

Mr. Lee Douglas  
Douglas Parking Company  
1721 Webster Street  
Oakland, California 94612

Ms. Barbara Jakub  
Alameda County Environmental Health  
Department of Environmental Health  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, CA 94502-6577

**Re: Douglas Parking Company**  
1721 Webster Street  
Oakland, California  
ACEH File No. 129

**RECEIVED**

*9:57 am, Dec 07, 2011*

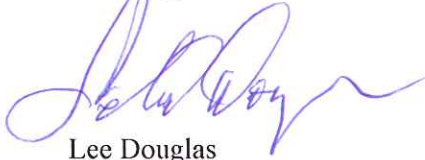
Alameda County  
Environmental Health

Dear Ms. Jakub:

I, Mr. Lee Douglas, have retained Pangea Environmental Services, Inc. (Pangea) as the environmental consultant for the project referenced above. Pangea is submitting the attached report on my behalf.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

Sincerely,



Lee Douglas



November 29, 2011

***VIA ALAMEDA COUNTY FTP SITE***

Ms. Barbara Jakub  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, California 94502

Re: **Groundwater Monitoring and Remediation Report – Second Half 2011**  
Douglas Parking Company  
1721 Webster Street  
Oakland, California  
ACEH File No. 129

Dear Ms. Jakub:

On behalf of the Douglas Parking Company, Pangea Environmental Services, Inc. has prepared this *Groundwater Monitoring and Remediation Report – Second Half 2011* for the above-referenced site. The report describes groundwater monitoring and sampling, site remediation, and other site activities.

If you have any questions, please call me at (510) 435-8664.

Sincerely,

**Pangea Environmental Services, Inc.**

A handwritten signature in blue ink that reads "Bob Clark-Riddell".

Bob Clark-Riddell, P.E.  
Principal Engineer

Attachment: *Groundwater Monitoring and Remediation Report – Second Half 2011*

cc: Mr. Lee Douglas, Douglas Parking Company, 1721 Webster Street, Oakland, California 94612  
SWRCB Geotracker Database (electronic copy)

**PANGEA Environmental Services, Inc.**

1710 Franklin Street, Suite 200, Oakland, CA 94612 Telephone 510.836.3700 Facsimile 510.836.3709 [www.pangeaenv.com](http://www.pangeaenv.com)



**GROUNDWATER MONITORING AND REMEDIATION REPORT  
SECOND HALF 2011**

**Douglas Parking Company  
1721 Webster Street  
Oakland, California  
File No. 4070**

**November 29, 2011**

*Prepared for:*

Mr. Lee Douglas  
1721 Webster Street  
Oakland, California 94612


*Prepared by:*

Pangea Environmental Services, Inc.  
1710 Franklin Street, Suite 200  
Oakland, California 94612

*Written by:*



  
Morgan Gillies  
Project Manager

  
Bob Clark-Riddell, P.E.  
Principal Engineer

**PANGEA Environmental Services, Inc.**

## **INTRODUCTION**

On behalf of Douglas Parking Company, Pangea Environmental Services, Inc. (Pangea), performed groundwater monitoring and sampling during this half-year at the subject site (Figure 1). Current groundwater analytical results and elevation data are shown on Figure 2. Current and historical groundwater data are summarized on Table 1. Site remediation data are summarized on Table 2.

## **SITE BACKGROUND**

The site is currently being utilized as a parking garage, and is located between 17th and 19th Streets in downtown Oakland, California, approximately four miles east of San Francisco Bay and one quarter of a mile west of Lake Merritt (Figure 1). The site is relatively flat with an elevation of approximately 30 feet (ft) above mean sea level (msl).

Several former underground storage tank (UST) sites are located close to the site, including Prentiss Properties to the northeast at 1750 Webster Street, a former gas station to the east at 1700 Webster, and a former Chevron service station which is located approximately 400 feet to the southwest on the corner of 17<sup>th</sup> Street and Harrison Street.

On August 3 and 6, 1992, Parker Environmental Services removed one 1,000-gallon and two 500-gallon gasoline underground storage tanks (USTs) from the site. Up to 1,500 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg) and up to 12 mg/kg benzene were detected in the soil samples collected from the UST excavation.

Several investigations have been completed at the site. On July 8 and September 8, 1994, Gen Tech/Piers Environmental, Inc. (Gen Tech) of San Jose, California drilled six exploratory borings and installed three groundwater monitoring wells (MW-1 through MW-3). In February and May 1996, Cambria Environmental Technology (Cambria) of Emeryville, California advanced seven geoprobe soil borings and installed two groundwater monitoring wells (MW-4 and MW-5). On August 8, 2000, *Conduit Study and File Review Report* was submitted by Cambria Environmental Technology. The report provided significant information about offsite hydrocarbon impact and offsite sources, and concluded that there were no identified conduits for contaminant migration in groundwater. On June 27, 2003 Cambria installed two additional offsite monitoring wells (MW-6 and MW-7) to facilitate additional plume delineation.

Limited site remediation has been conducted at the site. In January 1998, Cambria installed ORC socks in well MW-2 to enhance the natural attenuation of dissolved-phase hydrocarbons. Dissolved oxygen (DO) concentrations temporarily increased in well MW-2 following the ORC sock installation. In February and March 1999, a total of 120 gallons of 7.5% hydrogen peroxide solution was added into monitoring wells

MW-2 and MW-3 to oxidize hydrocarbons and also increase DO levels to enhance biodegradation of dissolved-phase hydrocarbons. The hydrogen peroxide *temporarily* increased groundwater DO levels, but hydrocarbon concentrations remained at elevated levels.

On March 4, 2003, Cambria installed a co-axial air sparging/soil vapor extraction well (SV-1/AS-1) and two angled air sparging wells (AS-2 and AS-3) to approximately 30 ft bgs (Figure 3). The wells were installed to facilitate feasibility testing and future site remediation. Site remediation via soil vapor extraction and air sparging began in October 2007. To improve system performance and further evaluate site conditions, Pangea submitted an *Investigation and Remediation Workplan* dated March 5, 2009, which proposed additional investigation, remediation system expansion, and evaluation of groundwater geochemistry.

On November 19, 2010 ACEH issued a letter requesting a cross section, additional information regarding a potential offsite source and a preferential pathway survey. In December 2010 Pangea informed the ACEH that the significant information about the offsite hydrocarbon impact was presented in the August 8, 2000 *Conduit Study and File Review Report* prepared by Cambria. In December 2010 the UST Cleanup Fund prepared a 5 Year Review that recommended a site conceptual model, risk assessment, and sensitive receptor survey to help facilitate selection of an enhanced remediation technique. In March 2011, Pangea provided information requested by the ACEH and proposed remediation and assessment tasks to help facilitate regulatory case closure. In a letter dated June 17, 2011, ACEH requested a site conceptual model with a preferential pathway evaluation. Pangea will soon submit a *Sensitive Receptor Survey, Conduit Study and Site Conceptual Model*.

## **GROUNDWATER MONITORING AND SAMPLING**

On July 12, 2011, Pangea conducted groundwater monitoring and sampling at the site. All site monitoring wells were gauged for depth to water. Following the sampling protocol presented in Appendix A, groundwater samples were collected from monitoring wells MW-2, MW-3, MW-4 and MW-6..

Before well purging, the dissolved oxygen (DO) concentration was measured in each well. DO was measured by lowering a downwell sensor to the approximate middle of the water column, and allowing the reading to stabilize during gentle height adjustment. Prior to sample collection approximately three casing volumes of water were purged using disposable bailers, an electric submersible pump or new polyethylene tubing with a check valve. During well purging field technicians measured pH, temperature and conductivity. A groundwater sample was collected from each well with a disposable bailer and decanted into the appropriate containers supplied by the analytical laboratory. Groundwater samples were labeled, placed in protective plastic bags, and stored on crushed ice at or below 4° C. All samples were transported under chain-of-custody to the State-certified analytical laboratory. Purge water was stored onsite in DOT-approved 55-gallon drums. Field data sheets are presented as Appendix B.

## **Monitoring Results**

Groundwater elevation and analytical data are described below and summarized on Table 1 and Figure 2. Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015C; and benzene, toluene, ethylbenzene and xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8021B. Samples were analyzed by McCampbell Analytical, Inc. of Pittsburg, California, a State-certified laboratory. The laboratory analytical report is included as Appendix C.

### **Groundwater Flow Direction**

Based on depth-to-water measurements collected on July 12, 2011, groundwater beneath the site flowed *north-northeastwards* (Figure 2). The groundwater depth measurements and inferred flow direction during this event are consistent with historical site conditions. Groundwater depths at the site have historically ranged from approximately 14 to 23 ft below ground surface (bgs), equivalent to a groundwater elevation range from 5 to 13 feet above msl (Table 1).

### **Hydrocarbon and MTBE Distribution in Groundwater**

TPHg, benzene and MTBE concentrations in site groundwater this event are shown on Figure 2. During this event the maximum TPHg (15,000 µg/L) and benzene (22 µg/L) concentrations were detected in onsite well MW-2.

To evaluate site remediation effectiveness, TPHg and benzene concentration trends in key source area wells MW-2 and MW-3 are graphed on Figure 3. Most importantly, benzene concentrations have dramatically decreased in source area well MW-2 since the commencement of SVE/AS in October 2007. However, TPHg concentrations remain elevated in wells MW-2 and MW-3.

MTBE was not detected above reporting limits in any of the sampled wells this quarter. The only apparent historical MTBE detection at the site (48 µg/L in well MW-3 by EPA Method 8020) was interpreted to be a false positive, based on the results of confirmation testing using EPA Method 8260 on July 21, 2003. Since the tank was removed in 1992 and because of the lack of confirmed detectable historical MTBE, MTBE is not a compound of concern at this site.

## **REMEDIATION SYSTEM SUMMARY**

### **Soil Vapor Extraction/Air Sparge System**

The soil vapor extraction (SVE) remediation system consists of a blower that extracts soil vapor from well SVE-1. Extracted vapors are routed through a moisture separator then treated by two 2,000-lb canisters of granular activated carbon plumbed in series. The treated vapor is discharged to the atmosphere in accordance

with Bay Area Air Quality Management District (BAAQMD) requirements. The air sparging (AS) system consists of a compressor for injecting air into wells AS-1, AS-2 and/or AS-3. Injection into AS wells is controlled by timer-activated solenoid valves. Wells SVE-1 and AS-1 are constructed as vertical co-axial wells, with angled wells AS-2 and AS-3 located in the same vault. A cross section of the remediation wells is included as Figure 4. The remediation system layout is shown on Figure 5.

## **Operation and Performance**

The SVE system operated from October 2007 to October 2010 with periodic cycling for rebound testing. By October 26, 2010, the SVE system operated for a total of about 19,396 hours (approximately 808 days) and the system removed a total of approximately 3,212 lbs TPHg and 6.9 lbs benzene. The AS system operated from November 2007 to April 2010, when the AS compressor broke down. Starting in August 2008, air sparge wells AS-1 and AS-3 were disconnected to focus air sparging on well AS-2 to target hydrocarbons in nearby key monitoring well MW-2. In prior reports Pangea proposed cost effective techniques to enhance site remediation. Pangea is awaiting agency direction regarding Pangea's remediation recommendations. System operation and performance data is summarized on Table 2.

## **OTHER SITE ACTIVITIES**

### **Enhanced Site Remediation**

Pangea submitted an *Investigation and Remediation Workplan* dated March 5, 2009, which recommended additional investigation and expansion of the remediation system. On November 19, 2010, ACEH issued a letter requesting a cross section, additional information regarding a potential offsite source and a preferential pathway survey. In December 2010, the California UST Cleanup Fund prepared a 5 Year Review that recommended a site conceptual model, risk assessment, and sensitive receptor survey to help facilitate selection of an enhanced remediation technique. In December 2010, Pangea informed the ACEH that much of the work recently requested by ACEH and the UST Cleanup Fund has already been addressed in the August 8, 2000 *Conduit Study and File Review Report* prepared by Cambria. In March 2011, Pangea provided information requested by the ACEH and proposed remediation and assessment tasks to help facilitate regulatory case closure.

### **Sensitive Receptor Survey, Conduit Study, and Site Conceptual Model**

On June 17, 2011, ACEH issued a letter requesting a site conceptual model and a preferential pathway evaluation. Pangea plans to soon submit a *Sensitive Receptor Survey, Conduit Study and Site Conceptual Model*.

## **Semi-Annual Groundwater Monitoring**

Pangea will conduct semi-annual groundwater monitoring and sampling at the site in accordance with the approved monitoring program shown in Appendix A. All monitoring wells will be gauged for depth to water. Groundwater samples from program wells will be analyzed for TPHg, BTEX and MTBE by EPA Method 8015Cm/8021B.

## **ELECTRONIC REPORTING**

This report will be submitted to Alameda County Environmental Health via upload to the County's ftp site. Applicable data, maps, and reports for groundwater monitoring and other activities will be uploaded to the State Water Resource Control Board's Geotracker database. As requested, report hard copies will no longer be provided to local agencies.

## **ATTACHMENTS**

Figure 1 – Vicinity Map

Figure 2 – Groundwater Elevations and Hydrocarbon Concentration Map

Figure 3 – TPHg and Benzene Concentration Trends in Groundwater

Figure 4 – Cross Section of Remediation Wells

Figure 5 – Remediation System Layout

Table 1 – Groundwater Elevation and Analytical Data

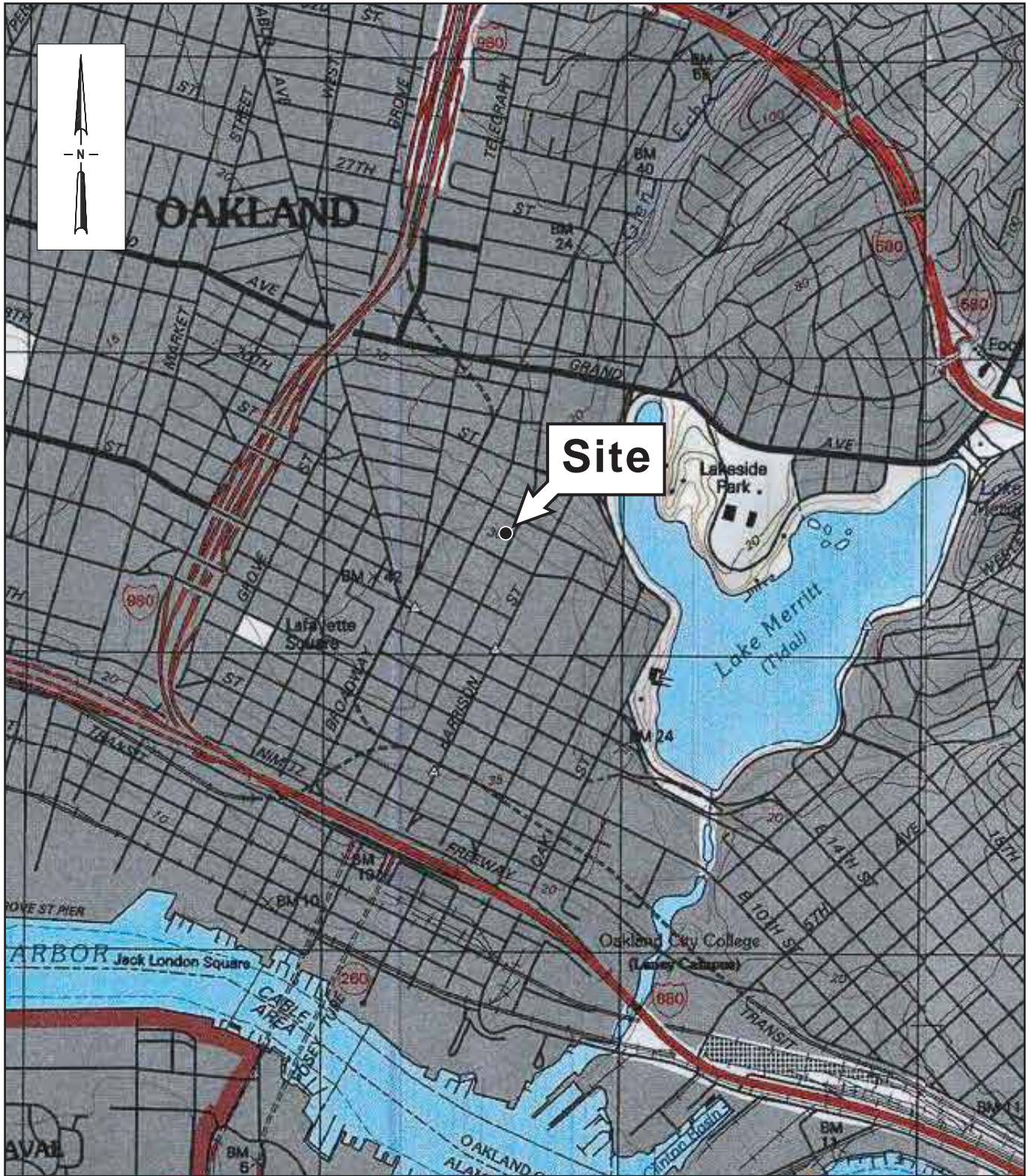
Table 2 – SVE System Performance Summary

