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

RECEIVED
By Alameda County Environmental Health 8:27 am, Jun 23, 2017

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

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

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

June 19, 2017

VIA ALAMEDA COUNTY FTP SITE

Ms. Karel Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Re: **Groundwater Monitoring Report – First Half 2017**
Douglas Parking Company
1721 Webster Street
Oakland, California
ACEH File No. 129

Dear Ms. Detterman:

On behalf of the Douglas Parking Company, Pangea Environmental Services, Inc. has prepared this *Groundwater Monitoring Report – First Half 2017* for the above referenced site. The report describes groundwater monitoring at the site.

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

Sincerely,
Pangea Environmental Services, Inc.

Bob Clark-Riddell, P.E.
Principal Engineer

Attachment: *Groundwater Monitoring Report – First Half 2017*

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

GROUNDWATER MONITORING REPORT - FIRST HALF 2017

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

June 19, 2017

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

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 is 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 17th Street and Harrison Street.

UST Removal and Initial Assessment and Remediation

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.

Initial limited site remediation commenced in 1998. 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 to monitoring wells MW-2 and MW-3 to oxidize hydrocarbons and to 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 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 (SCM), risk assessment, and sensitive receptor survey to help facilitate selection of a 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. The UST Cleanup Fund 5-Year Review of March 12, 2012 also requested an SCM prior to any system modification. Pangea submitted a *Sensitive Receptor Survey, Conduit Study and Site Conceptual Model* dated March 26, 2012. In a letter dated December 21, 2012, ACEH requested a workplan to evaluate vapor intrusion and to investigate secondary source near well MW-2. Pangea submitted a *Workplan for Additional Assessment and Soil Gas Sampling* dated April 4, 2013. Following a meeting with ACEH on May 28, 2013, Pangea submitted a *Revised Data Gap Workplan* dated July 25, 2013.

Soil Vapor Extraction and Air Sparge Remediation

A SVE system operated from October 2007 to October 2010 with periodic cycling for rebound testing. The soil vapor extraction (SVE) remediation system consisted of a blower that extracted soil vapor from well SVE-1. Extracted vapors were routed through a moisture separator then treated by two 2,000-lb canisters of granular activated carbon plumbed in series. The treated vapor was discharged to the atmosphere in accordance with Bay Area Air Quality Management District (BAAQMD) requirements. The air sparging (AS) system consisted of a compressor for injecting air into wells AS-1, AS-2 and/or AS-3. Injection into AS wells was 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 7. The remediation system layout is shown on Figure 8.

By November 23, 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. From August 2008 to April 2010, 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. System operation and performance data is summarized on Table 2.

At client request, on August 20 and 21 and December 7, 2015, Pangea removed the SVE/AS equipment and enclosure that occupied valuable space at the facility.

Additional Site Assessment and Groundwater Monitoring

Following approval of the workplan, Pangea installed two confirmation soil borings (CB-1 and CB-2) near the former UST excavation areas and three soil gas probes (SS-1 through SS-3). Pangea detailed the findings of this data gap investigation in the *Data Gap Site Assessment Report* dated January 22, 2014. Included in the report was an updated SCM in tabular format.

Pangea submitted a *Data Gap Workplan* (Workplan) dated June 21, 2016 as requested in an ACEH email dated April 20, 2016. The Workplan was approved in an email ACEH dated August 22, 2016. The Workplan included a sensitive receptor survey, and a workplan for subslab/soil gas sampling. The goal for implementation of this Workplan is to facilitate regulatory case closure in the very near future. Pangea completed the data gap sampling in September 2016 and a data gap assessment report will be submitted separately.

In a September 8, 2016, 2016 letter, ACDEH and the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) requested a groundwater monitoring and sampling event at 1700, 1710, 1721, and 1750 Webster Street properties to provide a "snapshot" of the groundwater flow direction and groundwater quality at the subject site and nearby properties. This sampling event on October 12, 2016 included groundwater collection from three key wells (MW-2, MW-3 and MW-6) at the subject site. This sampling event was conducted by GeoDesign Inc. and is documented in the *Groundwater Monitoring Report: October 2016* dated November 14, 2016, available on Geotracker. Site data from this monitoring event is summarized on Table 1.

GROUNDWATER MONITORING AND SAMPLING

On January 20, 2017, Pangea coordinated groundwater monitoring and sampling at the site. All accessible program monitoring wells were gauged for depth to water. Following the sampling protocol presented in Appendix A, groundwater samples were collected from select site monitoring wells. Wells MW-4 and MW-7 were apparently paved over during street resurfacing work and were not accessible.

Before well purging, dissolved oxygen (DO) 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, oxygen reduction potential (ORP) 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 January 20, 2017, groundwater beneath the site flowed *northwards* (Figure 2). The groundwater depth measurements and inferred flow direction during this event are generally consistent with historical site conditions. Groundwater depths at the site have historically ranged from approximately 14 to 23 ft below ground surface (bgs) (Table 1).

Hydrocarbon and MTBE Distribution in Groundwater

TPHg, benzene and MTBE concentrations detected in site groundwater during this monitoring event are shown on Figure 2. The maximum TPHg and benzene concentrations were detected in well MW-6 at 13,000 µg/L and 120 µg/L, respectively.

TPHg and benzene concentration trends in key source area wells MW-2 and MW-3 are graphed on Figure 3. Benzene concentrations have dramatically decreased in source area well MW-2 since the commencement of SVE/AS remediation in October 2007. TPHg concentrations remain elevated but exhibit a long term declining trend in wells MW-2 and MW-3. As requested during a May 28, 2013 meeting at the ACEH office, TPHg and benzene concentration trends for key offsite wells (MW-4 and MW-6) and key remediation wells (AS-1 and AS-2) are graphed on Figures 4 and 5, respectively.

MTBE was detected in site well MW-6 at a concentration of 260 µg/L. Prior to the current groundwater monitoring event, MTBE was detected in site groundwater on August 3, 2016 (450 µg/L in well MW-6) and July 21, 2003 (48 µg/L in well MW-3 by EPA Method 8020). However, the July 2003 result was interpreted to be a false positive based on confirmation testing using EPA Method 8260. 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. Based on the lack of historical MTBE concentrations on site, the detected concentrations in groundwater from well MW-6 are likely from an offsite source.

OTHER SITE ACTIVITIES

'Snapshot' Groundwater Monitoring at Several Properties

In a September 8, 2016, 2016 letter, ACDEH and the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) requested a groundwater monitoring and sampling event at 1700, 1710, 1721, and 1750 Webster Street properties to provide a "snapshot" of the groundwater flow direction and groundwater quality at the subject site and nearby properties. This sampling event on October 12, 2016 included groundwater collection from three key wells (MW-2, MW-3 and MW-6) at the subject site. These site wells were gauged for depth to water, and groundwater samples were analyzed for TPH (full scan) and VOCs including BTEX and MTBE. This sampling event was conducted by GeoDesign Inc. and is documented in the *Groundwater Monitoring Report: October 2016* dated November 14, 2016. Dissolved-phase petroleum hydrocarbon concentrations in key site wells (MW-2, MW-3 and MW-6) were generally consistent with historical sampling data.

Semi-Annual Groundwater Monitoring

Unless otherwise directed, Pangea will continue semi-annual groundwater monitoring 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.

Subslab and Soil Gas Sampling

Pangea has completed the assessment work scope specified in the *Data Gap Workplan* (Workplan) dated June 21, 2016. To further evaluate shallow soil gas conditions, the work scope included the installation and sampling of two soil gas probes (SG-1 and SG-2), and soil gas sampling from two existing subslab vapor probes (SS-2 and SS-3). Soil/subslab gas sampling locations are shown on Figure 6. Investigation procedures and results are described in Pangea's *Soil Gas Sampling Report and Updated SCM* dated June 13, 2017.

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.

REFERENCES

CalEPA/DTSC, 2011, (CalEPA, 2011) *Vapor Intrusion Mitigation Advisory (VIMA)*, October.

CalEPA/DTSC, 2015, (CalEPA, 2015) *Advisory – Active Soil Gas Investigations*, July.

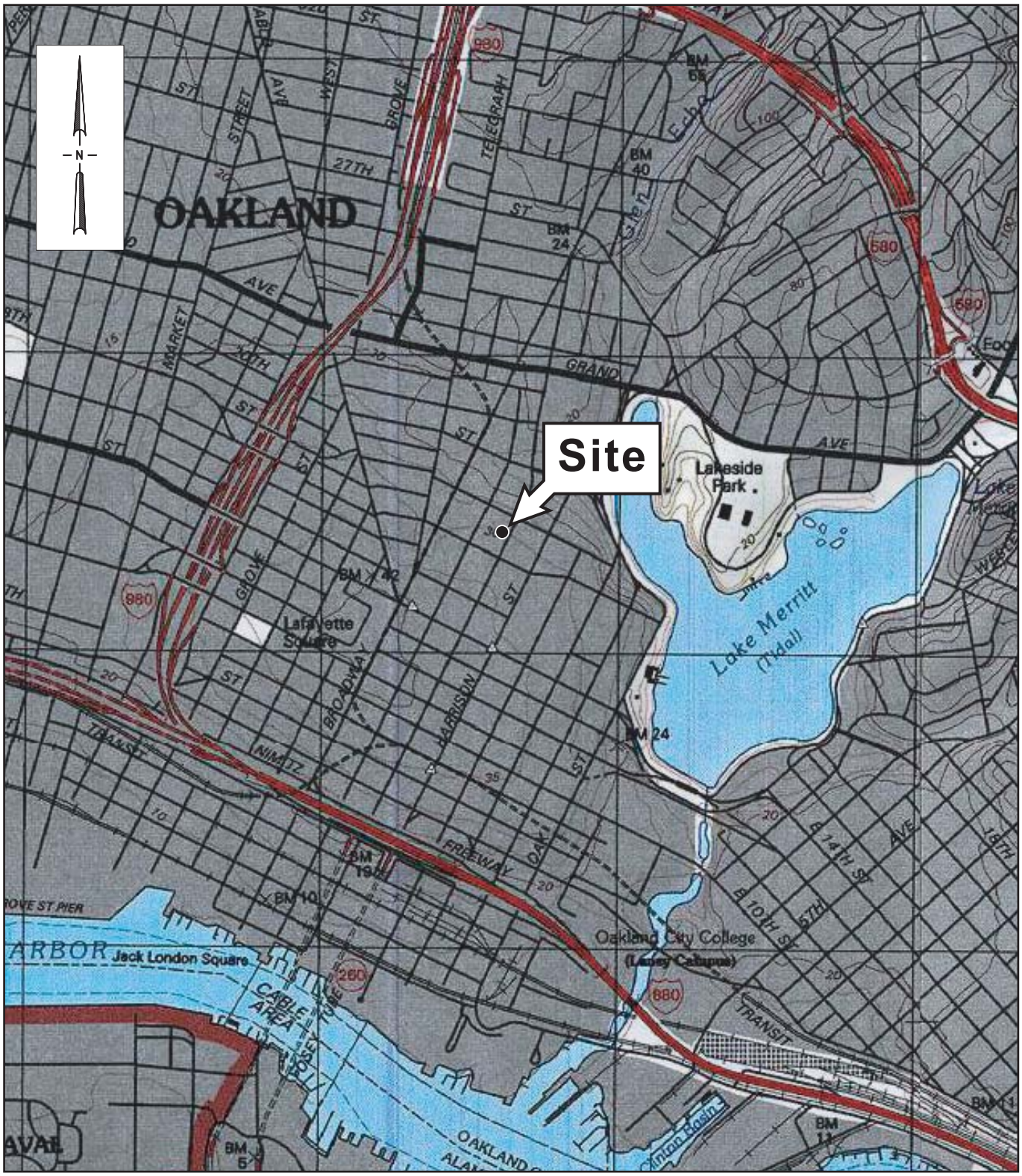
ATTACHMENTS

Figure 1 – Vicinity Map
Figure 2 – Groundwater Elevations and Hydrocarbon Concentration Map
Figure 3 – TPHg and Benzene Trends in Groundwater in Key Site Wells
Figure 4 – TPHg and Benzene Trends in Groundwater in Key Offsite Wells
Figure 5 – TPHg and Benzene Trends in Groundwater in Key Remediation Wells
Figure 6 – Boring and Subslab Probe Location Map
Figure 7 – Cross Section of Remediation Wells
Figure 8 – Remediation System Layout

