CONESTOGA-ROVERS
& ASSOCIATES

5900 Hollis Street, Suite A, Emeryville, California 94608
Telephone: 510-420-0700 Facsimile: 510-420-9170
www.CRAworld.com

December 10, 2007

Ms. Donna Drogos
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: **Groundwater Monitoring Report - Third Quarter 2007**
Allright Parking
1432 Harrison Street, Oakland, California
Fuel Leak Case No. RO0000266
CRA Project No. 540188

Dear Ms. Drogos:

On behalf of the Sydney & Barbara Borsuk Trust and Sheila Siegel Trust, Conestoga-Rovers & Associates, Inc. (CRA) is submitting the *Groundwater Monitoring Report – Third Quarter 2007*. Presented in this report are a summary of the field activities and a presentation of the results from the third quarter 2007 groundwater monitoring event.

If you have any questions or comments regarding this report, please call me at (510) 420-3307.

Sincerely,

**Conestoga-Rovers & Associates, Inc.**

Mark Jonas, P.G.
Senior Project Geologist

Attachments: *Groundwater Monitoring Report - Third Quarter 2007*

cc: Sydney and Barbara Borsuk Trust & Sheila Siegel Trust
c/o Mr. Mark Borsuk, 1626 Vallejo Street, San Francisco, CA 94123-5116

CONESTOGA-ROVERS
& ASSOCIATES

# GROUNDWATER MONITORING REPORT – THIRD QUARTER 2007

**Allright Parking**
**1432 Harrison Street**
**Oakland, California**
**Fuel Leak Case No. RO0000266**
**CRA Project No. 540188**

**December 10, 2007**

*Prepared for:*
Sydney & Barbara Borsuk Trust
Sheila Siegel Trust
c/o Mr. Mark Borsuk
1626 Vallejo Street
San Francisco, California 94123-5116

*Prepared by:*
Conestoga-Rovers & Associates, Inc.
5900 Hollis Street, Suite A
Emeryville, California 94608



Written by:

Bryan A. Fong
Staff Geologist

PROFESSIONAL GEOLOGIST
MARK L. JONAS
No. 6392
STATE OF CALIFORNIA

Reviewed By:

Mark Jonas, P.G.
Senior Project Geologist

CONESTOGA-ROVERS
& ASSOCIATES

# GROUNDWATER MONITORING REPORT – THIRD QUARTER 2007

**Allright Parking**
**1432 Harrison Street, Oakland, California**
**Fuel Leak Case No. RO0000266**
**CRA Project No. 540188**

**December 10, 2007**

## INTRODUCTION

On behalf of the Sydney & Barbara Borsuk Trust and Shiela Siegal Trust, Conestoga-Rovers & Associates, Inc. (CRA) has prepared this *Groundwater Monitoring Report – Third Quarter 2007* for the above-referenced site (see Figure 1). Presented in this report are the third quarter 2007 groundwater monitoring activities and results, and the anticipated fourth quarter 2007 activities.

Figure 1 is a vicinity map. Figure 2 presents groundwater elevation contours and hydrocarbon concentrations for this monitoring event. Table 1 provides well construction details. Table 2 presents recent and historic well water depth measurements and hydrochemical data, and separate phase hydrocarbon (SPH) measurements and observations. Appendix A contains the field data sheets for the third quarter 2007 monitoring events. Appendix B is the analytical laboratory report for the groundwater sampling event. Appendix C contains benzene concentrations and depth to water time-series graphs.

## THIRD QUARTER 2007 ACTIVITIES AND RESULTS

### Monitoring Activities

***Field Activities***: On September 28, 2007, CRA coordinated with Muskan Environmental Sampling (MES) to conduct quarterly monitoring activities. MES gauged groundwater levels and inspected for SPH in all monitoring wells. No measurable SPH was detected in any of the wells. Groundwater samples were collected from wells MW-2, MW-4, and MW-5. Due to insufficient water, well MW-1 was not sampled this quarter. Groundwater monitoring field data sheets are provides in Appendix A. The groundwater monitoring data has been submitted to the GeoTracker database.

Field activities associated with well sampling included well purging, water quality measurements, sample collection, and equipment decontamination. Prior to sampling, the monitoring wells were purged by repeated bailing using a new, disposable bailer for each well. Field measurements of pH, specific conductance, and temperature of the purged groundwater were measured after extraction of each

successive casing volume or at regular volume intervals. Purging of groundwater from each monitoring well continued until at least three casing volumes of water were extracted and consecutive pH, conductivity, and temperature measurements appeared to stabilize. Field water quality measurements purge volumes, and sample collection data were recorded on field sampling data forms (Appendix A).

Groundwater samples were collected using disposable bailers. The samples were decanted from the bailers into 40-milliliter (mL) glass volatile organic analysis (VOA) vials supplied by McCampbell Analytical, Inc. (McCampbell) of Pittsburg, California. Immediately after collection, the sample containers were labeled and placed on water-based ice in a cooler. Chain-of-custody procedures were followed from sample collection to transfer to the laboratory (Appendix B).

To minimize the potential for cross-contamination, groundwater monitoring equipment was decontaminated prior to being deployed in the first monitoring well and between successive wells. The probe of the electric well sounder used for water level measurements was rinsed thoroughly with distilled water and AlconoxTM detergent prior to first use and between subsequent water level measurements. The disposable bailers were discarded after use at each well.

***Sample Analyses:*** Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015; and benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary-butyl ether (MTBE) by EPA Method 8260. All analyses were performed by McCampbell. The laboratory analytical report is included as Appendix B. Hydrocarbon concentrations are summarized on Figure 2 and presented in Table 2. The analytical data were submitted to the GeoTracker database.

## Monitoring Results

***Groundwater Flow Direction***: Based on depth-to-water measurements collected during the September 28, 2007 site visit, groundwater beneath the site apparently flows toward the northeast, at a gradient of 0.006 feet/foot. Groundwater flow conditions observed during the third quarter 2007 are consistent with conditions observed during previous monitoring events. Groundwater elevation data is summarized on Figure 2 and presented in Table 2.

***Hydrocarbon Distribution in Groundwater***: Hydrocarbon concentrations were detected in all of the sampled wells. Due to insufficient water in MW-1, a sample was not collected. TPHg concentrations ranged from 140 micrograms per liter (µg/L) to 44,000 µg/L, with the highest concentration detected in well MW-2. Benzene concentrations ranged from 7.0 µg/L to 9,400 µg/L, with the highest concentration detected in well MW-2. Toluene concentrations ranged from 84 µg/L to 630 µg/L, with the highest

concentration detected in well MW-2. Ethylbenzene concentrations ranged from 1.2 µg/L to 1,400 µg/L, with the highest concentration detected in well MW-2. Xylenes concentrations ranged from 1,600 µg/L to 3,600 µg/L, with the highest concentration detected in well MW-2. MTBE was not detected above laboratory reporting limits. Refer to Table 2 for dissolved hydrocarbon concentrations, and Appendix C for benzene concentration trend graphs for wells MW-1 through MW-6. The unshaded symbols on the graphs represent results below laboratory detection limits.

## ANTICIPATED FOURTH QUARTER 2007 ACTIVITIES

### Monitoring Activities

CRA will coordinate with MES to perform quarterly monitoring activities. MES will gauge all monitoring wells; check wells for SPH; and collect groundwater samples from wells not containing SPH. As per the sampling schedule, wells MW-1, MW-2, MW-4 and MW-5 will be sampled during the fourth quarter event. Groundwater samples will be analyzed for TPHg by modified EPA Method 8015, and BTEX and MTBE by EPA Method 8260B. Groundwater monitoring and sampling results will be submitted to the State's GeoTracker database. CRA will summarize groundwater monitoring activities and results in the Groundwater Monitoring Report - Fourth Quarter 2007.

### Risk Assessment

On August 8, 2006 Cambria submitted a *Risk Assessment* for the subject site. This was submitted to the ACEH ftp site, Geotracker, and we mailed an original to the agency. We have yet to receive a formal response from ACEH.

## ATTACHMENTS

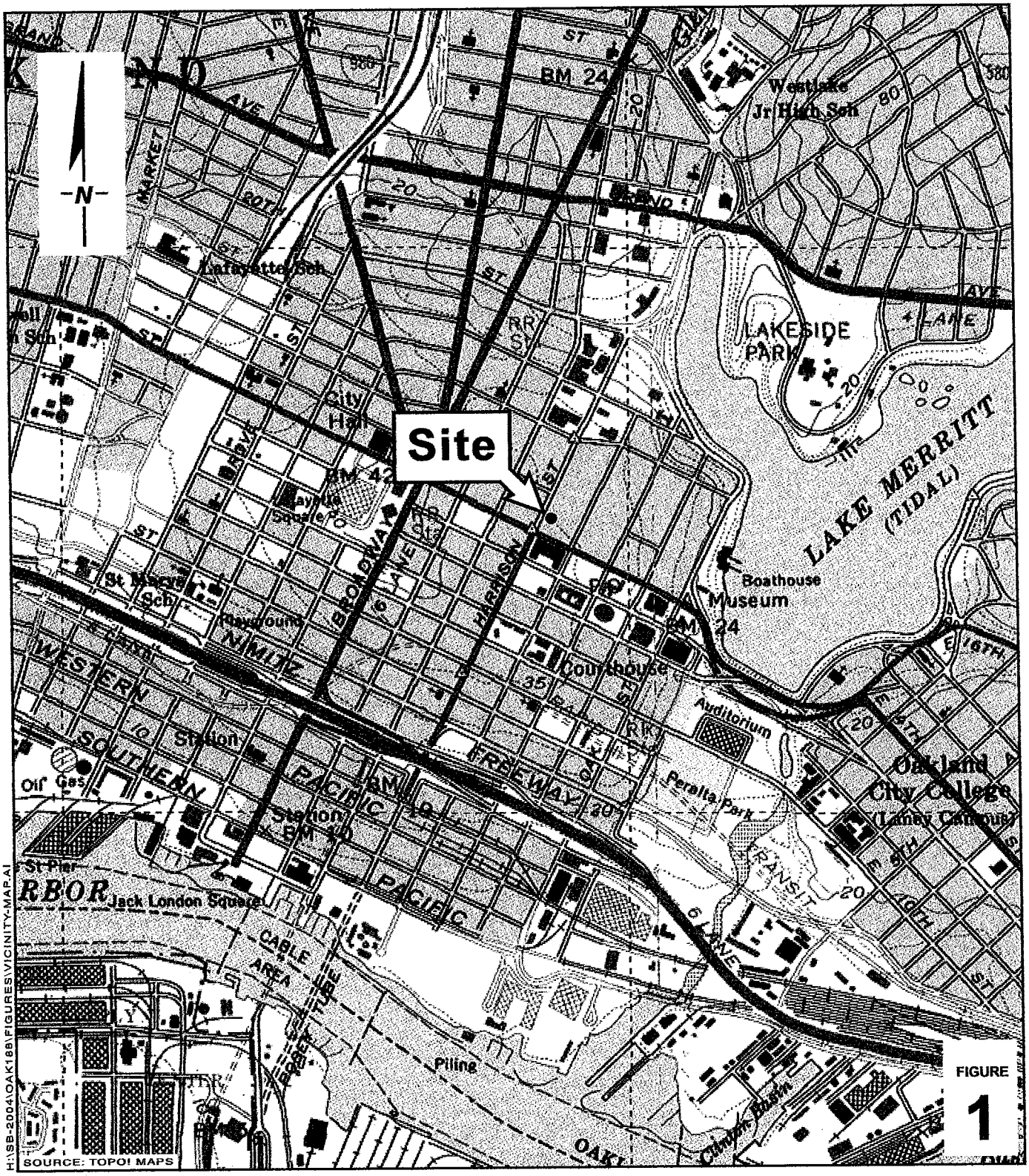
Figure 1 – Vicinity Map
Figure 2 – Groundwater Elevation and Hydrocarbon Concentration Map

Table 1 – Well Construction Details
Table 2 – Groundwater Elevations and Analytical Data

Appendix A – Groundwater Monitoring Field Data Sheets
Appendix B – Analytical Results for Groundwater Sampling
Appendix C – Benzene Concentration and Depth to Water Time-Series Graphs