Appendix A – Groundwater Monitoring Program

Appendix B – Groundwater Monitoring Field Data Sheets

Appendix C – Laboratory Analytical Report





SOURCE: TOPOI MAPS



SCALE : 1" = 1/4 MILE

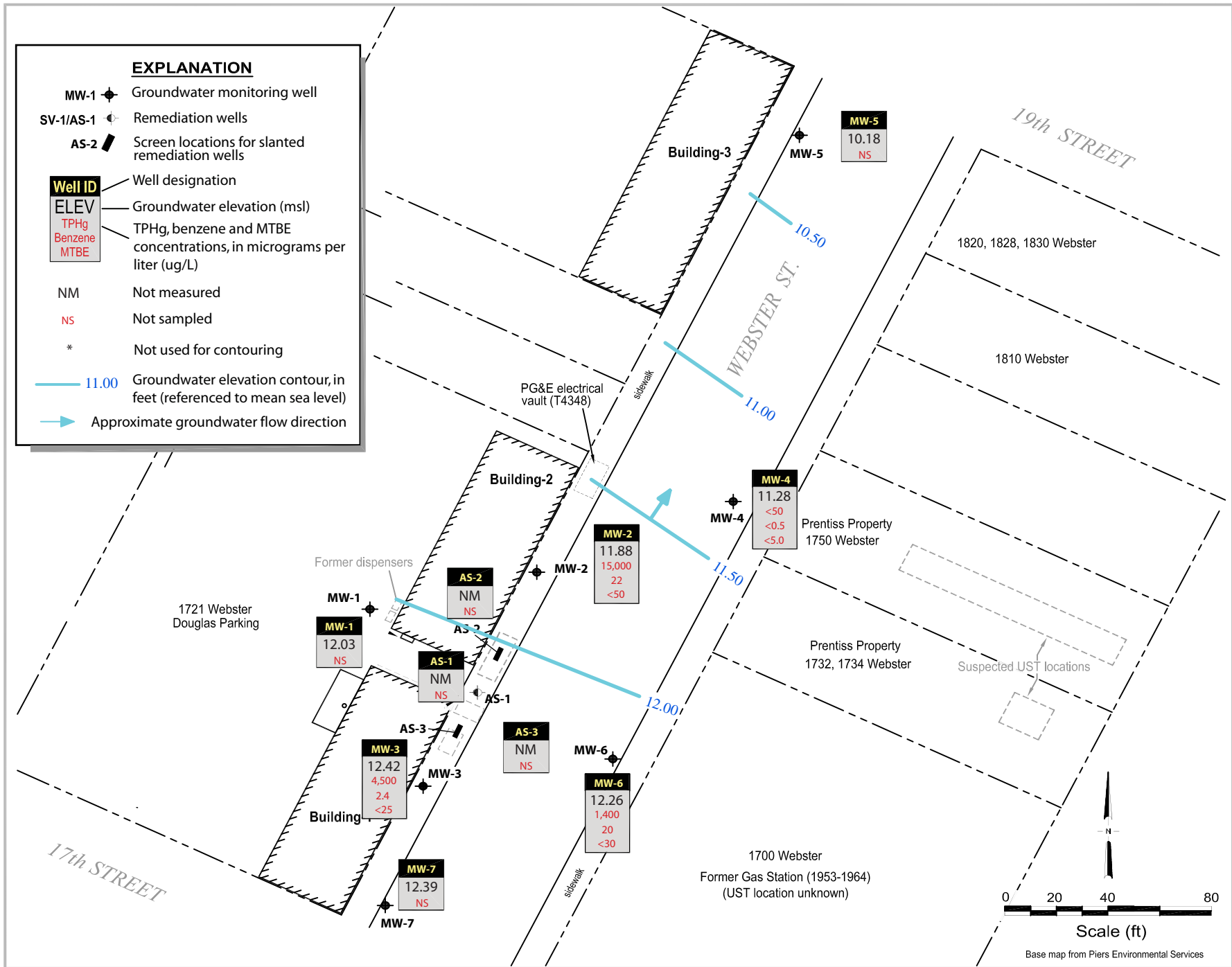
Figure

1

**Douglas Parking Facility**  
 1721 Webster Street  
 Oakland, California



Vicinity Map



**Douglas Parking**  
 1721 Webster Street  
 Oakland, California



**Groundwater Elevations and  
 Hydrocarbon Concentration Map**

July 12, 2011

FIGURE

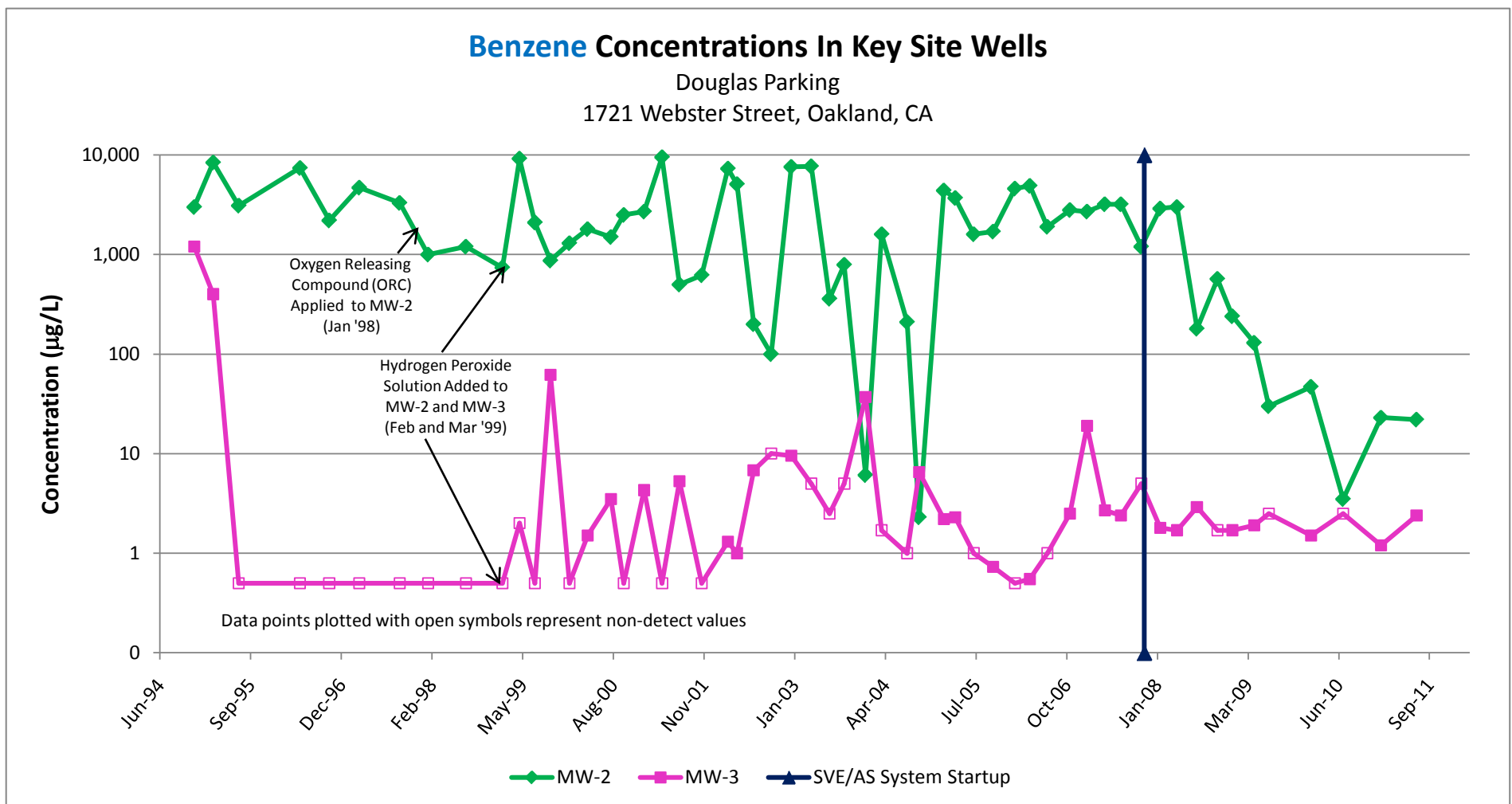
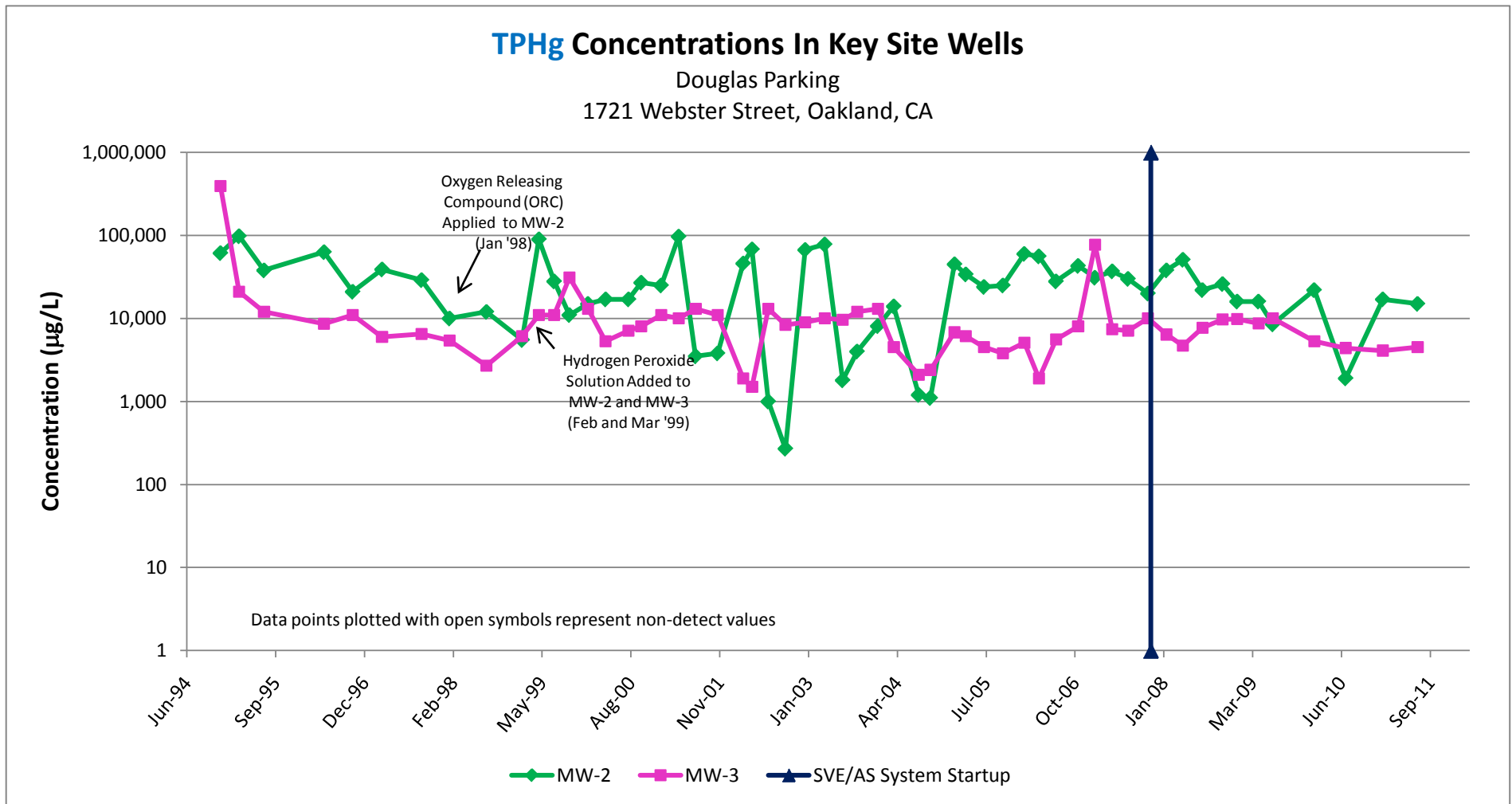
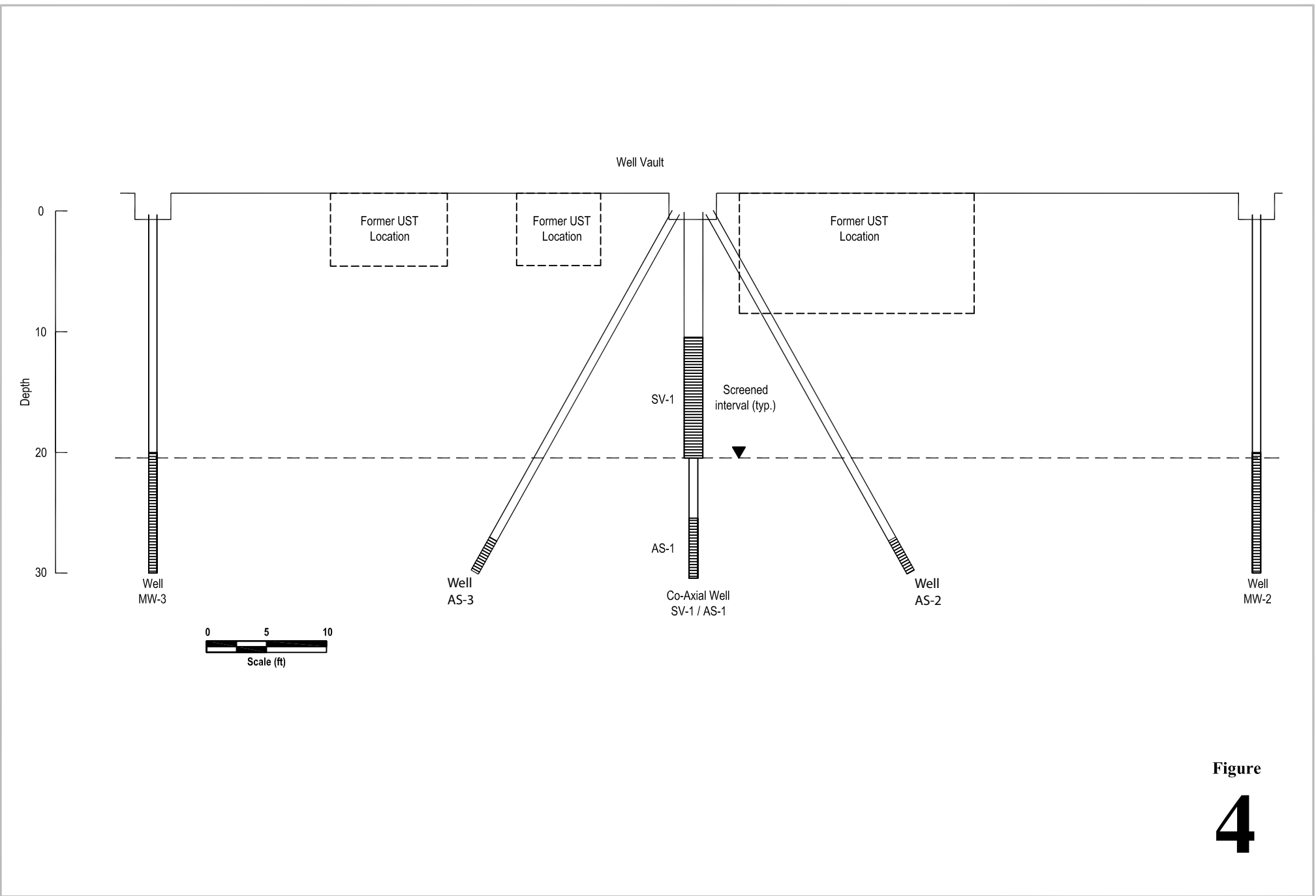



Figure 3 - TPHg and Benzene Concentration Trends in Groundwater



Figure

4

| EXPLANATION   |  |
|---|--|
| MW-1  | Groundwater monitoring well                    |
| SV-1, AS-1  | Remediation well                               |
|  | Former Underground Storage Tanks/Dispensers    |
| AS-2  | Screen locations for slanted remediation wells |

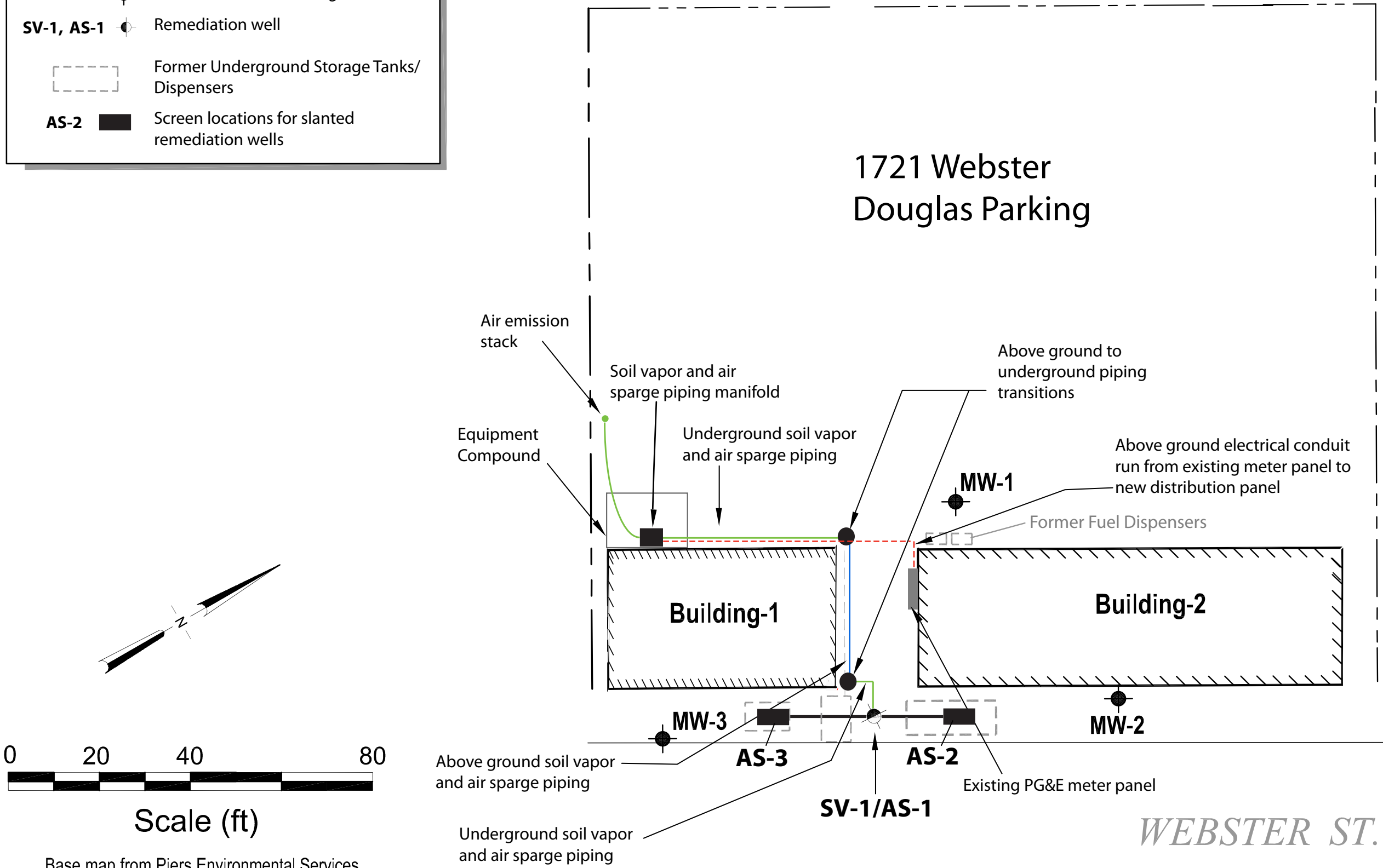


Figure 5

**Douglas Parking**  
 1721 Webster Street  
 Oakland, California



**Remediation System  
 Layout**

# PANGEA

**Table 1 - Groundwater Elevation and Analytical Data.**  
Douglas Parking Company, 1721 Webster Street, Oakland, California

