three drums generated during Fourth Quarter 2010 and First Semi-Annual 2011 groundwater monitoring events, were transported to an appropriate disposal facility. Appendix D includes the non-hazardous waste manifest for groundwater removal.

### 1.2.2 Laboratory Analysis

Curtis & Tompkins, Ltd., 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 were prepared using EPA Method 5030B and analyzed using EPA Method 8260B.

## 2. RESULTS

Following are results of field measurements and laboratory analysis for the February 2011 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 7.89 feet in SOMA-7 and OB-1 to 10.2 feet in SOMA-2. Groundwater elevations ranged from 167.07 feet in SOMA-3 to 171.90 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 southeasterly in the Shallow WBZ at an approximate gradient of 0.015 feet/feet. Because most of the site wells are either new wells or reinstalled wells, SOMA will prepare a new rose diagram of groundwater flow direction once sufficient data is available.

Since the previous monitoring event (February 2011), the groundwater flow direction has remained unchanged 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 concentrations ranging from 250 µg/L in OB-1 to 30,000 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 pre-MPE sampling event (June 2011), TPH-g decreased in SOMA-5 and OB-1, and increased in SOMA-7 and 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 and ethylbenzene were below laboratory-reporting limits in SOMA-5.
- Toluene was also below laboratory-reporting limit in OB-1. Other BTEX analytes were at low levels in this well.
- The highest benzene concentration was detected in SOMA-7 at 1,100 µg/L. The highest toluene, ethylbenzene, and total xylenes concentrations were detected in OB-2 at 31 µg/L, 1,300 µg/L, and 3,020 µg/L, respectively.

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 pre-MPE sampling event (June 2011), benzene decreased in SOMA-5 and OB-1, and increased in SOMA-7 and OB-2.

MtBE was below the laboratory-reporting limit in SOMA-2 and SOMA-8. Detectable MtBE concentrations ranged from 4.1 µg/L in OB-1 to 310 µg/L in OB-2. Figure 6 displays the contour map of MtBE concentrations in groundwater. Since the pre-MPE sampling event (June 2011), MtBE decreased in SOMA-3, SOMA-5, and OB-1, increased in SOMA-7, and remained same in OB-2.

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

- 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.

- Tertiary-butyl alcohol (TBA) was detected in OB-2 at 260 µg/L. It was below the laboratory reporting limit in other groundwater samples. Figure 7 displays the map showing TBA concentrations in groundwater.

## 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 7.92 feet in ESE-5R to 10.70 feet in SOMA-1. Groundwater elevations ranged from 167.75 feet in SOMA-4 to 171.74 feet in MW-6R. Table 1 also presents historical groundwater elevations in monitoring wells.

The groundwater elevation contour map is displayed in Figure 8. Groundwater flows south to southeasterly across the site at an approximate gradient of 0.013 feet/feet.

Since the previous monitoring event (February 2011), the groundwater flow direction has changed from southwesterly to southeasterly and the 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 wells ESE-1R, ESE-5R, and SOMA-4 where TPH-g was detected at 620 µg/L, 140 µg/L, and 57 µg/L, respectively. Figure 9 displays the contour map of TPH-g concentrations in groundwater. The highest TPH-g was observed to the southwest of the former UST cavity around ESE-1R. Since the previous monitoring event (February 2011), TPH-g has decreased in ESE-1R, remained same in ESE-5R, increased slightly in SOMA-4, and remained below the laboratory-reporting limit in other wells.

The following BTEX analytes were observed during this monitoring event:

- Benzene was detected at 30 µg/L and 2.3 µg/L in ESE-1R and SOMA-1, respectively. All other BTEX analytes were at low levels in ESE-1R and below laboratory-reporting limits in SOMA-1.
- In ESE-2R, ESE-5R, MW-6R and off-site wells MW-7R, and SOMA-4, all BTEX analytes were below laboratory-reporting limits.

Figure 10 displays the map of benzene concentrations in groundwater. As illustrated, benzene has only minimally impacted groundwater in the Shallow WBZ. Since the previous monitoring event (February 2011), benzene has decreased in ESE-1R and slightly increased in SOMA-1.

MtBE was below the laboratory-reporting limit in MW-6R. Detectable MtBE concentrations ranged from 0.97 µg/L in SOMA-4 to 21 µg/L in ESE-1R. Figure 11 displays the contour map of MtBE concentrations in groundwater. Based on the concentrations observed in MW-7R and SOMA-4, the MtBE plume has migrated off-site. Since the previous monitoring event (February 2011), detectable MtBE concentrations decreased in all wells.

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

- DIPE, ETBE, TAME, ethanol, 1,2-DCA, and EDB were below laboratory-reporting limits in all groundwater samples.
- TBA was detected in wells ESE-1R and SOMA-1 at 82 µg/L and 130 µg/L, respectively. It was below the laboratory-reporting limit in other wells.

Figure 10 displays the map showing TBA concentrations in groundwater. As illustrated, the highest TBA concentration was observed to the southeast of the former UST cavity at SOMA-1. Since the previous monitoring event (February 2011), TBA has decreased in ESE-1R and increased in SOMA-1.

Refer to Tables 1 and 2 for detailed historical concentration trends. Appendix C includes the laboratory report and chain of custody form for the Second Semi-Annual 2011 monitoring event.

# 3. CONCLUSIONS AND RECOMMENDATIONS

## 3.1 Conclusions

Conclusions based on the Second Semi-Annual 2011 groundwater monitoring event are summarized as follows:

- The groundwater flow direction was southeasterly in the Shallow and Semi-Confined WBZs.
- In the Shallow WBZ, TPH-g, MtBE, and TBA plumes appear to be centrally located in the southern section of the site in the vicinity of the former UST cavity, at OB-2. Highest benzene concentrations were detected in the southwestern section of the site at SOMA-7. Since the pre-MPE sampling event (June 2011), all contaminant concentrations have increased in these two wells, except for MtBE in OB-2 and TBA in SOMA-7. High TPH-g and BTEX concentrations suggest that this WBZ is

significantly impacted by petroleum hydrocarbons. Due to its high mobility and the south-to-southeasterly groundwater flow direction across the site from the former UST cavity, MtBE has migrated off-site.

- Within the Semi-Confined WBZ, TPH-g, benzene, and MtBE contamination is centered around the former UST cavity in the southern section of the site, around ESE-1R. However, since the previous monitoring event (February 2011) all contaminant concentrations have decreased in this well.
- 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:

- Conducting the next several monitoring events on a quarterly basis: Since Semi-Confined WBZ wells were just recently reconstructed and are no longer cross-screening the impacted shallow and deeper zones, at this time it is recommended to continue groundwater monitoring for several consecutive quarters to determine the concentration trends. In addition to standard monitoring, SOMA recommends evaluating pertinent natural attenuation indicators for this WBZ (e.g., DO, ORP, $Fe^{+2}$, $NO_3^-$, and $SO_4^{-2}$).

Based on ACEHS approval, SOMA conducted pilot testing for MPE and air sparging in June 2011. SOMA is currently preparing a report to document field activities and results.

# 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) | TPH-g (µg/L) | 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 | 2100 | 370 | 150 | 17 | 110 | NA |
| | 10/5/1992 | 177.69 | NM | NM | 2300 | 370 | 160 | 16 | 110 | NA |
| | 4/1/1993 | 177.69 | 8.79 | 168.90 | 5900 | 1500 | 410 | 110 | 390 | NA |
| | 6/29/1993 | 177.69 | 10.34 | 167.35 | 7600 | 2900 | 390 | 130 | 460 | NA |
| | 9/23/1993 | 177.69 | 10.91 | 166.78 | 2000 | 490 | 40 | 20 | 56 | 600 |
| | 9/23/1993 | 177.69 | NM | NM | 1500 | 420 | 39 | 19 | 56 | 550 |
| | 12/10/1993 | 177.69 | 9.93 | 167.76 | 1800 | 480 | 42 | 19 | 66 | 921 |
| | 12/10/1993 | 177.69 | NM | NM | 1500 | 380 | 38 | 17 | 55 | 770 |
| | 2/17/1994 | 177.69 | 9.64 | 168.05 | 1900 | 380 | 48 | 24 | 80 | 585 |
| | 2/17/1994 | 177.69 | NM | NM | 2200 | 430 | 42 | 19 | 65 | 491 |
| | 8/8/1994 | 177.69 | 11.72 | 165.97 | 2100 | 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 | 2000 | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-1** cont. | 1/22/1998 | 177.69 | 7.52 | 170.17 | 4200 | 440 | 9 | 15 | 17.7 | 1300 |
| | 4/23/1998 | 177.69 | 8.80 | 168.89 | 15000 | 3400 | 190 | 910 | 900 | 4900 |
| | 4/23/1998 | 177.69 | NM | NM | 15000 | 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 | 15000 | <2.5 | <5.0 | <5.0 | <5.0 | 15000 |
| | 12/17/1998 | 177.69 | 9.51 | 168.18 | 2400 | 73 | 1 | 2.8 | 4.6 | 2000 |
| | 3/19/1999 | 177.69 | 8.65 | 169.04 | 4700 | 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 | 3000 | 1300 | 120 | 80 | 140 | 7300 |
| | 6/8/2000 | 177.69 | 9.40 | 168.29 | 2900 | 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 | 1600 | 11.1 | <0.5 | <0.5 | <0.5 | 2730 |
| | 3/21/2001 | 177.69 | 9.75 | 167.94 | 5700 | 2.28 | <0.5 | 0.51 | <1.5 | 6810 |
| | 6/18/2001 | 177.69 | 10.21 | 167.48 | 2000 | 152 | 0.669 | 3.62 | 2.34 | 1980 |
| | 9/18/2001 | 177.69 | 10.30 | 167.39 | 2500 | 57.1 | <5.0 | 6.25 | <15 | 2090 |
| | 12/13/2001 | 177.69 | 9.82 | 167.87 | 2800 | 208 | 6.05 | 8.54 | 9.66 | 2030 |
| | 3/14/2002 | 177.69 | 9.10 | 168.59 | 1800 | 140 | 6.31 | 4.5 | 9.41 | 1970 |
| | 6/19/2002 | 177.69 | 9.92 | 167.77 | 1100 | 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 | 1700 | 490 | 21 | 22 | 41 | 530 |
| | 6/17/2003 | 177.69 | 9.86 | 167.83 | 1300 | 140 | <10 | <10 | <10 | 480 |
| | 12/9/2003 | 177.69 | 9.32 | 168.37 | 1400 | 390 | 12 | 14 | 26.1 | 260 |
| | 2/26/2004 | 177.69 | 7.71 | 169.98 | 3200 | 880 | 50 | 44 | 89 | 200 |
| | 5/21/2004 | 177.69 | 10.19 | 167.50 | 1500 | 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 | 1600 | 490 | 13 | 12 | 25.3 | 110 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-1** cont. | 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 | 3020 | 766 | 25.6 | 21.3 | 25.26 | 88.2 |
| | 7/7/2005 | 180.24 | 9.94 | 170.30 | 1940 | 440 | 15.5 | 15.7 | 21 | 80.6 |
| | 11/15/2005 | 180.24 | 10.21 | 170.03 | 1260 | 259 | 6.2 | 8.2 | 10.81 | 45.8 |
| | 2/8/2006 | 180.24 | 9.01 | 171.23 | 1430 | 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 |
| | 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** |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| ESE-2 | 10/5/1992 | 178.23 | 11.68 | 166.55 | 300 | 5.4 | 16 | 3.9 | 45 | NA |
| | 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) | TPH-g (µg/L) | 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) | TPH-g (µg/L) | 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 | 180.7 | 10.61 | 170.09 | 200 | 0.93 | <0.5 | 1.3 | 13.5 | 16 |
| | 11/16/2010 | 180.7 | 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** |
| | | | | | | | | | | |
| **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 | 2400 | 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 |
| | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-3** cont. | 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 | 10000 | 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 | 4800 | 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 | 1800 | 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 | 2000 | 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 |
| | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-3** cont. | 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 |
| | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-4** cont. | 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 | 1300 | 200 | 3.8 | 1.2 | 18 | NA |
| | 4/1/1993 | 176.08 | 7.02 | 169.06 | 13000 | 2200 | 26 | 730 | 1000 | NA |
| | 4/1/1993 | 176.08 | NM | NM | 13000 | 2500 | 25 | 740 | 1100 | NA |
| | 6/29/1993 | 176.08 | 10.21 | 165.87 | 7600 | 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 | 1700 | 300 | 3 | 76 | 110 | 14.07 |
| | 2/7/1994 | 176.08 | 9.35 | 166.73 | 3500 | 640 | 7.8 | 90 | 130 | 45.13 |
| | 8/8/1994 | 176.08 | 8.76 | 167.32 | 2600 | 210 | 4.6 | 9.4 | 4.4 | 33 |
| | 8/8/1994 | 176.08 | NM | NM | 2500 | 230 | 4.6 | 13 | 4.8 | 32 |
| | 10/12/1994 | 176.08 | 8.95 | 167.13 | 5600 | 560 | 9.5 | 75 | 21 | 79.2 |
| | 10/12/1994 | 176.08 | NM | NM | 6000 | 550 | 10 | 78 | 22 | 77 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-5** cont | 1/19/1995 | 176.08 | 5.40 | 170.68 | 1900 | 620 | <5 | 95 | 15 | NA |
| | 1/19/1995 | 176.08 | NM | NM | 1600 | 620 | <5 | 93 | 17 | NA |
| | 5/2/1995 | 176.08 | 6.48 | 169.60 | 5700 | 1100 | <10 | 180 | 58 | NA |
| | 5/2/1995 | 176.08 | NM | NM | 5300 | 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 | 4100 | 670 | 6 | 190 | 140 | <50 |
| | 4/23/1996 | 176.08 | 7.35 | 168.73 | 3000 | 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 | 1100 | 29 | <5 | <5 | <5 | <50 |
| | 10/10/1996 | 176.08 | NM | NM | 1100 | 31 | <5 | <5 | <5 | <50 |
| | 1/20/1997 | 176.08 | 5.82 | 170.26 | 2100 | 980 | <25 | 280 | 80 | <250 |
| | 1/20/1997 | 176.08 | NM | NM | 2700 | 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 |
| | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-5** cont. | 3/9/2000 | 176.08 | 5.08 | 171.00 | 1700 | 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 | 1000 | 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 | 1300 | 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 | 2100 | 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 | 2400 H | 41 | 2.8 C | 18 | 2.4 C | 29 |
| | 5/21/2004 | 176.26 | 7.50 | 168.76 | 1500 | 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 | 2400 | 18 | 1.4 | 22 | 2.1 | 26 |
| | 4/14/2005 | 178.80 | 6.13 | 172.67 | 4800 | 7.75 | 1.26 | 14.3 | <1.0 | 23.1 |
| | 7/7/2005 | 178.80 | 7.52 | 171.28 | 3240 | 0.78 | <2.0 | 1.18 | <1.0 | 36.6 |
| | 11/15/2005 | 178.80 | 7.85 | 170.95 | 1190 | 0.51 | <2.0 | <0.5 | <1.0 | 30 |
| | 2/8/2006 | 178.80 | 5.83 | 172.97 | 2510 | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **ESE-5** cont. | 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** |
| | | | | | | | | | | |
| **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 |
| | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **MW-6** cont. | 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 |
| | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **MW-6** cont. | 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 |
| **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** |
| | | | | | | | | | | |
| **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) | TPH-g (µg/L) | 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) | TPH-g (µg/L) | 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** |
| | | | | | | | | | | |
| **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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **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 |
| | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-1** cont. | 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** |
| | | | | | | | | | | |
| **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 |
| | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-4** cont | 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** |
| **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 |
| | 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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-2** cont. | 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** |
| | | | | | | | | | | |
| **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 |
| | 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** |
| | | | | | | | | | | |
| **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 |

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|
| **SOMA-5** cont. | 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** |
| **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** |
| **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 |
| | 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** |
| **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** |
| **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** |
| **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.