Table 1 – Groundwater Elevation and Analytical Data
Table 2 – Subslab Gas Analytical Data
Table 3 – SVE System Performance Summary

Appendix A – Groundwater Monitoring Program
Appendix B – Groundwater Monitoring Field Data Sheets
Appendix C – Laboratory Analytical Report

10/7/2006



SOURCE: TOPO! MAPS

0 1/8 1/4 1/2 1

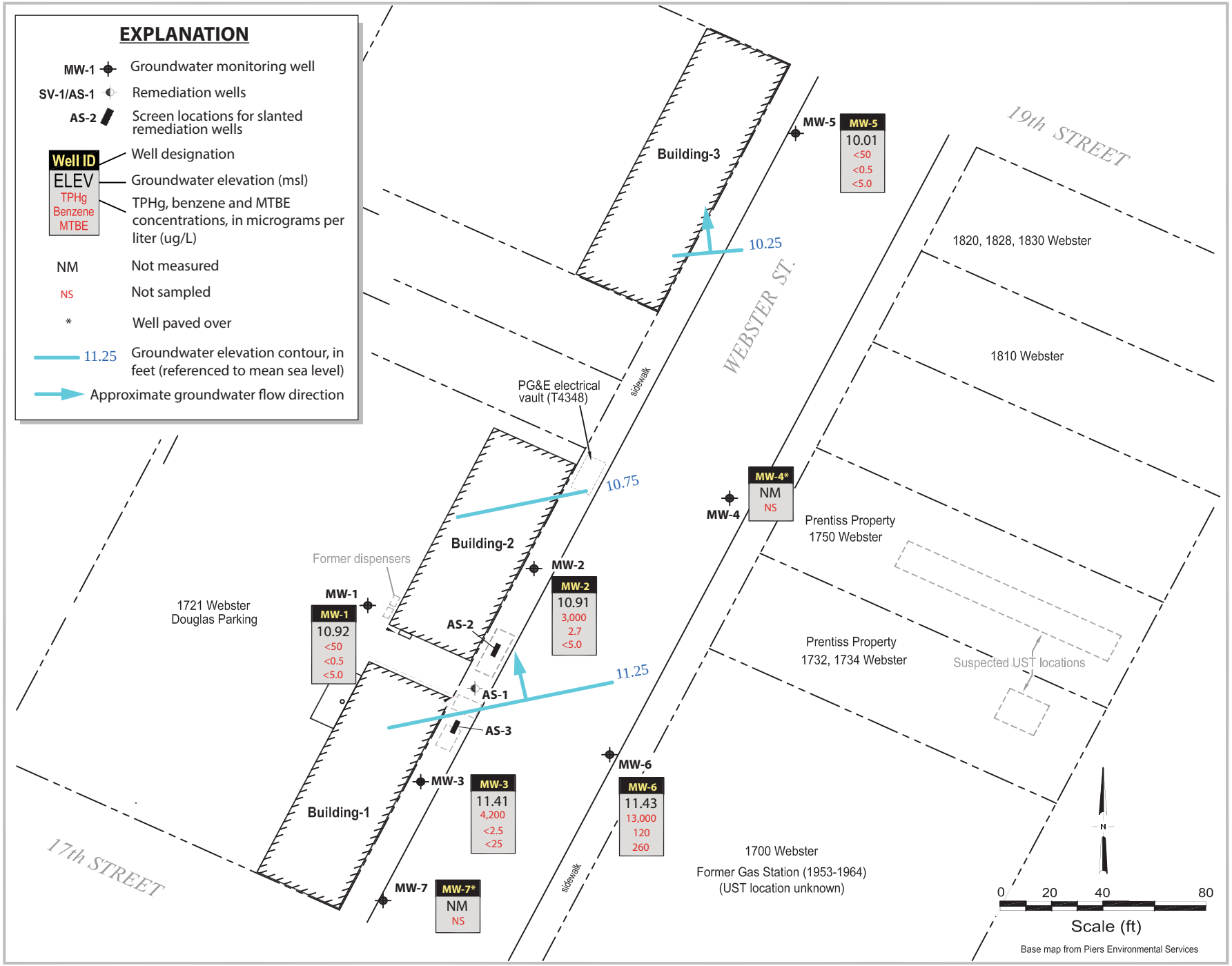
SCALE : 1" = 1/4 MILE

Figure 1

Douglas Parking Vacility
1721 Webster Street