| Boring / Well ID<br><i>TOC</i> | Date             | Depth to Water (ft) | Groundwater Elevation (ft amsl) | TPHg              | Benzene | Toluene | Ethylbenzene<br>(µg/L) | Xylenes | MTBE |  |
|--------------------------------|------------------|---------------------|---------------------------------|-------------------|---------|---------|------------------------|---------|------|--|
| <b>Monitoring Wells</b>        |                  |                     |                                 |                   |         |         |                        |         |      |  |
| MW-1                           | 12/2/1994        | 19.42               | 9.83                            | ND                | ND      | ND      | ND                     | ND      | -    |  |
| 29.25                          | 3/6/1995         | 20.69               | 9.04                            | ND                | ND      | ND      | ND                     | ND      | -    |  |
| 29.73                          | 7/11/1995        | 20.65               | 9.16                            | ND                | ND      | ND      | ND                     | ND      | -    |  |
| 29.81                          | 5/10/1996        | 20.80               | 9.01                            | ND                | ND      | ND      | ND                     | ND      | -    |  |
|                                | 10/2/1996        | 21.35               | 8.46                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 2/28/1997        | 20.57               | 9.24                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 9/16/1997        | 21.50               | 8.31                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 2/5/1998         | 20.91               | 8.90                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 8/11/1998        | 20.50               | 9.31                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 2/8/1999         | 21.42               | 8.39                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 2/24/1999        | 22.99               | 6.82                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 3/3/1999         | 20.84               | 8.97                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 3/10/1999        | 20.89               | 8.92                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 3/17/1999        | 20.84               | 8.97                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 5/4/1999         | 20.80               | 9.01                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 7/20/1999        | 21.25               | 8.56                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 10/5/1999        | 21.37               | 8.44                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 1/7/2000         | 21.65               | 8.16                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 4/6/2000         | 21.05               | 8.76                            | <50               | <0.5    | <0.5    | <0.5                   | <0.5    | <5.0 |  |
|                                | 7/31/2000        | 21.13               | 8.68                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 10/3/2000        | 21.69               | 8.12                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 1/12/2001        | 22.00               | 7.81                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 4/11/2001        | 22.16               | 7.65                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 7/6/2001         | 22.57               | 7.24                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 10/25/2001       | 22.71               | 7.10                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 3/4/2002         | 22.53               | 7.28                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 4/18/2002        | 22.81               | 7.00                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 7/9/2002         | 22.95               | 6.86                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 10/4/2002        | 23.13               | 6.68                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 1/12/2003        | 22.05               | 7.76                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 4/21/2003        | 21.17               | 8.64                            | -                 | -       | -       | -                      | -       | -    |  |
| 32.75                          | 7/21/2003        | 21.39               | 11.36                           | -                 | -       | -       | -                      | -       | -    |  |
|                                | 10/2/2003        | 21.64               | 11.11                           | -                 | -       | -       | -                      | -       | -    |  |
|                                | 1/15/2004        | 21.10               | 11.65                           | -                 | -       | -       | -                      | -       | -    |  |
|                                | 4/5/2004         | 21.20               | 11.55                           | -                 | -       | -       | -                      | -       | -    |  |
|                                | 8/9/2004         | 22.97               | 9.78                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 10/7/2004        | 23.55               | 9.20                            | -                 | -       | -       | -                      | -       | -    |  |
|                                | 2/7/2005         | 20.90               | 11.85                           | <50               | <0.5    | <0.5    | <0.5                   | <0.5    | <5.0 |  |
|                                | 4/5/2005         | 20.60               | 12.15                           | -                 | -       | -       | -                      | -       | -    |  |
|                                | 7/6/2005         | 20.66               | 12.09                           | -                 | -       | -       | -                      | -       | -    |  |
|                                | 10/10/2005       | 21.16               | 11.59                           | -                 | -       | -       | -                      | -       | -    |  |
|                                | 1/26/2006        | 20.73               | 12.02                           | <50               | <0.5    | <0.5    | <0.5                   | <0.5    | <5.0 |  |
|                                | 4/10/2006        | 20.05               | 12.70                           | -                 | -       | -       | -                      | -       | -    |  |
|                                | 7/6/2006         | 20.90               | 11.85                           | <50               | <0.5    | <0.5    | <0.5                   | <0.5    | <5.0 |  |
|                                | 10/26/2006       | 21.80               | 10.95                           | <50               | <0.5    | <0.5    | <0.5                   | <0.5    | <5.0 |  |
|                                | 1/19/2007        | 22.02               | 10.73                           | --                | --      | --      | --                     | --      | --   |  |
|                                | 4/17/2007        | 22.13               | 10.62                           | --                | --      | --      | --                     | --      | --   |  |
|                                | 7/6/2007         | 21.83               | 10.92                           | --                | --      | --      | --                     | --      | --   |  |
|                                | 10/15/2007       | 22.28               | 10.47                           | --                | --      | --      | --                     | --      | --   |  |
|                                | 1/17/2008        | 22.33               | 10.42                           | <50               | <0.5    | <0.5    | <0.5                   | <0.5    | <5.0 |  |
|                                | 4/9/2008         | 22.11               | 10.64                           | --                | --      | --      | --                     | --      | --   |  |
|                                | 7/17/2008        | 22.50               | 10.25                           | --                | --      | --      | --                     | --      | --   |  |
|                                | 10/27/2008       | 22.75               | 10.00                           | --                | --      | --      | --                     | --      | --   |  |
|                                | 1/9/2009         | 22.89               | 9.86                            | <50               | <0.5    | <0.5    | <0.5                   | <0.5    | <5.0 |  |
|                                | 4/27/2009        | 22.40               | 10.35                           | --                | --      | --      | --                     | --      | --   |  |
|                                | 7/9/2009         | 22.55               | 10.20                           | --                | --      | --      | --                     | --      | --   |  |
|                                | 2/3/2010         | 22.08               | 10.67                           | <50               | <0.5    | <0.5    | <0.5                   | <0.5    | <5.0 |  |
|                                | 7/13/2010        | 21.20               | 11.55                           | ---               | ---     | ---     | ---                    | ---     | ---  |  |
|                                | 1/17/2011        |                     |                                 | Well Inaccessible |         |         |                        |         |      |  |
|                                | <b>7/12/2011</b> | <b>20.72</b>        | <b>12.03</b>                    | --                | --      | --      | --                     | --      | --   |  |
| MW-2                           | 12/2/1994        | 19.50               | 7.60                            | 61,300            | 3,000   | 3,900   | 160                    | 4,500   | -    |  |
| 27.10                          | 3/6/1995         | 18.49               | 8.61                            | 98,000            | 8,400   | 16,000  | 2,000                  | 2,600   | -    |  |
| 27.40                          | 7/11/1995        | 18.45               | 8.95                            | 38,000            | 3,100   | 7,500   | 940                    | 3,700   | -    |  |
|                                | 5/10/1996        | 18.56               | 8.84                            | 63,000            | 7,400   | 16,000  | 1,500                  | 6,000   | -    |  |

# PANGEA

**Table 1 - Groundwater Elevation and Analytical Data.**  
Douglas Parking Company, 1721 Webster Street, Oakland, California

| Boring / Well<br>ID<br>TOC      | Date             | Depth to<br>Water<br>(ft) | Groundwater<br>Elevation<br>(ft amsl) | TPHg          | Benzene   | Toluene   | Ethylbenzene Xylenes MTBE<br>(µg/L) |            |               |     |
|---------------------------------|------------------|---------------------------|---------------------------------------|---------------|-----------|-----------|-------------------------------------|------------|---------------|-----|
|                                 |                  |                           |                                       |               |           |           | ←                                   | →          | →             |     |
| MW-2<br>(cont.)                 | 10/2/1996        | 19.15                     | 8.25                                  | 21,000        | 2,200     | 3,400     | 430                                 | 1,600      | -             |     |
|                                 | 2/28/1997        | 18.43                     | 8.97                                  | 39,000        | 4,700     | 9,600     | 950                                 | 4,200      | ND            |     |
|                                 | 9/16/1997        | 19.26                     | 8.14                                  | 29,000        | 3,300     | 5,800     | 690                                 | 2,900      | <620          |     |
|                                 | 2/5/1998         | 18.66                     | 8.74                                  | 10,000        | 1,000     | 2,000     | 170                                 | 860        | <330          |     |
|                                 | 8/11/1998        | 18.41                     | 8.99                                  | 12,000        | 1,200     | 2,300     | 260                                 | 1,400      | 300           |     |
|                                 | 2/8/1999         | 19.84                     | 7.56                                  | 5,500         | 740       | 1,200     | 150                                 | 780        | 60            |     |
|                                 | 2/17/1999        | 18.94                     | 8.46                                  | -             | -         | -         | -                                   | -          | -             |     |
|                                 | 2/24/1999        | 20.76                     | 6.64                                  | -             | -         | -         | -                                   | -          | -             |     |
|                                 | 3/3/1999         | 18.55                     | 8.85                                  | -             | -         | -         | -                                   | -          | -             |     |
|                                 | 3/10/1999        | 20.74                     | 6.66                                  | -             | -         | -         | -                                   | -          | -             |     |
|                                 | 3/17/1999        | 18.57                     | 8.83                                  | -             | -         | -         | -                                   | -          | -             |     |
|                                 | 5/4/1999         | 18.55                     | 8.85                                  | 90,000        | 9,200     | 21,000    | 1,600                               | 10,000     | 560           |     |
|                                 | 7/20/1999        | 18.98                     | 8.42                                  | 28,000        | 2,100     | 3,700     | 900                                 | 4,200      | <860          |     |
|                                 | 10/5/1999        | 19.10                     | 8.30                                  | 11,000        | 870       | 180       | 30                                  | 1,400      | <110          |     |
|                                 | 1/7/2000         | 19.41                     | 7.99                                  | 15,000        | 1,300     | 2,100     | 440                                 | 1,800      | <14           |     |
|                                 | 4/6/2000         | 18.80                     | 8.60                                  | 17,000        | 1,800     | 3,100     | 500                                 | 2,200      | <50           |     |
|                                 | 7/31/2000        | 18.87                     | 8.53                                  | 17,000        | 1,500     | 2,700     | 430                                 | 2,100      | <200          |     |
|                                 | 10/3/2000        | 19.45                     | 7.95                                  | 27,000        | 2,500     | 4,000     | 660                                 | 2,900      | <50           |     |
|                                 | 1/12/2001        | 19.80                     | 7.60                                  | 25,000        | 2,700     | 4,100     | 670                                 | 3,000      | <200          |     |
|                                 | 4/11/2001        | 20.03                     | 7.37                                  | 97,000        | 9,500     | 21,000    | 2,200                               | 7,900      | <200          |     |
|                                 | 7/6/2001         | 20.19                     | 7.21                                  | 3,500         | 500       | 150       | 11                                  | 420        | <5.0          |     |
|                                 | 10/25/2001       | 20.35                     | 7.05                                  | 3,800         | 620       | 230       | 70                                  | 400        | <50           |     |
|                                 | 3/4/2002         | 20.37                     | 7.03                                  | 46,000        | 7,300     | 12,000    | 870                                 | 3,200      | <500          |     |
|                                 | 4/18/2002        | 20.15                     | 7.25                                  | 68,000        | 5,100     | 8,900     | 1,100                               | 4,000      | <1,000        |     |
|                                 | 7/9/2002         | 21.09                     | 6.31                                  | 1,000         | 200       | 8.9       | 0.67                                | 82         | <10           |     |
|                                 | 10/4/2002        | 21.28                     | 6.12                                  | 270           | 100       | 3.4       | 0.53                                | 10         | <5.0          |     |
|                                 | 1/12/2003        | 20.59                     | 6.81                                  | 67,000        | 7,600     | 13,000    | 1,400                               | 5,600      | <500          |     |
|                                 | 4/21/2003        | 19.98                     | 7.42                                  | 78,000        | 7,700     | 12,000    | 1,900                               | 6,900      | <500          |     |
|                                 | 30.40            | 7/21/2003                 | 20.08                                 | 10.32         | 1,800     | 360       | 16                                  | <5.0       | 190           | <50 |
|                                 |                  | 10/2/2003                 | 20.41                                 | 9.99          | 4,000     | 790       | 110                                 | 60         | 350           | <50 |
| 1/15/2004                       |                  | 19.93                     | 10.47                                 | 8,100         | 6.1       | 23        | 44                                  | 530        | <50           |     |
| 4/5/2004                        |                  | 18.99                     | 11.41                                 | 14,000        | 1,600     | 2,100     | 550                                 | 2,500      | <500          |     |
| 8/9/2004                        |                  | 19.79                     | 10.61                                 | 1,200         | 210       | 16        | 14                                  | 100        | <20           |     |
| 10/7/2004                       |                  | 20.26                     | 10.14                                 | 1,100         | 2.3       | 9.8       | 2.9                                 | 36         | <5.0          |     |
| 2/7/2005                        |                  | 18.80                     | 11.60                                 | 45,000        | 4,400     | 4,800     | 1,400                               | 5,800      | <200          |     |
| 4/5/2005                        |                  | 18.40                     | 12.00                                 | 34,000        | 3,700     | 3,600     | 1,200                               | 5,300      | <500 (<5.0)   |     |
| 7/6/2005                        |                  | 18.48                     | 11.92                                 | 24,000        | 1,600     | 1,700     | 570                                 | 2,800      | <500          |     |
| 10/10/2005                      |                  | 19.00                     | 11.40                                 | 25,000        | 1,700     | 2,100     | 710                                 | 3,200      | <500          |     |
| 1/26/2006                       |                  | 18.58                     | 11.82                                 | 60,000        | 4,600     | 7,200     | 1,600                               | 6,900      | <1,000        |     |
| 4/10/2006                       |                  | 17.84                     | 12.56                                 | 56,000        | 4,900     | 7,500     | 1,200                               | 7,400      | <500          |     |
| 7/6/2006                        |                  | 18.76                     | 11.64                                 | 28,000        | 1,900     | 1,700     | 720                                 | 2,900      | <500          |     |
| 10/26/2006                      |                  | 19.60                     | 10.80                                 | 43,000        | 2,800     | 2,500     | 1,700                               | 7,600      | <500          |     |
| 1/19/2007                       |                  | 19.84                     | 10.56                                 | 31,000        | 2,700     | 2,400     | 1,400                               | 5,800      | <150          |     |
| 4/17/2007                       |                  | 19.90                     | 10.50                                 | 37,000        | 3,200     | 2,900     | 1,600                               | 6,400      | <400          |     |
| 7/6/2007                        |                  | 19.63                     | 10.77                                 | 30,000        | 3,200     | 2,000     | 1,500                               | 5,200      | <250          |     |
| 10/15/2007                      |                  | 20.11                     | 10.29                                 | 20,000        | 1,200     | 990       | 650                                 | 2,300      | <500          |     |
| 1/17/2008                       |                  | 20.10                     | 10.30                                 | 38,000        | 2,900     | 5,100     | 1,200                               | 5,000      | <210          |     |
| 4/9/2008                        |                  | 20.12                     | 10.28                                 | 51,000        | 3,000     | 6,400     | 1,700                               | 6,500      | <250          |     |
| 7/17/2008                       |                  | 20.01                     | 10.39                                 | 22,000        | 180       | 500       | 660                                 | 2,100      | <250          |     |
| 10/27/2008                      |                  | 20.61                     | 9.79                                  | 26,000        | 570       | 2,100     | 670                                 | 3,400      | <50           |     |
| 1/9/2009                        |                  | 20.80                     | 9.60                                  | 16,000        | 240       | 680       | 460                                 | 3,000      | <100          |     |
| 4/27/2009                       |                  | 20.17                     | 10.23                                 | 16,000        | 130       | 660       | 570                                 | 3,600      | <500          |     |
| 7/9/2009                        |                  | 20.36                     | 10.04                                 | 8,500         | 30        | 110       | 250                                 | 1,400      | <100          |     |
| 2/3/2010                        |                  | 19.84                     | 10.56                                 | 22,000        | 47        | 140       | 500                                 | 3,000      | <100          |     |
| 7/13/2010                       |                  | 19.08                     | 11.32                                 | 1,900         | 3.5       | 5.8       | 38                                  | 110        | <5.0          |     |
| 1/17/2011                       | 19.02            | 11.38                     | 17,000                                | 23            | 100       | 330       | 2,200                               | <100       |               |     |
|                                 | <b>7/12/2011</b> | <b>18.52</b>              | <b>11.88</b>                          | <b>15,000</b> | <b>22</b> | <b>30</b> | <b>190</b>                          | <b>740</b> | <b>&lt;50</b> |     |
| MW-3<br>29.50<br>29.25<br>29.56 | 12/2/1994        | 22.15                     | 7.35                                  | 394,000       | 1,200     | ND        | 1,800                               | 4,000      | -             |     |
|                                 | 3/6/1995         | 20.09                     | 9.16                                  | 21,000        | 400       | 150       | 24                                  | 62         | -             |     |
|                                 | 7/11/1995        | 19.99                     | 9.57                                  | 12,000        | ND        | 10        | 16                                  | 99         | -             |     |
|                                 | 5/10/1996        | 20.24                     | 9.32                                  | 8,600         | ND        | 7.6       | 16                                  | 84         | -             |     |
|                                 | 10/2/1996        | 20.90                     | 8.66                                  | 11,000        | ND        | 7.4       | 19                                  | 92         | -             |     |
|                                 | 2/28/1997        | 20.12                     | 9.44                                  | 6,000         | ND        | 4.4       | 17                                  | 88         | 50            |     |
|                                 | 9/16/1997        | 20.97                     | 8.59                                  | 6,500         | <0.5      | 0.69      | 1.2                                 | 6.7        | <5.0          |     |
|                                 | 2/5/1998         | 20.39                     | 9.17                                  | 5,400         | <0.5      | 6.3       | 15                                  | 86         | <63           |     |
|                                 | 8/11/1998        | 19.95                     | 9.61                                  | 2,700         | <0.5      | 3.5       | 3.2                                 | 12         | <10           |     |