# 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) | TPH-g (µg/L) | Benzene (µg/L) | Toluene (µg/L) | Ethyl benzene (µg/L) | Total Xylenes (µg/L) | MtBE (µg/L) 8260B |
|---|---|---|---|---|---|---|---|---|---|---|

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

# 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** |
| | | | | | | | | |
| **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 |

# 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-2R** cont. | 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 |
| | 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** |
| | | | | | | | | |
| **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 |

# 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. | 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 |
| | 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** |
| | | | | | | | | |
| **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 |

# 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-6** contd. | 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 |
| **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** |
| | | | | | | | | |
| **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** |

# 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** |
| **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 |

# 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 | 1/17/2008 | <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** |
| **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** |
| | | | | | | | | |
| **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** |
| | | | | | | | | |
| **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** |
| | | | | | | | | |
| **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** |
| | | | | | | | | |
| **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** |
| | | | | | | | | |
| **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** |
| | | | | | | | | |
| **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** |

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

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)


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.

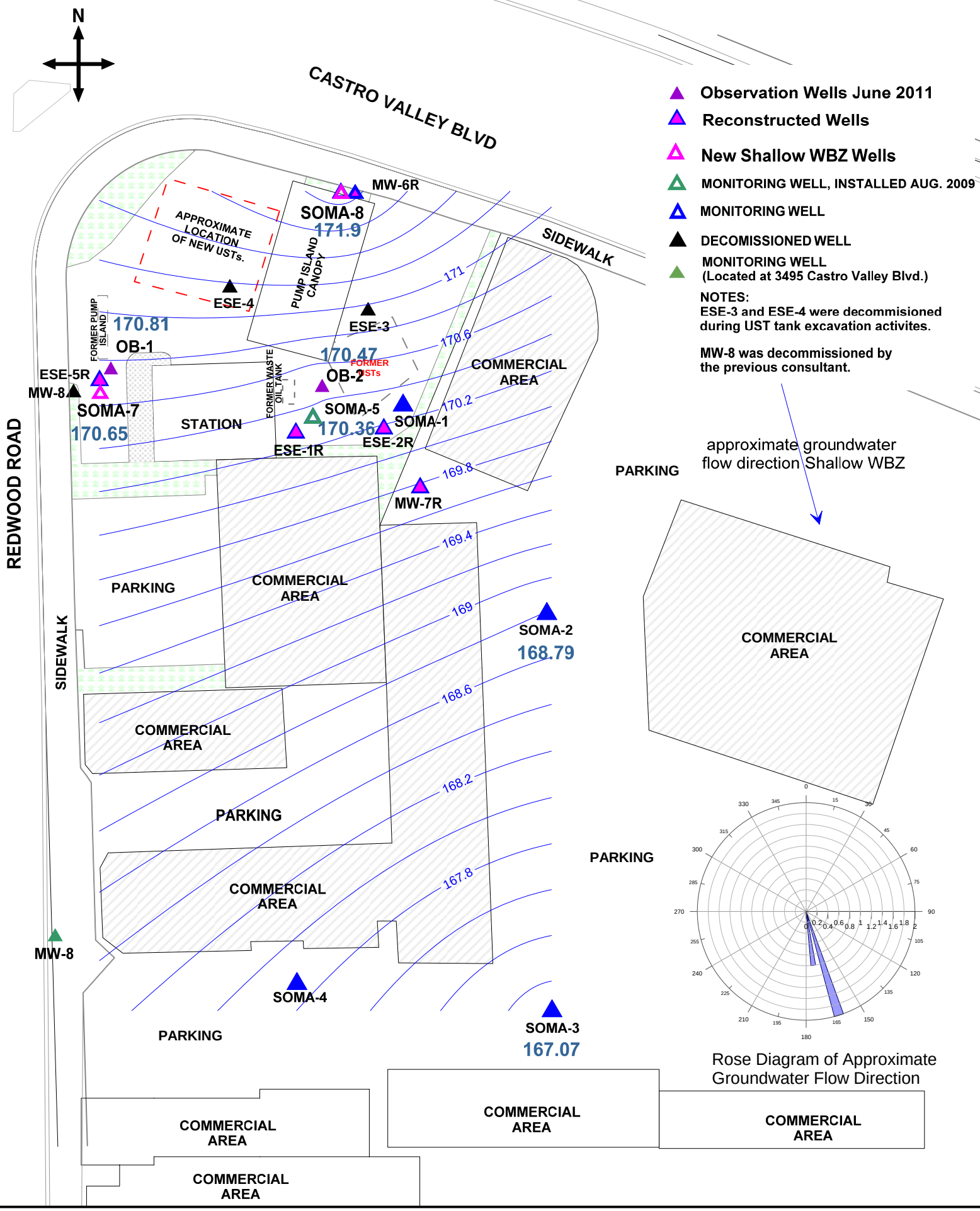



Figure 3: Groundwater Elevation Contour Map for Shallow WBZ Wells in Feet. July 19, 2011

ENVIRONMENTAL ENGINEERING, INC.

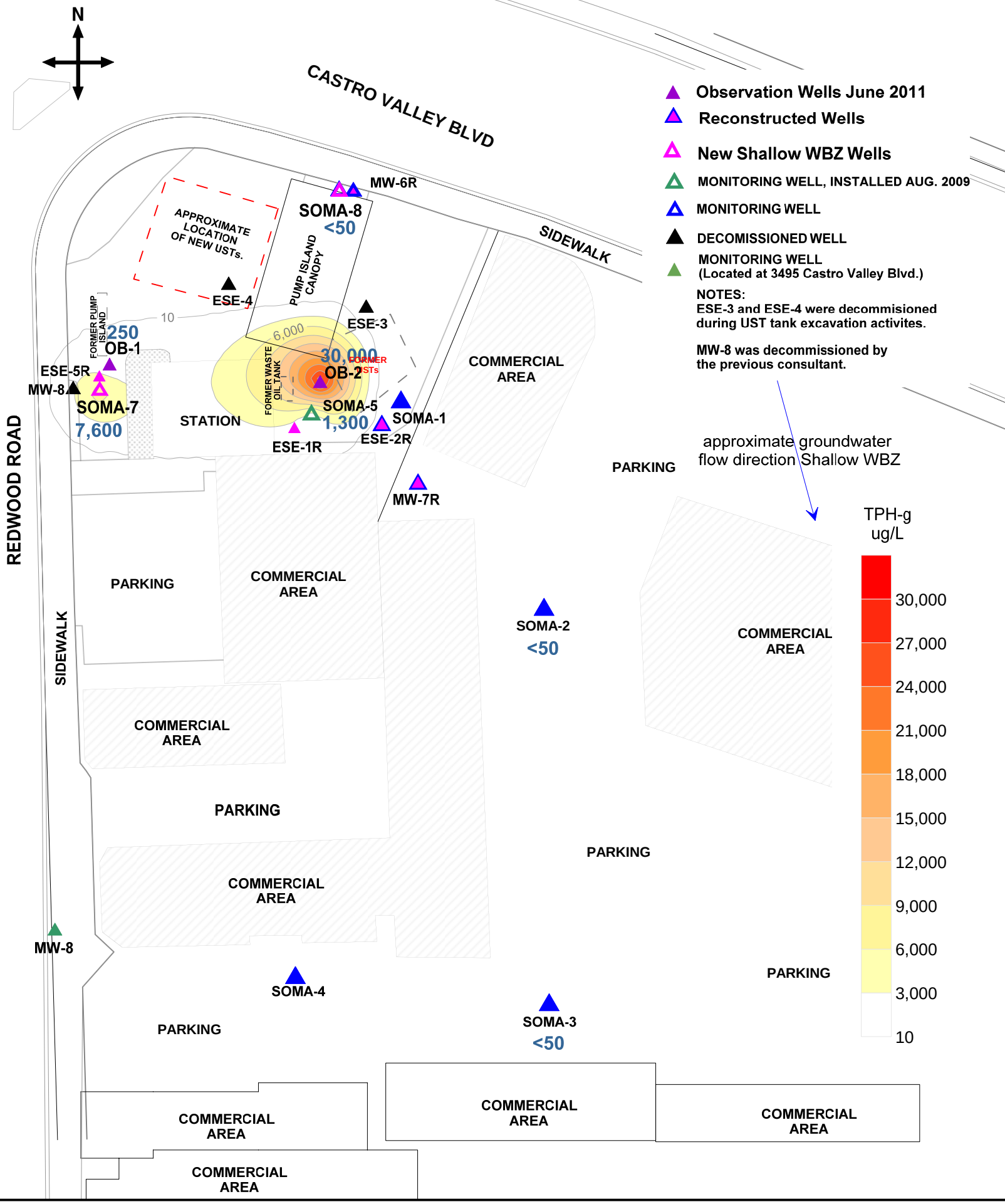



Figure 4: Contour Map of TPH-g Concentrations in Shallow WBZ Wells in Feet. July 19, 2011

ENVIRONMENTAL ENGINEERING, INC.

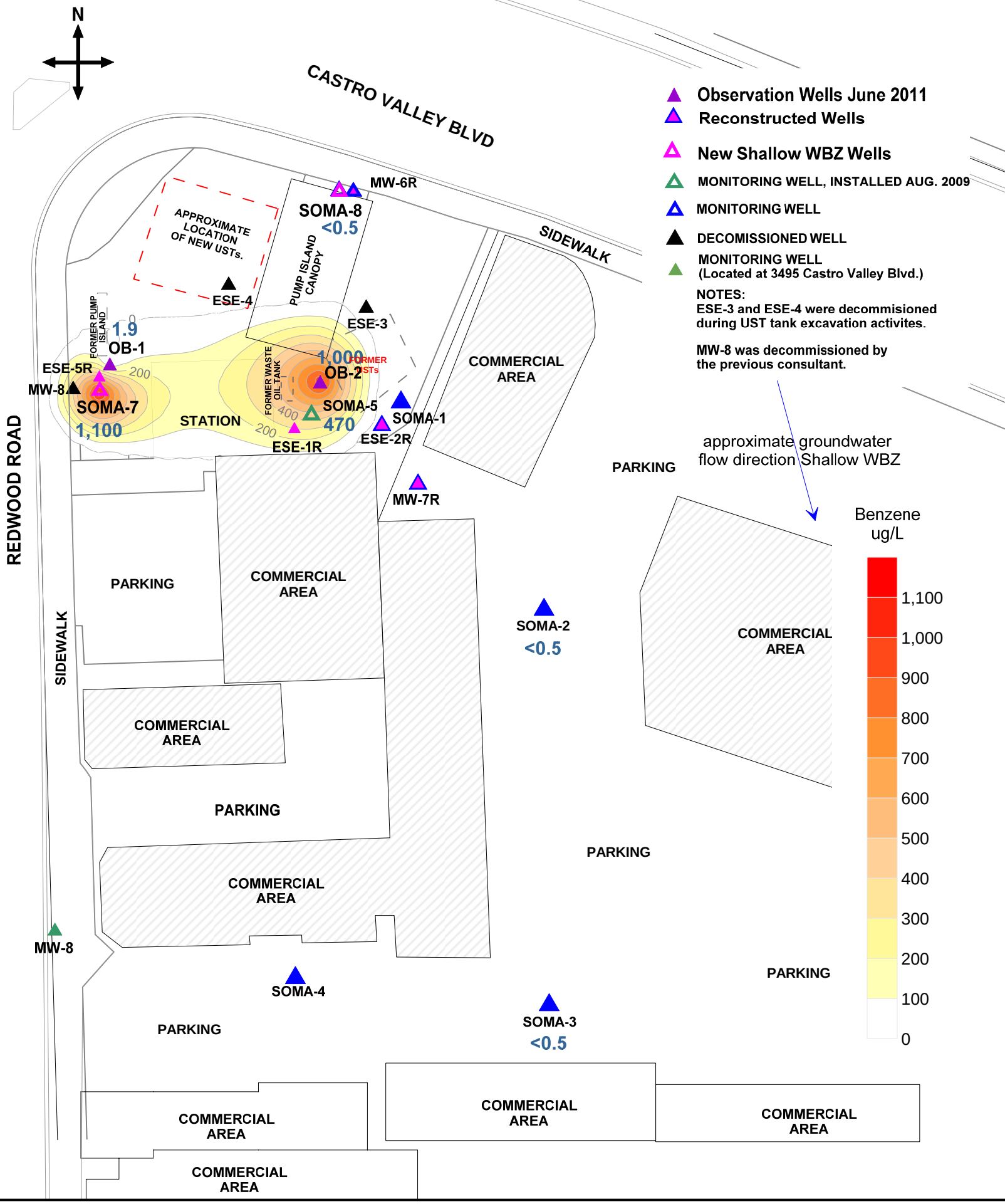



Figure 5: Contour Map of Benzene Concentrations in Shallow WBZ Wells in Feet. July 19, 2011

ENVIRONMENTAL ENGINEERING, INC.