I:\IR\BORSUK - OAKLAND\QM\2007\3Q07\QMR 3Q07 BORSUK, OAKLAND 540188.DOC

04/11/07




H:\SB-2004\OAK188\FIGURES\VICINITY-MAP.AI

FIGURE 1

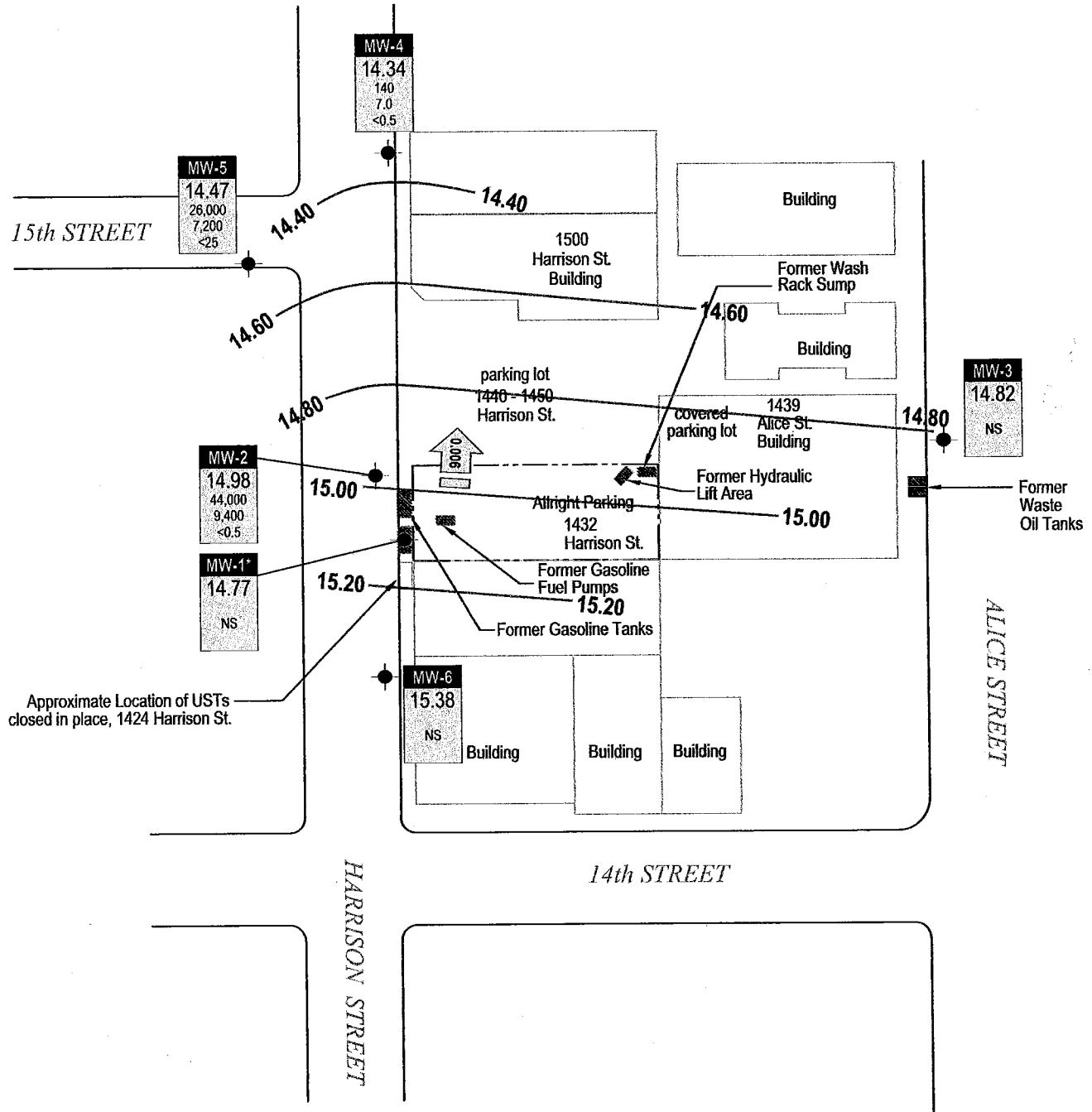
0 1/8 1/4 1/2 1 MILE

SCALE 1:1/4

**Allright Parking**
1432 Harrison Street
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

**Vicinity Map**




## EXPLANATION

- Groundwater monitoring well
- 15.50 — Groundwater elevation contour, in feet above mean sea level (dashed where inferred)
- 0.006 — Groundwater flow direction and gradient
- Well ID — Well designation
- ELEV — Groundwater elevation, in feet above mean sea level
- TPHg / Benzene / MTBE — Hydrocarbons and MTBE in groundwater, in micrograms per liter
- NS — Not Sampled
- * — MW-1 is possibly anomalous

N

0 50 100

Scale (ft)

FIGURE **2**

H:\BORS\K\FIGURES\2007\3Q07.DWG

# Allright Parking

1432 Harrison Street

Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

## Groundwater Elevation and Hydrocarbon Concentration Map

September 28, 2007

**Table 1. Well Construction Details** - Allright Parking, 1432 Harrison Street, Oakland, California

| Well No. | Installation Date | Total Depth (ft-bgs) | Boring Diameter (inch) | Well Diameter (inch) | Screen Size (inch) | Screened Interval (ft-bgs) | Sand Pack Interval (ft-bgs) | Surface Seal (ft-bgs) | TOC Elevation (ft-msl) |
|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 1/12/1994 | 27 | 12 | 4 | 0.020 | 16-26.5 | 14.5-27 | 0-14.5 | 35.37* |
| MW-2 | 7/30/1994 | 26 | | 2 | 0.010 | 11-26 | 9-26 | 0-9 | 35.21 |
| MW-3 | 7/30/1994 | 25 | | 2 | 0.010 | 15-25 | 13-25 | 0-13 | 34.01 |
| MW-4 | 10/2/1996 | 25 | 8 | 2 | 0.010 | 15-25 | 13-25 | 0-13 | 33.75 |
| MW-5 | 10/2/1996 | 30 | 8 | 2 | 0.010 | 14-29 | 12-30 | 0-12 | 34.63 |
| MW-6 | 10/2/1996 | 30.5 | 8 | 2 | 0.010 | 14-29 | 30-Dec | 0-12 | 35.89 |
| VES-1 (VE) | 7/23/1999 | 30 | 8 | 3 | 0.020 | 5-20 | 4.5-20 | 0-5 | - |
| VES-1 (AS) | | | | 1 | 0.020 | 28-30 | 27.5-30 | 0-27.5 | - |
| VES-2 (VE) | 7/22/1999 | 29.5 | 8 | 3 | 0.020 | 5-20 | 4-20 | 0-4 | - |
| VES-2 (AS) | | | | 1 | 0.020 | 27.5-29.5 | 27-29.5 | 0-27 | - |
| VES-3 (VE) | 7/23/1999 | 30 | 8 | 3 | 0.020 | 5-20 | 4-20 | 0-4 | - |
| VES-3 (AS) | | | | 1 | 0.020 | 28-30 | 25-30 | 0-25 | - |
| VES-4 (VE) | 7/23/1999 | 29 | 8 | 3 | 0.020 | 5-20 | 4-20 | 0-4 | - |
| VES-4 (AS) | | | | 1 | 0.020 | 27-29 | 26.5-28.5 | 0-26.5 | - |

ft-bgs feet below ground surface
ft-msl feet above mean sea level

# Conestoga-Rovers & Associates

**Table 2. Groundwater Elevations and Analytical Data** - Allright Parking, 1432 Harrison Street, Oakland, California

| Well ID<br>Sample ID<br>*TOC (ft amsl)* | Date | Depth to Groundwater (ft amsl) | SPH Thickness (feet) | Groundwater Elevation (feet) | TPHg | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ← | | (µg/L) | | | → | |
| ***Monitoring Well Sample Results:*** | | | | | | | | | | | |
| MW-1 | 8/1/1994 | -- | -- | -- | 170,000 | 35,000 | 51,000 | 2,400 | 13,000 | -- | -- |
| *34.95* | 12/21/1994 | 19.53 | -- | 15.42 | 180,000 | 41,000 | 64,000 | 3,100 | 100,000 | -- | -- |
| | 3/13/1995 | 18.66 | -- | 16.29 | 150,000 | 31,000 | 45,000 | 2,500 | 17,000 | -- | -- |
| | 6/27/1995 | 18.20 | -- | 16.75 | 71,000 | 17,000 | 18,000 | 1,600 | 7,700 | -- | -- |
| | 7/7/1995 | 18.35 | -- | 16.60 | 71,000 | 17,000 | 18,000 | 1,600 | 7,700 | -- | -- |
| | 9/28/1995 | 18.20 | -- | 16.75 | 110,000 | 27,000 | 34,000 | 1,700 | 14,000 | -- | -- |
| | 12/20/1995 | 19.96 | -- | 14.99 | 120,000 | 33,000 | 43,000 | 2,300 | 15,000 | -- | -- |
| | 3/26/1996 | 19.27 | -- | 15.68 | 140,000 | 29,000 | 36,000 | 1,900 | 13,000 | <200* | d |
| | 6/20/1996 | 18.64 | -- | 16.31 | 110,000 | 30,000 | 38,000 | 2,200 | 13,000 | <200* | -- |
| | 9/26/1996 | 19.35 | -- | 15.60 | 170,000 | 28,000 | 40,000 | 2,200 | 15,000 | ND** | -- |
| | 10/28/1996 | 19.58 | -- | 15.37 | -- | -- | -- | -- | -- | -- | -- |
| | 12/12/1996 | 19.68 | -- | 15.27 | 110,000 | 36,000 | 47,000 | 2,500 | 16,000 | ND* | -- |
| | 3/31/1997 | 18.80 | -- | 16.15 | 160,000 | 24,000 | 39,000 | 1,900 | 13,000 | ND* | -- |
| | 6/27/1997 | 19.26 | -- | 15.69 | 130,000 | 25,000 | 36,000 | 2,000 | 14,000 | ND* | -- |
| | 9/9/1997 | 19.70 | -- | 15.25 | 99,000 | 22,000 | 27,000 | 1,600 | 13,000 | 270* | -- |
| | 12/18/1997 | 19.25 | -- | 15.70 | 160,000 | 30,000 | 44,000 | 2,200 | 15,000 | ND*** | -- |
| | 3/12/1998 | 17.52 | -- | 17.43 | 190,000 | 20,000 | 49,000 | 2,500 | 18,000 | ND*** | -- |
| | 6/22/1998 | 18.63 | -- | 16.32 | 90,000 | 19,000 | 40,000 | 2,100 | 16,000 | -- | -- |
| | 9/18/1998 | 18.60 | -- | 16.35 | 190,000 | 29,000 | 48,000 | 2,400 | 17,000 | -- | -- |
| | 12/23/1998 | 19.18 | -- | 15.77 | 140,000 | 24,000 | 44,000 | 2,000 | 8,200 | -- | -- |
| | 3/29/1999 | 18.52 | -- | 16.43 | 181,000 | 22,200 | 40,100 | 1,844 | 12,200 | -- | -- |
| | 6/23/1999 | 18.60 | -- | 16.35 | 80,000 | 20,000 | 33,000 | 1,600 | 11,000 | -- | -- |
| | 9/24/1999 | 19.05 | -- | 15.90 | 117,000 | 15,100 | 20,700 | 1,550 | 11,800 | -- | -- |
| | 12/23/1999 | 19.95 | -- | 15.00 | 186,000 | 25,900 | 39,000 | 1,990 | 12,400 | -- | -- |
| | 3/21/2000 | 18.48 | -- | 16.47 | 210,000 | 35,000 | 42,000 | 2,200 | 13,000 | <3,000 | a |
| | 7/3/2000 | 18.95 | -- | 16.00 | 200,000 | 33,000 | 46,000 | 2,200 | 15,000 | <200* | a |
| | 9/7/2000 | 19.45 | Sheen | 15.50 | -- | -- | -- | -- | -- | -- | -- |
| | 12/5/2000 | 19.90 | -- | 15.05 | 220,000 | 42,000 | 57,000 | 2,700 | 17,000 | <200 | a |
| | 3/6/2001 | 18.20 | -- | 16.75 | 180,000 | 27,000 | 39,000 | 2,000 | 13,000 | <1200* /<20*** | a,l |
| | 6/8/2001 | 20.14 | -- | 14.81 | 170,000 | 28,000 | 40,000 | 1,900 | 13,000 | <200 | a |
| | 8/27/2001 | 21.19 | -- | 13.76 | 130,000 | 24,000 | 33,000 | 1,600 | 11,000 | <350 | a |
| | 10/25/2001 | 21.74 | -- | 13.21 | 160,000 | 22,000 | 28,000 | 1,500 | 10,000 | <350 | a |
| | 3/1/2002 | 21.39 | 0.41 | 13.84[x] | -- | -- | -- | -- | -- | -- | -- |
| | 6/10/2002 | 22.30 | -- | 12.65 | 210,000 | 30,000 | 51,000 | 3,100 | 22,000 | <1,000* | a |
| *34.96* | 9/3/2002 | 21.40 | -- | 13.56 | 2,500,000 | 31,000 | 170,000 | 29,000 | 170,000 | 2,500,000* | a |
| | 12/22/2002 | 20.50 | -- | 14.46 | 89,000 | 2,600 | 9,300 | 530 | 28,000 | <1,700 | a,m |
| | 1/23/2003 | 18.57 | -- | 16.39 | 130,000 | 600 | 1,600 | <100 | 41,000 | <50*** | a,b,l |
| | 6/12/2003 | 19.10 | 0.07 | 15.91[x] | -- | -- | -- | -- | -- | -- | -- |
| | 7/23/2003 | 19.42 | 0.07 | 15.59[x] | -- | -- | -- | -- | -- | -- | -- |
| *35.37#* | 12/22/2003 | 17.09 | 0.01 | 18.29[x] | -- | -- | -- | -- | -- | -- | -- |
| | 3/10/2004 | 13.82 | -- | 21.55 | 22,000 | 190 | 250 | <10 | 5,100 | <100 | a,c |
| | 6/16/2004 | 14.75 | -- | 20.62 | 2,700 | 23 | 160 | 13 | 520 | <25 | a |
| | 9/27/2004 | 18.02 | -- | 17.35 | 27,000 | 580 | 2,000 | 56 | 6,800 | <10*** | a,m |
| | 12/22/2004 | 11.25 | -- | 24.12 | 250 | 3.5 | 18 | <0.5 | 47 | <0.5*** | a,m |
| | 3/3/2005 | 14.42 | -- | 20.95 | 320 | 5.2 | 13 | 3.2 | 46 | <5.0 | a |
| *34.96##* | 6/9/2005 | 17.80 | -- | 17.16 | -- | -- | -- | -- | -- | -- | + |
| | 9/9/2005 | 18.26 | -- | 16.70 | -- | -- | -- | -- | -- | -- | + |
| | 12/20/2005 | 18.68 | -- | 16.28 | -- | -- | -- | -- | -- | -- | + |
| | 3/26/2006 | 16.96 | -- | 18.00 | 23,000 | 270 | 400 | 65 | 4,400 | <50 | a |
| | 6/23/2006 | 17.55 | -- | 17.41 | 30,000 | 340 | 680 | 170 | 6,900 | <500 | a,m |
| | 9/7/2006 | 18.53 | -- | 16.43 | 34,000 | 540 | 630 | 190 | 7,000 | <500 | a |
| | 12/29/2006 | 19.43 | -- | 15.53 | 20,000 | 550 | 55 | 130 | 4,700 | <100*/<0.5*** | a,m |
| | 3/21/2007 | 18.92 | -- | 16.04 | 23,000 | 910 | 210 | 140 | 5,900 | <250* | a |
| | 6/7/2007 | 19.22 | -- | 15.74 | 24,000 | 680 | 61 | 190 | 4,300 | <100* | a,b |
| | **9/28/2007** | **20.19** | -- | **14.77** | -- | -- | -- | -- | -- | -- | |
| MW-2 | 8/1/1994 | -- | -- | -- | 130,000 | 28,000 | 35,000 | 3,000 | 12,000 | -- | -- |
| *35.18* | 12/21/1994 | 19.91 | -- | 15.27 | 200 | 140,000 | 200,000 | 3,500 | 22,000 | -- | -- |
| | 3/13/1995 | 19.15 | -- | 16.03 | 500 | 9,200 | 23,000 | 7,000 | 36,000 | -- | -- |
| | 6/27/1995 | 18.74 | -- | 16.44 | 120,000 | 23,000 | 30,000 | 2,700 | 13,000 | -- | -- |
| | 7/7/1995 | 18.80 | -- | 16.38 | 120,000 | 23,000 | 30,000 | 2,700 | 13,000 | -- | -- |
| | 9/28/1995 | 19.30 | -- | 15.88 | 110,000 | 23,000 | 29,000 | 2,500 | 11,000 | -- | -- |
| | 12/20/1995 | 20.24 | -- | 14.94 | 83,000 | 980 | 1,800 | 2,200 | 10,000 | -- | -- |
| | 3/26/1996 | 19.69 | -- | 15.49 | 150,000 | 23,000 | 32,000 | 2,800 | 12,000 | <200* | d |
| | 6/20/1996 | 19.20 | -- | 15.98 | 94,000 | 15,000 | 23,000 | 2,400 | 12,000 | <200* | -- |
| | 9/26/1996 | 19.80 | -- | 15.38 | 150,000 | 20,000 | 29,000 | 2,800 | 12,000 | ND** | -- |
| | 10/28/1996 | 20.18 | -- | 15.00 | -- | -- | -- | -- | -- | -- | -- |
| | 12/12/1996 | 20.17 | -- | 15.01 | 58,000 | 3,100 | 11,000 | 1,700 | 8,100 | 220* | -- |
| | 3/31/1997 | 19.67 | -- | 15.51 | 38,000 | 6,000 | 7,900 | 690 | 3,300 | ND* | -- |
| | 6/27/1997 | 19.68 | -- | 15.50 | 62,000 | 13,000 | 16,000 | 1,300 | 6,000 | ND* | -- |
| | 9/9/1997 | 20.20 | -- | 14.98 | 81,000 | 16,000 | 18,000 | 1,800 | 8,600 | ND*** | -- |
| | 12/18/1997 | 19.80 | -- | 15.38 | 110,000 | 18,000 | 26,000 | 2,200 | 9,500 | ND*** | -- |
| | 3/12/1998 | 18.07 | -- | 17.11 | 120,000 | 16,000 | 26,000 | 2,200 | 9,400 | ND*** | -- |
| | 6/22/1998 | 18.29 | -- | 16.89 | 38,000 | 9,800 | 9,500 | 1,500 | 6,000 | -- | -- |
| | 9/18/1998 | 19.09 | -- | 16.09 | 68,000 | 12,000 | 16,000 | 1,400 | 5,900 | -- | -- |
| | 12/23/1998 | 19.67 | -- | 15.51 | 180,000 | 16,000 | 22,000 | 2,200 | 8,300 | -- | -- |