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**Table 1 - Groundwater Elevation and Analytical Data.**  
Douglas Parking Company, 1721 Webster Street, Oakland, California

| Boring / Well<br>ID<br>TOC | Date       | Depth to<br>Water<br>(ft) | Groundwater<br>Elevation<br>(ft amsl) | TPHg         | Benzene      | Toluene    | Ethylbenzene Xylenes MTBE<br>(µg/L) |                |            |               |
|----------------------------|------------|---------------------------|---------------------------------------|--------------|--------------|------------|-------------------------------------|----------------|------------|---------------|
|                            |            |                           |                                       |              |              |            | ←                                   | →              | →          |               |
| MW-3<br>(cont.)            | 2/8/1999   | 20.58                     | 8.98                                  | 6,100        | <0.5         | 8.1        | 18                                  | 80             | <140       |               |
|                            | 2/17/1999  | 20.53                     | 9.03                                  | -            | -            | -          | -                                   | -              | -          |               |
|                            | 2/24/1999  | 22.53                     | 7.03                                  | -            | -            | -          | -                                   | -              | -          |               |
|                            | 3/3/1999   | 20.28                     | 9.28                                  | -            | -            | -          | -                                   | -              | -          |               |
|                            | 3/10/1999  | 22.45                     | 7.11                                  | -            | -            | -          | -                                   | -              | -          |               |
|                            | 3/17/1999  | 20.26                     | 9.30                                  | -            | -            | -          | -                                   | -              | -          |               |
|                            | 5/4/1999   | 20.24                     | 9.32                                  | 11,000       | <2           | <2         | 9.8                                 | 140            | <10        |               |
|                            | 7/20/1999  | 20.68                     | 8.88                                  | 11,000       | <0.5         | 3.1        | 13                                  | 88             | <80        |               |
|                            | 10/5/1999  | 20.81                     | 8.75                                  | 31,000       | 62           | <0.5       | 21                                  | 170            | <90        |               |
|                            | 1/7/2000   | 21.09                     | 8.47                                  | 13,000       | <0.5         | <2         | 21                                  | 140            | <80        |               |
|                            | 4/6/2000   | 20.48                     | 9.08                                  | 5,300        | 1.5          | 1.4        | 9.8                                 | 60             | <30        |               |
|                            | 7/31/2000  | 20.62                     | 8.94                                  | 7,100        | 3.5          | 1.0        | 12                                  | 66             | <5.0       |               |
|                            | 10/3/2000  | 21.13                     | 8.43                                  | 8,000        | <0.5         | 3.3        | 11                                  | 70             | <40        |               |
|                            | 1/12/2001  | 21.45                     | 8.11                                  | 11,000       | 4.3          | 6.7        | 11                                  | 73             | <70        |               |
|                            | 4/11/2001  | 21.69                     | 7.87                                  | 10,000       | <0.5         | <0.5       | 11                                  | 65             | <10        |               |
|                            | 7/6/2001   | 21.60                     | 7.96                                  | 13,000       | 5.3          | 1.6        | 11                                  | 58             | <5.0       |               |
|                            | 10/25/2001 | 21.70                     | 7.86                                  | 11,000       | <0.5         | 3.0        | 15                                  | 70             | <10        |               |
|                            | 3/4/2002   | 21.65                     | 7.91                                  | 1,900        | 1.3          | 0.8        | <0.5                                | 15             | <5.0       |               |
|                            | 4/18/2002  | 21.77                     | 7.79                                  | 1,500        | 1.0          | 0.97       | 1.3                                 | 5.8            | <5         |               |
|                            | 7/9/2002   | 22.03                     | 7.53                                  | 13,000       | 6.8          | 5.7        | 13                                  | 59             | <90        |               |
|                            | 10/4/2002  | 22.15                     | 7.41                                  | 8,400        | <10          | <10        | <10                                 | 42             | <100       |               |
|                            | 1/12/2003  | 21.13                     | 8.43                                  | 9,000        | 9.5          | 5.1        | 8.5                                 | 46             | <90        |               |
|                            | 4/21/2003  | 20.63                     | 8.93                                  | 10,000       | <5.0         | <5.0       | 8.5                                 | 32             | <50        |               |
|                            | 32.56      | 7/21/2003                 | 20.68                                 | 11.88        | 9,600        | <2.5       | <2.5                                | 7.4            | 39         | 48 (<1.0)     |
|                            |            | 10/2/2003                 | 20.99                                 | 11.57        | 12,000       | <5.0       | <5.0                                | 10             | 40         | <90           |
|                            |            | 1/15/2004                 | 20.74                                 | 11.82        | 13,000       | 37         | 41                                  | 78             | 930        | <50           |
|                            |            | 4/5/2004                  | 20.59                                 | 11.97        | 4,500        | <1.7       | <1.7                                | <1.7           | 12         | <17           |
|                            |            | 8/9/2004                  | 22.18                                 | 10.38        | 2,100        | <1.0       | 3.7                                 | <1.0           | 8.1        | <10           |
|                            |            | 10/7/2004                 | 22.79                                 | 9.77         | 2,400        | 6.5        | 26                                  | 7.5            | 89         | <15           |
|                            |            | 2/7/2005                  | 20.35                                 | 12.21        | 6,800        | 2.2        | 5.6                                 | 2.0            | 12         | <30           |
|                            |            | 4/5/2005                  | 19.95                                 | 12.61        | 6,100        | 2.3        | 2.6                                 | 1.3            | 8.3        | <45 (<0.5)    |
|                            |            | 7/6/2005                  | 19.93                                 | 12.63        | 4,500        | <1.0       | 1.5                                 | 1.0            | 8.3        | <10           |
| 10/10/2005                 |            | 20.45                     | 12.11                                 | 3,800        | 0.73         | <0.5       | 0.98                                | 5.7            | <15        |               |
| 1/26/2006                  |            | 20.05                     | 12.51                                 | 5,100        | <0.5         | 1.1        | <0.5                                | 6.6            | <15        |               |
| 4/10/2006                  |            | 19.39                     | 13.17                                 | 1,900        | 0.55         | 1.6        | 0.51                                | 4.1            | <10        |               |
| 7/6/2006                   |            | 20.25                     | 12.31                                 | 5,600        | <1.0         | 2.3        | <1.0                                | 6.4            | <20        |               |
| 10/26/2006                 |            | 21.07                     | 11.49                                 | 8,000        | 2.5          | 1.0        | 2.3                                 | 12             | <35        |               |
| 1/19/2007                  |            | 21.38                     | 11.18                                 | 77,000       | 19           | 40         | 9.5                                 | 130            | <300       |               |
| 4/17/2007                  |            | 21.45                     | 11.11                                 | 7,400        | 2.7          | 6.6        | 1.1                                 | 12             | <40        |               |
| 7/6/2007                   |            | 21.29                     | 11.27                                 | 7,100        | 2.4          | 5.6        | 0.85                                | 10             | <30        |               |
| 10/15/2007                 |            | 21.62                     | 10.94                                 | 10,000       | <5.0         | <5.0       | <5.0                                | 14             | <50        |               |
| 1/17/2008                  |            | 21.68                     | 10.88                                 | 6,400        | 1.8          | <0.5       | 1.0                                 | 8.4            | 23         |               |
| 4/9/2008                   |            | 21.42                     | 11.14                                 | 4,700        | 1.7          | 2.2        | <0.5                                | 3.8            | <18        |               |
| 7/17/2008                  |            | 22.10                     | 10.46                                 | 7,700        | 2.9          | 3.1        | 1.4                                 | 11             | <60        |               |
| 10/27/2008                 |            | 22.13                     | 10.43                                 | 9,700        | <1.7         | 1.8        | 2.3                                 | 11             | <17        |               |
| 1/9/2009                   |            | 22.27                     | 10.29                                 | 9,800        | 1.7          | 2.0        | 3.0                                 | 14             | <17        |               |
| 4/27/2009                  |            | 21.74                     | 10.82                                 | 8,700        | 1.9          | 3.3        | <1.7                                | 11             | <50        |               |
| 7/9/2009                   |            | 21.92                     | 10.64                                 | 10,000       | <2.5         | 4.1        | 2.6                                 | 11             | <60        |               |
| 2/3/2010                   |            | 21.55                     | 11.01                                 | 5,300        | 1.5          | 2.3        | <0.5                                | 2.7            | <25        |               |
| 7/13/2010                  |            | 21.31                     | 11.25                                 | 4,400        | <2.5         | 9.0        | <2.5                                | 4.6            | <25        |               |
| 1/17/2011                  |            | 20.75                     | 11.81                                 | 4,100        | 1.2          | 1.8        | <0.5                                | 2.7            | <20        |               |
|                            |            | <b>7/12/2011</b>          | <b>20.14</b>                          | <b>12.42</b> | <b>4,500</b> | <b>2.4</b> | <b>2.8</b>                          | <b>&lt;0.5</b> | <b>5.0</b> | <b>&lt;25</b> |
| MW-4<br>25.29              |            | 5/10/1996                 | 16.98                                 | 8.31         | 14,000       | ND         | 1,200                               | 720            | 3,100      | -             |
|                            |            | 10/2/1996                 | 17.65                                 | 7.64         | 12,000       | ND         | 650                                 | 580            | 2,200      | -             |
|                            |            | 2/28/1997                 | 16.80                                 | 8.49         | 13,000       | ND         | 1,100                               | 750            | 2,700      | 110           |
|                            | 9/17/1997  | 17.93                     | 7.36                                  | 13,000       | <2.5         | 820        | 750                                 | 2,900          | <190       |               |
|                            | 2/5/1998   | 16.78                     | 8.51                                  | 13,000       | <1.0         | 690        | 690                                 | 2,900          | <170       |               |
|                            | 8/11/1998  | 16.59                     | 8.70                                  | 15,000       | <5           | 360        | 520                                 | 1,900          | 280        |               |
|                            | 2/8/1999   | 17.10                     | 8.19                                  | 9,800        | <5           | 680        | 770                                 | 2,200          | 300        |               |
|                            | 2/24/1999  | 18.95                     | 6.34                                  | -            | -            | -          | -                                   | -              | -          |               |
|                            | 3/3/1999   | 16.80                     | 8.49                                  | -            | -            | -          | -                                   | -              | -          |               |
|                            | 3/10/1999  | 16.86                     | 8.43                                  | -            | -            | -          | -                                   | -              | -          |               |
|                            | 3/17/1999  | 16.82                     | 8.47                                  | -            | -            | -          | -                                   | -              | -          |               |
|                            | 5/4/1999   | 16.86                     | 8.43                                  | 11,000       | 46           | 600        | 620                                 | 1,900          | <100       |               |
|                            | 7/20/1999  | 17.30                     | 7.99                                  | 13,000       | <0.5         | 470        | 7.0                                 | 2,000          | <150       |               |
| 10/5/1999                  | 17.43      | 7.86                      | 18,000                                | 4.4          | 720          | 800        | 2,100                               | <120           |            |               |



# PANGEA

**Table 1 - Groundwater Elevation and Analytical Data.**  
Douglas Parking Company, 1721 Webster Street, Oakland, California

| Boring / Well<br>ID<br>TOC | Date             | Depth to<br>Water<br>(ft) | Groundwater<br>Elevation<br>(ft amsl) | TPHg          | Benzene        | Toluene     | Ethylbenzene Xylenes MTBE<br>(µg/L) |             |                |
|----------------------------|------------------|---------------------------|---------------------------------------|---------------|----------------|-------------|-------------------------------------|-------------|----------------|
|                            |                  |                           |                                       |               |                |             | ←                                   | →           | →              |
| MW-4<br>(cont.)            | 1/7/2000         | 17.78                     | 7.51                                  | 18,000        | <2             | 930         | 990                                 | 2,700       | <30            |
|                            | 4/6/2000         | 17.17                     | 8.12                                  | 8,000         | 31             | 390         | 530                                 | 1,300       | <10            |
|                            | 7/31/2000        | 17.21                     | 8.08                                  | 6,200         | 13             | 170         | 460                                 | 850         | <10            |
|                            | 10/3/2000        | 18.00                     | 7.29                                  | 14,000        | 42             | 820         | 730                                 | 2,000       | <50            |
|                            | 1/12/2001        | 18.20                     | 7.09                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 4/11/2001        | 18.31                     | 6.98                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 7/6/2001         | 18.35                     | 6.94                                  | 470           | 2.3            | 1.6         | 0.81                                | 43          | <5.0           |
|                            | 10/25/2001       | 18.47                     | 6.82                                  | 110           | 0.70           | <0.5        | <0.5                                | 3.3         | <5.0           |
|                            | 3/4/2002         | 18.43                     | 6.86                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 4/18/2002        | 18.61                     | 6.68                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 7/9/2002         | 19.50                     | 5.79                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 10/4/2002        | 19.83                     | 5.46                                  | 310           | 2.0            | 2.9         | 13                                  | 16          | <0.5           |
|                            | 1/12/2003        | 19.07                     | 6.22                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 4/21/2003        | 18.71                     | 6.58                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
| 28.29                      | 7/21/2003        | 18.81                     | 9.48                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 10/2/2003        | 19.02                     | 9.27                                  | 59            | 0.78           | <0.5        | 1.1                                 | 0.91        | <5.0           |
|                            | 1/15/2004        | 18.68                     | 9.61                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 4/5/2004         | 17.41                     | 10.88                                 | 6,200         | 29             | 250         | 450                                 | 730         | <100           |
|                            | 8/9/2004         | 19.07                     | 9.22                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 10/7/2004        | 19.65                     | 8.64                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 2/7/2005         | 17.21                     | 11.08                                 | 8,700         | 48             | 340         | 550                                 | 720         | <100           |
|                            | 4/5/2005         | 16.78                     | 11.51                                 | 6,900         | 27             | 290         | 520                                 | 660         | <170 (<0.5)    |
|                            | 7/6/2005         | 16.98                     | 11.31                                 | 5,600         | <5.0           | 130         | 470                                 | 480         | <50            |
|                            | 10/10/2005       | 17.59                     | 10.70                                 | 6,300         | 23             | 78          | 530                                 | 430         | <50            |
|                            | 1/26/2006        | 17.08                     | 11.21                                 | 5,600         | 41             | 68          | 400                                 | 290         | <120           |
|                            | 4/10/2006        | 16.27                     | 12.02                                 | 2,900         | 39             | 32          | 200                                 | 140         | <60            |
|                            | 7/6/2006         | 17.20                     | 11.09                                 | 5,400         | 65             | 59          | 340                                 | 150         | <120           |
|                            | 10/26/2006       | 18.06                     | 10.23                                 | 7,200         | 72             | 46          | 460                                 | 200         | <150           |
|                            | 1/19/2007        | 18.29                     | 10.00                                 | 7,100         | 140            | 35          | 520                                 | 150         | <200           |
|                            | 4/17/2007        | 18.30                     | 9.99                                  | 4,900         | 90             | 32          | 290                                 | 89          | <110           |
|                            | 7/6/2007         | 18.00                     | 10.29                                 | 4,600         | 91             | 30          | 210                                 | 55          | <90            |
|                            | 10/15/2007       | 18.52                     | 9.77                                  | 8,600         | 200            | 62          | 480                                 | 110         | <210           |
|                            | 1/17/2008        | 18.46                     | 9.83                                  | 820           | 15             | 3.7         | 25                                  | 9.3         | <10            |
|                            | 4/9/2008         | 18.23                     | 10.06                                 | 3,600         | 55             | 20          | 160                                 | 64          | <60            |
|                            | 7/17/2008        | 18.72                     | 9.57                                  | 6,500         | 210            | 47          | 510                                 | 180         | <180           |
|                            | 10/27/2008       | 19.07                     | 9.22                                  | 7,700         | 200            | 28          | 450                                 | 87          | <150           |
|                            | 1/9/2009         | 19.12                     | 9.17                                  | 4,400         | 180            | 34          | 180                                 | 93          | <150           |
|                            | 4/27/2009        | 18.52                     | 9.77                                  | 2,500         | 110            | 24          | 190                                 | 69          | <150           |
|                            | 7/9/2009         | 18.78                     | 9.51                                  | 5,600         | 150            | 34          | 270                                 | 83          | <250           |
|                            | 2/3/2010         | 18.24                     | 10.05                                 | 2,900         | 38             | 20          | 69                                  | 54          | <50            |
|                            | 7/13/2010        | 17.59                     | 10.70                                 | 1,100         | 20             | 7.6         | 43                                  | 26          | <60            |
|                            | 1/17/2011        | 17.42                     | 10.87                                 | 2,900         | 16             | 43          | 60                                  | 99          | <15            |
|                            | <b>7/12/2011</b> | <b>17.01</b>              | <b>11.28</b>                          | <b>&lt;50</b> | <b>&lt;0.5</b> | <b>0.56</b> | <b>0.52</b>                         | <b>0.93</b> | <b>&lt;5.0</b> |
| MW-5<br>21.97              | 5/10/1996        | 14.60                     | 7.37                                  | ND            | ND             | ND          | ND                                  | ND          | -              |
|                            | 10/2/1996        | 15.25                     | 6.72                                  | ND            | ND             | ND          | ND                                  | ND          | -              |
|                            | 2/28/1997        | 14.31                     | 7.66                                  | ND            | ND             | ND          | ND                                  | ND          | ND             |
|                            | 9/17/1997        | 15.18                     | 6.79                                  | <0.5          | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 2/5/1998         | 13.64                     | 8.33                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 8/11/1998        | 13.92                     | 8.05                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 2/8/1999         | 14.19                     | 7.78                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 2/24/1999        | 16.18                     | 5.79                                  | -             | -              | -           | -                                   | -           | -              |
|                            | 3/3/1999         | 14.23                     | 7.74                                  | -             | -              | -           | -                                   | -           | -              |
|                            | 3/10/1999        | 14.32                     | 7.65                                  | -             | -              | -           | -                                   | -           | -              |
|                            | 3/17/1999        | 14.25                     | 7.72                                  | -             | -              | -           | -                                   | -           | -              |
|                            | 5/4/1999         | 14.41                     | 7.56                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 7/20/1999        | 14.44                     | 7.53                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 10/5/1999        | 14.79                     | 7.18                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 1/7/2000*        | 15.23                     | 6.74                                  | -             | -              | -           | -                                   | -           | -              |
|                            | 4/6/2000         | 14.74                     | 7.23                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 7/31/2000        | 14.52                     | 7.45                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 10/3/2000        | 15.37                     | 6.60                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 1/12/2001        | 15.70                     | 6.27                                  | 6,400         | 13             | 290         | 450                                 | 1,100       | <40            |
|                            | 4/11/2001        | 15.78                     | 6.19                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 7/6/2001         | 15.97                     | 6.00                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 10/25/2001       | 16.05                     | 5.92                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |
|                            | 3/4/2002         | 16.21                     | 5.76                                  | <50           | <0.5           | <0.5        | <0.5                                | <0.5        | <5.0           |