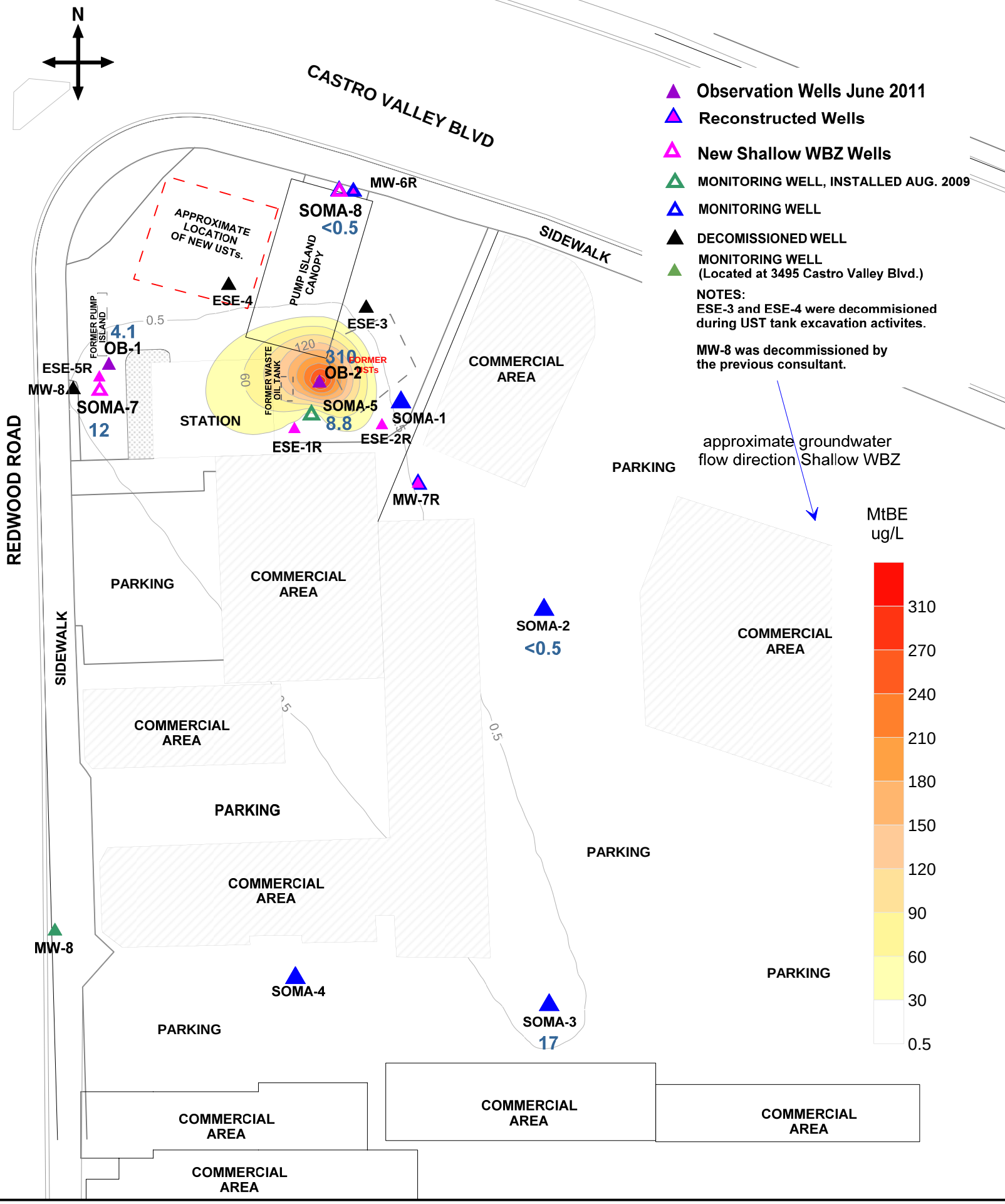
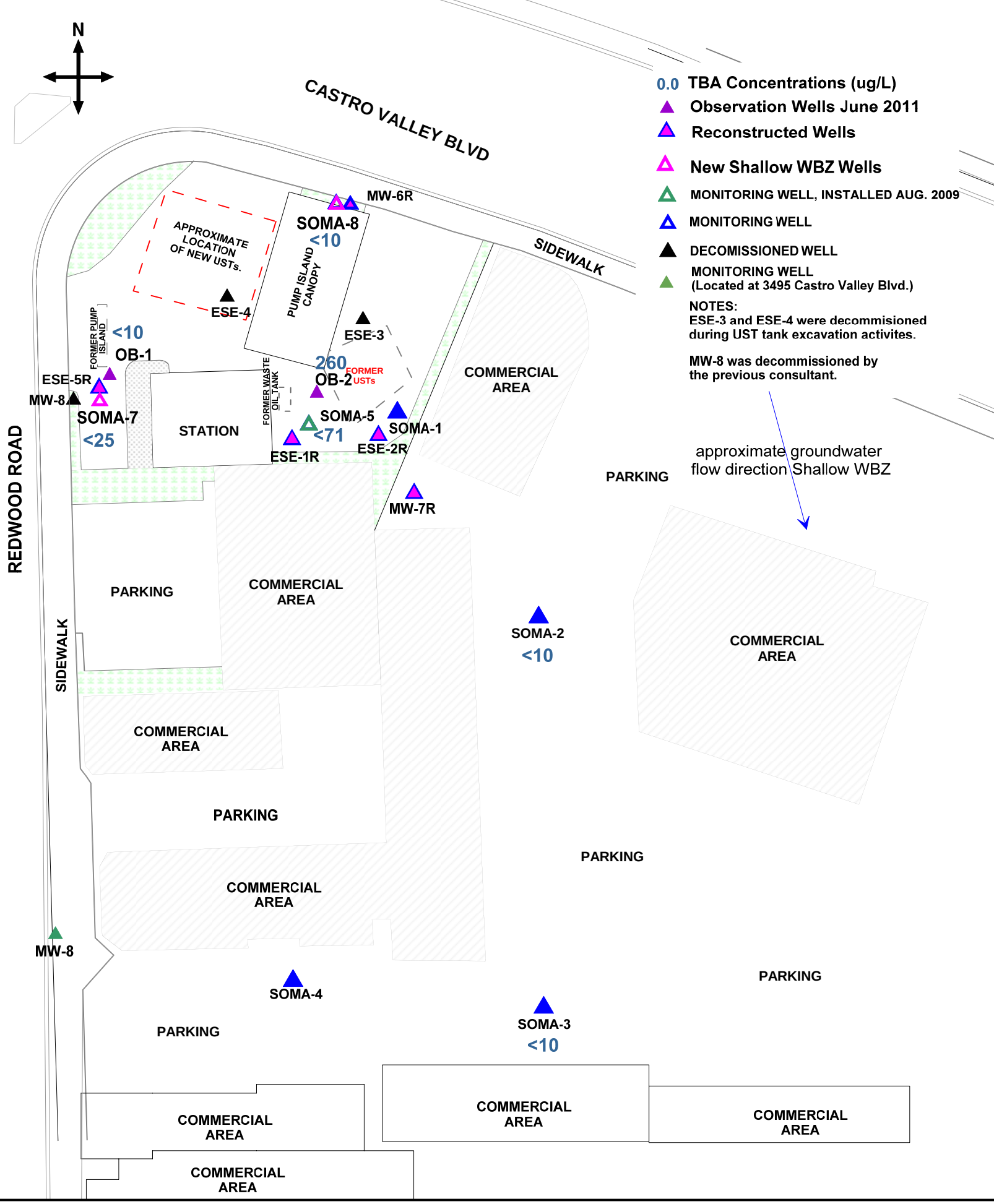



Figure 6: Contour Map of MtBE Concentrations in Shallow WBZ Wells in Feet. July 19, 2011

ENVIRONMENTAL ENGINEERING, INC.


N
CASTRO VALLEY BLVD
0.0 TBA Concentrations (ug/L)
Observation Wells June 2011
Reconstructed Wells
New Shallow WBZ Wells
MONITORING WELL, INSTALLED AUG. 2009
MONITORING WELL
DECOMISSIONED WELL
MONITORING WELL
(Located at 3495 Castro Valley Blvd.)
NOTES:
ESE-3 and ESE-4 were decommisioned during UST tank excavation activites.
MW-8 was decommissioned by the previous consultant.
approximate groundwater flow direction Shallow WBZ
REDWOOD ROAD
SIDEWALK
APPROXIMATE LOCATION OF NEW USTs.
PUMP ISLAND CANOPY
FORMER PUMP ISLAND
FORMER WASTE OIL TANK
FORMER USTs
STATION
MW-6R
SOMA-8
<10
ESE-4
ESE-3
OB-1
<10
260
OB-2
ESE-5R
MW-8
SOMA-7
<25
SOMA-5
<71
SOMA-1
ESE-2R
ESE-1R
MW-7R
SOMA-2
<10
SOMA-4
SOMA-3
<10
MW-8
COMMERCIAL AREA
PARKING
approximate scale in feet
0
40
80
Figure 7: Map of TBA Concentrations in Shallow WBZ Wells in Feet. July 19, 2011
ENVIRONMENTAL ENGINEERING, INC.

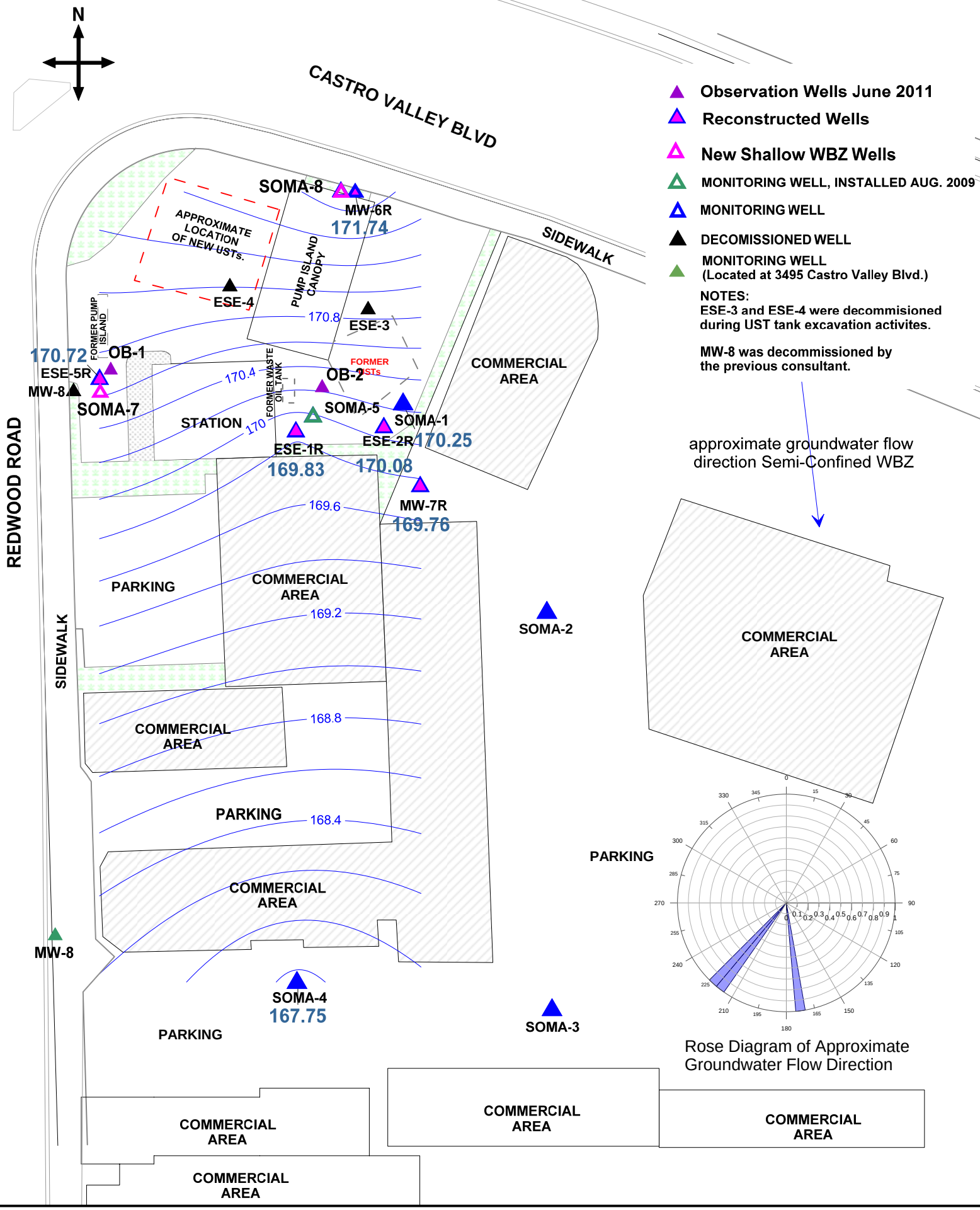
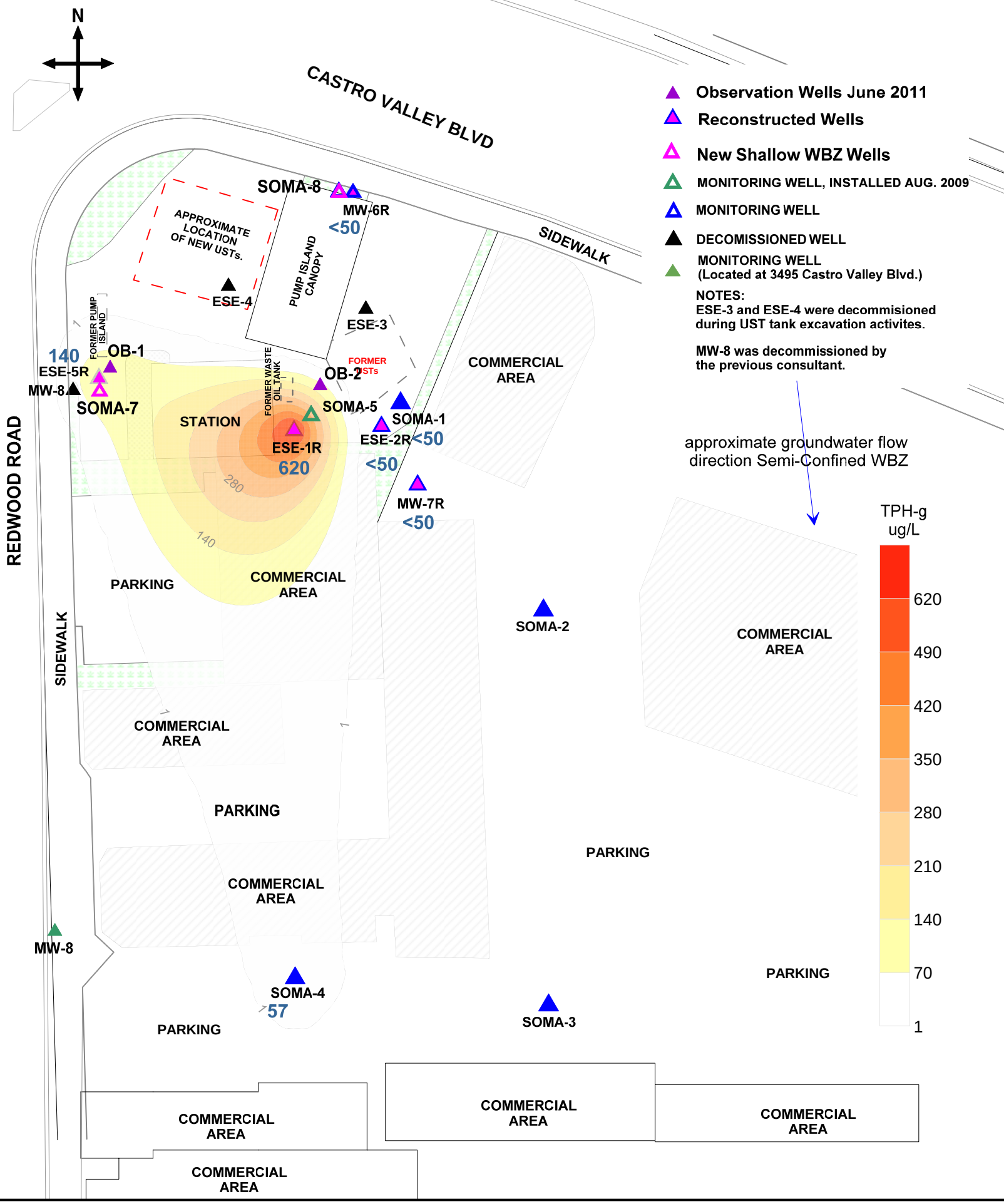



Figure 8: Groundwater Elevation Contour Map for Semi-Confined WBZ Wells in Feet. July 19, 2011

ENVIRONMENTAL ENGINEERING, INC.




approximate scale in feet

0 40 80

Figure 9: Contour Map of TPH-g Concentrations in Semi-Confined WBZ Wells. July 19, 2011

SOMA ENVIRONMENTAL ENGINEERING, INC.