**Table 2. Groundwater Elevations and Analytical Data** - Allright Parking, 1432 Harrison Street, Oakland, California

| Well ID<br>Sample ID<br>*TOC (ft amsl)* | Date | Depth to Groundwater (ft amsl) | SPH Thickness (feet) | Groundwater Elevation (feet) | TPHg | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ← | | (µg/L) | | | → | |
| MW-2 | 3/29/1999 | 18.97 | -- | 16.21 | 16,600 | 1,380 | 1,920 | 373 | 1,840 | -- | -- |
| (cont.) | 6/23/1999 | 18.25 | -- | 16.93 | 41,000 | 10,000 | 9,400 | 1,100 | 5,000 | -- | -- |
| | 9/24/1999 | 19.60 | -- | 15.58 | 40,600 | 4,880 | 3,490 | 1,090 | 4,560 | -- | -- |
| | 12/23/1999 | 20.21 | -- | 14.97 | 61,900 | 6,710 | 9,320 | 1,150 | 5,360 | -- | -- |
| | 3/21/2000 | 18.93 | -- | 16.25 | 98,000 | 14,000 | 21,000 | 1,600 | 6,900 | <1600 | a |
| | 7/3/2000 | 19.38 | -- | 15.80 | 140,000 | 18,000 | 33,000 | 2,600 | 11,000 | <200* | a |
| | 9/7/2000 | 19.83 | -- | 15.35 | 110,000 | 17,000 | 21,000 | 2,200 | 9,700 | <100*** | a,l |
| | 12/5/2000 | 20.30 | -- | 14.88 | 130,000 | 19,000 | 28,000 | 2,500 | 11,000 | <200 | a |
| | 3/6/2001 | 19.57 | -- | 15.61 | 32,000 | 3,400 | 3,400 | 580 | 2,500 | <200 | a |
| | 6/8/2001 | 20.59 | -- | 14.59 | 72,000 | 9,400 | 9,200 | 1,300 | 5,800 | <200 | a |
| | 8/27/2001 | 21.79 | -- | 13.39 | 110,000 | 17,000 | 28,000 | 2,600 | 11,000 | <950 | a |
| | 10/25/2001 | 22.05 | -- | 13.13 | 110,000 | 15,000 | 18,000 | 2,000 | 8,700 | <350 | a |
| | 3/1/2002 | 21.80 | -- | 13.38 | 3,100 | 370 | 180 | 62 | 330 | <5.0* | a |
| | 6/10/2002 | 22.83 | -- | 12.35 | 7,800 | 2,000 | 1,100 | 76 | 570 | <100* | a |
| *35.21* | 9/3/2002 | 22.03 | -- | 13.18 | 21,000 | 2,400 | 2,900 | 320 | 1,400 | <500 | a |
| | 12/22/2002 | 22.70 | -- | 12.51 | 630 | 48 | 56 | 19 | 82 | <5.0 | a |
| | 1/23/2003 | 20.49 | -- | 14.72 | 1,100 | 27 | 32 | 19 | 150 | <25 | a |
| | 6/12/2003 | 21.03 | -- | 14.18 | 10,000 | 2,100 | 1,600 | 150 | 660 | <250 | a |
| | 7/23/2003 | 21.40 | -- | 13.81 | 28,000 | 4,800 | 4,800 | 380 | 1,700 | <500 | a |
| | 12/22/2003 | 19.33 | -- | 15.88 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 3/10/2004 | 19.33 | -- | 15.88 | 3,100 | 460 | 290 | 38 | 240 | <50 | a |
| | 6/16/2004 | 19.90 | -- | 15.31 | 9,100 | 1,600 | 1,200 | 220 | 830 | <400 | a |
| | 9/27/2004 | 22.08 | -- | 13.13 | 14,000 | 2,800 | 490 | 340 | 1,600 | <350 | a |
| | 12/22/2004 | 21.74 | -- | 13.47 | 1,100 | 300 | 28 | 22 | 71 | <15 | a |
| | 3/3/2005 | 19.60 | -- | 15.61 | 340 | 12 | 4.4 | 9.1 | 28 | <10 | a |
| | 6/9/2005 | 18.65 | -- | 16.56 | 240 | 22 | 2.7 | 6.4 | 27 | <10 | a |
| | 9/9/2005 | 19.27 | -- | 15.94 | 7,800 | 1,100 | 170 | 380 | 690 | <160 | a |
| | 12/20/2005 | 19.70 | -- | 15.51 | 150 | 10 | 1.9 | 2.8 | 10 | <5.0 | a |
| | 3/26/2006 | 18.51 | -- | 16.70 | 2,200 | 93 | 19 | 66 | 130 | <50 | a |
| | 6/23/2006 | 18.47 | -- | 16.74 | 8,800 | 1,600 | 110 | 500 | 480 | <500 | a,m |
| | 9/7/2006 | 18.97 | -- | 16.24 | 29,000 | 4,800 | 280 | 940 | 1,000 | <500 | a |
| | 12/29/2006 | 19.76 | -- | 15.45 | 4,500 | 720 | 54 | 250 | 480 | 75*[1]/<0.5*** | a |
| | 3/21/2007 | 19.59 | -- | 15.62 | 34,000 | 9,100 | 500 | 890 | 2,500 | <1,100* | a |
| | 6/7/2007 | 19.74 | -- | 15.47 | 46,000 | 7,100 | 410 | 870 | 2,400 | <800* | a,b |
| | **9/28/2007** | **20.23** | **--** | **14.98** | **44,000** | **9,400** | **630** | **1,400** | **3,600** | **<0.5*** ** | **a** |
| MW-3 | 8/1/1994 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <2.0 | -- | |
| *33.97* | 12/21/1994 | 18.82 | -- | 15.15 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | -- |
| | 3/13/1995 | 17.86 | -- | 16.11 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | -- | e |
| | 7/7/1995 | 18.25 | -- | 15.72 | -- | -- | -- | -- | -- | -- | f,g |
| | 9/28/1995 | 18.00 | -- | 15.97 | -- | -- | -- | -- | -- | -- | h |
| | 12/20/1995 | 18.74 | -- | 15.23 | -- | -- | -- | -- | -- | -- | -- |
| | 3/26/1996 | 18.25 | -- | 15.72 | -- | -- | -- | -- | -- | -- | -- |
| | 6/20/1996 | 18.35 | -- | 15.62 | -- | -- | -- | -- | -- | -- | -- |
| | 9/26/1996 | 19.12 | -- | 14.85 | -- | -- | -- | -- | -- | -- | -- |
| | 10/28/1996 | 19.11 | -- | 14.86 | -- | -- | -- | -- | -- | -- | -- |
| | 12/12/1996 | 18.61 | -- | 15.36 | -- | -- | -- | -- | -- | -- | -- |
| | 3/31/1997 | 18.35 | -- | 15.62 | -- | -- | -- | -- | -- | -- | -- |
| | 6/27/1997 | 18.81 | -- | 15.16 | -- | -- | -- | -- | -- | -- | -- |
| | 9/9/1997 | 19.18 | -- | 14.79 | -- | -- | -- | -- | -- | -- | -- |
| | 12/18/1997 | 18.64 | -- | 15.33 | -- | -- | -- | -- | -- | -- | -- |
| | 3/12/1998 | 17.56 | -- | 16.41 | -- | -- | -- | -- | -- | -- | -- |
| | 6/22/1998 | 18.64 | -- | 15.33 | -- | -- | -- | -- | -- | -- | -- |
| | 9/18/1998 | 18.33 | -- | 15.64 | -- | -- | -- | -- | -- | -- | -- |
| | 12/23/1998 | 18.60 | -- | 15.37 | -- | -- | -- | -- | -- | -- | -- |
| | 3/29/1999 | 17.85 | -- | 16.12 | -- | -- | -- | -- | -- | -- | -- |
| | 6/23/1999 | 18.67 | -- | 15.30 | -- | -- | -- | -- | -- | -- | -- |
| | 9/24/1999 | 18.64 | -- | 15.33 | -- | -- | -- | -- | -- | -- | -- |
| | 12/23/1999 | 19.32 | -- | 14.65 | -- | -- | -- | -- | -- | -- | -- |
| | 3/21/2000 | 17.89 | -- | 16.08 | -- | -- | -- | -- | -- | -- | -- |
| | 7/3/2000 | 18.40 | -- | 15.57 | -- | -- | -- | -- | -- | -- | -- |
| | 9/7/2000 | 18.75 | -- | 15.22 | -- | -- | -- | -- | -- | -- | -- |
| *34.01* | 12/5/2000 | 19.03 | -- | 14.94 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 3/6/2001 | 18.12 | -- | 15.85 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/8/2001 | 20.02 | -- | 13.95 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 8/27/2001 | 21.09 | -- | 12.88 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 10/25/2001 | 21.29 | -- | 12.68 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 3/1/2002 | 21.14 | -- | 12.83 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0* | -- |
| | 6/10/2002 | 21.99 | -- | 11.98 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0* | -- |
| | 9/3/2002 | 21.17 | -- | 12.84 | -- | -- | -- | -- | -- | -- | -- |
| | 12/22/2002 | 21.94 | -- | 12.07 | -- | -- | -- | -- | -- | -- | -- |
| | 1/23/2003 | 20.08 | -- | 13.93 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/12/2003 | 20.95 | -- | 13.06 | -- | -- | -- | -- | -- | -- | -- |
| | 7/23/2003 | 21.28 | -- | 12.73 | -- | -- | -- | -- | -- | -- | -- |
| | 12/22/2003 | 19.05 | -- | 14.96 | -- | -- | -- | -- | -- | -- | -- |
| | 3/10/2004 | 18.22 | -- | 15.79 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/16/2004 | 18.82 | -- | 15.19 | -- | -- | -- | -- | -- | -- | -- |