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**Table 1 - Groundwater Elevation and Analytical Data.**  
Douglas Parking Company, 1721 Webster Street, Oakland, California

| Boring / Well<br>ID<br>TOC | Date             | Depth to<br>Water<br>(ft) | Groundwater<br>Elevation<br>(ft amsl) | TPHg         | Benzene   | Toluene    | Ethylbenzene Xylenes MTBE |            |               |
|----------------------------|------------------|---------------------------|---------------------------------------|--------------|-----------|------------|---------------------------|------------|---------------|
|                            |                  |                           |                                       |              |           |            | (µg/L)                    |            |               |
| MW-5<br>(cont.)            | 4/18/2002        | 16.59                     | 5.38                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 7/9/2002         | 16.94                     | 5.03                                  | 170          | 1.0       | 0.65       | 2.1                       | 4.0        | <15           |
| 24.99                      | 10/4/2002        | 17.14                     | 4.83                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 1/12/2003        | 16.58                     | 5.39                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 4/21/2003        | 15.90                     | 6.07                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 7/21/2003        | 16.03                     | 8.96                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 10/2/2003        | 16.33                     | 8.66                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 1/15/2004        | 16.21                     | 8.78                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 4/5/2004         | 15.01                     | 9.98                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 8/9/2004         | 16.85                     | 8.14                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 10/7/2004        | 17.48                     | 7.51                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 2/7/2005         | 16.52                     | 8.47                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 4/5/2005         | 14.45                     | 10.54                                 | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0 (<0.5)   |
|                            | 7/6/2005         | 14.85                     | 10.14                                 | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 10/10/2005       | 15.44                     | 9.55                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 1/26/2006        | 14.96                     | 10.03                                 | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 4/10/2006        | 14.01                     | 10.98                                 | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 7/6/2006         | 15.17                     | 9.82                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 10/26/2006       | 15.94                     | 9.05                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 1/19/2007        | 16.05                     | 8.94                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 4/17/2007        | 15.99                     | 9.00                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 7/6/2007         | 15.50                     | 9.49                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 10/15/2007       | 16.27                     | 8.72                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 1/17/2008        | 15.10                     | 9.89                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 4/9/2008         | 15.96                     | 9.03                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
|                            | 7/17/2008        | 16.44                     | 8.55                                  | <50          | <0.5      | <0.5       | <0.5                      | <0.5       | <5.0          |
| 10/27/2008                 | 16.78            | 8.21                      | <50                                   | <0.5         | <0.5      | <0.5       | <0.5                      | <5.0       |               |
| 1/9/2009                   | 16.75            | 8.24                      | <50                                   | <0.5         | <0.5      | <0.5       | <0.5                      | <5.0       |               |
| 4/27/2009                  | 16.21            | 8.78                      | --                                    | --           | --        | --         | --                        | --         |               |
| 7/9/2009                   | 16.48            | 8.51                      | --                                    | --           | --        | --         | --                        | --         |               |
| 2/3/2010                   | 15.77            | 9.22                      | <50                                   | <0.5         | <0.5      | <0.5       | <0.5                      | <5.0       |               |
| 7/13/2010                  | 15.34            | 9.65                      | ---                                   | ---          | ---       | ---        | ---                       | ---        |               |
| 1/17/2011                  | 14.93            | 10.06                     | <50                                   | <0.5         | <0.5      | <0.5       | <0.5                      | <5.0       |               |
|                            | <b>7/12/2011</b> | <b>14.81</b>              | <b>10.18</b>                          | --           | --        | --         | --                        | --         |               |
| MW-6<br>30.99              | 6/30/2003        | 19.60                     | 11.39                                 | 68,000       | 950       | 6,000      | 2,400                     | 10,000     | <1,000        |
|                            | 7/21/2003        | 19.67                     | 11.32                                 | 120,000      | 170       | 1,400      | 1,100                     | 10,000     | <1,000        |
| 30.99                      | 10/2/2003        | 19.97                     | 11.02                                 | 16,000       | 7.6       | 200        | 38                        | 1,800      | <100          |
|                            | 1/15/2004        | 19.55                     | 11.44                                 | 14,000       | 48        | 51         | 94                        | 1,100      | <50           |
|                            | 4/5/2004         | 19.17                     | 11.82                                 | 24,000       | 180       | 900        | 430                       | 1,800      | <500          |
|                            | 8/9/2004         | 20.98                     | 10.01                                 | 5,300        | 6.4       | 25         | 5.3                       | 69         | <17 (<0.5)    |
|                            | 10/7/2004        | 21.52                     | 9.47                                  | 5,600        | 11        | 58         | 18                        | 210        | <50 (<0.5)    |
|                            | 2/7/2005         | 19.00                     | 11.99                                 | 31,000       | 120       | 620        | 310                       | 1,200      | <500          |
|                            | 4/5/2005         | 18.60                     | 12.39                                 | 21,000       | 170       | 1,100      | 350                       | 1,300      | <500 (<5.0)   |
|                            | 7/6/2005         | 18.56                     | 12.43                                 | 26,000       | 130       | 920        | 320                       | 1,200      | <500          |
|                            | 10/10/2005       | 19.99                     | 11.00                                 | 19,000       | 140       | 840        | 250                       | 980        | <500          |
|                            | 1/26/2006        | 18.70                     | 12.29                                 | 10,000       | 140       | 1,100      | 270                       | 1,200      | <170          |
|                            | 4/10/2006        | 18.04                     | 12.95                                 | 13,000       | 140       | 1,000      | 280                       | 1,000      | <250          |
|                            | 7/6/2006         | 18.80                     | 12.19                                 | 17,000       | 150       | 1,000      | 290                       | 1,000      | <250          |
|                            | 10/26/2006       | 19.62                     | 11.37                                 | 23,000       | 230       | 660        | 470                       | 1,500      | <500          |
|                            | 1/19/2007        | 19.92                     | 11.07                                 | 18,000       | 190       | 620        | 350                       | 1,100      | <150          |
|                            | 4/17/2007        | 19.97                     | 11.02                                 | 23,000       | 380       | 1,400      | 590                       | 2,000      | <450          |
|                            | 7/6/2007         | 19.81                     | 11.18                                 | 28,000       | 600       | 3,000      | 900                       | 2,700      | <500          |
|                            | 10/15/2007       | 20.15                     | 10.84                                 | 25,000       | 290       | 680        | 410                       | 1,100      | <250          |
|                            | 10/15/2007       | 20.15                     | 10.84                                 | 25,000       | 290       | 680        | 410                       | 1,100      | <250          |
|                            | 1/17/2007        | 20.22                     | 10.77                                 | 16,000       | 200       | 130        | 130                       | 460        | <150          |
|                            | 4/9/2008         | 19.86                     | 11.13                                 | 18,000       | 320       | 870        | 480                       | 1,500      | <250          |
|                            | 7/17/2008        | 20.36                     | 10.63                                 | 18,000       | 320       | 510        | 420                       | 1,200      | <500          |
|                            | 10/27/2008       | 20.69                     | 10.30                                 | 31,000       | 320       | 320        | 410                       | 990        | <350          |
|                            | 1/9/2009         | 20.83                     | 10.16                                 | 22,000       | 340       | 390        | 560                       | 1,400      | <250          |
|                            | 4/27/2009        | 20.27                     | 10.72                                 | 13,000       | 110       | 97         | 380                       | 1,100      | <350          |
| 7/9/2009                   | 20.43            | 10.56                     | 18,000                                | 250          | 520       | 470        | 1,300                     | <450       |               |
| 2/3/2010                   | 20.14            | 10.85                     | 6,200                                 | 82           | 180       | 190        | 550                       | <150       |               |
| 7/13/2010                  | 19.29            | 11.70                     | 12,000                                | 260          | 420       | 480        | 1,600                     | <450       |               |
| 1/17/2011                  | 19.31            | 11.68                     | 4,900                                 | 70           | 52        | 210        | 500                       | <50        |               |
|                            | <b>7/12/2011</b> | <b>18.73</b>              | <b>12.26</b>                          | <b>1,400</b> | <b>20</b> | <b>8.5</b> | <b>64</b>                 | <b>130</b> | <b>&lt;30</b> |

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**Table 1 - Groundwater Elevation and Analytical Data.**  
Douglas Parking Company, 1721 Webster Street, Oakland, California

| Boring / Well<br>ID<br>TOC | Date         | Depth to<br>Water<br>(ft) | Groundwater<br>Elevation<br>(ft amsl) | TPHg           | Benzene        | Toluene        | Ethylbenzene Xylenes MTBE |                |             |
|----------------------------|--------------|---------------------------|---------------------------------------|----------------|----------------|----------------|---------------------------|----------------|-------------|
|                            |              |                           |                                       |                |                |                | (µg/L)                    |                |             |
| MW-7<br>33.11              | 6/30/2003    | 21.40                     | 11.71                                 | 170            | <0.5           | 2.1            | 2.0                       | 8.7            | <5.0        |
|                            | 7/21/2003    | 21.44                     | 11.67                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 10/2/2003    | 21.73                     | 11.38                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 1/15/2004    | 21.57                     | 11.54                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 4/5/2004     | 20.84                     | 12.27                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 8/9/2004     | 22.68                     | 10.43                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 10/7/2004    | 23.27                     | 9.84                                  | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 2/7/2005     | 20.60                     | 12.51                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 4/5/2005     | 20.22                     | 12.89                                 | <50            | <0.5           | 0.75           | <0.5                      | <0.5           | <5.0 (<0.5) |
|                            | 7/6/2005     | 20.25                     | 12.86                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 10/10/2005   | 20.70                     | 12.41                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 1/26/2006    | 20.32                     | 12.79                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 4/10/2006    | 19.62                     | 13.49                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 7/6/2006     | 20.47                     | 12.64                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 10/26/2006   | 21.30                     | 11.81                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 1/19/2007    | 21.62                     | 11.49                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 4/17/2007    |                           | 11.49                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 7/6/2007     | 21.59                     | 11.52                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 10/15/2007   | 21.85                     | 11.26                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 1/17/2007    | 21.90                     | 11.21                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 4/9/2008     | 21.61                     | 11.50                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 7/17/2008    | 22.09                     | 11.02                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 10/27/2008   | 22.39                     | 10.72                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 1/9/2009     | 22.52                     | 10.59                                 | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 4/27/2009    | 21.98                     | 11.13                                 | --             | --             | --             | --                        | --             | --          |
|                            | 7/9/2009     | 22.18                     | 10.93                                 | --             | --             | --             | --                        | --             | --          |
| 2/3/2010                   | 21.87        | 11.24                     | <50                                   | <0.5           | <0.5           | <0.5           | <0.5                      | <5.0           |             |
| 7/13/2010                  | 21.01        | 12.10                     | ---                                   | ---            | ---            | ---            | ---                       | ---            |             |
| 1/17/2011                  | 21.07        | 12.04                     | <50                                   | <0.5           | <0.5           | <0.5           | <0.5                      | <5.0           |             |
| <b>7/12/2011</b>           | <b>20.72</b> | <b>12.39</b>              | <b>&lt;50</b>                         | <b>&lt;0.5</b> | <b>&lt;0.5</b> | <b>&lt;0.5</b> | <b>&lt;0.5</b>            | <b>&lt;5.0</b> |             |
| AS-1                       | 7/6/2006     | 19.53                     | --                                    | 18,000         | 2,700          | 570            | 700                       | 1,900          | <500        |
|                            | 10/26/2006   | 20.33                     | --                                    | 15,000         | 1,900          | 340            | 360                       | 1,400          | <250        |
|                            | 1/19/2007    | 20.64                     | --                                    | 5,700          | 1,100          | 110            | 88                        | 630            | <50         |
|                            | 1/19/2007    | 20.64                     | --                                    | 5,700          | 1,100          | 110            | 88                        | 630            | <50         |
|                            | 4/17/2007    | 20.71                     | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 7/16/2007    | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 10/15/2007   | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 1/17/2008    | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 4/9/2008     | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
| AS-2                       | 7/6/2006     | 22.26                     | --                                    | 2,100          | 6.1            | <0.5           | 33                        | 200            | <20         |
|                            | 10/26/2006   | 23.25                     | --                                    | 280            | 1.1            | <0.5           | <0.5                      | 6.0            | <15         |
|                            | 1/19/2007    | 23.61                     | --                                    | 2,100          | 2.3            | <0.5           | 96                        | 310            | <35         |
|                            | 4/17/2007    | 23.70                     | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 7/16/2007    | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 10/15/2007   | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 1/17/2008    | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 4/9/2008     | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
| AS-3                       | 7/6/2006     | 21.77                     | --                                    | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 10/26/2006   | 22.66                     | --                                    | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 1/19/2007    | 22.97                     | --                                    | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 4/17/2007    | 23.06                     | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 7/16/2007    | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 10/15/2007   | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 1/17/2008    | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
|                            | 4/9/2008     | --                        | --                                    | --             | --             | --             | --                        | --             | --          |
| Trip Blank                 | 01/12/01     | -                         | -                                     | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 4/11/2001    | -                         | -                                     | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 7/6/2001     | -                         | -                                     | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 3/4/2002     | -                         | -                                     | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 10/2/2003    | -                         | -                                     | <50            | <0.5           | <0.5           | <0.5                      | <0.5           | <5.0        |
|                            | 10/15/2007   | --                        | --                                    | --             | --             | --             | --                        | --             | --          |

# PANGEA

**Table 1 - Groundwater Elevation and Analytical Data.**  
Douglas Parking Company, 1721 Webster Street, Oakland, California

| Boring / Well<br>ID<br>TOC | Date      | Depth to<br>Water<br>(ft) | Groundwater<br>Elevation<br>(ft amsl) | TPHg    | Benzene | Toluene | Ethylbenzene Xylenes MTBE |        |    |
|----------------------------|-----------|---------------------------|---------------------------------------|---------|---------|---------|---------------------------|--------|----|
|                            |           |                           |                                       |         |         |         | (µg/L)                    |        |    |
| <b>Grab Groundwater</b>    |           |                           |                                       |         |         |         |                           |        |    |
| SB-A                       | 2/22/1996 | --                        | --                                    | 16,000  | 38      | 16      | 180                       | 620    | -- |
| SB-B                       | 2/22/1996 | --                        | --                                    | 20,000  | 100     | 29      | 320                       | 590    | -- |
| SB-C                       | 2/22/1996 | --                        | --                                    | 1,200   | 130     | 100     | 68                        | 230    | -- |
| SB-D                       | 2/22/1996 | --                        | --                                    | 7,400   | 550     | 110     | 160                       | 89     | -- |
| SB-E                       | 2/23/1996 | --                        | --                                    | 16,000  | 31      | 160     | 390                       | 1,400  | -- |
| SB-F                       | 2/23/1996 | --                        | --                                    | <50     | <0.5    | 1.4     | <0.5                      | 2.3    | -- |
| SB-G                       | 2/23/1996 | --                        | --                                    | 5,200   | 1.3     | <0.5    | 0.7                       | <0.5   | -- |
| EB-1GWS                    | 7/8/1994  | --                        | --                                    | 62,000  | <0.5    | 26      | 850.0                     | 8,900  | -- |
| EB-2GWS                    | 7/8/1994  | --                        | --                                    | 160,000 | 5,300   | 20,000  | 2,100                     | 17,000 | -- |
| EB-3GWS                    | 7/8/1994  | --                        | --                                    | 87,000  | 1,400   | 21,000  | 1,700                     | 19,000 | -- |
| EB-4GWS                    | 7/8/1994  | --                        | --                                    | 350,000 | 290     | 1,300   | 3,200                     | 31,000 | -- |
| EB-5GWS                    | 7/8/1994  | --                        | --                                    | 120,000 | 2,100.0 | 13,000  | 1,300.0                   | 16,000 | -- |
| EB-6GWS                    | 7/8/1994  | --                        | --                                    | 230,000 | 10,000  | 34,000  | 2,300                     | 16,000 | -- |

**Notes and Abbreviations:**

TOC = Top of casing elevations in feet above mean sea level.

ft amsl = Measured in feet above mean sea level

µg/L = Micrograms per liter.

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015C.

BTEX = Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8021B.

MTBE = Methyl tertiary butyl ether by EPA Method 8021B, and by EPA Method 8260 in parenthesis.

<0.5 = Concentration not detected above specific laboratory reporting limit.

-- = Not analyzed, not sampled, or not applicable.

ND = Not detected.

Data prior to 7/11/95 from Gen Tech and Piers Environmental Quarterly Groundwater Monitoring Reports dated December 2, 1994 and March 6, 1995, respectively.

On July 31, 2003, Virgil Chavez Land Surveying of Vallejo, California surveyed monitoring wells using a benchmark in the top of the curb near the SW return of the NW corner of 34th and Broadway.

**Table 2. SVE/AS System Performance Summary - 1721 Webster Street, Oakland, California**

| Date     | Sample ID                     | FIELD MEASUREMENTS         |                              |                       |                      | ANALYTICAL RESULTS        |                             | REMOVAL                         |                                   |                                    |                                      | Air Sparge Unit on? (yes/no) | Comments  |
|----------|-------------------------------|----------------------------|------------------------------|-----------------------|----------------------|---------------------------|-----------------------------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------------|------------------------------|---|
|          |                               | Hour Meter Reading (hours) | System Vapor Flow Rate (cfm) | Applied Vacuum ("H2O) | FID Reading (ppm)    | TPHg Lab Data (ppmv)      | Benzene Lab Data (ppmv)     | SVE TPHg Removal Rate (lbs/day) | Cumulative SVE TPHg Removal (lbs) | SVE Benzene Removal Rate (lbs/day) | Cumulative SVE Benzene Removal (lbs) |                              |   |
| 10/29/07 | N/A                           | 1.0                        | 0                            | 0                     | 0                    | 0                         | 0                           | 0                               | 0                                 | 0                                  | 0                                    | no                           | System start up   |
| 10/29/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 1.5                        | 104                          | 68                    | 3,400<br>8<br>0      | 9,600<br>23<br>27         | 76<br>ND<0.077<br>0.15      | 320.3                           | 6.7                               | 2.30                               | 0.05                                 | no                           |   |
| 10/30/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 24.3                       | 50                           | 27                    | 37,000<br>635<br>700 | 9,000<br>ND<7.0<br>60     | 74<br>ND<0.077<br>0.29      | 144.4                           | 143.8                             | 1.08                               | 1.07                                 | no                           | Readings upon arrival   |
| 10/30/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 25.2                       | 45                           | 27                    | 3,200<br>620<br>530  | 1,500<br>ND<7.0<br>ND<7.0 | 11<br>ND<0.077<br>ND<0.077  | 21.7                            | 144.6                             | 0.14                               | 1.08                                 | no                           | Readings after dilution air introduced to reduce noise and limit hydrocarocarbon loading on carbon (prevent thermal |
| 10/31/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 48.8                       | 40                           | 27                    | 922*<br>0*<br>0*     | 880<br>ND<7.0<br>ND<7.0   | 8.6<br>ND<0.077<br>ND<0.077 | 11.3                            | 155.7                             | 0.10                               | 1.17                                 | no                           | Dilution airflow set at ~25% of total flow  |
| 11/01/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 78.8                       | 39                           | 27                    | 1,475<br>14<br>9     | ---<br>---<br>---         | ---                         | 11.0                            | 169.5                             | 0.10                               | 1.30                                 | no                           |   |
| 11/02/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 100.2                      | 40                           | 27                    | 736<br>19<br>10      | ---<br>---<br>---         | ---                         | 11.3                            | 179.6                             | 0.10                               | 1.39                                 | no                           | Shut system down at 100.5 hours for weekend   |
| 11/05/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 100.9                      | 38                           | 27                    | 1,546<br>30<br>4     | ---<br>---<br>---         | ---                         | 10.7                            | 179.9                             | 0.10                               | 1.39                                 | no                           | Restart system at 100.5 hours on 11/5/07  |
| 11/06/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 126.7                      | 38                           | 27                    | 213<br>0<br>0        | ---<br>---<br>---         | ---                         | 10.7                            | 191.4                             | 0.10                               | 1.49                                 | no                           |   |
| 11/07/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 154.7                      | 45                           | 27                    | 170<br>0<br>0        | ---<br>---<br>---         | ---                         | 12.7                            | 206.2                             | 0.11                               | 1.62                                 | no                           |   |
| 11/08/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 178.2                      | 47                           | 27                    | 160<br>0<br>0        | ---<br>---<br>---         | ---                         | 13.3                            | 219.2                             | 0.12                               | 1.74                                 | no                           | Lab analysis performed for methane; 2.4 u/L detected in SYS EFF   |
| 11/09/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 200.3                      | 45                           | 31                    | 163<br>0<br>0        | ---<br>---<br>---         | ---                         | 12.7                            | 230.9                             | 0.11                               | 1.84                                 | no                           | Shut system down at 200.3 hours for weekend   |
| 11/12/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 206.3                      | 42                           | 28                    | 211<br>0<br>2        | ---<br>---<br>---         | ---                         | 11.9                            | 233.9                             | 0.11                               | 1.87                                 | yes                          | Restart system at 200.3 hours on 11/12/07; start air sparge system  |
| 11/13/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 225.6                      | 46                           | 28                    | 2,937<br>0<br>4      | ---<br>---<br>---         | ---                         | 13.0                            | 244.3                             | 0.12                               | 1.96                                 | yes                          |   |