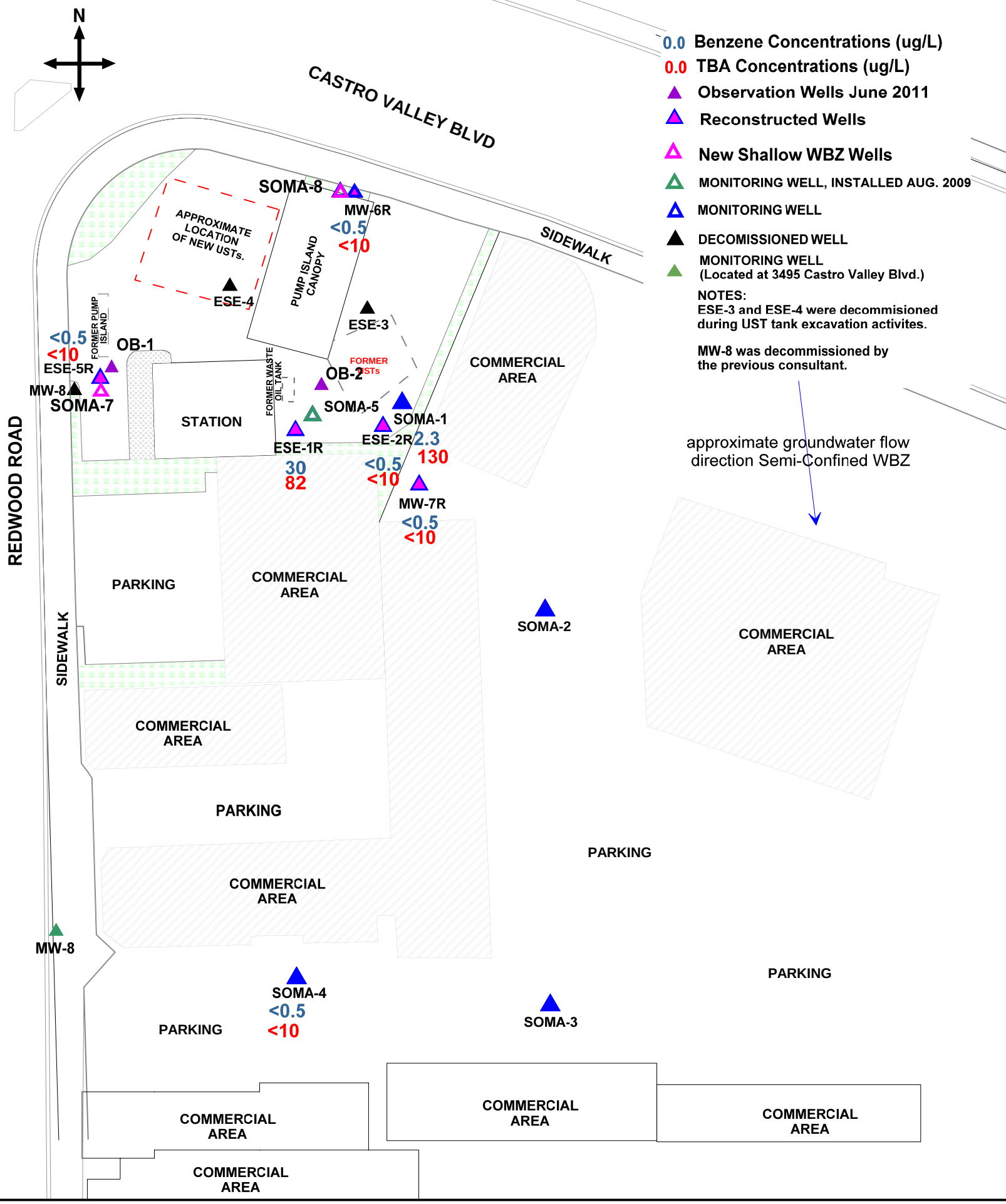



Figure 10: Map of Benzene and TBA Concentrations in Semi-Confined WBZ Wells. July 19, 2011

ENVIRONMENTAL ENGINEERING, INC.

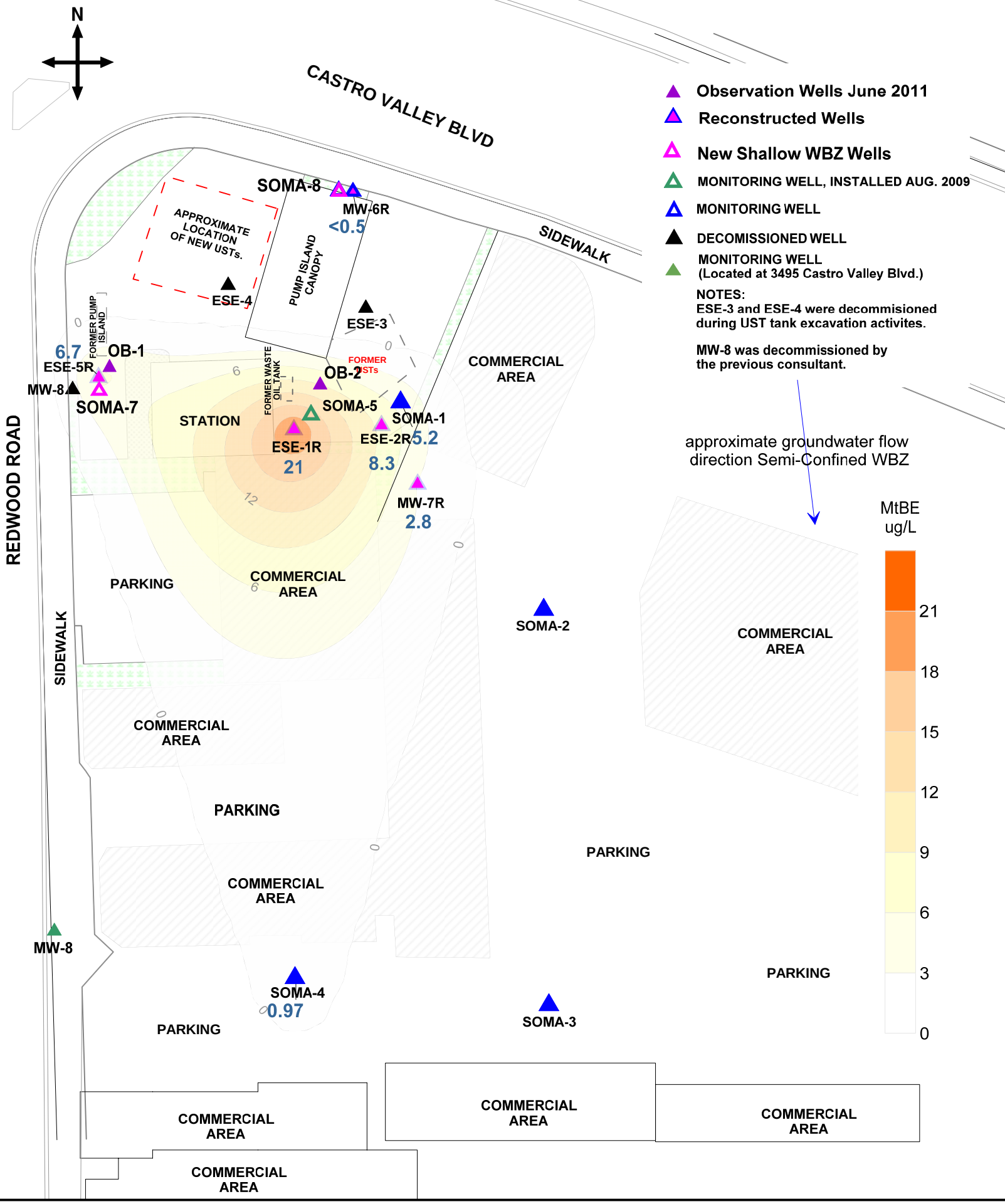



Figure 11: Contour Map of MtBE Concentrations in Semi-Confined WBZ Wells. July 19, 2011

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 and Field Measurements of Groundwater Sample Properties for Second Semi-Annual 2011 Monitoring Event

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.**
1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
Phone (925) 249-6555,
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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

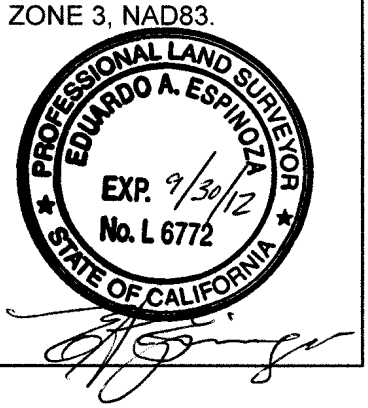
SOMA ENVIRONMENTAL ENGINEERING
3519 CASTRO VALLEY
CASTRO VALLEY, CA

| 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**
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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
1374 Garland Avenue, Clovis, CA 93612
Phone (559) 803-2679 Fax (559) 292-0560
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:** | July 19, 2011 |
| **Depth to Groundwater:** | 10.37 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 169.83 feet | | |
| **Water Column Height:** | 14.16 feet | | |
| **Purged Volume:** | 8 gallons | | |

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

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 15:51 | Started purging well | | | |
| 15:52 | 2 | 6.09 | 20.30 | 1080 |
| 15:53 | 4 | 6.13 | 19.9 | 1090 |
| 15:54 | 6 | 6.16 | 19.5 | 1050 |
| 15:55 | 8 | 6.19 | 19.5 | 1040 |
| 16:00 | 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:** | July 19, 2011 |
| **Depth to Groundwater:** | 10.62 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.08 feet | | |
| **Water Column Height:** | 16.92 feet | | |
| **Purged Volume:** | 8 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) |
|---|---|---|---|---|
| 14:53 | Started purging Well | | | |
| 14:54 | 2 | 6.10 | 19.8 | 990 |
| 14:55 | 4 | 6.14 | 19.3 | 980 |
| 14:56 | 6 | 6.15 | 19.3 | 960 |
| 14:57 | 8 | 6.14 | 19.2 | 950 |
| 15:02 | 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:** | July 19, 2011 |
| **Depth to Groundwater:** | 7.92 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.72 feet | | |
| **Water Column Height:** | 15.62 feet | | |
| **Purged Volume:** | 8 gallons | | |

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

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 17:32 | Started purging well | | | |
| 17:33 | 2 | 6.80 | 19.8 | 850 |
| 17:34 | 4 | 6.72 | 19.7 | 810 |
| 17:35 | 6 | 6.69 | 19.9 | 820 |
| 17:36 | 8 | 6.65 | 19.7 | 830 |
| 17:41 | 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:** | July 19, 2011 |
| **Depth to Groundwater:** | 9.60 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 171.74 feet | | |
| **Water Column Height:** | 17.97 feet | | |
| **Purged Volume:** | 8 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) |
|---|---|---|---|---|
| 14:26 | Started purging well | | | |
| 14:27 | 2 | 6.24 | 19.2 | 770 |
| 14:28 | 4 | 6.16 | 19.0 | 740 |
| 14:29 | 6 | 6.16 | 18.9 | 750 |
| 14:30 | 8 | 6.15 | 18.9 | 750 |
| 14:35 | 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:** | July 19, 2011 |
| **Depth to Groundwater:** | 9.38 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 169.76 feet | | |
| **Water Column Height:** | 20.21 feet | | |
| **Purged Volume:** | 8 gallons | | |

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

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 11:39 | Started purging well | | | |
| 11:40 | 2 | 6.01 | 19.0 | 840 |
| 11:41 | 4 | 5.93 | 18.8 | 800 |
| 11:42 | 6 | 5.93 | 18.7 | 790 |
| 11:43 | 8 | 5.94 | 18.6 | 790 |
| 11:48 | 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:** | July 19, 2011 |
| **Depth to Groundwater:** | 10.70 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.25 feet | | |
| **Water Column Height:** | 19.04 feet | | |
| **Purged Volume:** | 8 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) |
|---|---|---|---|---|
| 15:19 | Started purging well | | | |
| 15:20 | 2 | 6.15 | 20.40 | 1010 |
| 15:21 | 4 | 6.10 | 19.8 | 1010 |
| 15:22 | 6 | 6.10 | 19.7 | 1000 |
| 15:23 | 8 | 6.10 | 19.5 | 1010 |
| 15:28 | 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:** | July 19, 2011 |
| **Depth to Groundwater:** | 10.20 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 168.79 feet | | |
| **Water Column Height:** | 4.50 feet | | |
| **Purged Volume:** | 2.50 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) |
|---|---|---|---|---|
| 12:06 | Started purging well | | | |
| 12:12 | 1 | 6.37 | 20.8 | 600 |
| 12:14 | 2 | 6.38 | 20.1 | 600 |
| 12:17 | 2.50 | 6.39 | 20.3 | 640 |
| 12:22 | Sampled | | | |
| | | | | |

ENVIRONMENTAL ENGINEERING, INC

| | | | |
|---|---|---|---|
| **Well No.:** | SOMA-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:** | July 19, 2011 |
| **Depth to Groundwater:** | 9.74 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 167.07 feet | | |
| **Water Column Height:** | 4.96 feet | | |
| **Purged Volume:** | 2.5 gallons | | |

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

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 12:49 | Started purging well | | | |
| 12:50 | 1 | 6.11 | 21.5 | 1020 |
| 12:53 | 2 | 6.14 | 21.5 | 1000 |
| 12:55 | 2.5 | 6.15 | 21.1 | 1000 |
| 13:00 | 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:** | July 19, 2011 |
| **Depth to Groundwater:** | 9.19 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 167.75 feet | | |
| **Water Column Height:** | 12.46 feet | | |
| **Purged Volume:** | 6 gallons | | |

| | | | | |
|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☐ | **Pump** ☑ | | |
| **Sampling Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Color:** | **No** ☑ | **Yes** ☐ | **Describe:** | |
| **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) |
|---|---|---|---|---|
| 13:10 | Started purging well | | | |
| 13:11 | 2 | 5.90 | 22.1 | 660 |
| 13:12 | 4 | 5.88 | 21.9 | 640 |
| 13:13 | 6 | 5.86 | 22.2 | 650 |
| 13:18 | 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:** | July 19, 2011 |
| **Depth to Groundwater:** | 9.95 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.36 feet | | |
| **Water Column Height:** | 4.92 feet | | |
| **Purged Volume:** | 2.5 gallons | | |

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

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 16:13 | Started purging wells | | | |
| 16:15 | 1 | 6.42 | 20.9 | 1510 |
| 16:18 | 2 | 6.50 | 19.9 | 1460 |
| 16:21 | 2.5 | 6.52 | 19.8 | 1460 |
| 16:26 | Sampled | | | |
| | | | | |