**Table 2. Groundwater Elevations and Analytical Data** - Allright Parking, 1432 Harrison Street, Oakland, California

| Well ID<br>Sample ID<br>*TOC (ft amsl)* | Date | Depth to Groundwater (ft amsl) | SPH Thickness (feet) | Groundwater Elevation (feet) | TPHg | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ← | | (µg/L) | | | → | |
| MW-3 | 9/27/2004 | 21.03 | -- | 12.98 | -- | -- | -- | -- | -- | -- | -- |
| (cont.) | 12/22/2004 | 20.69 | -- | 13.32 | -- | -- | -- | -- | -- | -- | -- |
| | 3/3/2005 | 17.94 | -- | 16.07 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/9/2005 | 18.00 | -- | 16.01 | -- | -- | -- | -- | -- | -- | -- |
| | 9/9/2005 | 18.43 | -- | 15.58 | -- | -- | -- | -- | -- | -- | -- |
| | 12/20/2005 | 18.18 | -- | 15.83 | -- | -- | -- | -- | -- | -- | -- |
| | 3/26/2006 | 17.42 | -- | 16.59 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/23/2006 | 17.77 | -- | 16.24 | -- | -- | -- | -- | -- | -- | -- |
| | 9/7/2006 | 18.20 | -- | 15.81 | -- | -- | -- | -- | -- | -- | -- |
| | 12/29/2006 | 18.49 | -- | 15.52 | -- | -- | -- | -- | -- | -- | -- |
| | 3/21/2007 | 18.44 | -- | 15.57 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0* | -- |
| | 6/7/2007 | 18.68 | -- | 15.33 | -- | -- | -- | -- | -- | -- | -- |
| | **9/28/2007** | **19.19** | -- | **14.82** | -- | -- | -- | -- | -- | -- | |
| MW-4 | 10/28/1996 | 19.32 | -- | 14.43 | 10,000 | 3,900 | 420 | 400 | 360 | <200* | n |
| *33.75* | 12/12/1996 | 19.42 | -- | 14.33 | 11,000 | 4,200 | 410 | 420 | 260 | 32* | -- |
| | 3/31/1997 | 18.67 | -- | 15.08 | ND | ND | ND | ND | ND | ND* | -- |
| | 6/27/1997 | 19.08 | -- | 14.67 | 160 | 49 | 1.2 | ND | 5.9 | ND* | -- |
| | 9/9/1997 | 19.33 | -- | 14.42 | 7,400 | 5,000 | 410 | 230 | 470 | 33* | -- |
| | 12/18/1997 | 19.17 | -- | 14.58 | 710 | 170 | 8.0 | ND | 39 | ND*** | -- |
| | 3/12/1998 | 17.68 | -- | 16.07 | 1,300 | 410 | 21 | ND | 57 | ND*** | -- |
| | 6/22/1998 | 17.63 | -- | 16.12 | ND | ND | ND | ND | ND | -- | -- |
| | 9/18/1998 | 18.58 | -- | 15.17 | ND | 42 | 1.6 | ND | 4.8 | -- | -- |
| | 12/23/1998 | 19.01 | -- | 14.74 | 1,900 | 1,000 | 76 | 50 | 120 | -- | -- |
| | 3/29/1999 | 18.35 | -- | 15.40 | ND | ND | ND | ND | ND | -- | -- |
| | 6/23/1999 | 17.58 | -- | 16.17 | ND | ND | ND | ND | ND | -- | -- |
| | 9/24/1999 | 19.05 | -- | 14.70 | 9,150 | 3,270 | 131 | 34 | 537 | -- | -- |
| | 12/23/1999 | 19.41 | -- | 14.34 | 12,200 | 5,360 | 275 | 424 | 592 | -- | -- |
| | 3/21/2000 | 18.42 | -- | 15.33 | 45,000 | 16,000 | 1,100 | 1,400 | 1,900 | 1400* /<35*** | a,l |
| | 7/3/2000 | 18.82 | -- | 14.93 | 33,000 | 10,000 | 720 | 840 | 1,800 | <200* | a |
| | 9/7/2000 | 19.21 | -- | 14.54 | 26,000 | 8,800 | 800 | 740 | 1,500 | <50*** | a,c,l |
| | 12/5/2000 | 19.60 | -- | 14.15 | 41,000 | 11,000 | 840 | 930 | 1,900 | <200 | a |
| | 3/6/2001 | 18.24 | -- | 15.51 | 1,100 | 400 | 5.7 | <0.5 | 20 | <5.0 | a |
| | 6/8/2001 | 20.91 | -- | 12.84 | 92 | 19 | <0.5 | <0.5 | 1 | <5.0 | a |
| | 8/27/2001 | 21.63 | -- | 12.12 | 49,000 | 17,000 | 1700 | 1,700 | 3,200 | <260 | a |
| | 10/25/2001 | 21.70 | -- | 12.05 | 57,000 | 16,000 | 1,500 | 1,600 | 2,600 | <300 | a |
| | 3/1/2002 | 21.53 | -- | 12.22 | 400 | 140 | 2.3 | <0.5 | 12 | <5.0* | a |
| | 6/10/2002 | 22.23 | -- | 11.52 | <50 | 2.5 | <0.5 | <0.5 | <0.5 | <5.0* | -- |
| | 9/3/2002 | 21.85 | -- | 11.90 | 31,000 | 9,700 | 300 | 650 | 1,100 | <1,000 | a |
| | 12/22/2002 | 22.39 | -- | 11.36 | 35,000 | 13,000 | 310 | 1,100 | 1,800 | <1,500 | a |
| | 1/23/2003 | 20.61 | -- | 13.14 | 51,000 | 18,000 | 430 | 1,500 | 2,200 | <5.0*** | a,l |
| | 6/12/2003 | 21.20 | -- | 12.55 | 80 | 12 | <0.5 | <0.5 | 1.0 | <10 | a |
| | 7/23/2003 | 21.51 | -- | 12.24 | 20,000 | 7,600 | 100 | 65 | 660 | <250 | a |
| | 12/22/2003 | 19.60 | -- | 14.15 | 26,000 | 9,500 | 200 | 380 | 1,100 | <150 | a |
| | 3/10/2004 | 18.81 | -- | 14.94 | 14,000 | 4,800 | 150 | 320 | 530 | <400 | a |
| | 6/16/2004 | 19.32 | -- | 14.43 | 2,800 | 1,100 | 24 | 17 | 100 | <50 | a |
| | 9/27/2004 | 21.45 | -- | 12.30 | 45,000 | 16,000 | 260 | 1,700 | 2,000 | <25*** | a |
| | 12/22/2004 | 21.15 | -- | 12.60 | 29,000 | 10,000 | 160 | 890 | 1,200 | <5.0*** | a,j |
| | 3/3/2005 | 18.60 | -- | 15.15 | 18,000 | 6,400 | 98 | 500 | 610 | <600 | a |
| | 6/9/2005 | 18.11 | -- | 15.64 | 20,000 | 6,100 | 110 | 460 | 580 | <500 | a |
| | 9/9/2005 | 18.65 | -- | 15.10 | 17,000 | 6,400 | 100 | 470 | 730 | <250 | a |
| | 12/20/2005 | 19.01 | -- | 14.74 | 26,000 | 8,500 | 160 | 640 | 800 | <120 | a |
| | 3/26/2006 | 17.84 | -- | 15.91 | 1,900 | 700 | 22 | 49 | 85 | <50 | a |
| | 6/23/2006 | 17.96 | -- | 15.79 | 12,000 | 3,400 | 130 | 370 | 510 | 260 | a |
| | 9/7/2006 | 18.29 | -- | 15.46 | 8,600 | 1,800 | 100 | 170 | 220 | <210 | a,i |
| | 12/29/2006 | 18.93 | -- | 14.82 | 4,200 | 1,100 | 120 | 150 | 280 | <150*/<0.5*** | a |
| | 3/21/2007 | 18.76 | -- | 14.99 | 550 | 30 | 2.0 | 4.5 | 5.1 | <30* | a |
| | 6/7/2007 | 18.92 | -- | 14.83 | 85 | 4.4 | <0.5 | 0.77 | 0.82 | <5.0* | a |
| | **9/28/2007** | **19.41** | -- | **14.34** | **140** | **7.0** | **<0.5** | **1.2** | **<0.5** | **<0.5***** | **a** |
| MW-5 | 10/28/1996 | 19.88 | -- | 14.75 | 90 | 4.0 | 0.6 | <0.50 | <0.50 | 16* | |
| *34.63* | 12/12/1996 | 20.09 | -- | 14.54 | 230 | 5.6 | 0.9 | ND | 0.9 | 3.6* | n |
| | 3/31/1997 | 19.24 | -- | 15.39 | 90 | 3.1 | ND | ND | ND | ND* | -- |
| | 6/27/1997 | 19.16 | -- | 15.47 | ND | ND | ND | ND | ND | ND* | -- |
| | 9/9/1997 | 19.93 | -- | 14.70 | ND | ND | ND | ND | ND | ND* | -- |
| | 12/18/1997 | 19.77 | -- | 14.86 | ND | ND | ND | ND | ND | ND*** | -- |
| | 3/12/1998 | 19.77 | -- | 14.86 | 79 | 2.3 | ND | 0.8 | ND | ND* | -- |
| | 6/22/1998 | 18.08 | -- | 16.55 | ND | ND | ND | ND | ND | -- | -- |
| | 9/18/1998 | 19.12 | -- | 15.51 | ND | ND | ND | ND | ND | -- | -- |
| | 12/23/1998 | 19.60 | -- | 15.03 | ND | 0.8 | 0.9 | ND | ND | -- | -- |
| | 3/29/1999 | 18.88 | -- | 15.75 | ND | ND | ND | ND | ND | -- | -- |
| | 6/23/1999 | 18.05 | -- | 16.58 | ND | ND | ND | ND | ND | -- | -- |
| | 9/24/1999 | 19.61 | -- | 15.02 | ND | ND | ND | ND | ND | -- | -- |
| | 12/23/1999 | 20.01 | -- | 14.62 | ND | ND | ND | ND | ND | -- | -- |
| | 3/21/2000 | 19.05 | -- | 15.58 | 140 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 7/3/2000 | 19.40 | -- | 15.23 | 85 | 8.1 | 3.1 | 1.6 | 7.8 | <5.0* | k |
| | 9/7/2000 | 19.62 | -- | 15.01 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0* | a |