**Table 2. SVE/AS System Performance Summary - 1721 Webster Street, Oakland, California**

| Date     | Sample ID                     | FIELD MEASUREMENTS         |                              |                       |                   | ANALYTICAL RESULTS   |                            | REMOVAL                         |                                   |                                    |                                      | Air Sparge Unit on? (yes/no) | Comments  |
|----------|-------------------------------|----------------------------|------------------------------|-----------------------|-------------------|----------------------|----------------------------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------------|------------------------------|---|
|          |                               | Hour Meter Reading (hours) | System Vapor Flow Rate (cfm) | Applied Vacuum ("H2O) | FID Reading (ppm) | TPHg Lab Data (ppmv) | Benzene Lab Data (ppmv)    | SVE TPHg Removal Rate (lbs/day) | Cumulative SVE TPHg Removal (lbs) | SVE Benzene Removal Rate (lbs/day) | Cumulative SVE Benzene Removal (lbs) |                              |   |
| 11/14/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 253.0                      | 45                           | 28                    | 4,113<br>0<br>0   | ---                  | ---                        | 12.7                            | 258.9                             | 0.11                               | 2.09                                 | yes                          |   |
| 11/15/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 278.4                      | 45                           | 28                    | 2,810<br>0<br>0   | ---                  | ---                        | 12.7                            | 272.3                             | 0.11                               | 2.21                                 | yes                          |   |
| 11/16/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 301.4                      | 43                           | 28                    | 2,570<br>0<br>0   | ---                  | ---                        | 12.1                            | 283.9                             | 0.11                               | 2.31                                 | yes                          |   |
| 11/17/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 327.1                      | 42                           | 41                    | 11<br>0<br>0      | ---                  | ---                        | 11.9                            | 296.6                             | 0.11                               | 2.42                                 | yes                          |   |
| 11/18/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 352.1                      | 44                           | 41                    | 530<br>0<br>0     | ---                  | ---                        | 12.4                            | 309.6                             | 0.11                               | 2.54                                 | yes                          |   |
| 11/19/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 375.2                      | 42                           | 41                    | 24<br>0<br>0      | 22<br>---            | <0.077<br>---              | 0.3                             | 309.9                             | 0.00                               | 2.54                                 | yes                          |   |
| 11/20/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 398.8                      | 49                           | 68                    | 660<br>0<br>0     | ---                  | ---                        | 0.3                             | 310.2                             | 0.00                               | 2.54                                 | yes                          | Increased system vacuum by closing off recirculation valve on blower.             |
| 11/26/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 426.3                      | 49                           | 68                    | 1,800<br>0<br>0   | ---                  | ---                        | 0.3                             | 310.6                             | 0.00                               | 2.54                                 | yes                          | Received verbal approval from BAAQMD to decrease monitoring from daily to weekly. |
| 12/03/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 593.5                      | 48                           | 61                    | 1,300<br>0<br>0   | ---                  | ---                        | 0.3                             | 313.0                             | 0.00                               | 2.54                                 | yes                          |   |
| 12/14/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 853.0                      | 52                           | 54                    | 280<br>0<br>0     | 280<br><7.0<br><7.0  | 0.17<br><0.077<br><0.077   | 4.7                             | 363.5                             | 0.003                              | 2.57                                 | yes                          |   |
| 12/21/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 1,021.5                    | 58                           | 54                    | 0<br>0<br>0       | 170<br><7.0<br><7.0  | 0.14<br><0.077<br><0.077   | 3.2                             | 385.7                             | 0.00                               | 2.58                                 | yes                          | SVE shutdown after reading, restarted   |
| 12/27/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 1,163.5                    | 40                           | 54                    | NM<br>NM<br>NM    | ---                  | ---                        | 2.2                             | 398.6                             | 0.00                               | 2.59                                 | yes                          | SVE shutdown on arrival, restart and monitor                                      |
| 12/28/07 | SYS-INF<br>SYS-MID<br>SYS-EFF | 1,188.5                    | 50                           | 54                    | 14<br>0<br>0      | 14<br><7.0<br><7.0   | <0.077<br><0.077<br><0.077 | 0.2                             | 398.8                             | 0.00                               | 2.59                                 | yes                          |   |
| 01/03/08 | SYS-INF<br>SYS-MID<br>SYS-EFF | 1,329.5                    | 51                           | 54                    | 50<br>0<br>0      | 50<br>15<br><7.0     | <0.077<br><0.077<br><0.077 | 0.8                             | 403.6                             | 0.00                               | 2.59                                 | yes                          |   |

**Table 2. SVE/AS System Performance Summary - 1721 Webster Street, Oakland, California**

| Date       | Sample ID                     | FIELD MEASUREMENTS         |                              |                       |                   | ANALYTICAL RESULTS    |                            | REMOVAL                         |                                   |                                    |                                      | Air Sparge Unit on? (yes/no) | Comments  |
|------------|-------------------------------|----------------------------|------------------------------|-----------------------|-------------------|-----------------------|----------------------------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------------|------------------------------|---|
|            |                               | Hour Meter Reading (hours) | System Vapor Flow Rate (cfm) | Applied Vacuum ("H2O) | FID Reading (ppm) | TPHg Lab Data (ppmv)  | Benzene Lab Data (ppmv)    | SVE TPHg Removal Rate (lbs/day) | Cumulative SVE TPHg Removal (lbs) | SVE Benzene Removal Rate (lbs/day) | Cumulative SVE Benzene Removal (lbs) |                              |   |
| 01/10/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 1,430.2                    | 50                           | 54                    | 0                 | 16<br>0<br>0          | <0.077<br><0.077<br><0.077 | 0.3                             | 404.7                             | 0.00                               | 2.59                                 | no                           | AS system off while sampling  |
| 1/15/2008* | SYS-INF<br>SYS-MID<br>SYS-EFF | 1,546.0                    | 50                           | 81                    | --                | 1,200<br>7.7<br><7.0  | 2.1<br><0.077<br><0.077    | 19.2                            | 497.6                             | 0.03                               | 2.74                                 | yes                          |   |
| 1/23/2008* | SYS-INF<br>SYS-MID<br>SYS-EFF | 1,694.5                    | 50                           | 95                    | --                | 1,300<br>11<br><7.0   | 1.6<br><0.077<br><0.077    | 20.9                            | 626.6                             | 0.02                               | 2.88                                 | yes                          |   |
| 01/30/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 1,864.6                    | 49                           | 81                    | --                | 2,300<br>24<br><7.0   | 2.6<br><0.077<br><0.077    | 36.2                            | 882.9                             | 0.04                               | 3.15                                 | yes                          |   |
| 02/06/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 2,027.5                    | 50                           | 81                    | --                | 1,700<br>43<br><7.0   | 2.9<br><0.077<br><0.077    | 27.3                            | 1,068.0                           | 0.04                               | 3.43                                 | yes                          |   |
| 02/12/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 2,173.3                    | 60                           | 95                    | --                | 1,500<br>520<br>28    | 1.7<br>1.1<br><0.077       | 28.9                            | 1,243.4                           | 0.03                               | 3.61                                 | yes                          |   |
| 02/21/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 2,394.1                    | 65                           | 95                    | --                | ---                   | ---                        | 31.3                            | 1,531.2                           | 0.03                               | 3.91                                 | yes                          | Samples not picked up by the laboratory courier before hold time expired. |
| 02/29/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 2,580.5                    | 27                           | 95                    | --                | 1,100<br>890<br><7.0  | 1.4<br>5.3<br><0.077       | 9.5                             | 1,605.2                           | 0.01                               | 3.99                                 | yes                          | System shut down for future changeout of carbon in first vessel.          |
| 04/07/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 2,581.4                    | 44                           | 7.5                   | --                | 1,100<br>---          | 1.4<br>---                 | 15.5                            | 1,605.8                           | 0.02                               | 3.99                                 | yes                          | Restart system after carbon changeout                                     |
| 04/10/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 2,650.3                    | 26                           | 7                     | --                | 1,200<br><7.0<br><7.0 | 3.6<br><0.077<br><0.077    | 10.0                            | 1,634.5                           | 0.03                               | 4.07                                 | yes                          |   |
| 04/17/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 2,826.1                    | 28                           | 8                     | 962<br>3<br>3     | ---                   | ---                        | 10.8                            | 1,713.5                           | 0.03                               | 4.29                                 | yes                          |   |
| 04/23/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 2,969.4                    | 26                           | 7.5                   | --                | 1,100<br><7.0<br><7.0 | 1.5<br><0.077<br><0.077    | 9.2                             | 1,768.2                           | 0.01                               | 4.36                                 | yes                          |   |
| 04/30/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 3,136.8                    | 23                           | 7.5                   | --                | 780<br><7.0<br><7.0   | 1.4<br><0.077<br><0.077    | 5.8                             | 1,808.4                           | 0.01                               | 4.42                                 | yes                          |   |
| 05/07/08   | SYS-INF<br>SYS-MID<br>SYS-EFF | 3,304.6                    | 28                           | 8                     | 378<br>0<br>0     | ---                   | ---                        | 7.0                             | 1,857.4                           | 0.01                               | 4.50                                 | yes                          |   |

**Table 2. SVE/AS System Performance Summary - 1721 Webster Street, Oakland, California**

| Date        | Sample ID                     | FIELD MEASUREMENTS         |                              |                       |                   | ANALYTICAL RESULTS   |                         | REMOVAL                         |                                   |                                    |                                      | Air Sparge Unit on? (yes/no) | Comments |   |
|-------------|-------------------------------|----------------------------|------------------------------|-----------------------|-------------------|----------------------|-------------------------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------------|------------------------------|----------|---|
|             |                               | Hour Meter Reading (hours) | System Vapor Flow Rate (cfm) | Applied Vacuum ("H2O) | FID Reading (ppm) | TPHg Lab Data (ppmv) | Benzene Lab Data (ppmv) | SVE TPHg Removal Rate (lbs/day) | Cumulative SVE TPHg Removal (lbs) | SVE Benzene Removal Rate (lbs/day) | Cumulative SVE Benzene Removal (lbs) |                              |          |   |
| 05/14/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 3,472.2                    | 26                           | 8                     | 523<br>6<br>0     | ---<br>---<br>---    | ---                     | ---                             | 6.5                               | 1,902.8                            | 0.01                                 | 4.57                         | yes      |   |
| 05/23/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 3,690.2                    | 28                           | 7                     | 264<br>0<br>0     | ---<br>---<br>---    | ---                     | ---                             | 7.0                               | 1,966.5                            | 0.01                                 | 4.68                         | yes      |   |
| 05/30/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 3,859.2                    | 36                           | 7                     | 317<br>1<br>0     | ---<br>---<br>---    | ---                     | ---                             | 9.0                               | 2,029.9                            | 0.01                                 | 4.78                         | yes      |   |
| 06/05/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 3,999.6                    | 38                           | 7                     | 350<br>0<br>0     | ---<br>---<br>---    | ---                     | ---                             | 9.5                               | 2,085.5                            | 0.02                                 | 4.87                         | yes      |   |
| 06/13/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 4,193.1                    | 38                           | 7                     | --                | 700<br><7.0<br><7.0  | 1.6<br><0.077<br><0.077 | ---                             | 8.5                               | 2,154.3                            | 0.02                                 | 5.01                         | yes      |   |
| 06/19/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 4336.7                     | 25                           | 7                     | 349<br>--<br>0    | ---<br>---<br>---    | ---                     | ---                             | 5.6                               | 2,187.9                            | 0.01                                 | 5.08                         | yes      |   |
| 06/27/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 4,529.7                    | 25                           | 7                     | 335<br>0<br>0     | ---<br>---<br>---    | ---                     | ---                             | 5.6                               | 2,233.1                            | 0.01                                 | 5.18                         | yes      |   |
| 07/10/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 4,839.0                    | 56                           | 8                     | 256<br>40<br>0    | ---<br>---<br>---    | ---                     | ---                             | 12.6                              | 2,395.2                            | 0.03                                 | 5.51                         | yes      |   |
| 07/18/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 5,032.0                    | 33                           | 8                     | 330<br>174<br>0   | ---<br>---<br>---    | ---                     | ---                             | 7.4                               | 2,454.8                            | 0.02                                 | 5.64                         | yes      |   |
| 7/24/2008** | SYS-INF<br>SYS-MID<br>SYS-EFF | 5,178.0                    | 33                           | 8                     | 360<br>187<br>0   | ---<br>---<br>---    | ---                     | ---                             | 7.4                               | 2,499.8                            | 0.02                                 | 5.73                         | yes      |   |
| 8/1/2008**  | SYS-INF<br>SYS-MID<br>SYS-EFF | 5,368.0                    | 33                           | 8                     | 248<br>193<br>0   | ---<br>---<br>---    | ---                     | ---                             | 7.4                               | 2,558.5                            | 0.02                                 | 5.85                         | yes      | Lowered motor speed of blower to reduce noise within garage per client      |
| 8/8/2008**  | SYS-INF<br>SYS-MID<br>SYS-EFF | 5,536.7                    | 17                           | 4.5                   | 146<br>153<br>0   | ---<br>---<br>---    | ---                     | ---                             | 3.8                               | 2,585.3                            | 0.01                                 | 5.91                         | yes      | Stopped air sparging to wells AS-1 & AS-3. Sparging in well AS-2 full time. |
| 8/18/2008** | SYS-INF<br>SYS-MID<br>SYS-EFF | 5,774.1                    | 17                           | 4.5                   | 365<br>170<br>0   | 840<br>140<br><7.0   | 1.1<br><0.077<br><0.077 | ---                             | 4.6                               | 2,630.7                            | 0.01                                 | 5.96                         | yes      |   |
| 08/22/08    | SYS-INF<br>SYS-MID<br>SYS-EFF | 5,873.9                    | 17                           | 4                     | 325<br>207<br>0   | ---<br>---<br>---    | ---                     | ---                             | 4.6                               | 2,649.7                            | 0.01                                 | 5.98                         | yes      |   |



| Table 2. SVE/AS System Performance Summary - 1721 Webster Street, Oakland, California |                               |                            |                              |                       |                   |                      |                         |                                 |                                   |                                    |                                      |                              |   |
|---|-------------------------------|----------------------------|------------------------------|-----------------------|-------------------|----------------------|-------------------------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------------|------------------------------|---|
| Date  | Sample ID                     | FIELD MEASUREMENTS         |                              |                       |                   | ANALYTICAL RESULTS   |                         | REMOVAL                         |                                   |                                    |                                      | Air Sparge Unit on? (yes/no) | Comments  |
|   |                               | Hour Meter Reading (hours) | System Vapor Flow Rate (cfm) | Applied Vacuum ("H2O) | FID Reading (ppm) | TPHg Lab Data (ppmv) | Benzene Lab Data (ppmv) | SVE TPHg Removal Rate (lbs/day) | Cumulative SVE TPHg Removal (lbs) | SVE Benzene Removal Rate (lbs/day) | Cumulative SVE Benzene Removal (lbs) |                              |   |
| 09/05/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 6,208.4                    | 14                           | 5                     | 385<br>219<br>23  | ---                  | ---                     | 3.6                             | 2,700.4                           | 0.004                              | 6.05                                 | yes                          | System shutdown for carbon changeout  |
| 10/06/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 6,211.0                    | 13                           | 5                     | 443<br>23<br>0    | 1,000<br>---         | 1.8<br>---              | 3.4                             | 2,700.8                           | 0.004                              | 6.05                                 | yes                          | System restarted; samples collected after system ran for approximately 1                      |
| 10/14/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 6,405.0                    | 15                           | 5                     | 215<br>0<br>0     | ---                  | ---                     | 4.7                             | 2,738.4                           | 0.00                               | 6.05                                 | yes                          |   |
| 10/23/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 6,615.7                    | 14                           | 5                     | 205<br>0<br>0     | ---                  | ---                     | 4.5                             | 2,777.8                           | 0.01                               | 6.11                                 | yes                          |   |
| 10/29/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 6,760.3                    | 21                           | 5                     | 160<br>0<br>0     | ---                  | ---                     | 6.6                             | 2,817.5                           | 0.01                               | 6.17                                 | yes                          |   |
| 11/17/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 7,221.4                    | 20                           | 5                     | 98<br>0<br>0      | ---                  | ---                     | 6.3                             | 2,937.6                           | 0.01                               | 6.37                                 | yes                          |   |
| 11/25/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 7,413.9                    | 19                           | 5                     | 24<br>0<br>0      | ---                  | ---                     | 6.1                             | 2,986.5                           | 0.01                               | 6.45                                 | yes                          |   |
| 12/05/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 7,652.3                    | 15                           | 5                     | 74<br>0<br>0      | ---                  | ---                     | 4.8                             | 3,034.3                           | 0.01                               | 6.53                                 | yes                          | Shutdown system to conduct maintenance on blower. Greased fittings and lowered motor speed at |
| 12/16/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 7,915.0                    | 15                           | 5                     | 21<br>0<br>0      | 77<br>---            | <0.077<br>---           | 0.4                             | 3,038.4                           | 0.00                               | 6.53                                 | yes                          |   |
| 12/23/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 8,079.4                    | 20                           | 5                     | 22<br>0<br>0      | ---                  | ---                     | 0.5                             | 3,041.7                           | 0.00                               | 6.53                                 | yes                          |   |
| 12/31/08  | SYS-INF<br>SYS-MID<br>SYS-EFF | 8,277.1                    | 30                           | 5                     | 24<br>0<br>0      | ---                  | ---                     | 0.7                             | 3,047.8                           | 0.00                               | 6.53                                 | yes                          |   |
| 01/06/09  | SYS-INF<br>SYS-MID<br>SYS-EFF | 8,416.9                    | 27                           | 5                     | 28<br>0<br>0      | ---                  | ---                     | 0.7                             | 3,051.6                           | 0.00                               | 6.53                                 | yes                          | Greased blower  |
| 01/20/09  | SYS-INF<br>SYS-MID<br>SYS-EFF | 8,756.6                    | 27                           | 5                     | NM<br>---         | ---                  | ---                     | 0.7                             | 3,061.1                           | 0.00                               | 6.53                                 | yes                          | Shutdown system to evaluate effectiveness of remediation on groundwater.                      |
| 02/06/09  | SYS-INF<br>SYS-MID<br>SYS-EFF | 8,756.6                    | 25                           | 5                     | 50<br>0<br>0      | 50<br>---            | <0.077<br>---           | 0.4                             | 3,061.1                           | 0.00                               | 6.53                                 | yes                          | Restart system  |