Oakland, California

PANGEA

Vicinity Map

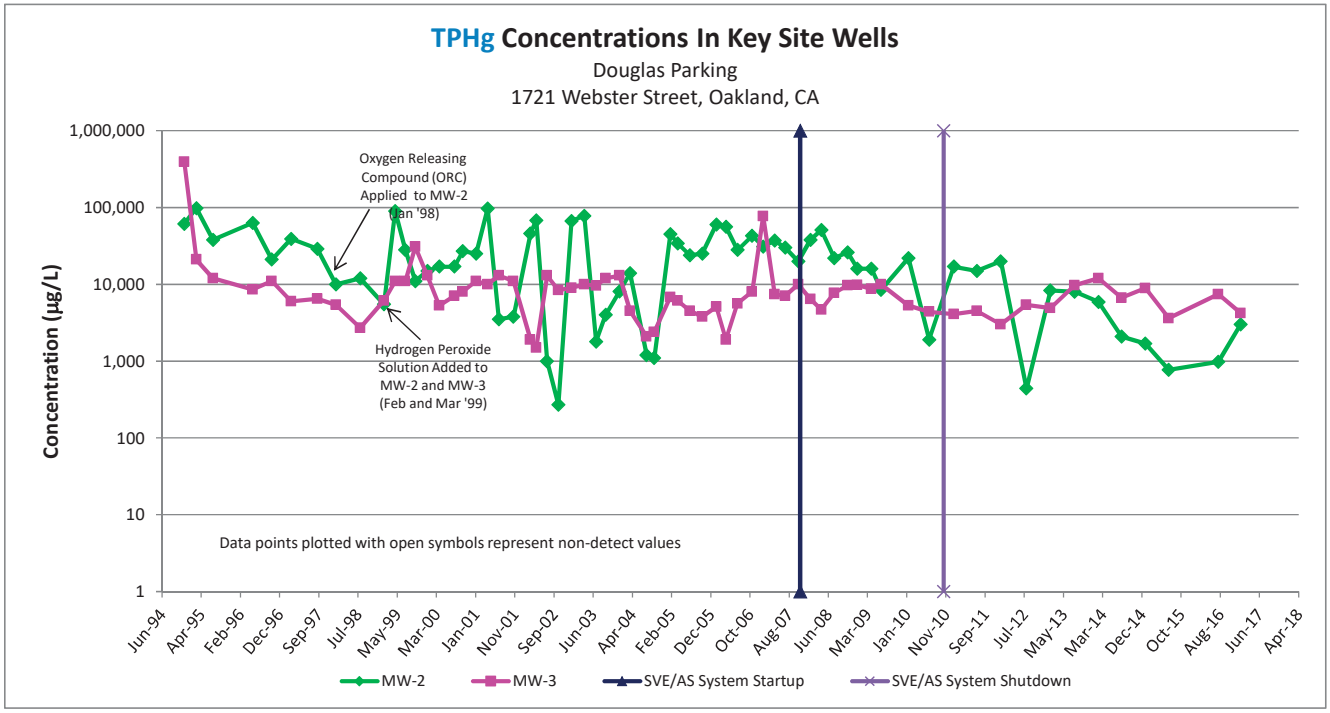


Douglas Parking
1721 Webster Street
Oakland, CA

PANGEA

Groundwater Elevations and Hydrocarbon Concentration Map
January 20, 2017

FIGURE
2



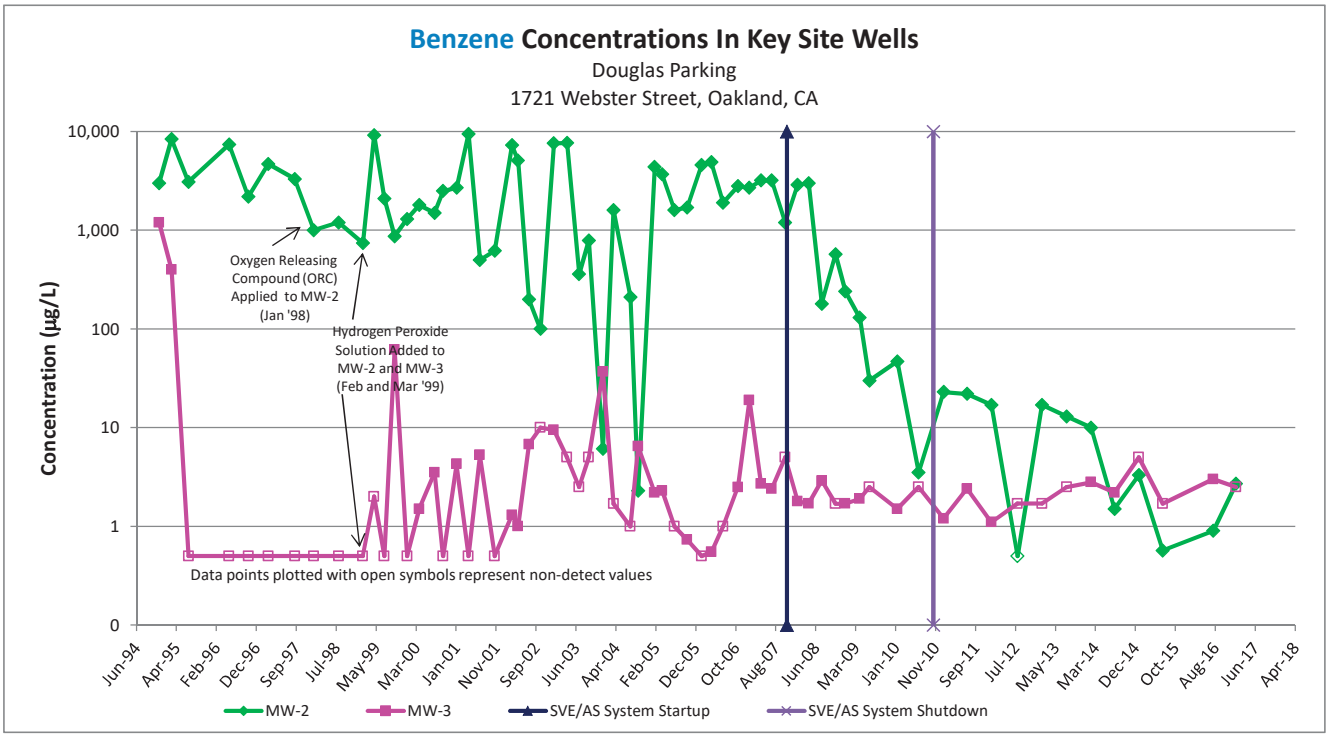
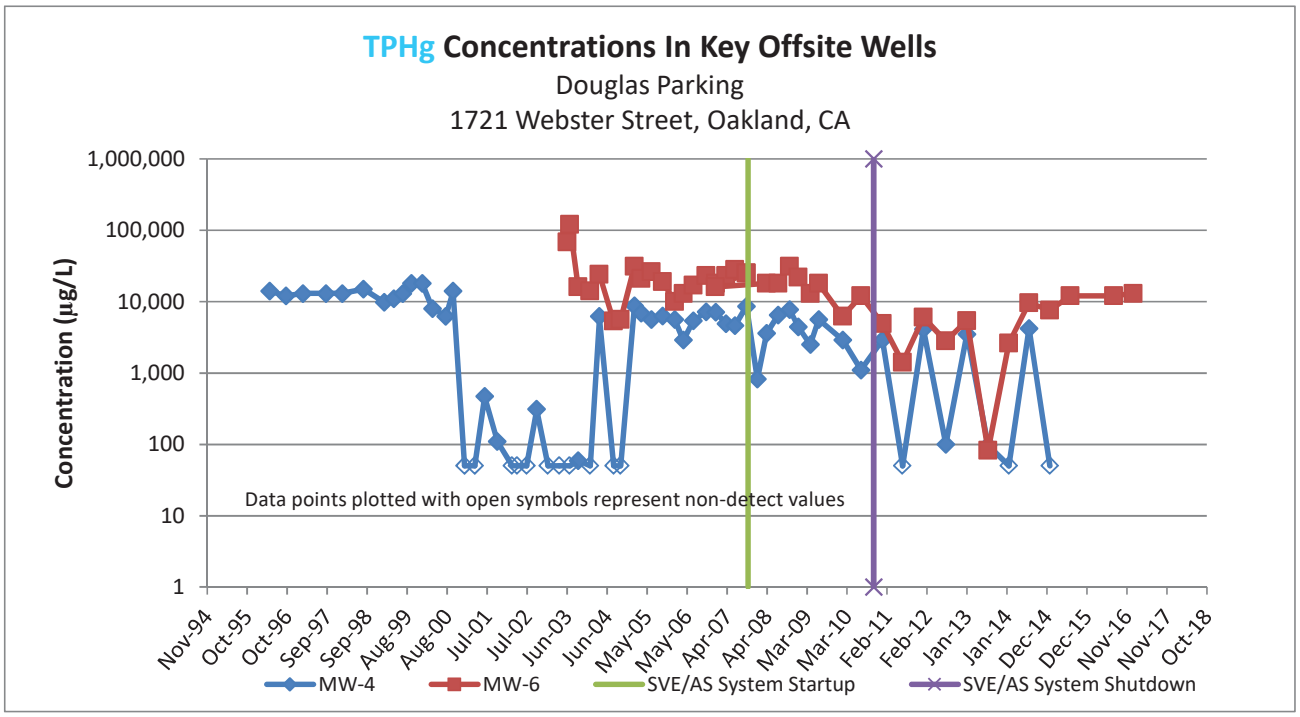


Figure 3 - TPHg and Benzene Trends in Key Onsite Wells



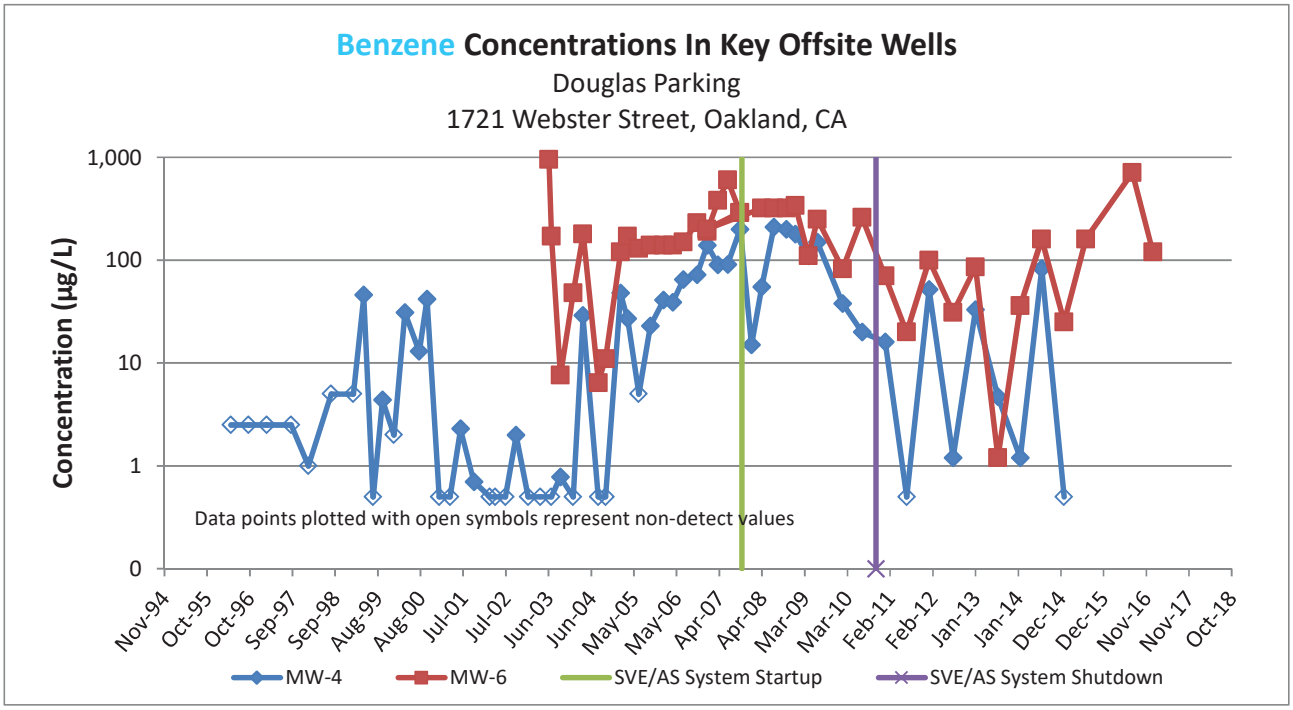
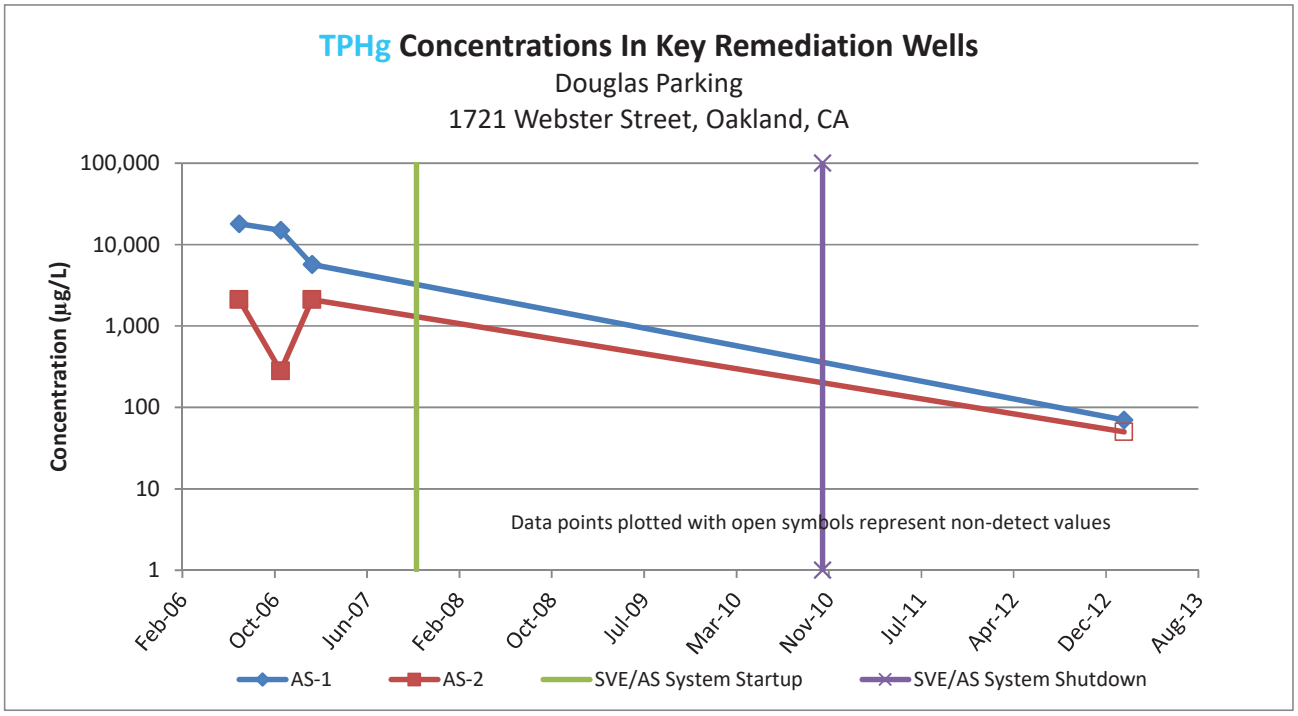