**Table 2. Groundwater Elevations and Analytical Data** - Allright Parking, 1432 Harrison Street, Oakland, California

| Well ID<br>Sample ID<br>*TOC (ft amsl)* | Date | Depth to Groundwater (ft amsl) | SPH Thickness (feet) | Groundwater Elevation (feet) | TPHg | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ← | | (µg/L) | | | → | |
| MW-5 | 12/5/2000 | 20.25 | -- | 14.38 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| (cont.) | 3/6/2001 | 19.07 | -- | 15.56 | 91 | 5.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/8/2001 | 20.77 | -- | 13.86 | 290 | 22.0 | 0.8 | <0.5 | <0.5 | <5.0 | -- |
| | 8/27/2001 | 21.33 | -- | 13.30 | 660 | 24.0 | 2.2 | 1.3 | 4.0 | <25 | a |
| | 10/25/2001 | 21.62 | -- | 13.01 | 55 | 3.5 | <0.5 | <0.5 | <0.5 | <5.0 | a |
| | 3/1/2002 | 21.49 | -- | 13.14 | 200 | 1.9 | 0.69 | <0.5 | <0.5 | <5.0* | a |
| | 6/10/2002 | 22.15 | -- | 12.48 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0* | a |
| | 9/3/2002 | 21.50 | -- | 13.13 | 60 | 1.9 | <0.5 | <0.5 | 0.77 | <5.0 | -- |
| | 12/22/2002 | 22.19 | -- | 12.44 | 82 | 0.57 | <0.5 | 0.68 | <0.5 | <5.0 | a |
| | 1/23/2003 | 20.27 | -- | 14.36 | <50 | 2.1 | <0.5 | <0.5 | <0.5 | <5.0 | a |
| | 6/12/2003 | 21.10 | -- | 13.53 | <50 | 0.88 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 7/23/2003 | 21.47 | -- | 13.16 | <50 | 4.0 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 12/22/2003 | 19.57 | -- | 15.06 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 3/10/2004 | 19.61 | -- | 15.02 | 990 | 200 | 2.9 | 4.0 | 20 | <70 | -- |
| | 6/16/2004 | 20.15 | -- | 14.48 | 250 | 42 | <0.5 | 0.88 | <0.5 | <35 | a |
| | 9/27/2004 | 22.14 | -- | 12.49 | 1,600 | 140 | 4.8 | 45 | 18 | <110 | a |
| | 12/22/2004 | 21.81 | -- | 12.82 | <50 | 5.3 | <0.5 | <0.5 | 0.66 | <5.0 | -- |
| | 3/3/2005 | 19.35 | -- | 15.28 | 2,000 | 330 | 4.4 | 63 | 39 | <150 | a |
| | 6/9/2005 | 18.73 | -- | 15.90 | 250 | 42 | 1.4 | 14 | 3.2 | <5.0 | a |
| | 9/9/2005 | 19.30 | -- | 15.33 | 2,000 | 390 | 5.0 | 71 | 38 | <400 | a |
| | 12/20/2005 | 19.65 | -- | 14.98 | 4,300 | 760 | 18 | 170 | 150 | <35 | a |
| | 3/26/2006 | 18.58 | -- | 16.05 | 1,600 | 460 | 3.3 | 35 | 32 | <50 | a |
| | 6/23/2006 | 18.57 | -- | 16.06 | 1,900 | 500 | 3.9 | 81 | 56 | <17 | a |
| | 9/7/2006 | 18.98 | -- | 15.65 | 8,800 | 1,900 | 12 | 350 | 220 | <260 | a,i |
| | 12/29/2006 | 19.70 | -- | 14.93 | 15,000 | 3,400 | 69 | 610 | 700 | <450*/<0.5*** | a |
| | 3/21/2007 | 19.57 | -- | 15.06 | 9,900 | 2,300 | 24 | 360 | 410 | <240* | a |
| | 6/7/2007 | 19.70 | -- | 14.93 | 14,000 | 3,800 | 40 | 790 | 720 | <550* | a |
| | **9/28/2007** | **20.16** | **--** | **14.47** | **26,000** | **7,200** | **84** | **1,100** | **1,600** | **<25*** ** | **a,l** |
| MW-6 | 10/28/1996 | 20.02 | | 15.87 | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.0* | |
| *35.89* | 12/12/1996 | 20.18 | -- | 15.71 | ND | ND | ND | ND | ND | ND* | n |
| (annual sampling) | 3/31/1997 | 19.81 | -- | 16.08 | -- | -- | -- | -- | -- | -- | -- |
| | 6/27/1997 | 19.76 | -- | 16.13 | -- | -- | -- | -- | -- | -- | -- |
| | 9/9/1997 | 20.06 | -- | 15.83 | ND | ND | ND | ND | ND | ND* | -- |
| | 12/18/1997 | 19.90 | -- | 15.99 | ND | ND | ND | ND | ND | -- | -- |
| | 3/12/1998 | 18.00 | -- | 17.89 | ND | ND | ND | ND | ND | ND* | -- |
| | 6/22/1998 | 18.43 | -- | 17.46 | ND | ND | ND | ND | ND | -- | -- |
| | 9/18/1998 | 19.10 | -- | 16.79 | ND | ND | ND | ND | ND | -- | -- |
| | 12/23/1998 | 19.61 | -- | 16.28 | ND | ND | ND | ND | ND | -- | -- |
| | 3/29/1999 | 18.92 | -- | 16.97 | ND | ND | ND | ND | ND | -- | -- |
| | 6/23/1999 | 18.41 | -- | 17.48 | ND | ND | ND | ND | ND | -- | -- |
| | 9/24/1999 | 19.61 | -- | 16.28 | ND | ND | ND | ND | ND | -- | -- |
| | 12/23/1999 | 20.30 | -- | 15.59 | ND | ND | ND | ND | ND | -- | -- |
| | 3/21/2000 | 18.97 | -- | 16.92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 7/3/2000 | 19.46 | -- | 16.43 | 59 | 5.1 | 2.3 | 1.1 | 5.3 | <5.0* | -- |
| | 9/7/2000 | 19.95 | -- | 15.94 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0* | a |
| | 12/5/2000 | 20.50 | -- | 15.39 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 3/6/2001 | 19.54 | -- | 16.35 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/8/2001 | 20.92 | -- | 14.97 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.1 | -- |
| | 8/27/2001 | 21.37 | -- | 14.52 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 10/25/2001 | 21.59 | -- | 14.30 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 3/1/2002 | 21.33 | -- | 14.56 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0* | -- |
| | 6/10/2002 | 21.97 | -- | 13.92 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0* | -- |
| | 9/3/2002 | 21.55 | -- | 14.34 | -- | -- | -- | -- | -- | -- | -- |
| | 12/22/2002 | 22.25 | -- | 13.64 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 1/23/2003 | 20.47 | -- | 15.42 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/12/2003 | 21.09 | -- | 14.80 | -- | -- | -- | -- | -- | -- | -- |
| | 7/23/2003 | 21.42 | -- | 14.47 | -- | -- | -- | -- | -- | -- | -- |
| | 12/22/2003 | 19.49 | -- | 16.40 | -- | -- | -- | -- | -- | -- | -- |
| | 3/10/2004 | 20.20 | -- | 15.69 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/16/2004 | 20.73 | -- | 15.16 | -- | -- | -- | -- | -- | -- | -- |
| | 9/27/2004 | 22.88 | -- | 13.01 | -- | -- | -- | -- | -- | -- | -- |
| | 12/22/2004 | 22.53 | -- | 13.36 | -- | -- | -- | -- | -- | -- | -- |
| | 3/3/2005 | 19.87 | -- | 16.02 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/9/2005 | 18.95 | -- | 16.94 | -- | -- | -- | -- | -- | -- | -- |
| | 9/9/2005 | 19.45 | -- | 16.44 | -- | -- | -- | -- | -- | -- | -- |
| | 12/20/2005 | 19.90 | -- | 15.99 | -- | -- | -- | -- | -- | -- | -- |
| | 3/26/2006 | 18.85 | -- | 17.04 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 6/23/2006 | 18.57 | -- | 17.32 | -- | -- | -- | -- | -- | -- | -- |
| | 9/7/2006 | 19.13 | -- | 16.76 | -- | -- | -- | -- | -- | -- | -- |
| | 12/29/2006 | 19.96 | -- | 15.93 | -- | -- | -- | -- | -- | -- | -- |
| | 3/21/2007 | 19.87 | -- | 16.02 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0* | m |
| | 6/7/2007 | 20.05 | -- | 15.84 | -- | -- | -- | -- | -- | -- | -- |
| | **9/28/2007** | **20.51** | **--** | **15.38** | **--** | **--** | **--** | **--** | **--** | **--** | |
| Trip Blank | 3/21/2000 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |
| | 9/7/2000 | -- | -- | -- | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | -- |

## Table 2. Groundwater Elevations and Analytical Data - Allright Parking, 1432 Harrison Street, Oakland, California

| Well ID<br>Sample ID<br>*TOC (ft amsl)* | Date | Depth to Groundwater (ft amsl) | SPH Thickness (feet) | Groundwater Elevation (feet) | TPHg | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ← (µg/L) → | | | | | | |
| ***Grab Groundwater Sample Results:*** | | | | | | | | | | | |
| SB-A | 7/6/1995 | ~20 | -- | -- | 330 | 16 | 3.6 | 1.3 | 4.9 | -- | i,j |
| SB-B | 7/7/1995 | ~20 | -- | -- | 450 | 55 | 3.1 | 5.1 | 5.0 | -- | a |
| SB-C | 7/6/1995 | ~20 | -- | -- | 44,000 | 6,600 | 5,900 | 980 | 4,400 | -- | a |
| SB-D | 7/6/1995 | ~20 | -- | -- | 70,000 | 7,400 | 10,000 | 1,600 | 7,200 | -- | a |
| SB-E | 7/6/1995 | ~20 | -- | -- | 25,000 | 1,000 | 3,000 | 610 | 2,700 | -- | a |
| SB-G | 7/7/1995 | ~20 | -- | -- | 84,000 | 9,400 | 16,000 | 2,200 | 9,900 | -- | a,b |
| SB-I | 7/7/1995 | ~20 | -- | -- | 24,000 | 6,100 | 1,400 | 680 | 1,600 | -- | a |
| SB-J | 7/7/1995 | ~20 | -- | -- | 960 | 110 | 66 | 8.7 | 71 | -- | a |
| SB-K | 7/7/1995 | ~20 | -- | -- | 72,000 | 9,600 | 9,600 | 1,800 | 7,000 | -- | a |
| CB-1-W | 7/22/1999 | -- | -- | -- | 110,000 | 1,300 | 16,000 | 2,700 | 12,000 | <3000* | a,b,c |
| CB-2-W | 7/22/1999 | -- | -- | -- | 4,700 | 21 | 13 | 170 | 76 | <50* | a,c |

**Abbreviations, Methods, & Notes**

TOC = Top of casing elevation
ft amsl = feet above mean sea level
SPH = Separate-phase hydrocarbons
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method SW8015C
Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW8021B
MTBE = Methyl tert-butyl ether
* = MTBE by EPA Method SW8021B
** = MTBE by EPA Method SW8240
*** = MTBE by EPA Method SW8260
l = Not confirmed with EPA method 8260B.
µg/L = micrograms per liter, equivalent to parts per billion
-- = Not sampled, not analyzed, or not applicable
<n = Not detected in sample above n µg/L
ND = Not detected above laboratory detection limit
x = Groundwater elevation adjusted for SPH by the relation:
Groundwater Elevation = TOC Elevation - Depth to Groundwater + (0.7 x SPH thickness)
# = The wellhead elevation was raised by 0.41 feet when well MW-1 was connected to the SVE system on October 31, 2003.
## = The wellhead elevation was lowered by 0.41 feet when well MW-1 was disconnected from the SVE system on April 30. 2005.
+ = Well de-watered during purging, no measurable water to sample.

a = Unmodified or weakly modified gasoline is significant.
b = Lighter than water immiscible sheen is present.
c = Liquid sample that contains greater than ~2 vol. % sediment.
d = MTBE result confirmed by secondary column or GC/MS analysis.
e = Sample analyzed for purgeable hydrocarbons by EPA Method SW8010, no purgeable hydrocarbons were detected.
f = Sample analyzed for VOCs by EPA Method SW8240, no non-BTEX compounds were detected.
g = Sample analyzed for Total Petroleum Hydrocarbons as motor oil (TPHmo) by Modified EPA Method SW8015, no TPHmo was detected.
h = Analytic sampling discontinued. Approved by Alameda County Department of Environmental Health.
i = Lighter than gasoline range compounds are significant.
j = Gasoline range compounds having broad chromatographic peaks are significant.
k = No recognizable pattern.
l = Sample diluted due to high organic content.
m = Liquid sample that contains greater than ~1 vol. % sediment.
n = TOC well elevation was increased by 3 ft based on a benchmark discrepancy discovered during a well survey performed on September 11, 2002

CONESTOGA-ROVERS
& ASSOCIATES

# APPENDIX A
## Field Data Sheet

MUSKAN
ENVIRONMENTAL
SAMPLING

# WELL GAUGING SHEET

**Client:** Conestoga-Rovers and Associates

**Site Address:** 1432 Harrison Street, Oakland, CA

**Date:** 9/28/2007 **Signature:**

| Well ID | Time | Depth to SPH | Depth to Water | SPH Thickness | Depth to Bottom | Comments |
|---|---|---|---|---|---|---|
| MW-1 | 9:45 | | 20.19 | | 20.45 | |
| MW-2 | 9:40 | | 20.23 | | 25.55 | |
| MW-3 | 9:20 | | 19.19 | | 23.95 | |
| MW-4 | 9:30 | | 19.41 | | 24.47 | |
| MW-5 | 9:35 | | 20.16 | | 27.90 | |
| MW-6 | 9:25 | | 20.51 | | 28.21 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

MUSKAN
ENVIRONMENTAL
SAMPLING

# WELL SAMPLING FORM

| | |
|---|---|
| **Date:** | 9/28/2007 |
| **Client:** | Conestoga-Rovers and Associates |
| **Site Address:** | 1432 Harrison Street, Oakland, CA |
| Well ID: | MW-1 |
| Well Diameter: | 4" |
| Purging Device: | |
| Sampling Method: | |

| | |
|---|---|
| Total Well Depth: | 20.45 |
| Depth to Water: | 20.19 |
| Water Column Height: | 0.26 |
| Gallons/ft: | 0.65 |
| 1 Casing Volume (gal): | 0.17 |
| 3 Casing Volumes (gal): | 0.51 |

| | |
|---|---|
| **Fe=** | **mg/L** |
| **ORP=** | **mV** |
| ***DO=*** | ***mg/L*** |

**COMMENTS:**
insufficent water, no sample taken

| TIME: | CASING VOLUME (gal) | TEMP (Celsius) | pH | COND. (µS) |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Sample ID: | Sample Date: | Sample Time: | Container Type | Preservative | Analytes | Method |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

***Signature:***

MUSKAN
ENVIRONMENTAL
SAMPLING

# WELL SAMPLING FORM

| | |
|---|---|
| **Date:** | 9/28/2007 |
| **Client:** | Conestoga-Rovers and Associates |
| **Site Address:** | 1432 Harrison Street, Oakland, CA |
| Well ID: | MW-2 |
| Well Diameter: | 2" |
| Purging Device: | Disposable Bailer |
| Sampling Method: | Disposable Bailer |

| | |
|---|---|
| Total Well Depth: | 25.55 |
| Depth to Water: | 20.23 |
| Water Column Height: | 5.32 |
| Gallons/ft: | 0.16 |
| 1 Casing Volume (gal): | 0.85 |
| 3 Casing Volumes (gal): | 2.55 |

| | |
|---|---|
| **Fe=** | **mg/L** |
| **ORP=** | **mV** |
| ***DO=*** | **mg/L** |

**COMMENTS:**
very turbid, very silty

| TIME: | CASING VOLUME (gal) | TEMP (Celsius) | pH | COND. (µS) |
|---|---|---|---|---|
| 11:07 | 0.9 | 20.7 | 6.90 | 1109 |
| 11:09 | 1.7 | 20.7 | 6.95 | 1085 |
| 11:11 | 2.6 | 20.7 | 6.95 | 1075 |
| | | | | |
| | | | | |

| Sample ID: | Sample Date: | Sample Time: | Container Type | Preservative | Analytes | Method |
|---|---|---|---|---|---|---|
| MW-2 | 9/28/2007 | 11:13 | 40 ml VOA | HCl, ICE | TPHg<br>BTEX<br>MTBE | 8015, 8021, 8260 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