**Table 2. SVE/AS System Performance Summary - 1721 Webster Street, Oakland, California**

| Date     | Sample ID                     | FIELD MEASUREMENTS         |                              |                       |                   | ANALYTICAL RESULTS   |                            | REMOVAL                         |                                   |                                    |                                      | Air Sparge Unit on? (yes/no) | Comments                                   |
|----------|-------------------------------|----------------------------|------------------------------|-----------------------|-------------------|----------------------|----------------------------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------------|------------------------------|--|
|          |                               | Hour Meter Reading (hours) | System Vapor Flow Rate (cfm) | Applied Vacuum ("H2O) | FID Reading (ppm) | TPHg Lab Data (ppmv) | Benzene Lab Data (ppmv)    | SVE TPHg Removal Rate (lbs/day) | Cumulative SVE TPHg Removal (lbs) | SVE Benzene Removal Rate (lbs/day) | Cumulative SVE Benzene Removal (lbs) |                              |  |
| 02/26/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 9,002.6                    | 22                           | 5                     | 13<br>1<br>0      | ---<br>---<br>---    | ---<br>---<br>---          | 0.3                             | 3,064.6                           | 0.00                               | 6.53                                 | yes                          | Restart system, off on arrival             |
| 03/06/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 9,197.4                    | 23                           | 5                     | 5<br>0<br>0       | ---<br>---<br>---    | ---<br>---<br>---          | 0.4                             | 3,067.6                           | 0.00                               | 6.53                                 | yes                          |  |
| 03/13/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 9,360.4                    | 22                           | 5                     | NM<br>NM<br>NM    | 20<br><7.0<br><7.0   | <0.077<br><0.077<br><0.077 | 0.1                             | 3,068.5                           | 0.00                               | 6.53                                 | yes                          |  |
| 03/18/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 9,480.4                    | 21                           | 5                     | 5<br>0<br>0       | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,069.2                           | 0.00                               | 6.53                                 | yes                          |  |
| 03/26/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 9,675.1                    | 21                           | 5                     | 5<br>0<br>0       | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,070.3                           | 0.00                               | 6.53                                 | yes                          |  |
| 04/03/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 9,868.7                    | 21                           | 5                     | 4<br>0<br>0       | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,071.4                           | 0.00                               | 6.53                                 | yes                          |  |
| 04/10/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 10,035.7                   | 22                           | 5                     | 1<br>0<br>0       | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,072.4                           | 0.00                               | 6.53                                 | yes                          |  |
| 04/17/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 10,203.7                   | 21                           | 5                     | 4<br>0<br>0       | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,073.3                           | 0.00                               | 6.53                                 | yes                          |  |
| 04/24/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 10,366.7                   | 19                           | 5                     | 4<br>0<br>0       | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,074.2                           | 0.00                               | 6.53                                 | yes                          | Shut AS/SVE off for upcoming QM            |
| 05/01/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 10,366.7                   | 20                           | 5                     | 3<br>0<br>0       | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,074.2                           | 0.00                               | 6.53                                 | yes                          | Restart SVE/AS                             |
| 05/08/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 10,543.3                   | 21                           | 5                     | 15<br>0<br>0      | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,075.1                           | 0.00                               | 6.53                                 | yes                          |  |
| 05/15/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 10,711.8                   | 20                           | 5                     | 32<br>0<br>0      | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,076.0                           | 0.00                               | 6.53                                 | yes                          |  |
| 05/22/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 10,879.5                   | 0                            | 0                     | NM<br>NM<br>NM    | ---<br>---<br>---    | ---<br>---<br>---          | 0.0                             | 3,076.0                           | 0.00                               | 6.53                                 | no                           | AS compressor down; shut SVE off           |
| 09/18/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 10,879.5                   | 22                           | 5                     | 41<br>0<br>0      | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,076.0                           | 0.00                               | 6.53                                 | yes                          | Restart AS and SVE after repairing AS comp |
| 10/30/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 11,889.8                   | 20                           | 5                     | 35<br>0<br>0      | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,081.5                           | 0.00                               | 6.53                                 | no                           | SVE on, AS comp has blown fuse             |
| 11/30/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 12,631.8                   | 20                           | 5                     | 31<br>0<br>0      | ---<br>---<br>---    | ---<br>---<br>---          | 0.1                             | 3,085.4                           | 0.00                               | 6.53                                 | yes                          | Replace fuse, restart AS                   |

**Table 2. SVE/AS System Performance Summary - 1721 Webster Street, Oakland, California**

| Date     | Sample ID                     | FIELD MEASUREMENTS         |                              |                       |                   | ANALYTICAL RESULTS   |                          | REMOVAL                         |                                   |                                    |                                      | Air Sparge Unit on? (yes/no) | Comments   |
|----------|-------------------------------|----------------------------|------------------------------|-----------------------|-------------------|----------------------|--------------------------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------------|------------------------------|--|
|          |                               | Hour Meter Reading (hours) | System Vapor Flow Rate (cfm) | Applied Vacuum ("H2O) | FID Reading (ppm) | TPHg Lab Data (ppmv) | Benzene Lab Data (ppmv)  | SVE TPHg Removal Rate (lbs/day) | Cumulative SVE TPHg Removal (lbs) | SVE Benzene Removal Rate (lbs/day) | Cumulative SVE Benzene Removal (lbs) |                              |  |
| 12/16/09 | SYS-INF<br>SYS-MID<br>SYS-EFF | 13,017.6                   | 22                           | 5                     | 22<br>0<br>0      | ---                  | ---                      | 0.1                             | 3,087.7                           | 0.00                               | 6.53                                 | yes                          |  |
| 01/18/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 13,808.6                   | 24                           | 5                     | 27<br>0<br>0      | ---                  | ---                      | 0.2                             | 3,092.8                           | 0.00                               | 6.53                                 | yes                          |  |
| 02/03/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 14,193.0                   | 12                           | 4                     | 34<br>0<br>0      | 72<br><7.0<br><7.0   | 0.25<br><0.077<br><0.077 | 0.3                             | 3,097.2                           | 0.00                               | 6.53                                 | yes                          | Serviced SVE blower, collected lab samples                         |
| 04/07/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 15,701.1                   | 12                           | 5                     | 45<br>0<br>0      | ---                  | ---                      | 0.3                             | 3,114.6                           | 0.00                               | 6.58                                 | no                           | AS off, compressor non-op  |
| 05/07/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 16,425.2                   | 27                           | 0                     | 43<br>0<br>0      | ---                  | ---                      | 0.6                             | 3,133.4                           | 0.00                               | 6.64                                 | no                           | AS off, compressor non-op  |
| 06/07/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 17,168.0                   | 27                           | 0                     | 46<br>0<br>0      | 84<br><7.0<br><7.0   | 0.29<br><0.077<br><0.077 | 0.7                             | 3,155.5                           | 0.00                               | 6.71                                 | no                           | AS off, compressor non-op  |
| 07/15/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 18,075.8                   | 23                           | 0                     | 4<br>2<br>0       | ---                  | ---                      | 0.6                             | 3,179.1                           | 0.00                               | 6.79                                 | no                           | AS off, compressor non-op  |
| 08/18/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 18,434.1                   | 30                           | 0                     | 26<br>2<br>0      | ---                  | ---                      | 0.8                             | 3,191.3                           | 0.00                               | 6.82                                 | no                           | Restart system, off on arrival                                     |
| 09/22/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 19,173.6                   | 25                           | 0                     | 17<br>2<br>0      | 66<br><7.0<br><7.0   | 0.21<br><0.077<br><0.077 | 0.5                             | 3,208.0                           | 0.00                               | 6.87                                 | no                           | Restart system, off on arrival                                     |
| 10/22/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 19,345.1                   | 25                           | 0                     | 14<br>1<br>0      | ---                  | ---                      | 0.5                             | 3,211.8                           | 0.00                               | 6.88                                 | no                           | Restart system, off on arrival                                     |
| 11/23/10 | SYS-INF<br>SYS-MID<br>SYS-EFF | 19,395.5                   | 0                            | 0                     | NM<br>NM<br>NM    | ---                  | ---                      | 0.0                             | 3,211.8                           | 0.00                               | 6.88                                 | no                           | Off on arrival, system shutdown October 26, 2010 for rainy season. |

**Notes:**

NM = not measured  
 cfm = cubic feet per minute.  
 ppmv = Parts per million by volume  
 lbs = Pounds  
 "H2O = Inches of water  
 SVE/AS = Soil vapor extraction and air sparge  
 FID = Flame Ionization Detector.  
 Hydrocarbon Removal/Emission Rate = Rate based on Bay Area Air Quality Management District's Manual of Procedures for Soil Vapor Extraction dated July 17, 1991.  
 Rate = vapor analytical concentration (ppmv) x system flowrate (scfm) x (1lb-mole/386 ft³) x molecular weight (86 lb/lb-mole for TPH-Gas hexane) x 1440 min/day x 1/1,000,000.  
 \* = Subtracted carbon tip readings of 28, 17, and 10, respectively, from influent, midpoint and effluent readings without carbon tip to account for methane.  
 (--) = not sampled  
 \*Soil vapor flow rates were not measured on 1/15/08 and 1/23/08 due to equipment breakage. For hydrocarbon mass removal calculation purposes, the flow rate recorded during the 1/10/08 visit was used.  
 \*\*Vapor flow meter being serviced from 7-24-2008 through 8-18-2008. Flow rates assumed from previous data, field observations, and adjustments made to system.

## **APPENDIX A**

### Groundwater Monitoring Program

**Table A - Groundwater Monitoring Program**  
Douglas Parking Company, 1721 Webster Street, Oakland, CA.

| Well ID  | Well Type | Screened Interval (ft bgs) | Well Location for Monitoring | Casing Diam. (in) | Gauge Frequency | Sample Frequency | TPHg/BTEX/MTBE | TAME/TBA/DIPE/ETBE/MTBE |
|--|-----------|----------------------------|------------------------------|-------------------|-----------------|------------------|----------------|-------------------------|
| <b>Onsite Monitoring and Remediation Wells</b> |           |                            |                              |                   |                 |                  |                |                         |
| MW-1   | Mon       | 17-30                      | Source Area                  | 2                 | 1st, 3rd        | 1st              | 1st            | ---                     |
| MW-2   | Mon       | 19.5-29.5                  | Downgradient                 | 2                 | 1st, 3rd        | 1st, 3rd         | 1st, 3rd       | ---                     |
| MW-3   | Mon       | 20-30                      | Upgradient                   | 2                 | 1st, 3rd        | 1st, 3rd         | 1st, 3rd       | ---                     |
| AS-1   | Rem       | 27-30                      | Source Area                  | 1                 | ---             | ---              | ---            | ---                     |
| AS-2   | Rem       | 27-30                      | Source Area                  | 2                 | ---             | ---              | ---            | ---                     |
| AS-3   | Rem       | 27-30                      | Source Area                  | 2                 | ---             | ---              | ---            | ---                     |
| <b>Offsite Monitoring Wells</b>                |           |                            |                              |                   |                 |                  |                |                         |
| MW-4   | Mon       | 15-30                      | Mid-Downgradient             | 2                 | 1st, 3rd        | 1st, 3rd         | 1st, 3rd       | ---                     |
| MW-5   | Mon       | 10-25                      | Downgradient                 | 2                 | 1st, 3rd        | 1st              | 1st            | ---                     |
| MW-6   | Mon       | 15-30                      | Crossgradient                | 2                 | 1st, 3rd        | 1st, 3rd         | 1st, 3rd       | ---                     |
| MW-7   | Mon       | 15-30                      | Upgradient                   | 2                 | 1st, 3rd        | 1st              | 1st            | ---                     |

Notes and Abbreviations:

1st = Sampled during the 1st quarter, typically January

1st, 3rd = Sampled during the 1st and 3rd quarters, typically January and July

Mon = Groundwater Monitoring Only

Rem= Remediation Well Only

--- = None or not applicable

AS-1 = Air Sparging Well

## **APPENDIX B**

Groundwater Monitoring Field Data Sheets

Well Gauging Data Sheet

| Project.Task #: 1135.001.228       |                 |      |                                 | Project Name: Douglas Parking <i>7</i> |                     |                      |                 |
|------------------------------------|-----------------|------|---------------------------------|--|---------------------|----------------------|-----------------|
| Address: 1721 Webster, Oakland, CA |                 |      |                                 |  |                     | Date: <i>6-12-11</i> |                 |
| Name: Steve Hunter                 |                 |      |                                 | Signature: <i>Steve Hunter</i>         |                     |                      |                 |
| Well ID                            | Well Size (in.) | Time | Depth to Immiscible Liquid (ft) | Thickness of Immiscible Liquid (ft)    | Depth to Water (ft) | Total Depth (ft)     | Measuring Point |
| MW-1                               | 2"              | 0924 |                                 |  | 20.72               | 26.03                | TOC             |
| MW-2                               | 2"              | 0931 |                                 |  | 18.52               | 25.52                | ↓               |
| MW-3                               | 2"              | 0937 |                                 |  | 20.14               | 26.18                |                 |
| MW-4                               | 2"              | 0946 |                                 |  | 17.01               | 29.41                |                 |
| MW-5                               | 2"              | 0910 |                                 |  | 14.81               | 24.56                |                 |
| MW-6                               | 2"              | 0951 |                                 |  | 18.73               | 24.60                |                 |
| MW-7                               | 2"              | 0917 |                                 |  | 20.72               | 26.03                |                 |
|                                    |                 |      |                                 |  |                     |                      |                 |
|                                    |                 |      |                                 |  |                     |                      |                 |
|                                    |                 |      |                                 |  |                     |                      |                 |
|                                    |                 |      |                                 |  |                     |                      |                 |

Comments:

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**MONITORING FIELD DATA SHEET**

Well ID: *MW-2*

|   |           |  |  |           |           |           |           |           |                             |
|---|-----------|--|--|-----------|-----------|-----------|-----------|-----------|-----------------------------|
| Project.Task #: 1135.001.228              |           | Project Name: Douglas Parking  |  |           |           |           |           |           |                             |
| Address: 1721 Webster Street, Oakland, CA |           |  |  |           |           |           |           |           |                             |
| Date: <i>7-12-11</i>                      |           | Weather: <i>overcast</i>   |  |           |           |           |           |           |                             |
| Well Diameter: <i>2"</i>                  |           | Volume/ft. <table border="1"> <tr> <td>1" = 0.04</td> <td>3" = 0.37</td> <td>6" = 1.47</td> </tr> <tr> <td>2" = 0.16</td> <td>4" = 0.65</td> <td>radius<sup>2</sup>* 0.163</td> </tr> </table> |  | 1" = 0.04 | 3" = 0.37 | 6" = 1.47 | 2" = 0.16 | 4" = 0.65 | radius <sup>2</sup> * 0.163 |
| 1" = 0.04                                 | 3" = 0.37 | 6" = 1.47  |  |           |           |           |           |           |                             |
| 2" = 0.16                                 | 4" = 0.65 | radius <sup>2</sup> * 0.163  |  |           |           |           |           |           |                             |
| Total Depth (TD): <i>25.52</i>            |           | Depth to Product: <i>-</i>   |  |           |           |           |           |           |                             |
| Depth to Water (DTW): <i>18.52</i>        |           | Product Thickness: <i>-</i>  |  |           |           |           |           |           |                             |
| Water Column Height: <i>7.00</i>          |           | 1 Casing Volume: <i>6.12</i> gallons   |  |           |           |           |           |           |                             |
| Reference Point: TOC                      |           | Casing Volumes: <i>3.5</i> gallons   |  |           |           |           |           |           |                             |

Purging Device: Disposable Bailer

Sampling Device: *1'*

| Time        | Temp (°C)   | pH          | Cond (µs)    | NTU         | DO(mg/L)    | ORP (mV) | Vol(gal)   | DTW |
|-------------|-------------|-------------|--------------|-------------|-------------|----------|------------|-----|
| <i>1010</i> | <i>-</i>    | <i>-</i>    | <i>-</i>     | <i>Acid</i> | <i>0.29</i> | <i>-</i> | <i>0</i>   |     |
| <i>1014</i> | <i>18.8</i> | <i>6.94</i> | <i>12.43</i> |             | <i>-</i>    |          | <i>1.5</i> |     |
| <i>1020</i> | <i>18.7</i> | <i>6.83</i> | <i>12.68</i> |             |             |          | <i>2.5</i> |     |
| <i>1025</i> | <i>18.6</i> | <i>6.72</i> | <i>12.71</i> |             |             |          | <i>3.5</i> |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |
|             |             |             |              |             |             |          |            |     |

Comments:

|  |                               |
|--|-------------------------------|
| Sample ID: <i>MW-2</i>                   | Sample Time: <i>1040</i>      |
| Laboratory: McCampbell                   | Sample Date: <i>7-12-11</i>   |
| Containers/Preservative: <i>3 Voa's</i>  |                               |
| Analyzed for: TPHg/BTEX/MTBE (8015/8020) |                               |
| Sampler Name: Steve Hunter               | Signature: <i>[Signature]</i> |



## MONITORING FIELD DATA SHEET

Well ID: *MW-3*

|   |             |                               |              |                           |                             |          |          |     |
|---|-------------|-------------------------------|--------------|---------------------------|-----------------------------|----------|----------|-----|
| Project.Task #: 1135.001.228              |             | Project Name: Douglas Parking |              |                           |                             |          |          |     |
| Address: 1721 Webster Street, Oakland, CA |             |                               |              |                           |                             |          |          |     |
| Date: <i>7-12-11</i>                      |             |                               |              | Weather: <i>overcast</i>  |                             |          |          |     |
| Well Diameter: <i>2"</i>                  |             | Volume/ft.                    | 1" = 0.04    | 3" = 0.37                 | 6" = 1.47                   |          |          |     |
|   |             |                               | 2" = 0.16    | 4" = 0.65                 | radius <sup>2</sup> * 0.163 |          |          |     |
| Total Depth (TD): <i>26.18</i>            |             |                               |              | Depth to Product:         |                             |          |          |     |
| Depth to Water (DTW): <i>20.14</i>        |             |                               |              | Product Thickness:        |                             |          |          |     |
| Water Column Height: <i>6.04</i>          |             |                               |              | 1 Casing Volume: <i>1</i> |                             | gallons  |          |     |
| Reference Point: TOC                      |             |                               |              | Casing Volumes: <i>3</i>  |                             | gallons  |          |     |
| Purging Device: Disposable Bailer         |             |                               |              |                           |                             |          |          |     |
| Sampling Device: <i>11</i>                |             |                               |              |                           |                             |          |          |     |
| Time                                      | Temp ©      | pH                            | Cond (µs)    | NTU                       | DO(mg/L)                    | ORP (mV) | Vol(gal) | DTW |
| <i>1053</i>                               |             |                               |              | <i>pre =</i>              | <i>0.63</i>                 |          | <i>∅</i> |     |
| <i>1059</i>                               | <i>18.2</i> | <i>6.68</i>                   | <i>11.65</i> |                           |                             |          |          |     |
| <i>1106</i>                               | <i>18.6</i> | <i>6.53</i>                   | <i>11.72</i> |                           |                             |          |          |     |
| <i>1111</i>                               | <i>18.5</i> | <i>6.72</i>                   | <i>11.81</i> |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |
|   |             |                               |              |                           |                             |          |          |     |