Figure 4 - TPHg and Benzene Trends in Key Offsite Wells



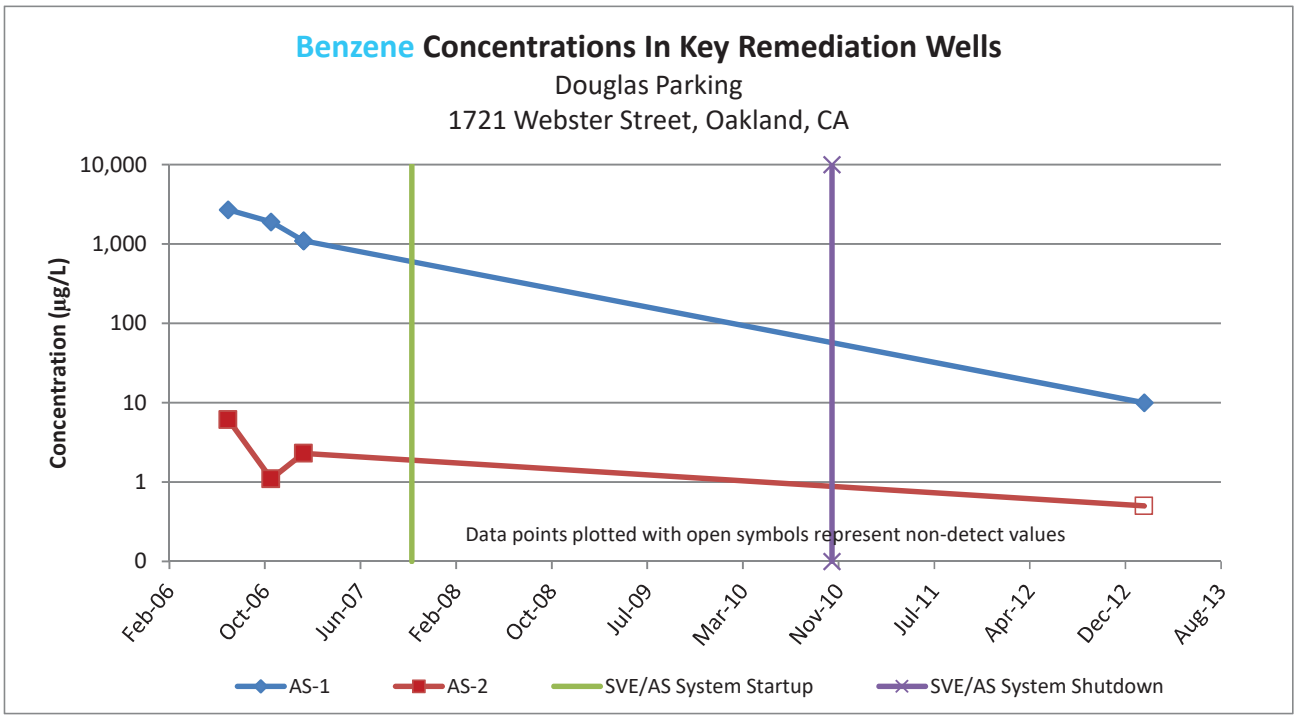
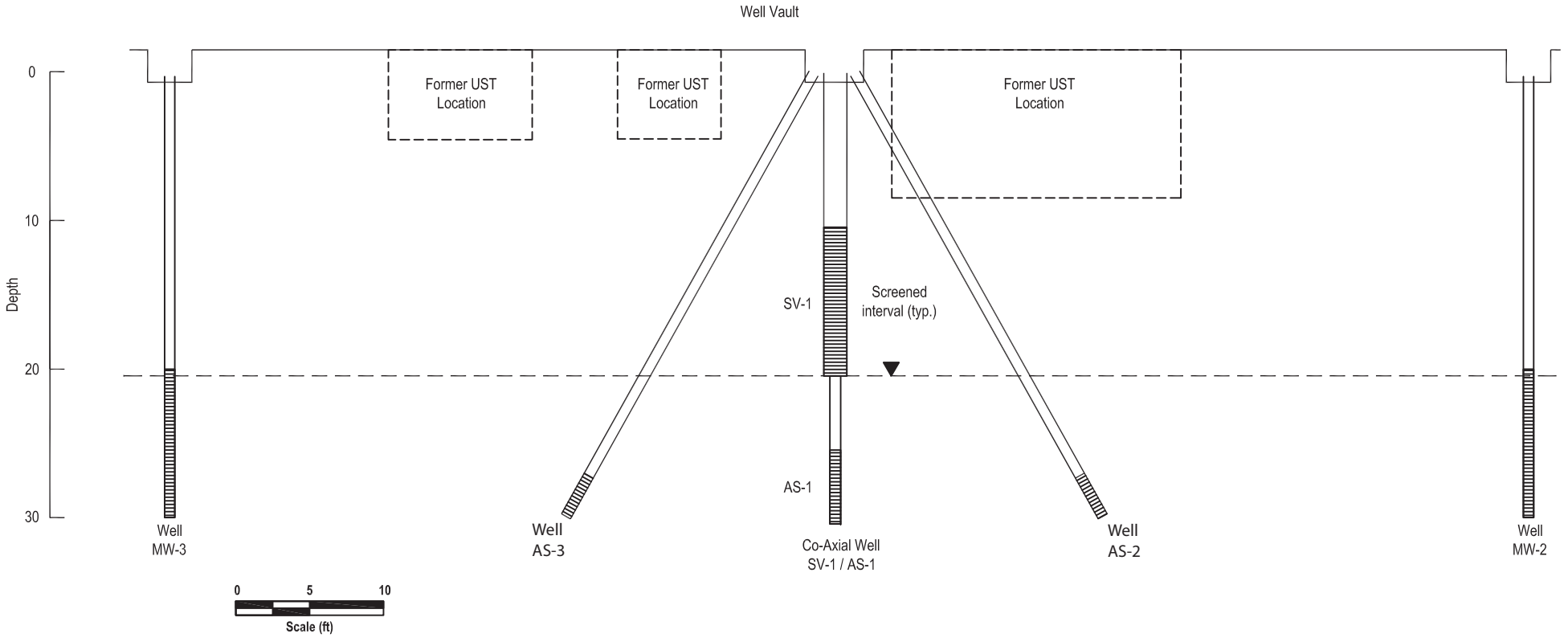


Figure 5 - TPHg and Benzene Trends in Key Remediation Wells



Figure

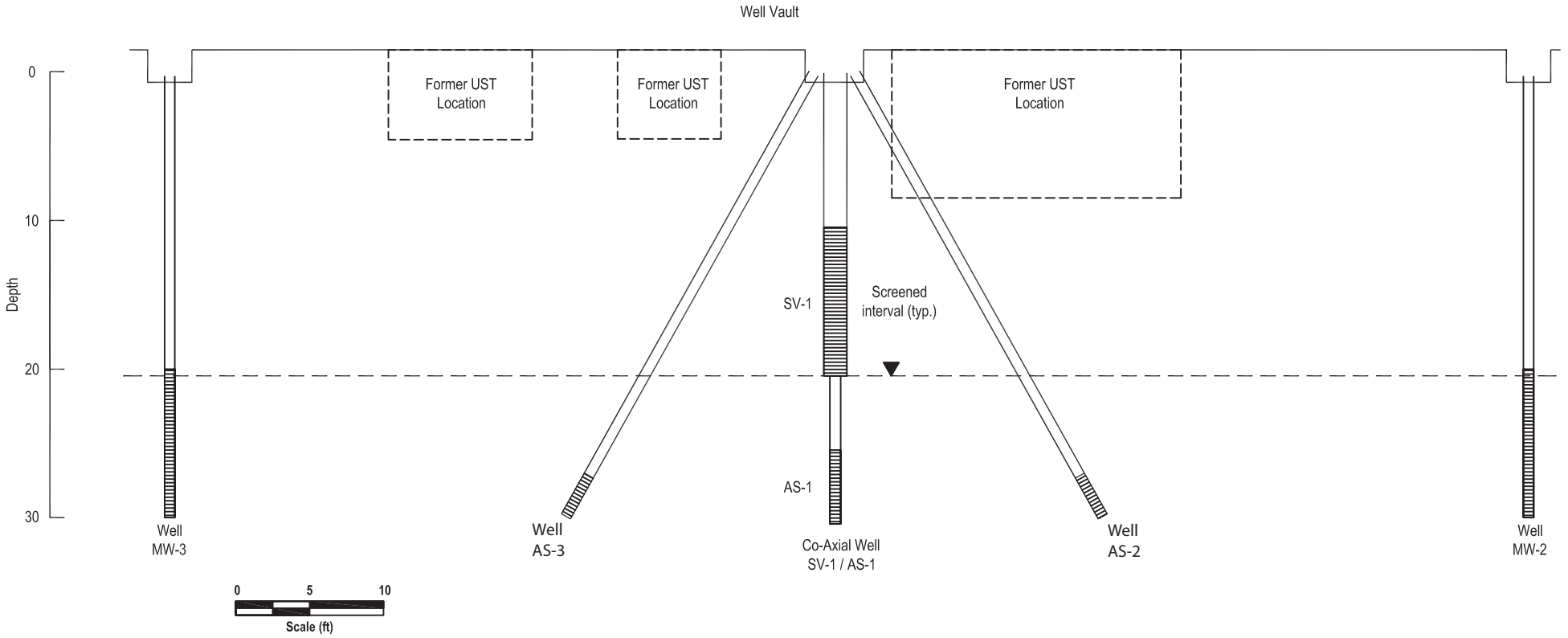
6

12/12/06

Douglas Parking
1721 Webster Street
Oakland, California

PANGEA

Cross Section of Remediation Wells SV-1/AS-1, AS-2, and AS-3



Figure

7

12/12/2006

Douglas Parking
1721 Webster Street
Oakland, California

PANGEA

Cross Section of Remediation Wells
SV-1/AS-1, AS-2, and AS-3

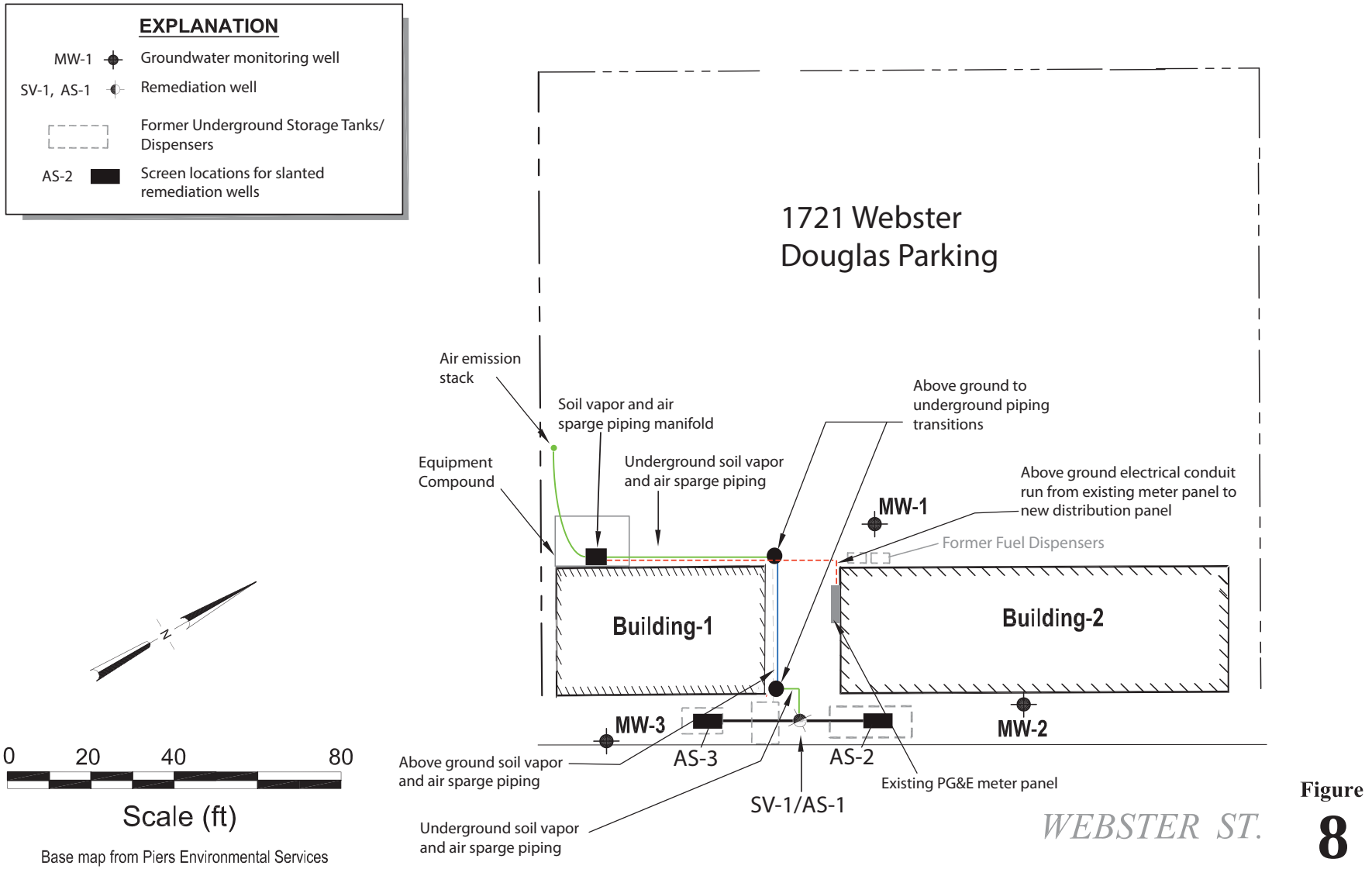


Figure 8

Douglas Parking
1721 Webster Street
Oakland, California

PANGEA

Remediation System Layout

Table 1 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				(µg/L)					
Monitoring Wells									
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	--	--	--	--	--	--