Pre-purge measurements:
DO: 1.22
pH: 6.26
ORP: +90.8
EC: 1432

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:** | July 19, 2011 |
| **Depth to Groundwater:** | 7.89 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.65 feet | | |
| **Water Column Height:** | 7.00 feet | | |
| **Purged Volume:** | 3.50 gallons | | |

| | | | | |
|---|---|---|---|---|
| **Purging Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Sampling Method:** | **Bailer** ☑ | **Pump** ☐ | | |
| **Color:** | **No** ☐ | **Yes** ☑ | **Describe:** | Gray/Cloudy |
| **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) |
|---|---|---|---|---|
| 17:53 | Started | | | |
| 17:55 | 1 | 6.31 | 20.00 | 1190 |
| 17:58 | 2 | 6.36 | 19.7 | 1120 |
| 18:01 | 3.5 | 6.35 | 19.7 | 1120 |
| 18:06 | Sampled | | | |
| | | | | |

Pre-purge measurements:
D.O.: 1.67
pH: 6.16
ORP: +68.2
EC: 1092

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:** | July 19, 2011 |
| **Depth to Groundwater:** | 9.67 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 171.90 feet | | |
| **Water Column Height:** | 5.22 feet | | |
| **Purged Volume:** | 2.5 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) |
|---|---|---|---|---|
| 13:43 | Started purging well | | | |
| 13:45 | 1 | 6.40 | 20.0 | 1070 |
| 13:48 | 2 | 6.41 | 19.1 | 1050 |
| 13:51 | 2.5 | 6.45 | 18.9 | 1030 |
| 13:56 | 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:** | 178.70 feet | **Date:** | July 19, 2011 |
| **Depth to Groundwater:** | 7.89 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.81 feet | | |
| **Water Column Height:** | 7.70 feet | | |
| **Purged Volume:** | 3.5 gallons | | |

**Purging Method:** Bailer ☑ Pump ☐

**Sampling Method:** Bailer ☑ Pump ☐

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

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

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

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 17:15 | Started purging well | | | |
| 17:17 | 1 | 6.72 | 21.1 | 1120 |
| 17:20 | 2 | 6.46 | 20.7 | 1130 |
| 17:23 | 3.5 | 6.47 | 20.5 | 1140 |
| 17:28 | Sampled | | | |
| | | | | |

Pre-purge Measurements:
D.O. : 1.44
pH : 6.27
ORP: ~~1137~~ +122.4
E C: 1137

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:** | July 19, 2011 |
| **Depth to Groundwater:** | 9.76 feet | **Sampler:** | Lizzie Hightower |
| **Groundwater Elevation:** | 170.47 feet | | |
| **Water Column Height:** | 6.73 feet | | |
| **Purged Volume:** | 3 gallons | | |

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

**Field Measurements:**

| Time | Vol (gallons) | pH | Temp ($^0$C) | E.C. (µs/cm) |
|---|---|---|---|---|
| 16:44 | Started purging well | | | |
| 16:46 | 1 | 6.23 | 21.9 | 1240 |
| 16:49 | 2 | 6.26 | 20.5 | 1250 |
| 16:52 | 3 | 6.26 | 20.4 | 1260 |
| 16:57 | Sampled | | | |
| | | | | |

Pre-purge Measurements:
D.O.: 1.95
pH: 5.95
ORP: +28.7
EC: 1167

# Appendix C

Chain of Custody Form and Laboratory Report

for the

Second Semi-Annual 2011 Monitoring Event

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

**Laboratory Job Number 229566**
**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 | 229566-001 |
| ESE-2R | 229566-002 |
| ESE-5R | 229566-003 |
| MW-6R | 229566-004 |
| MW-7R | 229566-005 |
| SOMA-1 | 229566-006 |
| SOMA-2 | 229566-007 |
| SOMA-3 | 229566-008 |
| SOMA-4 | 229566-009 |
| SOMA-5 | 229566-010 |
| SOMA-7 | 229566-011 |
| SOMA-8 | 229566-012 |
| OB-1 | 229566-013 |
| OB-2 | 229566-014 |

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: _____ Date: 07/29/2011
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

# CASE NARRATIVE

| | |
|---|---|
| Laboratory number: | **229566** |
| Client: | **SOMA Environmental Engineering Inc.** |
| Project: | **2761** |
| Location: | **3519 Castro Valley Blvd.** |
| Request Date: | **07/20/11** |
| Samples Received: | **07/20/11** |

This data package contains sample and QC results for fourteen water samples, requested for the above referenced project on 07/20/11. 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 # 229566

**Project No:** 2761

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

**Turnaround Time:** Standard

**Sampler:** Lizzie Hightower

**Report To:** Joyce Bobek

**Company :** SOMA Environmental

**Telephone:** 925-734-6400

**Fax:** 925-734-6401

**Analyses**

| Lab No. | Sample ID. | Sampling Date | Time | Matrix: Soil | Water | Waste | # of Containers | Preservative: HCL | $H_2SO_4$ | $HNO_3$ | ICE | TPHg, BTEX, MtBE 8260B | Gasoline Oxygenates & Lead Scavengers | Ethanol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ESE-1R | 7/19/11 | 16:00 | | * | | 4-VOAs | * | | | * | * | * | * |
| 2 | ESE-2R | | 15:02 | | * | | 4-VOAs | * | | | * | * | * | * |
| 3 | ESE-5R | | 17:41 | | * | | 4-VOAs | * | | | * | * | * | * |
| 4 | MW-6R | | 14:35 | | * | | 4-VOAs | * | | | * | * | * | * |
| 5 | MW-7R | | 11:48 | | * | | 4-VOAs | * | | | * | * | * | * |
| 6 | SOMA-1 | | 15:28 | | * | | 4-VOAs | * | | | * | * | * | * |
| 7 | SOMA-2 | | 12:22 | | * | | 4-VOAs | * | | | * | * | * | * |
| 8 | SOMA-3 | | 13:00 | | * | | 4-VOAs | * | | | * | * | * | * |
| 9 | SOMA-4 | | 13:18 | | * | | 4-VOAs | * | | | * | * | * | * |
| 10 | SOMA-5 | | 16:26 | | * | | 4-VOAs | * | | | * | * | * | * |
| 11 | SOMA-7 | | 18:06 | | * | | 4-VOAs | * | | | * | * | * | * |
| 12 | SOMA-8 | | 13:56 | | * | | 4-VOAs | * | | | * | * | * | * |
| 13 | OB-1 | | 17:20 | | * | | 4-VOAs | * | | | * | * | * | * |
| 14 | OB-2 | | 16:57 | | * | | 4-VOAs | * | | | * | * | * | * |

**Notes:** **EDF OUTPUT REQUIRED**
**GASOLINE OXYGENATES: TBA, DIPE, ETBE, TAME**

**LEAD SCAVENGERS: 1,2-DCA, EDB**

| RELINQUISHED BY: | | RECEIVED BY: | |
|---|---|---|---|
| E. Hightower | 7/20/11 7:04 DATE/TIME | Rudi Mathes | 7/20/11 8:30 DATE/TIME |
| Rudi Mathes | 11:00 DATE/TIME | | 7/20/11 1100 DATE/TIME |
| | DATE/TIME | | DATE/TIME |

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 229566 Date Received 7/20/11 Number of coolers 1
Client Soma Project Castro Valley Blvd

Date Opened 7/20/11 By (print) R. Pamr (sign)
Date Logged in ↓ By (print) ↓ (sign) ↓

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

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

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

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

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

(☒) Samples Received on ice & cold without a temperature blank

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

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

COMMENTS

_____
_____
_____
_____
_____
_____

Rev 8, 6/11

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | ESE-1R | Batch#: | 177155 |
| Lab ID: | 229566-001 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/26/11 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 620 | 50 |
| tert-Butyl Alcohol (TBA) | 82 | 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 | 21 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | 30 | 0.50 |
| Toluene | 0.76 | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | 4.4 | 0.50 |
| m,p-Xylenes | 0.96 | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 102 | 80-127 |
| 1,2-Dichloroethane-d4 | 124 | 73-145 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 107 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | ESE-2R | Batch#: | 177155 |
| Lab ID: | 229566-002 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/26/11 |
| 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 | 8.3 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | ND | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | ND | 0.50 |
| m,p-Xylenes | ND | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 104 | 80-127 |
| 1,2-Dichloroethane-d4 | 133 | 73-145 |
| Toluene-d8 | 97 | 80-120 |
| Bromofluorobenzene | 102 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | ESE-5R | Batch#: | 177155 |
| Lab ID: | 229566-003 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/26/11 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 140 | 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 | 6.7 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | ND | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | ND | 0.50 |
| m,p-Xylenes | ND | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 101 | 80-127 |
| 1,2-Dichloroethane-d4 | 124 | 73-145 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 106 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | MW-6R | Batch#: | 177194 |
| Lab ID: | 229566-004 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| 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 | 99 | 80-127 |
| 1,2-Dichloroethane-d4 | 122 | 73-145 |
| Toluene-d8 | 98 | 80-120 |
| Bromofluorobenzene | 98 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | MW-7R | Batch#: | 177194 |
| Lab ID: | 229566-005 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | ND | 50 |
| tert-Butyl Alcohol (TBA) | ND | 10 |
| Isopropyl Ether (DIPE) | ND | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND | 0.50 |
| Ethanol | ND | 1,000 |
| MTBE | 2.8 | 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 | 102 | 80-127 |
| 1,2-Dichloroethane-d4 | 123 | 73-145 |
| Toluene-d8 | 98 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-1 | Batch#: | 177194 |
| Lab ID: | 229566-006 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | ND | 50 |
| tert-Butyl Alcohol (TBA) | 130 | 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 | 5.2 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | 2.3 | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | ND | 0.50 |
| m,p-Xylenes | ND | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 103 | 80-127 |
| 1,2-Dichloroethane-d4 | 128 | 73-145 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-2 | Batch#: | 177194 |
| Lab ID: | 229566-007 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| 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 | 106 | 80-127 |
| 1,2-Dichloroethane-d4 | 126 | 73-145 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-3 | Batch#: | 177194 |
| Lab ID: | 229566-008 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| 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 | 17 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | ND | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | ND | 0.50 |
| m,p-Xylenes | ND | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 104 | 80-127 |
| 1,2-Dichloroethane-d4 | 128 | 73-145 |
| Toluene-d8 | 97 | 80-120 |
| Bromofluorobenzene | 103 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-4 | Batch#: | 177194 |
| Lab ID: | 229566-009 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 57 | 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 | 0.97 | 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 | 107 | 80-127 |
| 1,2-Dichloroethane-d4 | 134 | 73-145 |
| Toluene-d8 | 98 | 80-120 |
| Bromofluorobenzene | 103 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-5 | Batch#: | 177234 |
| Lab ID: | 229566-010 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/28/11 |
| Diln Fac: | 7.143 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 1,300 | 360 |
| tert-Butyl Alcohol (TBA) | ND | 71 |
| Isopropyl Ether (DIPE) | ND | 3.6 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 3.6 |
| Methyl tert-Amyl Ether (TAME) | ND | 3.6 |
| Ethanol | ND | 7,100 |
| MTBE | 8.8 | 3.6 |
| 1,2-Dichloroethane | ND | 3.6 |
| Benzene | 470 | 3.6 |
| Toluene | ND | 3.6 |
| 1,2-Dibromoethane | ND | 3.6 |
| Ethylbenzene | ND | 3.6 |
| m,p-Xylenes | 22 | 3.6 |
| o-Xylene | 190 | 3.6 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 98 | 80-127 |
| 1,2-Dichloroethane-d4 | 109 | 73-145 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 98 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | 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: | 229566-011 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |

| Analyte | Result | RL | Diln Fac | Batch# | Analyzed |
|---|---|---|---|---|---|
| Gasoline C7-C12 | 7,600 | 710 | 14.29 | 177234 | 07/28/11 |
| tert-Butyl Alcohol (TBA) | ND | 25 | 2.500 | 177194 | 07/27/11 |
| Isopropyl Ether (DIPE) | ND | 1.3 | 2.500 | 177194 | 07/27/11 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 1.3 | 2.500 | 177194 | 07/27/11 |
| Methyl tert-Amyl Ether (TAME) | ND | 1.3 | 2.500 | 177194 | 07/27/11 |
| Ethanol | ND | 2,500 | 2.500 | 177194 | 07/27/11 |
| MTBE | 12 | 1.3 | 2.500 | 177194 | 07/27/11 |
| 1,2-Dichloroethane | ND | 1.3 | 2.500 | 177194 | 07/27/11 |
| Benzene | 1,100 | 7.1 | 14.29 | 177234 | 07/28/11 |
| Toluene | 15 | 1.3 | 2.500 | 177194 | 07/27/11 |
| 1,2-Dibromoethane | ND | 1.3 | 2.500 | 177194 | 07/27/11 |
| Ethylbenzene | 200 | 7.1 | 14.29 | 177234 | 07/28/11 |
| m,p-Xylenes | 61 | 7.1 | 14.29 | 177234 | 07/28/11 |
| o-Xylene | ND | 7.1 | 14.29 | 177234 | 07/28/11 |

| Surrogate | %REC | Limits | Diln Fac | Batch# | Analyzed |
|---|---|---|---|---|---|
| Dibromofluoromethane | 87 | 80-127 | 2.500 | 177194 | 07/27/11 |
| 1,2-Dichloroethane-d4 | 98 | 73-145 | 2.500 | 177194 | 07/27/11 |
| Toluene-d8 | 98 | 80-120 | 2.500 | 177194 | 07/27/11 |
| Bromofluorobenzene | 100 | 80-120 | 2.500 | 177194 | 07/27/11 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | SOMA-8 | Batch#: | 177194 |
| Lab ID: | 229566-012 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| 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 | 106 | 80-127 |
| 1,2-Dichloroethane-d4 | 131 | 73-145 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | OB-1 | Batch#: | 177194 |
| Lab ID: | 229566-013 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| Diln Fac: | 1.000 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 250 | 50 |
| tert-Butyl Alcohol (TBA) | ND | 10 |
| Isopropyl Ether (DIPE) | ND | 0.50 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 0.50 |
| Methyl tert-Amyl Ether (TAME) | ND | 0.50 |
| Ethanol | ND | 1,000 |
| MTBE | 4.1 | 0.50 |
| 1,2-Dichloroethane | ND | 0.50 |
| Benzene | 1.9 | 0.50 |
| Toluene | ND | 0.50 |
| 1,2-Dibromoethane | ND | 0.50 |
| Ethylbenzene | 0.63 | 0.50 |
| m,p-Xylenes | 0.78 | 0.50 |
| o-Xylene | ND | 0.50 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 107 | 80-127 |
| 1,2-Dichloroethane-d4 | 138 | 73-145 |
| Toluene-d8 | 101 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

# Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Field ID: | OB-2 | Batch#: | 177234 |
| Lab ID: | 229566-014 | Sampled: | 07/19/11 |
| Matrix: | Water | Received: | 07/20/11 |
| Units: | ug/L | Analyzed: | 07/28/11 |
| Diln Fac: | 20.00 | | |

| Analyte | Result | RL |
|---|---|---|
| Gasoline C7-C12 | 30,000 | 1,000 |
| tert-Butyl Alcohol (TBA) | 260 | 200 |
| Isopropyl Ether (DIPE) | ND | 10 |
| Ethyl tert-Butyl Ether (ETBE) | ND | 10 |
| Methyl tert-Amyl Ether (TAME) | ND | 10 |
| Ethanol | ND | 20,000 |
| MTBE | 310 | 10 |
| 1,2-Dichloroethane | ND | 10 |
| Benzene | 1,000 | 10 |
| Toluene | 31 | 10 |
| 1,2-Dibromoethane | ND | 10 |
| Ethylbenzene | 1,300 | 10 |
| m,p-Xylenes | 2,600 | 10 |
| o-Xylene | 420 | 10 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 95 | 80-127 |
| 1,2-Dichloroethane-d4 | 112 | 73-145 |
| Toluene-d8 | 94 | 80-120 |
| Bromofluorobenzene | 102 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 177155 |
| Units: | ug/L | Analyzed: | 07/26/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC601605