***Signature:***

MUSKAN
ENVIRONMENTAL
SAMPLING

# WELL SAMPLING FORM

| | |
|---|---|
| **Date:** | 9/28/2007 |
| **Client:** | Conestoga-Rovers and Associates |
| **Site Address:** | 1432 Harrison Street, Oakland, CA |
| Well ID: | MW-4 |
| Well Diameter: | 2" |
| Purging Device: | Disposable Bailer |
| Sampling Method: | Disposable Bailer |

| | |
|---|---|
| Total Well Depth: | 24.47 |
| Depth to Water: | 19.41 |
| Water Column Height: | 5.06 |
| Gallons/ft: | 0.16 |
| 1 Casing Volume (gal): | 0.81 |
| 3 Casing Volumes (gal): | 2.43 |

| | |
|---|---|
| **Fe=** | **mg/L** |
| **ORP=** | **mV** |
| ***DO=*** | **mg/L** |

**COMMENTS:**

| TIME: | CASING VOLUME (gal) | TEMP (Celsius) | pH | COND. (µS) |
|---|---|---|---|---|
| 10:25 | 0.8 | 20.9 | 7.35 | 429 |
| 10:27 | 1.6 | 20.9 | 7.31 | 425 |
| 10:30 | 2.4 | 20.9 | 7.29 | 421 |
| | | | | |
| | | | | |

| Sample ID: | Sample Date: | Sample Time: | Container Type | Preservative | Analytes | Method |
|---|---|---|---|---|---|---|
| MW-4 | 9/28/2007 | 10:35 | 40 ml VOA | HCl, ICE | TPHg<br>BTEX<br>MTBE | 8015, 8021, 8260 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

***Signature:***

MUSKAN
ENVIRONMENTAL
SAMPLING

# WELL SAMPLING FORM

| | |
|---|---|
| **Date:** | 9/28/2007 |
| **Client:** | Conestoga-Rovers and Associates |
| **Site Address:** | 1432 Harrison Street, Oakland, CA |
| Well ID: | MW-5 |
| Well Diameter: | 2" |
| Purging Device: | Disposable Bailer |
| Sampling Method: | Disposable Bailer |

| | |
|---|---|
| Total Well Depth: | 27.90 |
| Depth to Water: | 20.16 |
| Water Column Height: | 7.74 |
| Gallons/ft: | 0.16 |
| 1 Casing Volume (gal): | 1.24 |
| 3 Casing Volumes (gal): | 3.72 |

| | |
|---|---|
| **Fe=** | **mg/L** |
| **ORP=** | **mV** |
| ***DO*=** | **mg/L** |

**COMMENTS:**

| TIME: | CASING VOLUME (gal) | TEMP (Celsius) | pH | COND. (µS) |
|---|---|---|---|---|
| 10:45 | 1.2 | 19.5 | 7.13 | 928 |
| 10:47 | 2.5 | 19.5 | 7.12 | 921 |
| 10:49 | 3.7 | 19.6 | 7.16 | 925 |
| | | | | |
| | | | | |

| Sample ID: | Sample Date: | Sample Time: | Container Type | Preservative | Analytes | Method |
|---|---|---|---|---|---|---|
| MW-5 | 9/28/2007 | 10:52 | 40 ml VOA | HCl, ICE | TPHg<br>BTEX<br>MTBE | 8015, 8021, 8260 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

**Signature:**

CONESTOGA-ROVERS
& ASSOCIATES

# APPENDIX B

## Laboratory Analytical Report

**McCampbell Analytical, Inc.**
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

| | | |
|---|---|---|
| Conestoga-Rovers & Associates | Client Project ID: #540188; Borsuk | Date Sampled: 09/28/07 |
| 5900 Hollis St, Suite A | | Date Received: 09/28/07 |
| Emeryville, CA 94608 | Client Contact: Mark Jonas | Date Reported: 10/04/07 |
| | Client P.O.: | Date Completed: 10/04/07 |

**WorkOrder: 0709708**

October 04, 2007

Dear Mark:

Enclosed are:

1). the results of **3** analyzed samples from your **#540188; Borsuk project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

Core 040708

# McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

# CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ PDF ☐ Excel ☐ Write On (DW) ☐

☐ Check if sample is effluent and "J" flag is required

Report To: Mark Jones Bill To: Conestoga Rovers & Associates

Company: Conestoga-Rovers & Associates
5900 Hollis Street, Ste A
Emeryville, CA

E-Mail: mjones@crawofd.com

Tele: (510) 420-3304 Fax: (510) 420-9170

Project #: 540188 Project Name: Borsuk

Project Location: 1432 Harrison Street, Oakland, CA

Sampler Signature: Muskan Environmental Sampling

| SAMPLE ID | LOCATION/ Field Point Name | SAMPLING Date | SAMPLING Time | # Containers | Type Containers | MATRIX Water | MATRIX Soil | MATRIX Air | MATRIX Sludge | MATRIX Other | METHOD PRESERVED ICE | METHOD PRESERVED HCL | METHOD PRESERVED $HNO_3$ | METHOD PRESERVED Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2 | | 9.28.07 | 11:13 | 4 | VOA | X | | | | | X | X | | |
| MW-4 | | " | 10:35 | " | " | X | | | | | X | X | | |
| MW-5 | | " | 10:52 | " | " | X | | | | | X | X | | |

Analysis Request

| BTEX & TPH as Gas (602 / 8021 + 8015) MTBE | TPH as Diesel (8015) | Total Petroleum Oil & Grease (1664 / 5520 E/B&F) | Total Petroleum Hydrocarbons (418.1) | EPA 502.2 / 601 / 8010 / 8021 (HVOCs) | MTBE / BTEX ONLY (EPA 602 / 8021) | EPA 505/ 608 / 8081 (Cl Pesticides) | EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners | EPA 507 / 8141 (NP Pesticides) | EPA 515 / 8151 (Acidic Cl Herbicides) | EPA 524.2 / 624 / 8260 (VOCs) | EPA 525.2 / 625 / 8270 (SVOCs) | EPA 8270 SIM / 8310 (PAHs / PNAs) | CAM 17 Metals (200.7 / 200.8 / 6010 / 6020) | LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020) | Lead (200.7 / 200.8 / 6010 / 6020) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X | | | | | | | | | | | | | | | |
| X | | | | | | | | | | | | | | | |
| X | | | | | | | | | | | | | | | |

Other: MTBE by 8260

Comments: Filter Samples for Metals analysis: Yes / No

| Relinquished By: | Date: | Time: | Received By: |
|---|---|---|---|
| | 9/28/07 | 1246 | |
| Relinquished By: | Date: | Time: | Received By: |
| Relinquished By: | Date: | Time: | Received By: |

ICE/T° 8.2 COMMENTS:
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

| | VOAS | O&G | METALS | OTHER |
|---|---|---|---|---|
| PRESERVATION | ✓ | | pH<2 | |

**McCampbell Analytical, Inc.**
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD



**WorkOrder: 0709708** **ClientID: CETE**

☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

**Requested TAT: 5 days**

**Report to:**
Mark Jonas
Conestoga-Rovers & Associates
5900 Hollis St, Suite A
Emeryville, CA 94608

Email: mjonas@CRAworld.com
TEL: (510) 420-070 FAX: (510) 420-917
ProjectNo: #540188; Borsuk
PO:

**Bill t**
Accounts Payable
Conestoga-Rovers & Associates
5900 Hollis St, Ste. A
Emeryville, CA 94608

***Date Received*** **09/28/2007**
***Date Printed:*** **09/28/2007**

| Sample ID | ClientSampID | Matrix | Collection Date | Hold | Requested Tests (See legend below) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 0709708-001 | MW-2 | Water | 9/28/2007 | ☐ | A | B | A | | | | | | | | | |
| 0709708-002 | MW-4 | Water | 9/28/2007 | ☐ | A | B | | | | | | | | | | |
| 0709708-003 | MW-5 | Water | 9/28/2007 | ☐ | A | B | | | | | | | | | | |

**Test Legend:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | G-MBTEX_W | 2 | MTBE_W | 3 | PREDF REPORT | 4 | | 5 | |
| 6 | | 7 | | 8 | | 9 | | 10 | |
| 11 | | 12 | | | | | | | |

**Prepared by: Elisa Venegas**

**Comments:**

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

**McCampbell Analytical, Inc.**
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

# Sample Receipt Checklist

Client Name: **Conestoga-Rovers & Associates**
Date and Time Received: **9/28/2007 4:54:42 PM**

Project Name: **#540188; Borsuk**
Checklist completed and reviewed by: Maria Venegas

WorkOrder N°: **0709708** Matrix Water
Carrier: Client Drop-In

## Chain of Custody (COC) Information

| | | |
|---|---|---|
| Chain of custody present? | Yes ☑ | No ☐ |
| Chain of custody signed when relinquished and received? | Yes ☑ | No ☐ |
| Chain of custody agrees with sample labels? | Yes ☑ | No ☐ |
| Sample IDs noted by Client on COC? | Yes ☑ | No ☐ |
| Date and Time of collection noted by Client on COC? | Yes ☑ | No ☐ |
| Sampler's name noted on COC? | Yes ☑ | No ☐ |

## Sample Receipt Information

| | | | |
|---|---|---|---|
| Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | NA ☑ |
| Shipping container/cooler in good condition? | Yes ☑ | No ☐ | |
| Samples in proper containers/bottles? | Yes ☑ | No ☐ | |
| Sample containers intact? | Yes ☑ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ☑ | No ☐ | |

## Sample Preservation and Hold Time (HT) Information

| | | | |
|---|---|---|---|
| All samples received within holding time? | Yes ☑ | No ☐ | |
| Container/Temp Blank temperature | Cooler Temp: | | NA ☑ |
| Water - VOA vials have zero headspace / no bubbles? | Yes ☑ | No ☐ | No VOA vials submitted ☐ |
| Sample labels checked for correct preservation? | Yes ☑ | No ☐ | |
| TTLC Metal - pH acceptable upon receipt (pH<2)? | Yes ☐ | No ☐ | NA ☑ |

Client contacted: Date contacted: Contacted by:

Comments:

**McCampbell Analytical, Inc.**
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

| | | |
|---|---|---|
| Conestoga-Rovers & Associates | Client Project ID: #540188; Borsuk | Date Sampled: 09/28/07 |
| 5900 Hollis St, Suite A | | Date Received: 09/28/07 |
| Emeryville, CA 94608 | Client Contact: Mark Jonas | Date Extracted: 10/01/07 |
| | Client P.O.: | Date Analyzed 10/01/07 |

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE***

Extraction method SW5030B Analytical methods SW8021B/8015Cm Work Order: 0709708

| Lab ID | Client ID | Matrix | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS |
|---|---|---|---|---|---|---|---|---|---|---|
| 001A | MW-2 | W | 44,000,a | --- | 9400 | 630 | 1400 | 3600 | 50 | 112 |
| 002A | MW-4 | W | 140,a | --- | 7.0 | ND | 1.2 | ND | 1 | 105 |
| 003A | MW-5 | W | 26,000,a | --- | 7200 | 84 | 1100 | 1600 | 50 | 116 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Reporting Limit for DF =1; ND means not detected at or above the reporting limit | W | 50 | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1 | µg/L |
| | S | NA | NA | NA | NA | NA | NA | 1 | mg/Kg |

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

**McCampbell Analytical, Inc.**
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

| | | |
|---|---|---|
| Conestoga-Rovers & Associates | Client Project ID: #540188; Borsuk | Date Sampled: 09/28/07 |
| | | Date Received: 09/28/07 |
| 5900 Hollis St, Suite A | Client Contact: Mark Jonas | Date Extracted: 10/03/07-10/04/07 |
| Emeryville, CA 94608 | Client P.O.: | Date Analyzed 10/03/07-10/04/07 |

## Methyl tert-Butyl Ether*

Extraction method SW5030B Analytical methods SW8260B Work Order: 0709708

| Lab ID | Client ID | Matrix | Methyl-t-butyl ether (MTBE) | DF | % SS |
|---|---|---|---|---|---|
| 001B | MW-2 | W | ND | 1 | 90 |
| 002B | MW-4 | W | ND | 1 | 102 |
| 003B | MW-5 | W | ND<25,j | 50 | 97 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | | | |
|---|---|---|---|
| Reporting Limit for DF =1; ND means not detected at or above the reporting limit | W | 0.5 | µg/L |
| | S | NA | NA |

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

**McCampbell Analytical, Inc.**
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

# QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0709708

**EPA Method SW8021B/8015Cm** **Extraction SW5030B** **BatchID: 30938** **Spiked Sample ID: 0709682-012A**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| TPH(btex)£ | ND | 60 | 103 | 94.9 | 8.05 | 109 | 102 | 7.11 | 70 - 130 | 30 | 70 - 130 | 30 |
| MTBE | ND | 10 | 88.8 | 96.9 | 8.77 | 99.8 | 87.5 | 13.1 | 70 - 130 | 30 | 70 - 130 | 30 |
| Benzene | ND | 10 | 98.4 | 95.8 | 2.55 | 102 | 95 | 6.73 | 70 - 130 | 30 | 70 - 130 | 30 |
| Toluene | ND | 10 | 101 | 95.4 | 5.62 | 93.6 | 95.9 | 2.48 | 70 - 130 | 30 | 70 - 130 | 30 |
| Ethylbenzene | ND | 10 | 95.5 | 90.5 | 5.18 | 104 | 101 | 3.53 | 70 - 130 | 30 | 70 - 130 | 30 |
| Xylenes | ND | 30 | 95.3 | 90.7 | 5.02 | 103 | 113 | 9.23 | 70 - 130 | 30 | 70 - 130 | 30 |
| %SS: | 102 | 10 | 107 | 107 | 0 | 102 | 90 | 12.3 | 70 - 130 | 30 | 70 - 130 | 30 |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 30938 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0709708-003A | 09/28/07 10:52 AM | 10/01/07 | 10/01/07 7:39 PM | | | | |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