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

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				<			(µg/L)		>
MW-1	7/17/2008	22.50	10.25	--	--	--	--	--	--
(cont'd)	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				
	7/12/2011	20.72	12.03	--	--	--	--	--	--
	1/11/2012	21.33	11.42	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/25/2012	20.94	11.81	--	--	--	--	--	--
	1/25/2013	21.41	11.34	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/29/2013	22.14	10.61	--	--	--	--	--	--
	1/28/2014	22.75	10.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/24/2014	22.84	9.91	--	--	--	--	--	--
	1/22/2015	22.45	10.30	<50	<0.5	<0.5	<0.5	<1.5	<5.0
	7/20/2015	22.87	9.88	--	--	--	--	--	--
	8/3/2016	22.27	10.48	<50	<0.5	<0.5	<0.5	<1.5	<5.0
	1/20/2017	**21.83**	**10.92**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<1.5**	**<5.0**
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	-
	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

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

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				<			(µg/L)		>
MW-2	1/15/2004	19.93	10.47	8,100	6.1	23	44	530	<50
(cont'd)	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
	7/12/2011	18.52	11.88	15,000	22	30	190	740	<50
	1/12/2011	19.18	11.22	20,000	17	47	250	2,100	<84
	7/25/2012	18.83	11.57	440	<0.5	2.2	1.0	39	<5.0
	1/25/2013	19.21	11.19	8,300	17	11	140	510	<50
	7/29/2013	19.94	10.46	8,000	13	13	200	100	<25
	1/28/2014	20.56	9.84	5,900	10	7.3	100	80	<50
	7/24/2014	20.61	9.79	2,100	1.5	3.1	21	37	<5.0
	1/22/2015	20.24	10.16	1,700	3.3	3.0	8.0	25	<10
	7/20/2015	20.66	9.74	770	0.57	0.69	9.2	10	<5.0
	8/3/2016	20.03	10.37	980	0.9	1.9	9.4	9.9	<5.0
	1/20/2017	**19.49**	**10.91**	**3,000**	**2.7**	**3.7**	**19**	**29**	**<5.0**
MW-3	12/2/1994	22.15	7.35	394,000	1,200	ND	1,800	4,000	-
29.50	3/6/1995	20.09	9.16	21,000	400	150	24	62	-
29.25	7/11/1995	19.99	9.57	12,000	ND	10	16	99	-
29.56	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
	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

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

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				(µg/L)					
MW-3	7/20/1999	20.68	8.88	11,000	<0.5	3.1	13	88	<80
(cont'd)	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
	7/12/2011	20.14	12.42	4,500	2.4	2.8	<0.5	5.0	<25
	1/11/2012	20.80	11.76	3,000	1.1	1.6	<0.5	1.9	<15
	7/25/2012	20.44	12.12	5,400	<1.7	<1.7	<1.7	4.1	<17
	1/25/2013	20.84	11.72	4,900	<1.7	2.7	<1.7	3.5	<17
	7/29/2013	21.48	11.08	9,700	<2.5	<2.5	<2.5	<2.5	<25
	1/28/2014	22.08	10.48	12,000	2.8	2.8	<2.5	4.6	<25
	7/24/2014	22.15	10.41	6,700	2.2	<1.7	1.9	5.2	<35
	1/22/2015	21.76	10.80	8,900	<5.0	<5.0	<5.0	<5.0	<50

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

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				<			(µg/L)		>
MW-3	7/20/2015	22.14	10.42	3,600	<1.7	<1.7	<1.7	3.5	<17
(cont'd)	8/3/2016	21.51	11.05	7,400	3.0	3.5	<2.5	<7.5	27
	1/20/2017	**21.15**	**11.41**	**4,200**	**<2.5**	**5.0**	**<2.5**	**<7.5**	**<25**
MW-4	5/10/1996	16.98	8.31	14,000	ND	1,200	720	3,100	-
25.29	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
	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

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

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				<			(µg/L)		>
MW-4	1/9/2009	19.12	9.17	4,400	180	34	180	93	<150
(cont'd)	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
	7/12/2011	17.01	11.28	<50	<0.5	0.56	0.52	0.93	<5.0
	1/11/2012	17.68	10.61	4,100	52	52	49	130	<90
	7/25/2012	17.26	11.03	100	1.2	<0.5	<0.5	<0.5	<5.0
	1/25/2013	17.58	10.71	3,500	33	20	23	65	<35
	7/29/2013	18.34	9.95	97	4.7	<0.5	<0.5	0.70	<10
	1/28/2014	18.99	9.30	<50	1.2	<0.5	<0.5	<0.5	<5.0
	7/24/2014	19.05	9.24	4,200	83	19	40	32	<50
	1/22/2015	18.57	9.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/20/2015	--	--			--well paved over--			
	8/3/2016	--	--			--well paved over--			
	1/20/2017	**--**	**--**			**--well paved over--**			
MW-5	5/10/1996	14.60	7.37	ND	ND	ND	ND	ND	-
21.97	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
	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
	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
24.99	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)

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

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				<			(µg/L)		>
MW-5	7/6/2005	14.85	10.14	<50	<0.5	<0.5	<0.5	<0.5	<5.0
(cont'd)	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
	7/12/2011	14.81	10.18	--	--	--	--	--	--
	1/11/2012	15.44	9.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/25/2012	14.79	10.20	--	--	--	--	--	--
	1/25/2013	15.21	9.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/29/2013	16.03	8.96	--	--	--	--	--	--
	1/28/2014	16.65	8.34	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/24/2014	16.75	8.24	--	--	--	--	--	--
	1/22/2015	16.25	8.74	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/20/2015	16.82	8.17	--	--	--	--	--	--
	8/3/2016	16.23	8.76	<50	<0.5	<0.5	<0.5	<1.5	<5.0
	1/20/2017	**14.98**	**10.01**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<1.5**	**<5.0**
MW-6	6/30/2003	19.60	11.39	68,000	950	6,000	2,400	10,000	<1,000
30.99	7/21/2003	19.67	11.32	120,000	170	1,400	1,100	10,000	<1,000
	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

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

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				<			(µg/L)		>
MW-6	7/17/2008	20.36	10.63	18,000	320	510	420	1,200	<500
(cont'd)	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
	7/12/2011	18.73	12.26	1,400	20	8.5	64	130	<30
	1/11/2012	19.39	11.60	6,000	100	38	310	700	<210
	7/25/2012	19.02	11.97	2,800	31	13	140	240	<75
	1/25/2013	19.35	11.64	5,400	86	34	310	620	<100
	7/29/2013	19.97	11.02	82	1.2	<0.5	<0.5	<0.5	<5.0
	1/28/2014	20.60	10.39	2,600	36	11	52	53	<50
	7/24/2014	20.70	10.29	9,600	160	53	410	590	<70
	1/22/2015	20.31	10.68	7,600	25	13	53	86	<50
	7/20/2015	20.68	10.31	12,000	160	73	540	650	<450
	8/3/2016	20.02	10.97	12,000	710	67	3,800	3,100	450
	1/20/2017	**19.56**	**11.43**	**13,000**	**120**	**71**	**760**	**760**	**260**
MW-7	6/30/2003	21.40	11.71	170	<0.5	2.1	2.0	8.7	<5.0
33.11	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
	7/12/2011	20.72	12.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/11/2012	21.13	11.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0

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

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				<			(µg/L)		>
MW-7	7/25/2012	20.75	12.36	--	--	--	--	--	--
(cont'd)	1/25/2013	21.10	12.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/29/2013	21.70	11.41	--	--	--	--	--	--
	1/28/2014	22.34	10.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/24/2014	22.41	10.70	--	--	--	--	--	--
	1/22/2015	21.99	11.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/20/2015	--	--			--well paved over--			
	8/3/2016	--	--			--well paved over--			
	1/20/2017	**--**	**--**			**--well paved over--**			
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	--	--	--	--	--	--	--	--
	1/25/2013	--	--	70	10	<0.5	<0.5	<0.5	<5.0
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	--	--	--	--	--	--	--	--
	1/25/2013	22.02	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
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	--	--	--	--	--	--	--	--
	1/25/2013	22.60	--	<50	<0.5	<0.5	0.55	<0.5	<5.0
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	--	--	--	--	--	--	--	--

Table 1 - Groundwater Elevation and Analytical Data.

Douglas Parking Company, 1721 Webster Street, Oakland, California

Boring / Well ID *TOC*	Date	Depth to Water (ft)	Groundwater Elevation (ft amsl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
				(µg/L)					
Grab Groundwater									
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.

Pangea

Table 2. Subslab/Soil Gas Analytical Data - Douglas Parking, 1721 Webster Street, Oakland, California

Boring/ Sample ID	Date Sampled	Sample Depth (ft - ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	TPH Gasoline	MTBE	Naphthalene	Isopropanol	Methane	Helium	Oxygen	Notes
			← ug/m³ →									%	%	
2016 Tier 1 ESL			48	160,000	560	52,000	50,000	5,400	41	--	--	--	--	For SG/SS samples
Residential ESL for subslab/soil gas; VI Human Health Risk:			48	160,000	560	52,000	300,000	5,400	41	--	--	--	--	For SG/SS samples
Commercial ESL for subslab/soil gas; VI Human Health Risk:			420	1,300,000	4,900	440,000	2,500,000	47,000	360	--	--	--	--	For SG/SS samples
No Bio-Attenuation Zone, **Residential** (LTCP)			85	--	1,100	--	--	--	93	--	--	--	--	
No Bio-Attenuation Zone, **Commercial** (LTCP)			280	--	3,600	--	--	--	310	--	--	--	--	
With Bio-Attenuation Zone, **Residential** (LTCP)			85,000	--	1,100,000	--	--	--	93,000	--	--	--	--	
With Bio-Attenuation Zone, **Commercial** (LTCP)			280,000	--	3,600,000	--	--	--	310,000	--	--	--	--	
Soil Gas Samples														
SG-1	9/23/2016	5 - 6	<3.3	5.7	<4.4	13.6	<7,170	<3.7	--	<13	<5,100	--	17.7	
SG-2	9/23/2016	5 - 6	12	<3.8	<4.4	23.9	<7,170	<3.7	--	<13	<5,100	--	19.8	
Subslab Gas Samples														
SS-1	11/14/2013	0.5 - 0.7	<1.6	<1.9	<2.2	<6.6	2,300	<1.8	<5.3	--	--	0.13	17	For other VOC detections see the lab report.
	6/23/2015	0.5 - 0.7	--floor refinished, probe covered--											
SS-2	11/13/2013	0.5 - 0.7	58	2.7	<2.2	<6.6	2,000	<1.8	<5.3	--	--	0.48	16	For other VOC detections see the lab report.
	6/23/2015	0.5 - 0.7	<1.6	3.7	2.3	14	<720	<1.8	<5.3	<50	--	--	--	For other VOC detections see the lab report.
	9/23/2016	0.5 - 0.7	<3.3	<3.8	<4.4	<13.2	<7,170	<3.7	--	<13	<5,400	--	20.4	
SS-3	11/13/2013	0.8 - 1.0	71	2.6	<2.2	<6.6	1,400	<1.8	<5.3	--	--	0.13	17	For other VOC detections see the lab report.
	6/23/2015	0.8 - 1.0	<1.6	3.3	<2.2	13	1,100	<1.8	<5.3	<50	--	--	--	For other VOC detections see the lab report.
	9/23/2016	0.8 - 1.0	<3.3	4.0	<4.4	13	<7,170	<3.7	--	<13	<5,000	--	20.5	

Abbreviations:

SG-1 = Soil Gas Sample

SS-1 = Subslab Sample

ug/m3 = Micrograms per cubic meter of air results calculated by laboratory from parts per billion results using normal temperature and pressure (NPT).

ft - ft bgs = Depth interval below ground surface (bgs) in feet.