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 71.94 | 115 | 46-141 |
| Isopropyl Ether (DIPE) | 12.50 | 9.803 | 78 | 52-139 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 10.43 | 83 | 56-131 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 9.672 | 77 | 65-120 |
| MTBE | 12.50 | 11.52 | 92 | 59-123 |
| 1,2-Dichloroethane | 12.50 | 14.37 | 115 | 71-135 |
| Benzene | 12.50 | 12.38 | 99 | 80-122 |
| Toluene | 12.50 | 12.48 | 100 | 80-120 |
| 1,2-Dibromoethane | 12.50 | 12.67 | 101 | 79-120 |
| Ethylbenzene | 12.50 | 13.15 | 105 | 80-120 |
| m,p-Xylenes | 25.00 | 25.83 | 103 | 80-120 |
| o-Xylene | 12.50 | 12.88 | 103 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 103 | 80-127 |
| 1,2-Dichloroethane-d4 | 121 | 73-145 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 102 | 80-120 |

Type: BSD Lab ID: QC601606

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 72.13 | 115 | 46-141 | 0 | 31 |
| Isopropyl Ether (DIPE) | 12.50 | 9.918 | 79 | 52-139 | 1 | 20 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 10.54 | 84 | 56-131 | 1 | 20 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 10.02 | 80 | 65-120 | 4 | 20 |
| MTBE | 12.50 | 10.91 | 87 | 59-123 | 5 | 20 |
| 1,2-Dichloroethane | 12.50 | 14.89 | 119 | 71-135 | 4 | 20 |
| Benzene | 12.50 | 12.38 | 99 | 80-122 | 0 | 20 |
| Toluene | 12.50 | 12.66 | 101 | 80-120 | 1 | 20 |
| 1,2-Dibromoethane | 12.50 | 13.49 | 108 | 79-120 | 6 | 20 |
| Ethylbenzene | 12.50 | 13.32 | 107 | 80-120 | 1 | 20 |
| m,p-Xylenes | 25.00 | 27.39 | 110 | 80-120 | 6 | 20 |
| o-Xylene | 12.50 | 12.45 | 100 | 80-120 | 3 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 99 | 80-127 |
| 1,2-Dichloroethane-d4 | 122 | 73-145 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 103 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 177155 |
| Units: | ug/L | Analyzed: | 07/26/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC601607

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,014 | 101 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 100 | 80-127 |
| 1,2-Dichloroethane-d4 | 119 | 73-145 |
| Toluene-d8 | 96 | 80-120 |
| Bromofluorobenzene | 103 | 80-120 |

Type: BSD Lab ID: QC601608

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 970.9 | 97 | 80-120 | 4 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 98 | 80-127 |
| 1,2-Dichloroethane-d4 | 123 | 73-145 |
| Toluene-d8 | 98 | 80-120 |
| Bromofluorobenzene | 104 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | 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: | QC601609 | Batch#: | 177155 |
| Matrix: | Water | Analyzed: | 07/26/11 |
| 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 | 102 | 80-127 |
| 1,2-Dichloroethane-d4 | 126 | 73-145 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 104 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 177194 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC601773

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 70.92 | 113 | 46-141 |
| Isopropyl Ether (DIPE) | 12.50 | 9.377 | 75 | 52-139 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 10.13 | 81 | 56-131 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 9.890 | 79 | 65-120 |
| MTBE | 12.50 | 11.34 | 91 | 59-123 |
| 1,2-Dichloroethane | 12.50 | 14.84 | 119 | 71-135 |
| Benzene | 12.50 | 12.52 | 100 | 80-122 |
| Toluene | 12.50 | 11.96 | 96 | 80-120 |
| 1,2-Dibromoethane | 12.50 | 12.68 | 101 | 79-120 |
| Ethylbenzene | 12.50 | 13.44 | 107 | 80-120 |
| m,p-Xylenes | 25.00 | 24.94 | 100 | 80-120 |
| o-Xylene | 12.50 | 12.27 | 98 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 97 | 80-127 |
| 1,2-Dichloroethane-d4 | 124 | 73-145 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 108 | 80-120 |

Type: BSD Lab ID: QC601774

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 76.45 | 122 | 46-141 | 8 | 31 |
| Isopropyl Ether (DIPE) | 12.50 | 10.92 | 87 | 52-139 | 15 | 20 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 11.23 | 90 | 56-131 | 10 | 20 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 10.34 | 83 | 65-120 | 4 | 20 |
| MTBE | 12.50 | 11.87 | 95 | 59-123 | 5 | 20 |
| 1,2-Dichloroethane | 12.50 | 15.05 | 120 | 71-135 | 1 | 20 |
| Benzene | 12.50 | 12.16 | 97 | 80-122 | 3 | 20 |
| Toluene | 12.50 | 12.10 | 97 | 80-120 | 1 | 20 |
| 1,2-Dibromoethane | 12.50 | 13.23 | 106 | 79-120 | 4 | 20 |
| Ethylbenzene | 12.50 | 12.93 | 103 | 80-120 | 4 | 20 |
| m,p-Xylenes | 25.00 | 25.68 | 103 | 80-120 | 3 | 20 |
| o-Xylene | 12.50 | 12.12 | 97 | 80-120 | 1 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 104 | 80-127 |
| 1,2-Dichloroethane-d4 | 121 | 73-145 |
| Toluene-d8 | 97 | 80-120 |
| Bromofluorobenzene | 98 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 177194 |
| Units: | ug/L | Analyzed: | 07/27/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC601775

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 979.4 | 98 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 97 | 80-127 |
| 1,2-Dichloroethane-d4 | 118 | 73-145 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

Type: BSD Lab ID: QC601776

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,054 | 105 | 80-120 | 7 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 98 | 80-127 |
| 1,2-Dichloroethane-d4 | 120 | 73-145 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | 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: | QC601777 | Batch#: | 177194 |
| Matrix: | Water | Analyzed: | 07/27/11 |
| Units: | ug/L | | |

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

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 100 | 80-127 |
| 1,2-Dichloroethane-d4 | 121 | 73-145 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 101 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

## Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 177234 |
| Units: | ug/L | Analyzed: | 07/28/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC601930

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 61.64 | 99 | 46-141 |
| Isopropyl Ether (DIPE) | 12.50 | 9.417 | 75 | 52-139 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 10.08 | 81 | 56-131 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 9.885 | 79 | 65-120 |
| MTBE | 12.50 | 11.27 | 90 | 59-123 |
| 1,2-Dichloroethane | 12.50 | 12.80 | 102 | 71-135 |
| Benzene | 12.50 | 12.25 | 98 | 80-122 |
| Toluene | 12.50 | 12.24 | 98 | 80-120 |
| 1,2-Dibromoethane | 12.50 | 12.41 | 99 | 79-120 |
| Ethylbenzene | 12.50 | 13.30 | 106 | 80-120 |
| m,p-Xylenes | 25.00 | 26.03 | 104 | 80-120 |
| o-Xylene | 12.50 | 12.66 | 101 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 91 | 80-127 |
| 1,2-Dichloroethane-d4 | 111 | 73-145 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

Type: BSD Lab ID: QC601931

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| tert-Butyl Alcohol (TBA) | 62.50 | 78.00 | 125 | 46-141 | 23 | 31 |
| Isopropyl Ether (DIPE) | 12.50 | 10.10 | 81 | 52-139 | 7 | 20 |
| Ethyl tert-Butyl Ether (ETBE) | 12.50 | 10.67 | 85 | 56-131 | 6 | 20 |
| Methyl tert-Amyl Ether (TAME) | 12.50 | 10.42 | 83 | 65-120 | 5 | 20 |
| MTBE | 12.50 | 12.02 | 96 | 59-123 | 6 | 20 |
| 1,2-Dichloroethane | 12.50 | 13.48 | 108 | 71-135 | 5 | 20 |
| Benzene | 12.50 | 12.40 | 99 | 80-122 | 1 | 20 |
| Toluene | 12.50 | 12.51 | 100 | 80-120 | 2 | 20 |
| 1,2-Dibromoethane | 12.50 | 13.06 | 104 | 79-120 | 5 | 20 |
| Ethylbenzene | 12.50 | 13.26 | 106 | 80-120 | 0 | 20 |
| m,p-Xylenes | 25.00 | 26.44 | 106 | 80-120 | 2 | 20 |
| o-Xylene | 12.50 | 13.12 | 105 | 80-120 | 4 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 94 | 80-127 |
| 1,2-Dichloroethane-d4 | 111 | 73-145 |
| Toluene-d8 | 97 | 80-120 |
| Bromofluorobenzene | 105 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | Location: | 3519 Castro Valley Blvd. |
| Client: | SOMA Environmental Engineering Inc. | Prep: | EPA 5030B |
| Project#: | 2761 | Analysis: | EPA 8260B |
| Matrix: | Water | Batch#: | 177234 |
| Units: | ug/L | Analyzed: | 07/28/11 |
| Diln Fac: | 1.000 | | |

Type: BS Lab ID: QC601932

| Analyte | Spiked | Result | %REC | Limits |
|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,093 | 109 | 80-120 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 95 | 80-127 |
| 1,2-Dichloroethane-d4 | 113 | 73-145 |
| Toluene-d8 | 97 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

Type: BSD Lab ID: QC601933

| Analyte | Spiked | Result | %REC | Limits | RPD | Lim |
|---|---|---|---|---|---|---|
| Gasoline C7-C12 | 1,000 | 1,055 | 105 | 80-120 | 4 | 20 |

| Surrogate | %REC | Limits |
|---|---|---|
| Dibromofluoromethane | 97 | 80-127 |
| 1,2-Dichloroethane-d4 | 115 | 73-145 |
| Toluene-d8 | 100 | 80-120 |
| Bromofluorobenzene | 103 | 80-120 |

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

## Gasoline by GC/MS

| | | | |
|---|---|---|---|
| Lab #: | 229566 | 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: | QC601934 | Batch#: | 177234 |
| Matrix: | Water | Analyzed: | 07/28/11 |
| 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 | 98 | 80-127 |
| 1,2-Dichloroethane-d4 | 118 | 73-145 |
| Toluene-d8 | 99 | 80-120 |
| Bromofluorobenzene | 100 | 80-120 |