DHS ELAP Certification N° 1644

QA/QC Officer

**McCampbell Analytical, Inc.**
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

# QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0709708

| EPA Method SW8260B | Extraction SW5030B | | | | BatchID: 30939 | | | Spiked Sample ID: 0709682-011B | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
| | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| Methyl-t-butyl ether (MTBE) | ND | 10 | 88.6 | 90 | 1.64 | 95.3 | 92.6 | 2.89 | 70 - 130 | 30 | 70 - 130 | 30 |
| %SS1: | 102 | 10 | 98 | 98 | 0 | 97 | 96 | 0.556 | 70 - 130 | 30 | 70 - 130 | 30 |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 30939 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0709708-001B | 09/28/07 11:13 AM | 10/03/07 | 10/03/07 4:43 AM | 0709708-002B | 09/28/07 10:35 AM | 10/03/07 | 10/03/07 3:58 AM |
| 0709708-003B | 09/28/07 10:52 AM | 10/04/07 | 10/04/07 4:26 AM | | | | |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

**McCampbell Analytical, Inc.**
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

# QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0709708

**EPA Method SW8021B/8015Cm** **Extraction SW5030B** **BatchID: 30940** **Spiked Sample ID: 0709683-003B**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| TPH(btex)£ | ND | 60 | 99.6 | 102 | 2.66 | 103 | 92.7 | 10.1 | 70 - 130 | 30 | 70 - 130 | 30 |
| MTBE | ND | 10 | 85.7 | 83.3 | 2.87 | 99 | 93.3 | 5.93 | 70 - 130 | 30 | 70 - 130 | 30 |
| Benzene | ND | 10 | 95.1 | 94.9 | 0.193 | 97.7 | 87.9 | 10.5 | 70 - 130 | 30 | 70 - 130 | 30 |
| Toluene | ND | 10 | 91.1 | 91.1 | 0 | 95.9 | 85.8 | 11.1 | 70 - 130 | 30 | 70 - 130 | 30 |
| Ethylbenzene | ND | 10 | 98.2 | 100 | 2.08 | 96.8 | 92 | 5.16 | 70 - 130 | 30 | 70 - 130 | 30 |
| Xylenes | ND | 30 | 110 | 113 | 2.99 | 91 | 85.3 | 6.43 | 70 - 130 | 30 | 70 - 130 | 30 |
| %SS: | 111 | 10 | 91 | 90 | 1.32 | 104 | 104 | 0 | 70 - 130 | 30 | 70 - 130 | 30 |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 30940 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0709708-001A | 09/28/07 11:13 AM | 10/01/07 | 10/01/07 7:05 PM | 0709708-002A | 09/28/07 10:35 AM | 10/01/07 | 10/01/07 7:17 PM |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

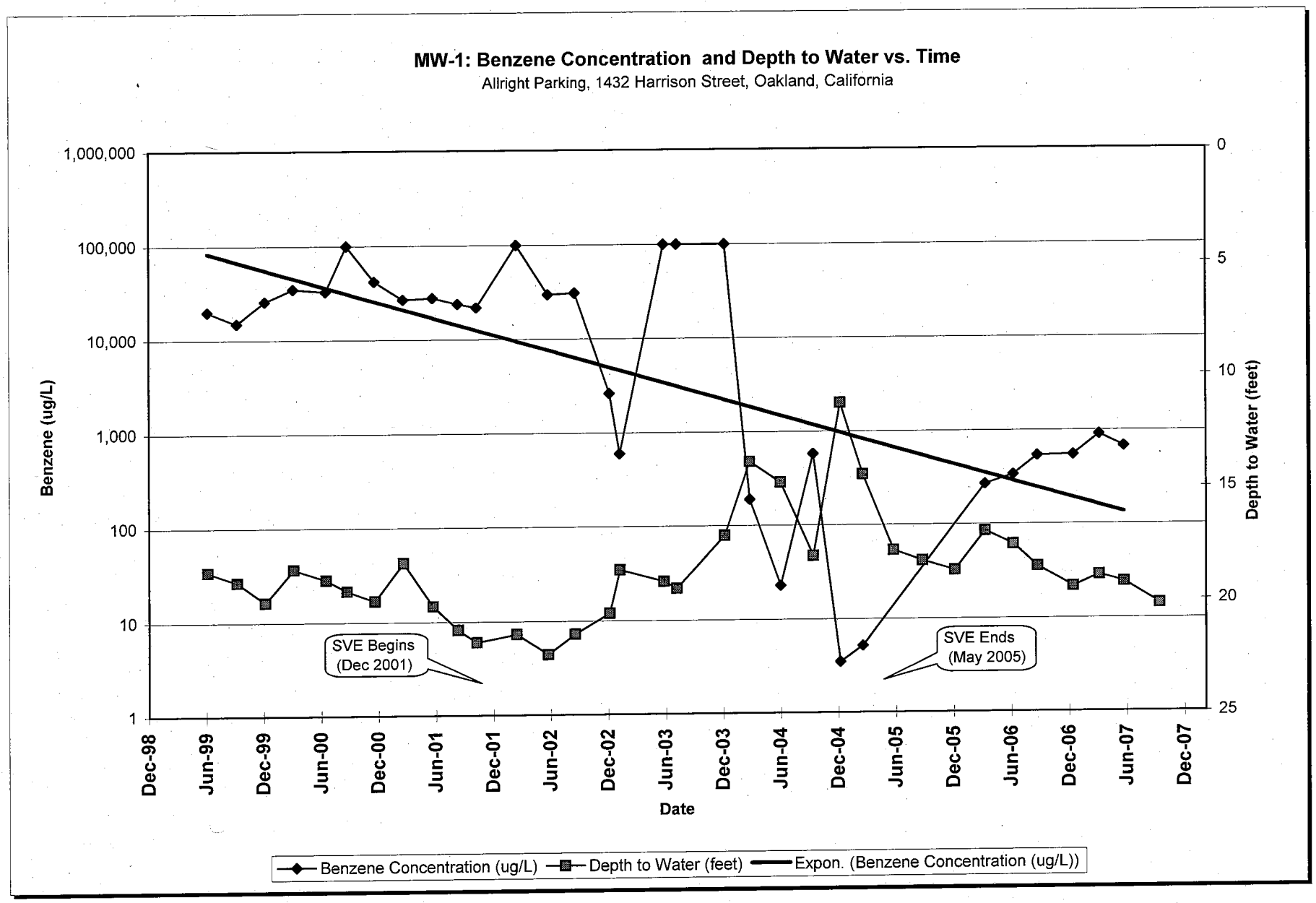
DHS ELAP Certification N° 1644

QA/QC Officer

CONESTOGA-ROVERS
& ASSOCIATES

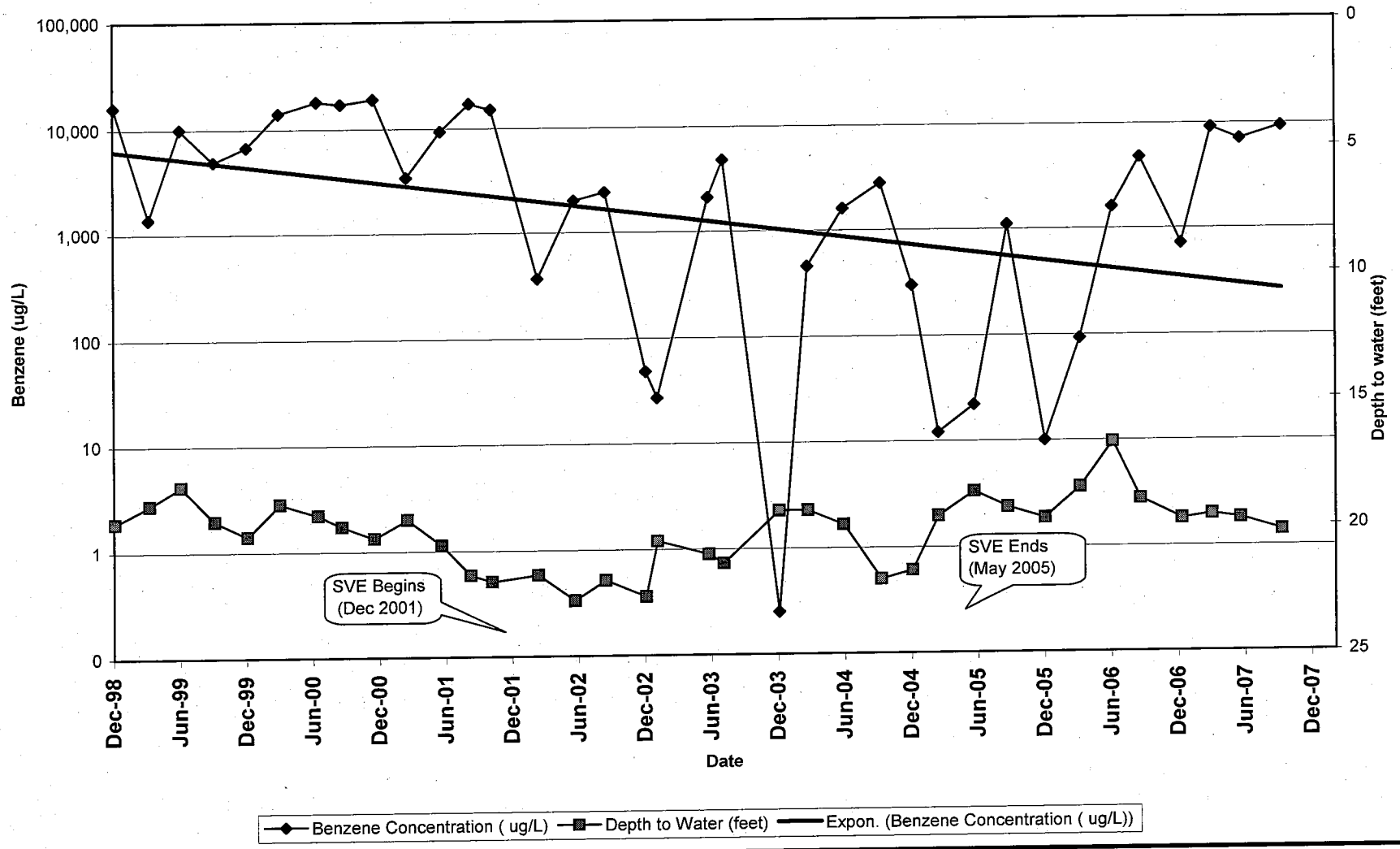
# APPENDIX C

## Benzene Concentration and Depth to Water Time-Series Graphs

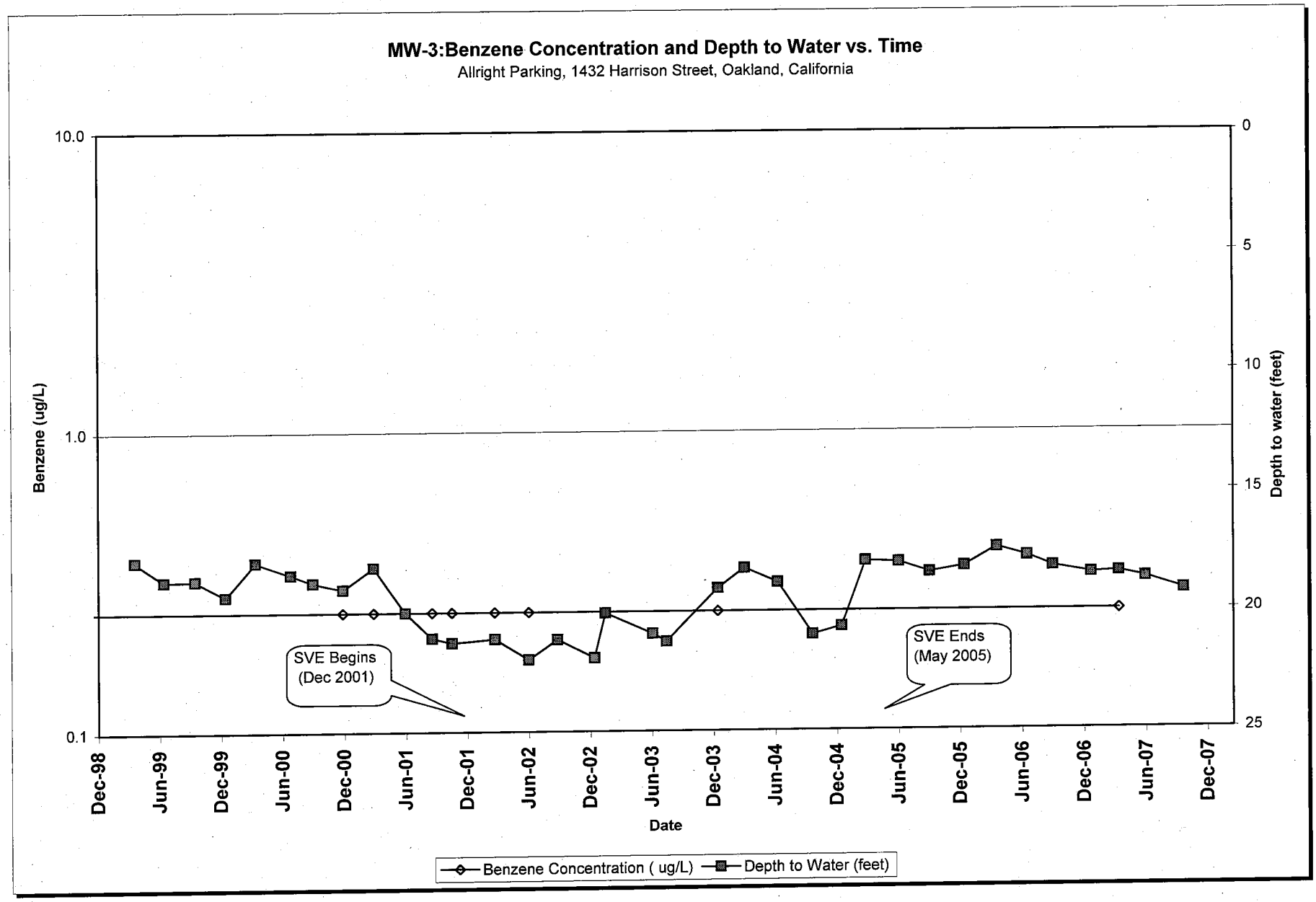

MW-1: Benzene Concentration and Depth to Water vs. Time
Allright Parking, 1432 Harrison Street, Oakland, California
Benzene (ug/L)
1,000,000
100,000
10,000
1,000
100
10
1
Depth to Water (feet)
0
5
10
15
20
25
Dec-98
Jun-99
Dec-99
Jun-00
Dec-00
Jun-01
Dec-01
Jun-02
Dec-02
Jun-03
Dec-03
Jun-04
Dec-04
Jun-05
Dec-05
Jun-06
Dec-06
Jun-07
Dec-07
Date
SVE Begins (Dec 2001)
SVE Ends (May 2005)
Benzene Concentration (ug/L)
Depth to Water (feet)
Expon. (Benzene Concentration (ug/L))