% = Percent of total sample volume.

Volatile organic compounds (VOCs) by EPA Method TO-15 (partial list), uses GC/MS scan.

Oxygen by Modified ASTM Method D-1946, uses GC/TCD scan.

< n = Chemical not present at a concentration in excess of detection limit shown.

MRL = Method reporting limit. Laboratory reporting limit based on parts per billion on volume to volume basis (ppbv/v) and converted to ug/m3.

ESL = Environmental Screening Level, from California Regional Water Quality Control Board - San Francisco Bay Region, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Revised February 2016 (Revision 3).

LTCP = Low Threat Closure Policy

Bold = Concentrations above Lowest ESLs for Commercial Land Use for shallow soil gas (SG & SS samples).

Table 3. 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 ("H20)	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	1.5	104	68	3,400	9,600	76	320.3	6.7	2.30	0.05	no	
	SYS-MID				8	23	ND<0.077						
	SYS-EFF				0	27	0.15						
10/30/07	SYS-INF	24.3	50	27	37,000	9,000	74	144.4	143.8	1.08	1.07	no	Readings upon arrival
	SYS-MID				635	ND<7.0	ND<0.077						
	SYS-EFF				700	60	0.29						
10/30/07	SYS-INF	25.2	45	27	3,200	1,500	11	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 excursion/fire).
	SYS-MID				620	ND<7.0	ND<0.077						
	SYS-EFF				530	ND<7.0	ND<0.077						
10/31/07	SYS-INF	48.8	40	27	922*	880	8.6	11.3	155.7	0.10	1.17	no	Dilution airflow set at ~25% of total flow
	SYS-MID				0*	ND<7.0	ND<0.077						
	SYS-EFF				0*	ND<7.0	ND<0.077						
11/01/07	SYS-INF	78.8	39	27	1,475	---	---	11.0	169.5	0.10	1.30	no	
	SYS-MID				14	---	---						
	SYS-EFF				9	---	---						
11/02/07	SYS-INF	100.2	40	27	736	---	---	11.3	179.6	0.10	1.39	no	Shut system down at 100.5 hours for weekend
	SYS-MID				19	---	---						
	SYS-EFF				10	---	---						
11/05/07	SYS-INF	100.9	38	27	1,546	---	---	10.7	179.9	0.10	1.39	no	Restart system at 100.5 hours on 11/5/07
	SYS-MID				30	---	---						
	SYS-EFF				4	---	---						
11/06/07	SYS-INF	126.7	38	27	213	---	---	10.7	191.4	0.10	1.49	no	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/07/07	SYS-INF	154.7	45	27	170	---	---	12.7	206.2	0.11	1.62	no	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						

Table 3. 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 ("H20)	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)		
11/08/07	SYS-INF	178.2	47	27	160	---	---	13.3	219.2	0.12	1.74	no	Lab analysis performed for methane; 2.4 ul/L detected in SYS EFF
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/09/07	SYS-INF	200.3	45	31	163	---	---	12.7	230.9	0.11	1.84	no	Shut system down at 200.3 hours for weekend
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/12/07	SYS-INF	206.3	42	28	211	---	---	11.9	233.9	0.11	1.87	yes	Restart system at 200.3 hours on 11/12/07; start air sparge system
	SYS-MID				0	---	---						
	SYS-EFF				2	---	---						
11/13/07	SYS-INF	225.6	46	28	2,937	---	---	13.0	244.3	0.12	1.96	yes	
	SYS-MID				0	---	---						
	SYS-EFF				4	---	---						
11/14/07	SYS-INF	253.0	45	28	4,113	---	---	12.7	258.9	0.11	2.09	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/15/07	SYS-INF	278.4	45	28	2,810	---	---	12.7	272.3	0.11	2.21	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/16/07	SYS-INF	301.4	43	28	2,570	---	---	12.1	283.9	0.11	2.31	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/17/07	SYS-INF	327.1	42	41	11	---	---	11.9	296.6	0.11	2.42	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/18/07	SYS-INF	352.1	44	41	530	---	---	12.4	309.6	0.11	2.54	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/19/07	SYS-INF	375.2	42	41	24	22	<0.077	0.3	309.9	0.00	2.54	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						

Table 3. 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 ("H20)	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)		
11/20/07	SYS-INF	398.8	49	68	660	---	---	0.3	310.2	0.00	2.54	yes	Increased system vacuum by closing off recirculation valve on blower.
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/26/07	SYS-INF	426.3	49	68	1,800	---	---	0.3	310.6	0.00	2.54	yes	Received verbal approval from BAAQMD to decrease monitoring from daily to weekly.
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
12/03/07	SYS-INF	593.5	48	61	1,300	---	---	0.3	313.0	0.00	2.54	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
12/14/07	SYS-INF	853.0	52	54	280	280	0.17	4.7	363.5	0.003	2.57	yes	
	SYS-MID				0	<7.0	<0.077						
	SYS-EFF				0	<7.0	<0.077						
12/21/07	SYS-INF	1,021.5	58	54	0	170	0.14	3.2	385.7	0.00	2.58	yes	SVE shutdown after reading, restarted
	SYS-MID				0	<7.0	<0.077						
	SYS-EFF				0	<7.0	<0.077						
12/27/07	SYS-INF	1,163.5	40	54	NM	---	---	2.2	398.6	0.00	2.59	yes	SVE shutdown on arrival, restart and monitor
	SYS-MID				NM	---	---						
	SYS-EFF				NM	---	---						
12/28/07	SYS-INF	1,188.5	50	54	14	14	<0.077	0.2	398.8	0.00	2.59	yes	
	SYS-MID				0	<7.0	<0.077						
	SYS-EFF				0	<7.0	<0.077						
01/03/08	SYS-INF	1,329.5	51	54	50	50	<0.077	0.8	403.6	0.00	2.59	yes	
	SYS-MID				0	15	<0.077						
	SYS-EFF				0	<7.0	<0.077						
01/10/08	SYS-INF	1,430.2	50	54	0	16	<0.077	0.3	404.7	0.00	2.59	no	AS system off while sampling
	SYS-MID				0	13	<0.077						
	SYS-EFF				0	<7.0	<0.077						
1/15/2008*	SYS-INF	1,546.0	50	81	--	1,200	2.1	19.2	497.6	0.03	2.74	yes	
	SYS-MID					7.7	<0.077						
	SYS-EFF					<7.0	<0.077						

Table 3. 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 ("H20)	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)		
1/23/2008*	SYS-INF	1,694.5	50	95	--	1,300	1.6	20.9	626.6	0.02	2.88	yes	
	SYS-MID					11	<0.077						
	SYS-EFF					<7.0	<0.077						
01/30/08	SYS-INF	1,864.6	49	81	--	2,300	2.6	36.2	882.9	0.04	3.15	yes	
	SYS-MID					24	<0.077						
	SYS-EFF					<7.0	<0.077						
02/06/08	SYS-INF	2,027.5	50	81	--	1,700	2.9	27.3	1,068.0	0.04	3.43	yes	
	SYS-MID					43	<0.077						
	SYS-EFF					<7.0	<0.077						
02/12/08	SYS-INF	2,173.3	60	95	--	1,500	1.7	28.9	1,243.4	0.03	3.61	yes	
	SYS-MID					520	1.1						
	SYS-EFF					28	<0.077						
02/21/08	SYS-INF	2,394.1	65	95	--	---	---	31.3	1,531.2	0.03	3.91	yes	Samples not picked up by the courier before hold time expired.
	SYS-MID					---	---						
	SYS-EFF					---	---						
02/29/08	SYS-INF	2,580.5	27	95	--	1,100	1.4	9.5	1,605.2	0.01	3.99	yes	System shut down for future changeout of carbon in first vessel.
	SYS-MID					890	5.3						
	SYS-EFF					<7.0	<0.077						
04/07/08	SYS-INF	2,581.4	44	7.5	--	1,100	1.4	15.5	1,605.8	0.02	3.99	yes	Restart system after carbon changeout
	SYS-MID					---	---						
	SYS-EFF					---	---						
04/10/08	SYS-INF	2,650.3	26	7	--	1,200	3.6	10.0	1,634.5	0.03	4.07	yes	
	SYS-MID					<7.0	<0.077						
	SYS-EFF					<7.0	<0.077						
04/17/08	SYS-INF	2,826.1	28	8	962	---	---	10.8	1,713.5	0.03	4.29	yes	
	SYS-MID				3	---	---						
	SYS-EFF				3	---	---						
04/23/08	SYS-INF	2,969.4	26	7.5	--	1,100	1.5	9.2	1,768.2	0.01	4.36	yes	
	SYS-MID					<7.0	<0.077						
	SYS-EFF					<7.0	<0.077						

Table 3. 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 ("H20)	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)		
04/30/08	SYS-INF	3,136.8	23	7.5	--	780	1.4	5.8	1,808.4	0.01	4.42	yes	
	SYS-MID					<7.0	<0.077						
	SYS-EFF					<7.0	<0.077						
05/07/08	SYS-INF	3,304.6	28	8	378	---	---	7.0	1,857.4	0.01	4.50	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
05/14/08	SYS-INF	3,472.2	26	8	523	---	---	6.5	1,902.8	0.01	4.57	yes	
	SYS-MID				6	---	---						
	SYS-EFF				0	---	---						
05/23/08	SYS-INF	3,690.2	28	7	264	---	---	7.0	1,966.5	0.01	4.68	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
05/30/08	SYS-INF	3,859.2	36	7	317	---	---	9.0	2,029.9	0.01	4.78	yes	
	SYS-MID				1	---	---						
	SYS-EFF				0	---	---						
06/05/08	SYS-INF	3,999.6	38	7	350	---	---	9.5	2,085.5	0.02	4.87	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
06/13/08	SYS-INF	4,193.1	38	7	--	700	1.6	8.5	2,154.3	0.02	5.01	yes	
	SYS-MID					<7.0	<0.077						
	SYS-EFF					<7.0	<0.077						
06/19/08	SYS-INF	4336.7	25	7	349	---	---	5.6	2,187.9	0.01	5.08	yes	
	SYS-MID				--	---	---						
	SYS-EFF				0	---	---						
06/27/08	SYS-INF	4,529.7	25	7	335	---	---	5.6	2,233.1	0.01	5.18	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
07/10/08	SYS-INF	4,839.0	56	8	256	---	---	12.6	2,395.2	0.03	5.51	yes	
	SYS-MID				40	---	---						
	SYS-EFF				0	---	---						