ND= Not Detected
RL= Reporting Limit

Data File: \\Gcmsserver\DD\chem\MSVOA10.i\072611.b\JGQ13TVH.D



Date : 26-JUL-2011 15:30

Client ID: DYNA P&T

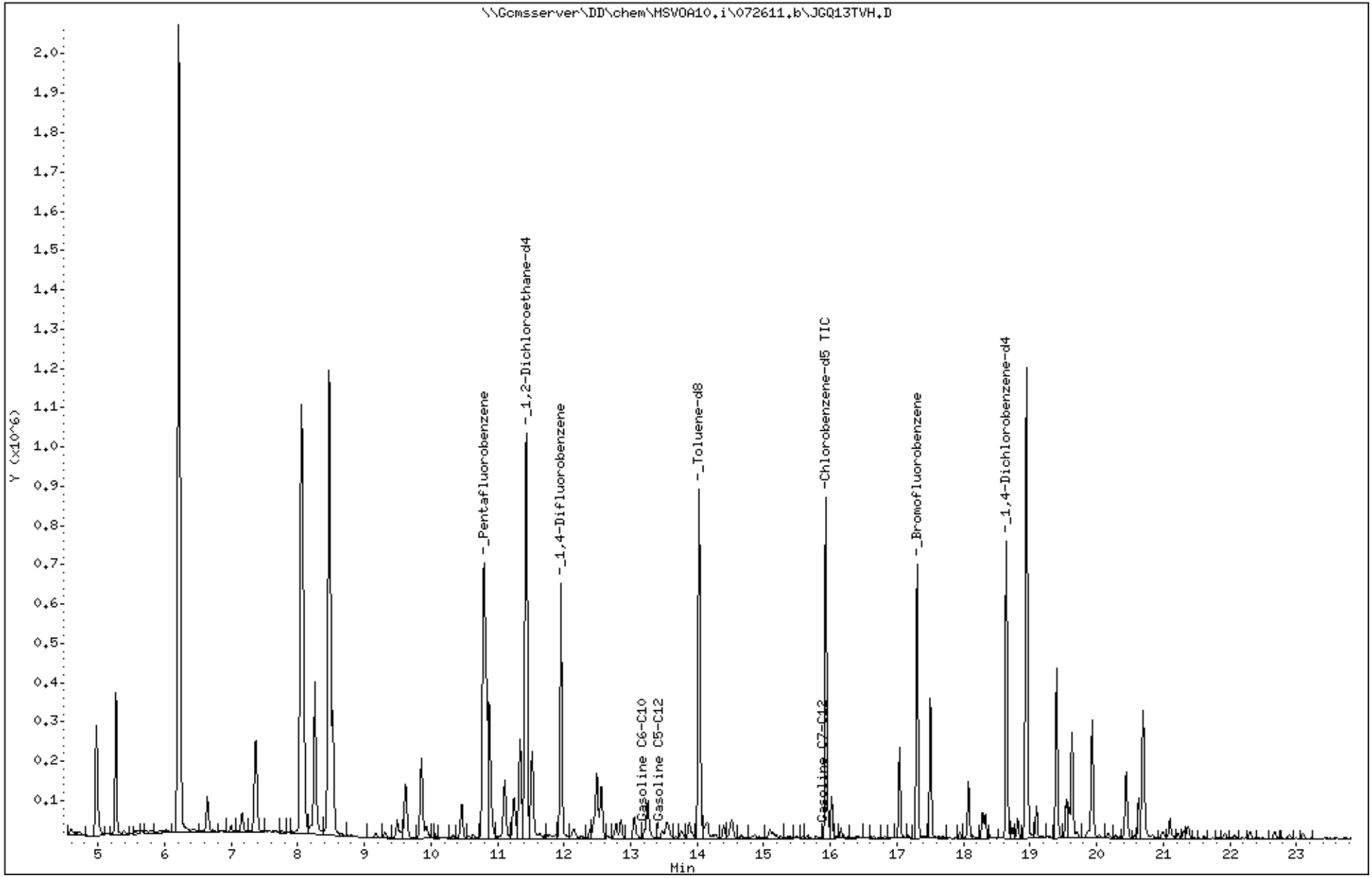
Instrument: MSVOA10.i

Sample Info: S,229566-001

Operator: VOA

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA10.i\072611.b\JGQ15TVH.D



Date : 26-JUL-2011 16:44

Client ID: DYNA P&T

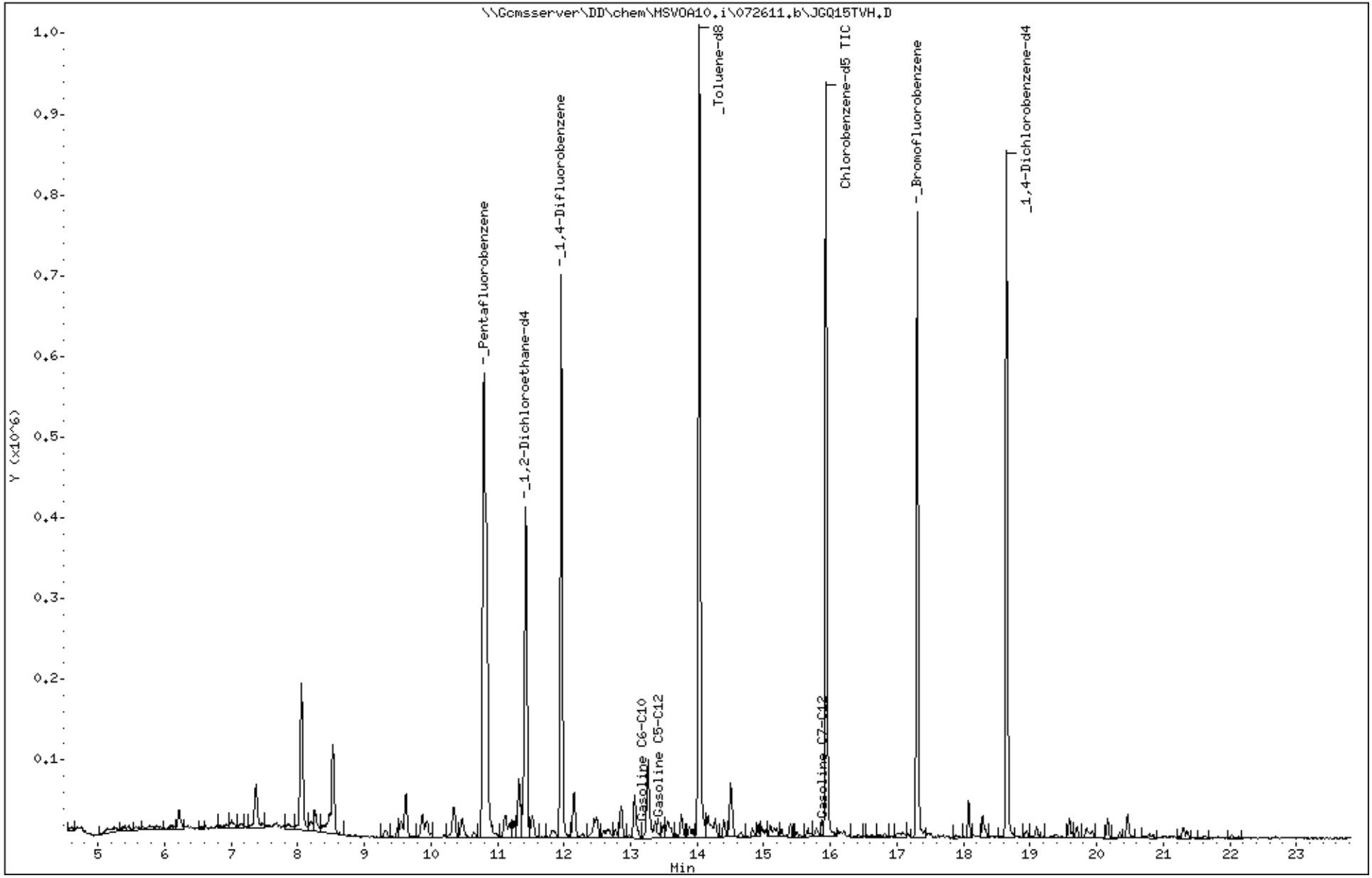
Instrument: MSVOA10.i

Sample Info: S,229566-003

Operator: VOA

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA10.i\072711.b\JGR20TVH.D



Date : 27-JUL-2011 19:38

Client ID: DYNA P&T

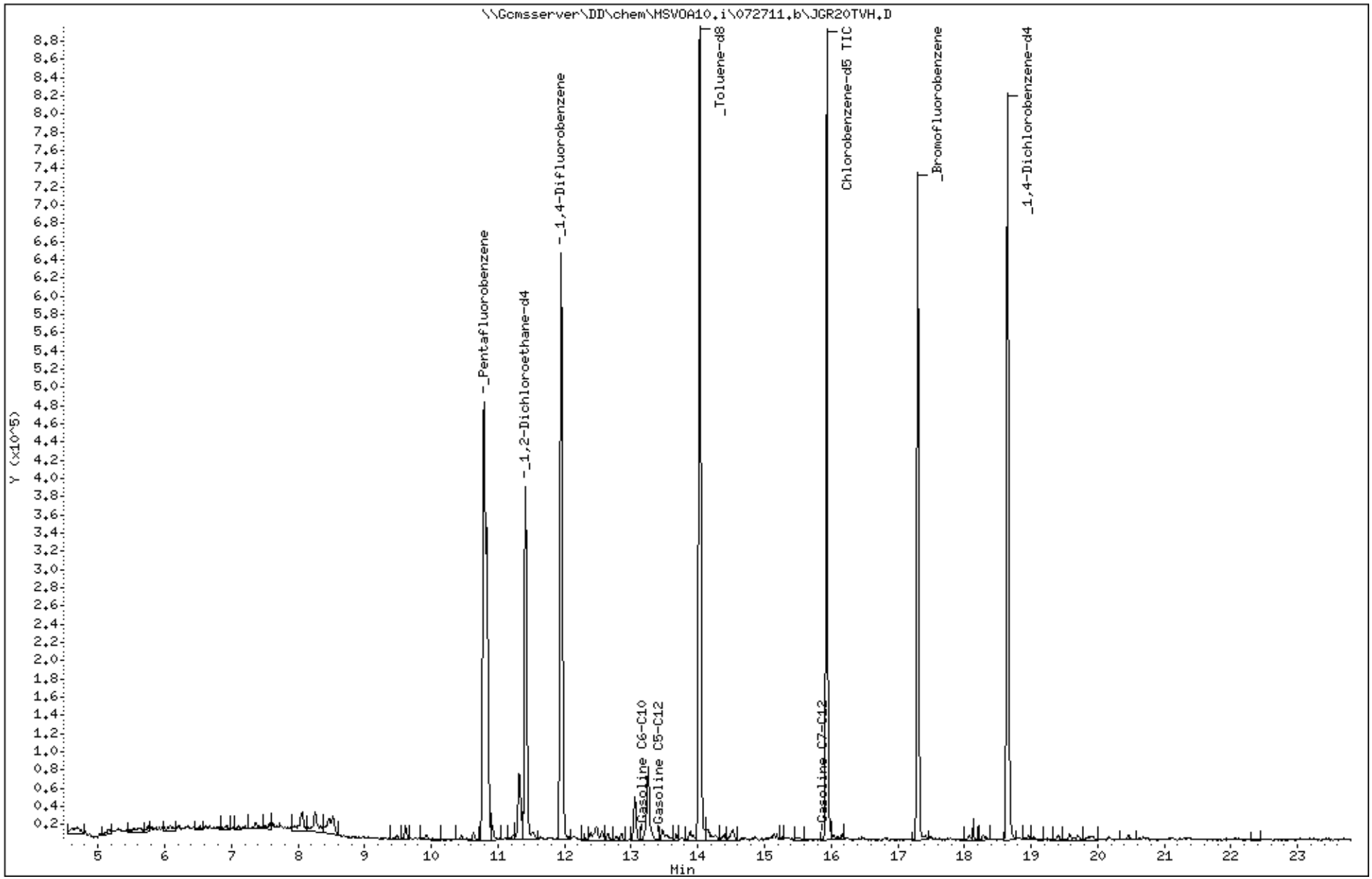
Instrument: MSVOA10.i

Sample Info: S,229566-009

Operator: VOA

Column phase:

Column diameter: 2.00



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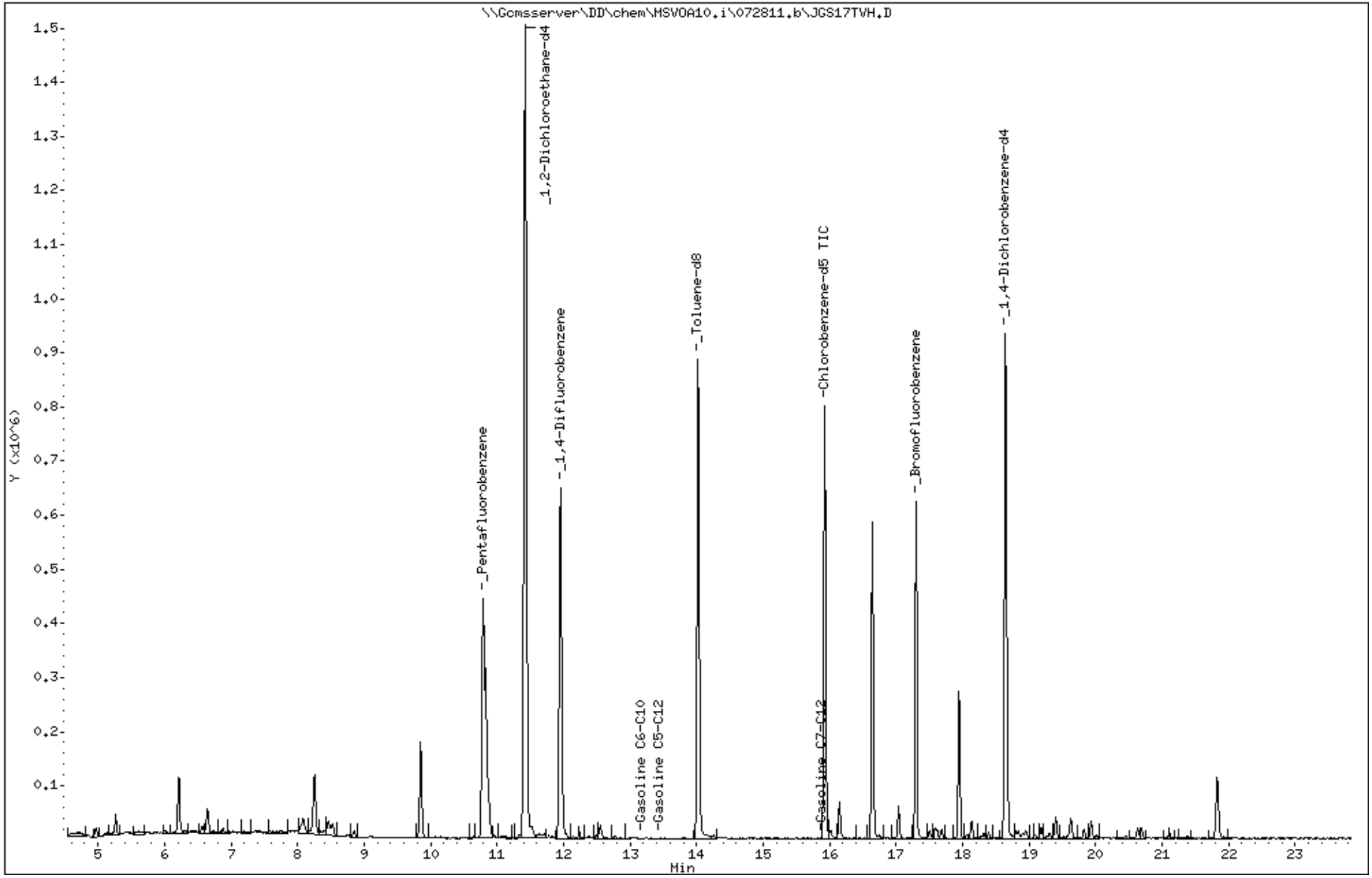
Date : 28-JUL-2011 17:27
Client ID: DYNA P&T
Sample Info: S,229566-010

Instrument: MSVOA10.i

Operator: VOA
Column diameter: 2.00

Column phase:



Data File: \\Gcmsserver\DD\chem\MSVOA10.i\072811.b\JGS19TVH.D



Date : 28-JUL-2011 18:40

Client ID: DYNA P&T

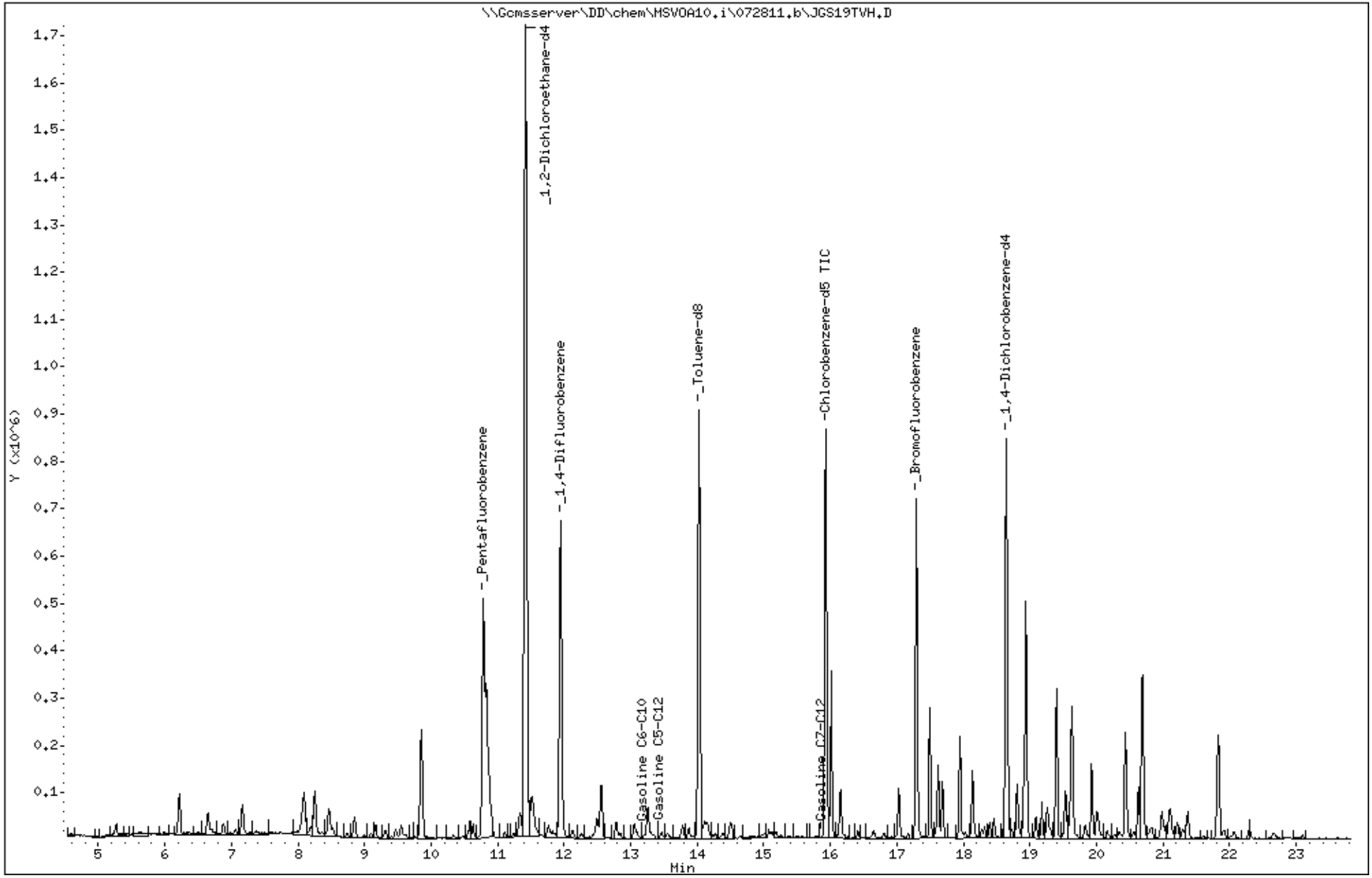
Instrument: MSVOA10.i

Sample Info: S,229566-011

Operator: VOA

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA10.i\072711.b\JGR22TVH.D



Date : 27-JUL-2011 20:53

Client ID: DYNA P&T

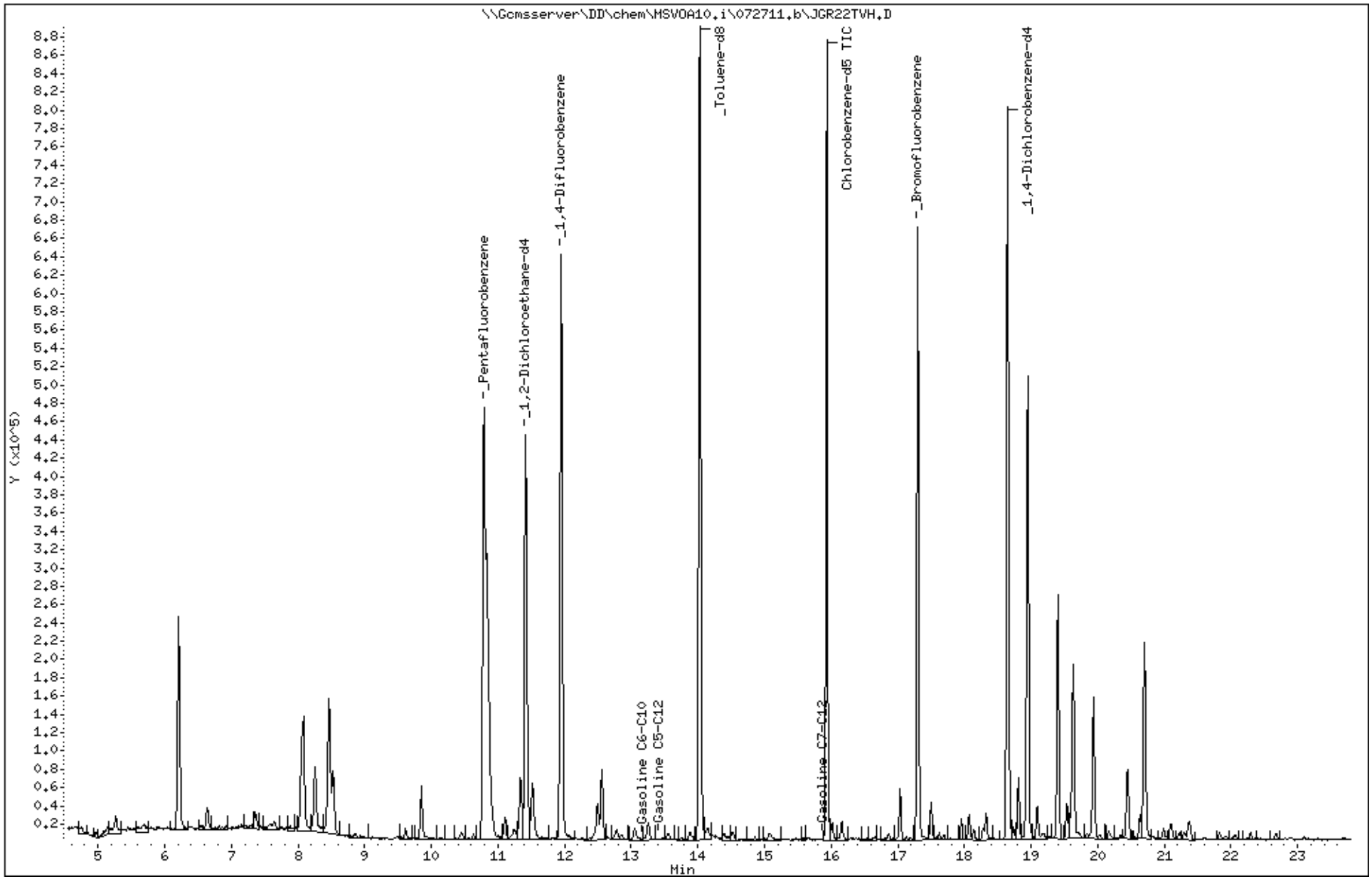
Instrument: MSVOA10.i

Sample Info: S,229566-013

Operator: VOA

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA10.i\072811.b\JGS20TVH.D



Date : 28-JUL-2011 19:18

Client ID: DYNA P&T

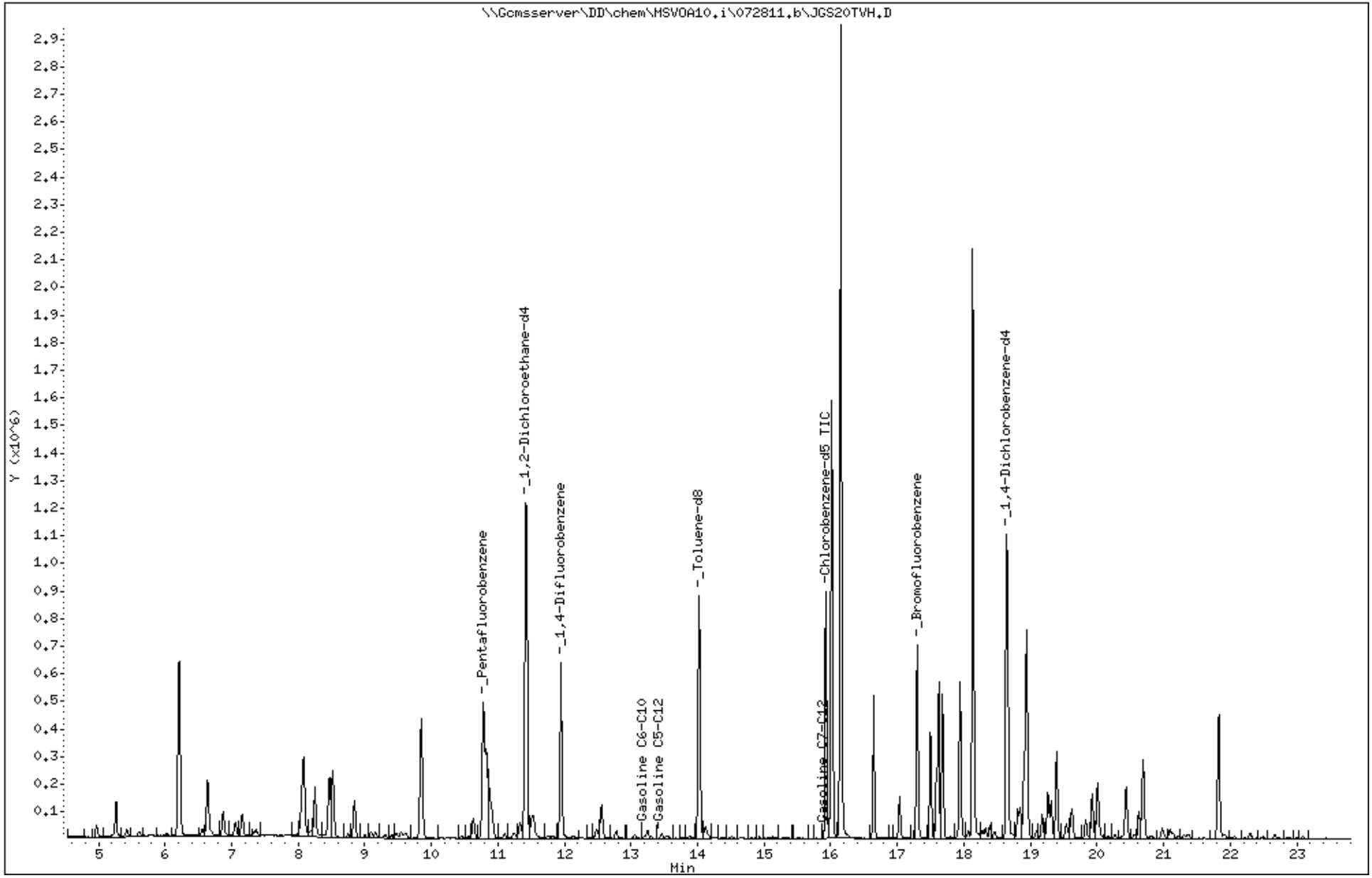
Instrument: MSVOA10.i

Sample Info: S,229566-014

Operator: VOA

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA10.i\072611.b\JGQ07TVH.D



Date : 26-JUL-2011 11:48

Client ID: DYNA P&T

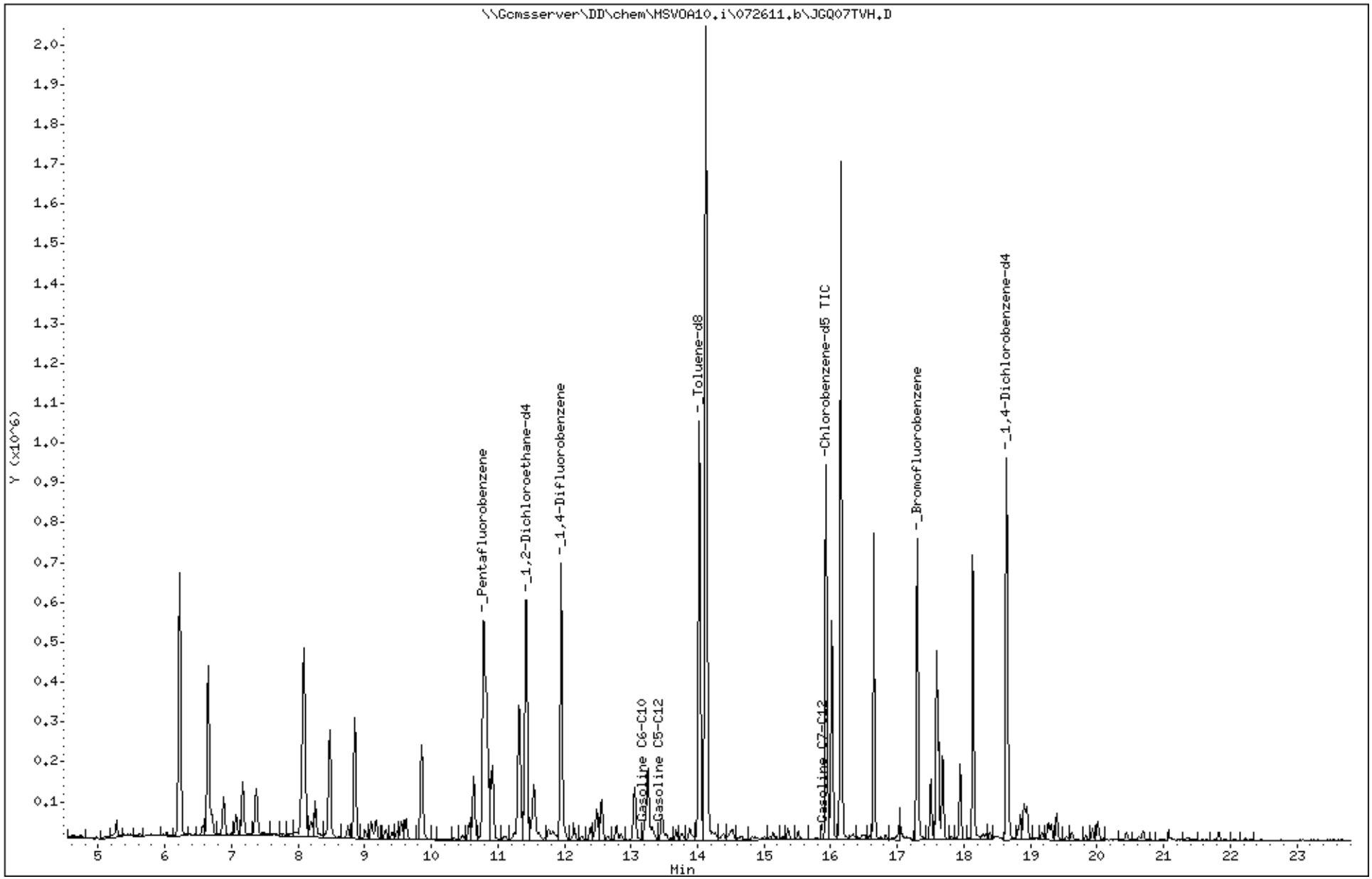
Instrument: MSVOA10.i

Sample Info: CCV/BS,QC601607,177155,S17254

Operator: VOA

Column phase:

Column diameter: 2.00



# Appendix D

## Non-Hazardous Waste Manifest for Groundwater Removal

NON-HAZARDOUS WASTE MANIFEST

| 1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Waste Tracking Number |
|---|---|---|---|
| CAL000162251 | 1 | 510-749-1390 | 57757-CV |

**GENERATOR**

5. Generator's Name and Mailing Address
AZIM SHAKOORI
4313 MANSFIELD DR
DANVILLE CA 94506
Generator's Phone: 510 432-5568

Alt MIRAZIM SHAKOORI

Generator's Site Address (if different than mailing address)
AZIM SHAKOORI
3519 CASTRO VALLEY BLVD.
CASTRO VALLEY CA 94506

6. Transporter 1 Company Name: NRC ENVIRONMENTAL SERVICES INC. — U.S. EPA ID Number: CAR000030114

7. Transporter 2 Company Name: Intrinsic — U.S. EPA ID Number: CAR000165274

8. Designated Facility Name and Site Address
Crosby & Overton, Inc.
1630 W. 17th Street
Long Beach CA 90813
Facility's Phone: 562 432-5445
U.S. EPA ID Number: CAD028409019

| | 9. Waste Shipping Name and Description | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | |
|---|---|---|---|---|---|---|
| 1. | | | | | | |
| | NON-HAZARDOUS WASTE LIQUID (PURGE WATER) | 003 | DM | 150 | G | |
| 3. | | | | | | |
| 4. | | | | | | |

13. Special Handling Instructions and Additional Information
WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT
JOB#/PO#: 57757 PROFILE # ~~115154~~ 151545 SOMA PROJECT # 2761
CONSULTANT: SOMA ENVIRONMENTAL 6620 OWENS DRIVE, SUITE A, PLEASANTON, CA.

D45947

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable International and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: E. Hightower for SOMA Environmental — Signature: E. Hightower — Month 3 Day 22 Year 11

**INT'L**

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

**TRANSPORTER**

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: THOM JAMA — Signature: [signature] — Month 3 Day 22 Year 11

Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

**DESIGNATED FACILITY**

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number: U.S. EPA ID Number

17b. Alternate Facility (or Generator)

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

H135

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Laura Christesen — Signature: [signature] — Month 03 Day 24 Year 11