## MW-2: Benzene Concentration and Depth to Water vs. Time

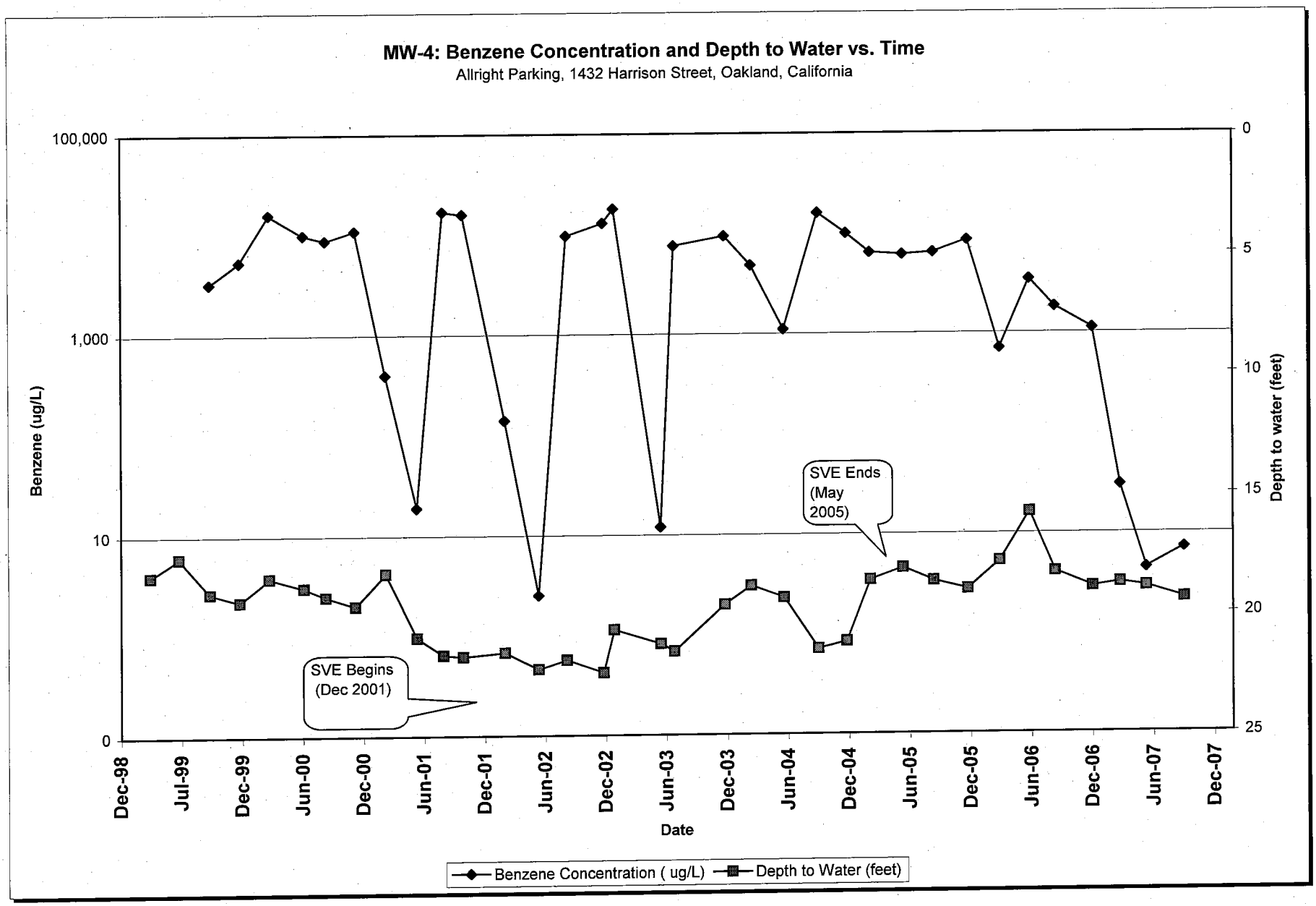
Allright Parking, 1432 Harrison Street, Oakland, California



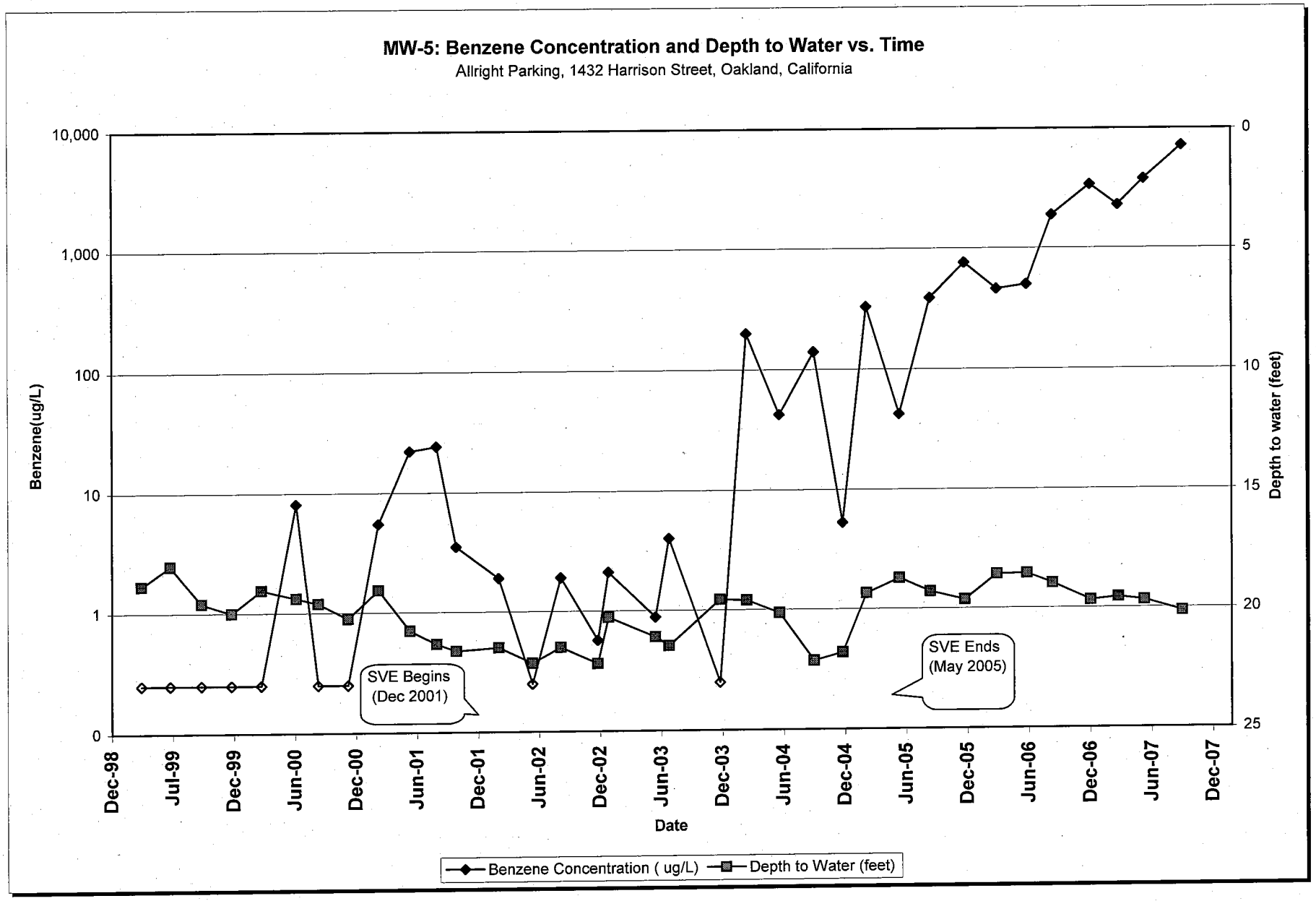

I:\IR\Borsuk - Oakland\Tables\Table Groundwater - Borsuk 540188



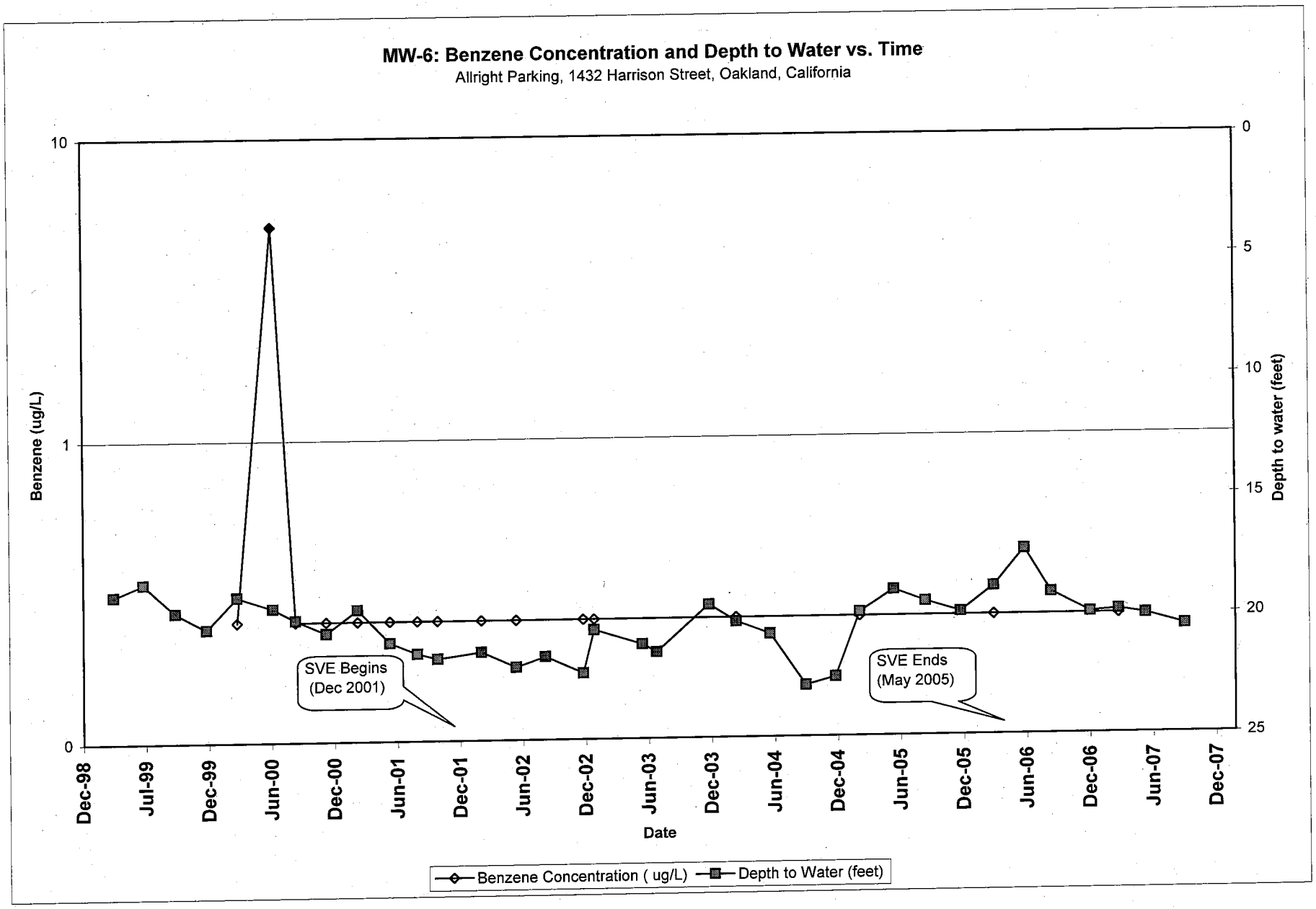

I:\IR\Borsuk - Oakland\Tables\Table Groundwater - Borsuk 540188




I:\IR\Borsuk - Oakland\Tables\Table Groundwater - Borsuk 540188




I:\IR\Borsuk - Oakland\Tables\Table Groundwater - Borsuk 540188




I:\IR\Borsuk - Oakland\Tables\Table Groundwater - Borsuk 540188