Table 3. 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 ("H20)	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)		
07/18/08	SYS-INF	5,032.0	33	8	330	---	---	7.4	2,454.8	0.02	5.64	yes	
	SYS-MID				174	---	---						
	SYS-EFF				0	---	---						
7/24/2008**	SYS-INF	5,178.0	33	8	360	---	---	7.4	2,499.8	0.02	5.73	yes	
	SYS-MID				187	---	---						
	SYS-EFF				0	---	---						
8/1/2008**	SYS-INF	5,368.0	33	8	248	---	---	7.4	2,558.5	0.02	5.85	yes	Lowered motor speed of blower to reduce noise within garage per client
	SYS-MID				193	---	---						
	SYS-EFF				0	---	---						
8/8/2008**	SYS-INF	5,536.7	17	4.5	146	---	---	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
	SYS-MID				153	---	---						
	SYS-EFF				0	---	---						
8/18/2008**	SYS-INF	5,774.1	17	4.5	365	840	1.1	4.6	2,630.7	0.01	5.96	yes	
	SYS-MID				170	140	<0.077						
	SYS-EFF				0	<7.0	<0.077						
08/22/08	SYS-INF	5,873.9	17	4	325	---	---	4.6	2,649.7	0.01	5.98	yes	
	SYS-MID				207	---	---						
	SYS-EFF				0	---	---						
09/05/08	SYS-INF	6,208.4	14	5	385	---	---	3.6	2,700.4	0.004	6.05	yes	System shutdown for carbon changeout
	SYS-MID				219	---	---						
	SYS-EFF				23	---	---						
10/06/08	SYS-INF	6,211.0	13	5	443	1,000	1.8	3.4	2,700.8	0.004	6.05	yes	System restarted; samples collected after system ran for approximately 1
	SYS-MID				23	---	---						
	SYS-EFF				0	<7.0	<0.077						
10/14/08	SYS-INF	6,405.0	15	5	215	---	---	4.7	2,738.4	0.00	6.05	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
10/23/08	SYS-INF	6,615.7	14	5	205	---	---	4.5	2,777.8	0.01	6.11	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						

Table 3. SVE/AS System Performance Summary - 1721 Webster Street, Oakland, California

		FIELD MEASUREMENTS				ANALYTICAL RESULTS		REMOVAL					
Date	Sample ID	Hour Meter Reading (hours)	System Vapor Flow Rate (cfm)	Applied Vacuum ("H20)	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)	Air Sparge Unit on? (yes/no)	Comments
10/29/08	SYS-INF	6,760.3	21	5	160	---	---	6.6	2,817.5	0.01	6.17	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/17/08	SYS-INF	7,221.4	20	5	98	---	---	6.3	2,937.6	0.01	6.37	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/25/08	SYS-INF	7,413.9	19	5	24	---	---	6.1	2,986.5	0.01	6.45	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
12/05/08	SYS-INF	7,652.3	15	5	74	---	---	4.8	3,034.3	0.01	6.53	yes	Shutdown system to conduct maintenance on blower. Greased fittings and lowered motor speed at
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
12/16/08	SYS-INF	7,915.0	15	5	21	77	<0.077	0.4	3,038.4	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	<7.0	<0.077						
12/23/08	SYS-INF	8,079.4	20	5	22	---	---	0.5	3,041.7	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
12/31/08	SYS-INF	8,277.1	30	5	24	---	---	0.7	3,047.8	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
01/06/09	SYS-INF	8,416.9	27	5	28	---	---	0.7	3,051.6	0.00	6.53	yes	Greased blower
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
01/20/09	SYS-INF	8,756.6	27	5	NM	---	---	0.7	3,061.1	0.00	6.53	yes	Shutdown system to evaluate effectiveness of remediation on groundwater.
	SYS-MID					---	---						
	SYS-EFF					---	---						
02/06/09	SYS-INF	8,756.6	25	5	50	50	<0.077	0.4	3,061.1	0.00	6.53	yes	Restart system
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						

Table 3. SVE/AS System Performance Summary - 1721 Webster Street, Oakland, California

		FIELD MEASUREMENTS				ANALYTICAL RESULTS		REMOVAL					
Date	Sample ID	Hour Meter Reading (hours)	System Vapor Flow Rate (cfm)	Applied Vacuum ("H20)	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)	Air Sparge Unit on? (yes/no)	Comments
02/26/09	SYS-INF	9,002.6	22	5	13	---	---	0.3	3,064.6	0.00	6.53	yes	Restart system, off on arrival
	SYS-MID				1	---	---						
	SYS-EFF				0	---	---						
03/06/09	SYS-INF	9,197.4	23	5	5	---	---	0.4	3,067.6	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
03/13/09	SYS-INF	9,360.4	22	5	NM	20	<0.077	0.1	3,068.5	0.00	6.53	yes	
	SYS-MID				NM	<7.0	<0.077						
	SYS-EFF				NM	<7.0	<0.077						
03/18/09	SYS-INF	9,480.4	21	5	5	---	---	0.1	3,069.2	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
03/26/09	SYS-INF	9,675.1	21	5	5	---	---	0.1	3,070.3	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
04/03/09	SYS-INF	9,868.7	21	5	4	---	---	0.1	3,071.4	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
04/10/09	SYS-INF	10,035.7	22	5	1	---	---	0.1	3,072.4	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
04/17/09	SYS-INF	10,203.7	21	5	4	---	---	0.1	3,073.3	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
04/24/09	SYS-INF	10,366.7	19	5	4	---	---	0.1	3,074.2	0.00	6.53	yes	Shut AS/SVE off for upcoming QM
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
05/01/09	SYS-INF	10,366.7	20	5	3	---	---	0.1	3,074.2	0.00	6.53	yes	Restart SVE/AS
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
05/08/09	SYS-INF	10,543.3	21	5	15	---	---	0.1	3,075.1	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
05/15/09	SYS-INF	10,711.8	20	5	32	---	---	0.1	3,076.0	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						

Table 3. 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 ("H20)	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)		
05/22/09	SYS-INF	10,879.5	0	0	NM	---	---	0.0	3,076.0	0.00	6.53	no	AS compressor down; shut SVE off
	SYS-MID				NM	---	---						
	SYS-EFF				NM	---	---						
09/18/09	SYS-INF	10,879.5	22	5	41	---	---	0.1	3,076.0	0.00	6.53	yes	Restart AS and SVE after repairing AS comp
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
10/30/09	SYS-INF	11,889.8	20	5	35	---	---	0.1	3,081.5	0.00	6.53	no	SVE on, AS comp has blown fuse
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
11/30/09	SYS-INF	12,631.8	20	5	31	---	---	0.1	3,085.4	0.00	6.53	yes	Replace fuse, restart AS
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
12/16/09	SYS-INF	13,017.6	22	5	22	---	---	0.1	3,087.7	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
01/18/10	SYS-INF	13,808.6	24	5	27	---	---	0.2	3,092.8	0.00	6.53	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
02/03/10	SYS-INF	14,193.0	12	4	34	72	0.25	0.3	3,097.2	0.00	6.53	yes	Serviced SVE blower, collected lab samples
	SYS-MID				0	<7.0	<0.077						
	SYS-EFF				0	<7.0	<0.077						
04/07/10	SYS-INF	15,701.1	12	5	45	---	---	0.3	3,114.6	0.00	6.58	no	AS off, compressor non-op
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
05/07/10	SYS-INF	16,425.2	27	0	43	---	---	0.6	3,133.4	0.00	6.64	no	AS off, compressor non-op
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						
06/07/10	SYS-INF	17,168.0	27	0	46	84	0.29	0.7	3,155.5	0.00	6.71	no	AS off, compressor non-op
	SYS-MID				0	<7.0	<0.077						
	SYS-EFF				0	<7.0	<0.077						
07/15/10	SYS-INF	18,075.8	23	0	4	---	---	0.6	3,179.1	0.00	6.79	no	AS off, compressor non-op
	SYS-MID				2	---	---						
	SYS-EFF				0	---	---						
08/18/10	SYS-INF	18,434.1	30	0	26	---	---	0.8	3,191.3	0.00	6.82	no	Restart system, off on arrrival
	SYS-MID				2	---	---						
	SYS-EFF				0	---	---						

Table 3. 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 ("H20)	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)		
09/22/10	SYS-INF	19,173.6	25	0	17	66	0.21	0.5	3,208.0	0.00	6.87	no	Restart system, off on arrrival
	SYS-MID				2	<7.0	<0.077						
	SYS-EFF				0	<7.0	<0.077						
10/22/10	SYS-INF	19,345.1	25	0	14	---	---	0.5	3,211.8	0.00	6.88	no	Restart system, off on arrrival
	SYS-MID				1	---	---						
	SYS-EFF				0	---	---						
11/23/10	SYS-INF	19,395.5	0	0	NM	---	---	0.0	3,211.8	0.00	6.88	no	Off on arrival, system shutdown October 26, 2010 for rainy season.
	SYS-MID				NM	---	---						
	SYS-EFF				NM	---	---						

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 ft^3) 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
Onsite Monitoring and Remediation Wells								
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	---	---	---	---
Offsite Monitoring Wells								
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

Pangea
ENVIRONMENTAL SERVICES, INC.

Well Gauging Data Sheet

Project.Task #: 1135.001.249	Project Name: Douglas Parking
Address: 1721 Webster St, Oakland	Date: 01.20.17
Name: Erik Lervaag	Signature: EL

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	1059	—	—	21.83		notch in casing.
MW-2	2 ~~1105~~	1105	—	—	19.49		"
MW-3	2 ~~1103~~	1103	—	—	21.15		NTOC
MW-5	2 ~~1107~~	1107	—	—	14.98		notch in casing
MW-6	2	1111	—	—	19.56		notch in casing

Comments:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-1

Project.Task #: 1135.001.249	Project Name: Douglas Parking
Address: 1721 Webster St, Oakland	
01.20.17	Weather Ptly Cloudy, showers 50's
Well Diameter: 2	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 30	Depth to Product: —
Depth to Water (DTW): 21.83	Product Thickness: —
Water Column Height: 8.17	1 Casing Volume: 1.3 gallons
Reference Point: NTOC	3 Casing Volumes: 3.9 gallons
Purging Device: New Bailer	
Sampling Device: New Bailer	

Time	Temp ©	pH	Cond (µs)	~~NTU~~	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
~~1427~~		Pre-bailing DO =			0.87			
~~1431~~	19.8	7.51	593.3			-69	0	
1433	19.3	6.84	551.9			-78	1.3	
1439	19.2	6.66	547.6			-89	2.5	
1444	19.2	6.61	545.1			-87	3.9	
1445	Sample Collected							

Comments: DO @ 25' bgs

Sample ID: MW-1	Sample Time: 1445
Laboratory: Sunstar	Sample Date: 01.20.17
Containers/Preservative: 3 VOAs w/HCl	
Analyzed for: TPHg/BTEX/MTBE by 8015/8020	
Sampler Name: E. Lervaag	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-2

Project.Task #: 1135.001.249	Project Name: Douglas Parking			
Address: 1721 Webster St, Oakland				
01.20.17	Weather Ptly Cldy 50/60			
Well Diameter: 2	Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47
		2" = 0.16	4" = 0.65	radius^2 * 0.163
Total Depth (TD): 29.5	Depth to Product:			
Depth to Water (DTW): 19.49	Product Thickness:			
Water Column Height: 10.01	1 Casing Volume: 1.6 gallons			
Reference Point: NTOC	3 Casing Volumes: 4.8 gallons			
Purging Device: New Bailer				
Sampling Device: New Bailer				

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
		Pre-Purge DO =			0.73			
1226	20.1	6.99	645.7			-87	X	
1231	19.8	6.68	693.0			-110	1.6	
1237	19.7	6.72	691.4			-115	3.2	
1244	19.8	6.63	688.7			-107	4.8	
1245	Sample Collected							