Comments:

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|  |                               |
|--|-------------------------------|
| Sample ID: <i>MW-3</i>                   | Sample Time: <i>1125</i>      |
| Laboratory: McCampbell                   | Sample Date: <i>7-12-11</i>   |
| Containers/Preservative: <i>3</i> Voa's  |                               |
| Analyzed for: TPHg/BTEX/MTBE (8015/8020) |                               |
| Sampler Name: Steve Hunter               | Signature: <i>[Signature]</i> |

## MONITORING FIELD DATA SHEET

Well ID: *MW-4*

|   |                                   |                               |                             |
|---|-----------------------------------|-------------------------------|-----------------------------|
| Project.Task #: 1135.001.228              |                                   | Project Name: Douglas Parking |                             |
| Address: 1721 Webster Street, Oakland, CA |                                   |                               |                             |
| Date: <i>7-12-11</i>                      |                                   | Weather: <i>overcast</i>      |                             |
| Well Diameter: <i>2"</i>                  | Volume/ft.                        | 1" = 0.04                     | 3" = 0.37                   |
|   |                                   | 2" = 0.16                     | 4" = 0.65                   |
|   |                                   | 6" = 1.47                     | radius <sup>2</sup> * 0.163 |
| Total Depth (TD): <i>29.41</i>            | Depth to Product: <i>-</i>        |                               |                             |
| Depth to Water (DTW): <i>17.01</i>        | Product Thickness: <i>-</i>       |                               |                             |
| Water Column Height: <i>12.40</i>         | 1 Casing Volume: <i>2</i>         | gallons                       |                             |
| Reference Point: TOC                      | <i>3</i> Casing Volumes: <i>6</i> | gallons                       |                             |

Purging Device: Disposable Bailer

Sampling Device:

| Time        | Temp (°C)   | pH          | Cond (µs)    | NTU         | DO(mg/L)    | ORP (mV) | Vol(gal) | DTW |
|-------------|-------------|-------------|--------------|-------------|-------------|----------|----------|-----|
| <i>1225</i> |             |             |              | <i>pre:</i> | <i>1.73</i> |          | <i>0</i> |     |
| <i>1231</i> | <i>18.0</i> | <i>6.70</i> | <i>11.57</i> |             |             |          |          |     |
| <i>1238</i> | <i>18.2</i> | <i>6.81</i> | <i>11.62</i> |             |             |          |          |     |
| <i>1242</i> | <i>18.1</i> | <i>6.72</i> | <i>11.52</i> |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |
|             |             |             |              |             |             |          |          |     |

Comments:

|  |                               |
|--|-------------------------------|
| Sample ID: <i>MW-4</i>                   | Sample Time: <i>1255</i>      |
| Laboratory: McCampbell                   | Sample Date: <i>7-12-11</i>   |
| Containers/Preservative: <i>3 Voa's</i>  |                               |
| Analyzed for: TPHg/BTEX/MTBE (8015/8020) |                               |
| Sampler Name: Steve Hunter               | Signature: <i>[Signature]</i> |

## MONITORING FIELD DATA SHEET

Well ID: *MW-6*

| Project.Task #: 1135.001.228              |             |             |              | Project Name: Douglas Parking     |             |           |                             |     |
|---|-------------|-------------|--------------|-----------------------------------|-------------|-----------|-----------------------------|-----|
| Address: 1721 Webster Street, Oakland, CA |             |             |              |                                   |             |           |                             |     |
| Date: <i>7-12-11</i>                      |             |             |              | Weather: <i>overcast</i>          |             |           |                             |     |
| Well Diameter: <i>2"</i>                  |             |             |              | Volume/ft.                        | 1" = 0.04   | 3" = 0.37 | 6" = 1.47                   |     |
|   |             |             |              |                                   | 2" = 0.16   | 4" = 0.65 | radius <sup>2</sup> * 0.163 |     |
| Total Depth (TD): <i>24.60</i>            |             |             |              | Depth to Product: <i>—</i>        |             |           |                             |     |
| Depth to Water (DTW): <i>18.73</i>        |             |             |              | Product Thickness: <i>—</i>       |             |           |                             |     |
| Water Column Height: <i>5.87</i>          |             |             |              | 1 Casing Volume: <i>1</i>         |             |           | gallons                     |     |
| Reference Point: TOC                      |             |             |              | <i>3</i> Casing Volumes: <i>3</i> |             |           | gallons                     |     |
| Purging Device: Disposable Bailer         |             |             |              |                                   |             |           |                             |     |
| Sampling Device: <i>11</i>                |             |             |              |                                   |             |           |                             |     |
| Time                                      | Temp ©      | pH          | Cond (µs)    | NTU                               | DO(mg/L)    | ORP (mV)  | Vol(gal)                    | DTW |
| <i>1140</i>                               | <i>—</i>    | <i>—</i>    | <i>—</i>     | <i>pre.</i>                       | <i>0.50</i> |           | <i>2</i>                    |     |
| <i>1148</i>                               | <i>18.2</i> | <i>6.40</i> | <i>11.75</i> |                                   |             |           | <i>1</i>                    |     |
| <i>1153</i>                               | <i>18.4</i> | <i>6.52</i> | <i>11.81</i> |                                   |             |           | <i>2</i>                    |     |
| <i>1159</i>                               | <i>18.5</i> | <i>6.49</i> | <i>11.86</i> |                                   |             |           | <i>3</i>                    |     |
|   |             |             |              |                                   |             |           |                             |     |
|   |             |             |              |                                   |             |           |                             |     |
|   |             |             |              |                                   |             |           |                             |     |
|   |             |             |              |                                   |             |           |                             |     |
|   |             |             |              |                                   |             |           |                             |     |
|   |             |             |              |                                   |             |           |                             |     |
|   |             |             |              |                                   |             |           |                             |     |
|   |             |             |              |                                   |             |           |                             |     |
|   |             |             |              |                                   |             |           |                             |     |
|   |             |             |              |                                   |             |           |                             |     |

Comments:

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|  |  |                               |  |
|--|--|-------------------------------|--|
| Sample ID: <i>MW-6</i>                   |  | Sample Time: <i>1210</i>      |  |
| Laboratory: McCampbell                   |  | Sample Date: <i>7-12-11</i>   |  |
| Containers/Preservative: <i>3</i> Voa's  |  |                               |  |
| Analyzed for: TPHg/BTEX/MTBE (8015/8020) |  |                               |  |
| Sampler Name: Steve Hunter               |  | Signature: <i>[Signature]</i> |  |

## **APPENDIX C**

Laboratory Analytical Reports



## Analytical Report

|   |  |                          |
|---|--|--------------------------|
| Pangea Environmental Svcs., Inc.<br><br>1710 Franklin Street, Ste. 200<br><br>Oakland, CA 94612 | Client Project ID: #1135.001; Douglas-Webster St | Date Sampled: 07/12/11   |
|   |  | Date Received: 07/12/11  |
|   | Client Contact: Tina De La Fuente                | Date Reported: 07/18/11  |
|   | Client P.O.:                                     | Date Completed: 07/14/11 |

**WorkOrder: 1107261**

July 18, 2011

Dear Tina:

Enclosed within are:

- 1) The results of the **4** analyzed samples from your project: **#1135.001; Douglas-Webster St,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice 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 or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.

***The analytical results relate only to the items tested.***

1107261

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Road  
Pittsburg, CA 94565

Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)

Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR  48 HR  72 HR  5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

| Report To: Tina de la Fuente                       |                             | Bill To: Pangea  |            | Analysis Request  |                 |  |      |     |        |       |                  |     |                  |       |   | Other  | Comments |
|--|-----------------------------|--|------------|---|-----------------|--|------|-----|--------|-------|------------------|-----|------------------|-------|---|--|----------|
| Company: Pangea Environmental Services, Inc.       |                             | E-Mail: <a href="mailto:tdelafuente@pangeaenv.com">tdelafuente@pangeaenv.com</a> |            | BTEX & TPH as Gas (602/8020 + 8015)/MTBE<br>TPH as Diesel (8015) w/ Silica Gel Cleanup<br>Total Petroleum Oil & Grease (5520 E&F/B&F)<br>Total Petroleum Hydrocarbons (418.1)<br>EPA 601 / 8010 / 8021<br>BTEX ONLY (EPA 602 / 8020)<br>EPA 608 / 8081<br>EPA 608 / 8082 PCB's ONLY<br>EPA 8140 / 8141<br>EPA 8150 / 8151<br>EPA 524.2 / 624 / 8260<br>EPA 525 / 625 / 8270<br>PAH's / PNA's by EPA 625 / 8270 / 8310<br>CAM-17 Metals (6010 / 6020)<br>LUFT 5 Metals (6010 / 6020)<br>Lead (200.8 / 200.9 / 6010)<br>Five fuel oxygenates by EPA Method 8260 |                 |  |      |     |        |       |                  |     |                  |       |   | Filter Samples for Metals analysis: Yes / No |          |
| 1710 Franklin Street, Suite 200, Oakland, CA 94612 |                             | Project Name: Douglas - Webster St   |            |   |                 |  |      |     |        |       |                  |     |                  |       |   |  |          |
| Tele: (510) 836-3700                               |                             | Fax: (510) 836-3709  |            |   |                 |  |      |     |        |       |                  |     |                  |       |   |  |          |
| Project #: 1135.001                                |                             | Project Location: 1721 Webster St., Oakland, CA                                  |            |   |                 |  |      |     |        |       |                  |     |                  |       |   |  |          |
| Sampler Signature: <i>[Signature]</i>              |                             |  |            |   |                 |  |      |     |        |       |                  |     |                  |       |   |  |          |
| SAMPLE ID  | LOCATION (Field Point Name) | SAMPLING   |            | # Containers  | Type Containers | MATRIX   |      |     |        |       | METHOD PRESERVED |     |                  |       |   |  |          |
|  |                             | Date   | Time       |   |                 | Water  | Soil | Air | Sludge | Other | ICE              | HCL | HNO <sub>3</sub> | Other |   |  |          |
| MW-2   |                             | 7-12-11  | 1040       | 3   | Wells           | X  |      |     |        |       | X                | X   |                  |       | X |  |          |
| MW-3   |                             | ↓  | 1125       | 3   | ↓               | X  |      |     |        |       | X                | X   |                  |       | X |  |          |
| MW-4   |                             | ↓  | 1255       | 3   | ↓               | X  |      |     |        |       | X                | X   |                  |       | X |  |          |
| MW-6   |                             | ↓  | 1210       | 3   | ↓               | X  |      |     |        |       | X                | X   |                  |       | X |  |          |
| Relinquished By: <i>[Signature]</i>                |                             | Date: 7-12-11  | Time: 1430 | Received By: <i>[Signature]</i>   |                 | COMMENTS: ICE/TPH 10/20<br>GOOD CONDITION<br>HEAD SPACE ABSENT<br>DECHLORINATED IN LAB<br>APPROPRIATE CONTAINERS<br>PRESERVED IN LAB |      |     |        |       |                  |     |                  |       |   |  |          |
| Relinquished By: <i>[Signature]</i>                |                             | Date: 7/12/11  | Time: 1600 | Received By: <i>[Signature]</i>   |                 | VOAS O&G METALS OTHER<br>PRESERVATION pH<2   |      |     |        |       |                  |     |                  |       |   |  |          |

**McC Campbell Analytical, Inc.**



1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

**CHAIN-OF-CUSTODY RECORD**

**WorkOrder: 1107261**

**ClientCode: PEO**

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**

Tina De La Fuente  
 Pangea Environmental Svcs., Inc.  
 1710 Franklin Street, Ste. 200  
 Oakland, CA 94612  
 (510) 836-3700    FAX: (510) 836-3709

Email: tdelafuente@pangeaenv.com  
 cc:  
 PO:  
 ProjectNo: #1135.001; Douglas-Webster St

**Bill to:**

Bob Clark-Riddell  
 Pangea Environmental Svcs., Inc.  
 1710 Franklin Street, Ste. 200  
 Oakland, CA 94612

**Requested TAT:**

**5 days**

*Date Received:* **07/12/2011**

*Date Printed:* **07/12/2011**

| Lab ID      | Client ID | Matrix | Collection Date | Hold                     | Requested Tests (See legend below) |   |   |   |   |   |   |   |   |    |    |    |  |
|-------------|-----------|--------|-----------------|--------------------------|------------------------------------|---|---|---|---|---|---|---|---|----|----|----|--|
|             |           |        |                 |                          | 1                                  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
| 1107261-001 | MW-2      | Water  | 7/12/2011 10:40 | <input type="checkbox"/> | A                                  | A |   |   |   |   |   |   |   |    |    |    |  |
| 1107261-002 | MW-3      | Water  | 7/12/2011 11:25 | <input type="checkbox"/> | A                                  |   |   |   |   |   |   |   |   |    |    |    |  |
| 1107261-003 | MW-4      | Water  | 7/12/2011 12:55 | <input type="checkbox"/> | A                                  |   |   |   |   |   |   |   |   |    |    |    |  |
| 1107261-004 | MW-6      | Water  | 7/12/2011 12:10 | <input type="checkbox"/> | A                                  |   |   |   |   |   |   |   |   |    |    |    |  |

**Test Legend:**

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

**Prepared by: Ana Venegas**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
 Hazardous samples will be returned to client or disposed of at client expense.



### Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**

Date and Time Received: **7/12/2011 4:47:24 PM**

Project Name: **#1135.001; Douglas-Webster St**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **1107261** Matrix: Water

Carrier: Rob Pringle (MAI Courier)

#### 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: 14.6°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA
- Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

-----

Client contacted:

Date contacted:

Contacted by:

Comments:





# McC Campbell Analytical, Inc.

"When Quality Counts"

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

|   |  |                          |
|---|--|--------------------------|
| Pangea Environmental Svcs., Inc.<br><br>1710 Franklin Street, Ste. 200<br><br>Oakland, CA 94612 | Client Project ID: #1135.001; Douglas-Webster St | Date Sampled: 07/12/11   |
|   | Client Contact: Tina De La Fuente                | Date Received: 07/12/11  |
|   | Client P.O.:                                     | Date Extracted: 07/13/11 |
|   |  | Date Analyzed: 07/13/11  |

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1107261

| Lab ID | Client ID | Matrix | TPH(g) | MTBE  | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments |
|--------|-----------|--------|--------|-------|---------|---------|--------------|---------|----|------|----------|
| 001A   | MW-2      | W      | 15,000 | ND<50 | 22      | 30      | 190          | 740     | 10 | 119  | d1,b1    |
| 002A   | MW-3      | W      | 4500   | ND<25 | 2.4     | 2.8     | ND           | 5.0     | 1  | ---# | d1,b1    |
| 003A   | MW-4      | W      | ND     | ND    | ND      | 0.56    | 0.52         | 0.93    | 1  | 104  | b1       |
| 004A   | MW-6      | W      | 1400   | ND<30 | 20      | 8.5     | 64           | 130     | 1  | ---# | d1,b1    |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |
|        |           |        |        |       |         |         |              |         |    |      |          |

|  |   |     |      |       |       |       |       |       |       |
|--|---|-----|------|-------|-------|-------|-------|-------|-------|
| Reporting Limit for DF =1;<br>ND means not detected at or<br>above the reporting limit | W | 50  | 5.0  | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | µg/L  |
|  | S | 1.0 | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | mg/Kg |

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

# cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:  
b1) aqueous sample that contains greater than ~1 vol. % sediment  
d1) weakly modified or unmodified gasoline is significant



**QC SUMMARY REPORT FOR SW8021B/8015Bm**

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 59596

WorkOrder: 1107261

| EPA Method: SW8021B/8015Bm |        | Extraction: SW5030B |        |        |        |        |        |          | Spiked Sample ID: 1107193-001A |     |          |     |
|----------------------------|--------|---------------------|--------|--------|--------|--------|--------|----------|--------------------------------|-----|----------|-----|
| 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                  | 86.6   | 94.5   | 8.72   | 89     | 86.4   | 2.99     | 70 - 130                       | 20  | 70 - 130 | 20  |
| MTBE                       | ND     | 10                  | 120    | 117    | 2.35   | 117    | 108    | 8.14     | 70 - 130                       | 20  | 70 - 130 | 20  |
| Benzene                    | ND     | 10                  | 112    | 113    | 0.579  | 118    | 109    | 7.67     | 70 - 130                       | 20  | 70 - 130 | 20  |
| Toluene                    | ND     | 10                  | 97.8   | 98.1   | 0.299  | 105    | 97.1   | 7.42     | 70 - 130                       | 20  | 70 - 130 | 20  |
| Ethylbenzene               | ND     | 10                  | 98.7   | 99.7   | 0.994  | 103    | 96.5   | 6.99     | 70 - 130                       | 20  | 70 - 130 | 20  |
| Xylenes                    | ND     | 30                  | 111    | 113    | 2.04   | 117    | 108    | 7.56     | 70 - 130                       | 20  | 70 - 130 | 20  |
| %SS:                       | 101    | 10                  | 108    | 105    | 2.17   | 112    | 110    | 1.20     | 70 - 130                       | 20  | 70 - 130 | 20  |

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

BATCH 59596 SUMMARY

| Lab ID       | Date Sampled      | Date Extracted | Date Analyzed    | Lab ID       | Date Sampled      | Date Extracted | Date Analyzed    |
|--------------|-------------------|----------------|------------------|--------------|-------------------|----------------|------------------|
| 1107261-001A | 07/12/11 10:40 AM | 07/13/11       | 07/13/11 2:07 AM | 1107261-002A | 07/12/11 11:25 AM | 07/13/11       | 07/13/11 4:15 AM |
| 1107261-003A | 07/12/11 12:55 PM | 07/13/11       | 07/13/11 7:09 PM | 1107261-004A | 07/12/11 12:10 PM | 07/13/11       | 07/13/11 4:47 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.  
 £ TPH(btex) = sum of BTEX areas from the FID.  
 # cluttered chromatogram; sample peak coelutes with surrogate peak.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = matrix interference and/or 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, or inconsistency in sample containers.