Comments:

Sample ID: MW-2	Sample Time: 1245
Laboratory: Sunstar	Sample Date: 01.20.17
Containers/Preservative: 3 VOAs w/HCl	
Analyzed for: TPHg/BTEX/MTBE by 8015/8020	
Sampler Name: E. Lervaag	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-3

Project.Task #: 1135.001.249	Project Name: Douglas Parking
Address: 1721 Webster St, Oakland	
01.20.17	Weather Ptly cloudy 50's
Well Diameter: 2	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 30	Depth to Product:
Depth to Water (DTW): 21.15	Product Thickness:
Water Column Height: 8.85	1 Casing Volume: 1.4 gallons
Reference Point: NTOC	3 Casing Volumes: 4.2 gallons
Purging Device: New Bailer	
Sampling Device: New Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
		Pre-Purge DO =			0.69			
1349	20.5	6.84	431.4			-88	0	
1348	20.3	6.73	406.7			-79	1.4	
1352	20.2	6.69	411.3			-62	3.0	
1357	20.2	6.67	413.1			-55	4.2	
1358	Sample Collected							

Comments:

Sample ID: MW-3	Sample Time: 1358
Laboratory: Sunstar	Sample Date: 01.20.17
Containers/Preservative: 3 VOAs w/HCl	
Analyzed for: TPHg/BTEX/MTBE by 8015/8020	
Sampler Name: E. Lervaag	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-5

Project.Task #: 1135.001.249	Project Name: Douglas Parking
Address: 1721 Webster St, Oakland	
01.20.17	Weather Ptly Cldy 50's
Well Diameter: 2	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 25	Depth to Product:
Depth to Water (DTW): 14.98	Product Thickness:
Water Column Height: 10.02	1 Casing Volume: 1.6 gallons
Reference Point: NTOC	3 Casing Volumes: 4.8 gallons
Purging Device: New Bailer	
Sampling Device: New Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
		Pre-Purge DO =			0.73			
1303	~~1228~~	20.6	7.09	603.9		35	0	
1309	~~1233~~	20.3	6.81	591.3		52	1.6	
1314	~~1239~~	20.2	6.77	589.4		69	3.2	
1320	~~1245~~	20.2	6.76	586.5		73	4.8	
1321	~~1246~~	Sample collected						

Comments:

Sample ID: MW-5	Sample Time: 1321
Laboratory: Sunstar	Sample Date: 01.20.17
Containers/Preservative: 3 VOAs w/HCl	
Analyzed for: TPHg/BTEX/MTBE by 8015/8020	
Sampler Name: E. Lervaag	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-6

Project.Task #: 1135.001.249	Project Name: Douglas Parking
Address: 1721 Webster St, Oakland	
01.20.17	Weather Ptly cloudy 50's
Well Diameter: 2	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 30	Depth to Product:
Depth to Water (DTW): 19.56	Product Thickness:
Water Column Height: 10.44	1 Casing Volume: 1.7 gallons
Reference Point: NTOC	3 Casing Volumes: 5.0 gallons
Purging Device: New Bailer	
Sampling Device: New Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
		Pre-Purge DO =			0.87			
1145	20.1	6.89	671.4			-103	0	
1149	19.8	6.66	668.5			-92	1.7	
1153	19.7	6.65	663.9			-81	3.5	
1157	19.7	6.65	665.1			-72	5.0	
1158	Sample Collected							

Comments:

Sample ID: MW-6	Sample Time: 1158
Laboratory: Sunstar	Sample Date: 01.20.17

Containers/Preservative: 3 VOAs w/HCl

Analyzed for: TPHg/BTEX/MTBE by 8015/8020

Sampler Name: E. Lervaag	Signature:

APPENDIX C

Laboratory Analytical Reports

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1701920

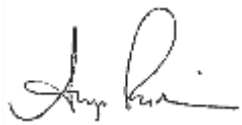
Report Created for: Pangea Environmental Svcs., Inc.

1710 Franklin Street, Ste. 200
Oakland, CA 94612

Project Contact: Elizabeth Avery
Project P.O.:
Project Name: Douglas Parking

Project Received: 01/23/2017

Analytical Report reviewed & approved for release on 01/26/2017 by:



Angela Rydelius,
Laboratory Manager

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
CA ELAP 1644 ♦ NELAP 4033ORELAP

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Pangea Environmental Svcs., Inc.
Project: Douglas Parking
WorkOrder: 1701920

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Pangea Environmental Svcs., Inc.
Project: Douglas Parking
WorkOrder: 1701920

Analytical Qualifiers

S	surrogate spike recovery outside accepted recovery limits
b1	aqueous sample that contains greater than ~1 vol. % sediment
c4	surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
d1	weakly modified or unmodified gasoline is significant

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Pangea Environmental Svcs., Inc.	**WorkOrder:**	1701920
Date Received:	1/23/17 8:00	**Extraction Method:**	SW5030B
Date Prepared:	1/23/17-1/25/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Douglas Parking	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	**1701920-001A**	**Water**	**01/20/2017 13:15**	**GC7**	**133031**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	01/23/2017 20:20
MTBE	ND	5.0	1	01/23/2017 20:20
Benzene	ND	0.50	1	01/23/2017 20:20
Toluene	ND	0.50	1	01/23/2017 20:20
Ethylbenzene	ND	0.50	1	01/23/2017 20:20
Xylenes	ND	1.5	1	01/23/2017 20:20

Surrogates	REC (%)	Limits	
aaa-TFT	104	89-115	01/23/2017 20:20

Analyst(s): IA Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	**1701920-002A**	**Water**	**01/20/2017 12:05**	**GC7**	**133031**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**3000**	50	1	01/23/2017 22:19
MTBE	ND	5.0	1	01/23/2017 22:19
Benzene	**2.7**	0.50	1	01/23/2017 22:19
Toluene	**3.7**	0.50	1	01/23/2017 22:19
Ethylbenzene	**19**	0.50	1	01/23/2017 22:19
Xylenes	**29**	1.5	1	01/23/2017 22:19

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	117	S	89-115	01/23/2017 22:19

Analyst(s): IA Analytical Comments: d1,c4

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Pangea Environmental Svcs., Inc.	**WorkOrder:**	1701920
Date Received:	1/23/17 8:00	**Extraction Method:**	SW5030B
Date Prepared:	1/23/17-1/25/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Douglas Parking	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	**1701920-003A**	**Water**	**01/20/2017 12:30**	**GC7**	**133031**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**4200**	250	5	01/25/2017 10:23
MTBE	ND	25	5	01/25/2017 10:23
Benzene	ND	2.5	5	01/25/2017 10:23
Toluene	**5.0**	2.5	5	01/25/2017 10:23
Ethylbenzene	ND	2.5	5	01/25/2017 10:23
Xylenes	ND	7.5	5	01/25/2017 10:23

Surrogates	REC (%)	Limits	
aaa-TFT	108	89-115	01/25/2017 10:23

Analyst(s): IA Analytical Comments: d1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	**1701920-004A**	**Water**	**01/20/2017 11:40**	**GC7**	**133031**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	01/23/2017 19:51
MTBE	ND	5.0	1	01/23/2017 19:51
Benzene	ND	0.50	1	01/23/2017 19:51
Toluene	ND	0.50	1	01/23/2017 19:51
Ethylbenzene	ND	0.50	1	01/23/2017 19:51
Xylenes	ND	1.5	1	01/23/2017 19:51

Surrogates	REC (%)	Limits	
aaa-TFT	103	89-115	01/23/2017 19:51

Analyst(s): IA

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	Pangea Environmental Svcs., Inc.	**WorkOrder:**	1701920
Date Received:	1/23/17 8:00	**Extraction Method:**	SW5030B
Date Prepared:	1/23/17-1/25/17	**Analytical Method:**	SW8021B/8015Bm
Project:	Douglas Parking	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-6	**1701920-005A**	**Water**	**01/20/2017 11:45**	**GC7**	**133031**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**13,000**	1000	20	01/25/2017 09:52
MTBE	**260**	100	20	01/25/2017 09:52
Benzene	**120**	10	20	01/25/2017 09:52
Toluene	**71**	10	20	01/25/2017 09:52
Ethylbenzene	**760**	10	20	01/25/2017 09:52
Xylenes	**760**	30	20	01/25/2017 09:52

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	116	S	89-115	01/25/2017 09:52

Analyst(s): IA Analytical Comments: d1,c4

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	Pangea Environmental Svcs., Inc.	**WorkOrder:**	1701920
Date Prepared:	1/23/17	**BatchID:**	133031
Date Analyzed:	1/23/17	**Extraction Method:**	SW5030B
Instrument:	GC7	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	Douglas Parking	**Sample ID:**	MB/LCS-133031 1701921-020AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	56.5	40	60	-	94	85-112
MTBE	ND	10.5	5.0	10	-	105	74-127
Benzene	ND	10.8	0.50	10	-	109	81-124
Toluene	ND	11.5	0.50	10	-	115	79-131
Ethylbenzene	ND	11.1	0.50	10	-	111	86-127
Xylenes	ND	33.6	1.5	30	-	112	87-133
Surrogate Recovery							
aaa-TFT	10.4	10.4		10	104	104	87-117

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	61.0	59.0	60	ND	102	98	85-113	3.40	20
MTBE	10.6	10.9	10	ND	101	104	73-120	2.93	20
Benzene	10.7	11.1	10	ND	106	110	84-121	3.78	20
Toluene	11.1	11.6	10	ND	111	116	86-125	4.34	20
Ethylbenzene	10.8	11.3	10	ND	108	112	93-124	3.91	20
Xylenes	33.1	33.9	30	ND	110	113	93-130	2.42	20
Surrogate Recovery									
aaa-TFT	10.3	10.3	10		103	103	89-115	0	20

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1701920 **ClientCode: PEO**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Elizabeth Avery
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612
(510) 836-3700 FAX: (510) 836-3709

Email: eavery@pangeaenv.com
cc/3rd Party:
PO:
ProjectNo: Douglas Parking

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

Requested TAT: 5 days;

Date Received: 01/23/2017
Date Logged: 01/23/2017

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
1701920-001	MW-1	Water	1/20/2017 13:15	☐	A	A										
1701920-002	MW-2	Water	1/20/2017 12:05	☐	A											
1701920-003	MW-3	Water	1/20/2017 12:30	☐	A											
1701920-004	MW-5	Water	1/20/2017 11:40	☐	A											
1701920-005	MW-6	Water	1/20/2017 11:45	☐	A											

Test Legend:

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

Prepared by: Maria 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.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: PANGEA ENVIRONMENTAL SVCS., INC. **Project:** Douglas Parking **Work Order:** 1701920
Client Contact: Elizabeth Avery **QC Level:** LEVEL 2
Contact's Email: eavery@pangeaenv.com **Comments:** **Date Logged:** 1/23/2017

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1701920-001A	MW-1	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	1/20/2017 13:15	5 days	5%+	☐	
1701920-002A	MW-2	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	1/20/2017 12:05	5 days	Present	☐	
1701920-003A	MW-3	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	1/20/2017 12:30	5 days	Present	☐	
1701920-004A	MW-5	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	1/20/2017 11:40	5 days	Present	☐	
1701920-005A	MW-6	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	1/20/2017 11:45	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

General COC

MAI Work Order # 1701920

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
Telephone: (877) 252-9262 / Fax: (925) 252-9269
www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush ☐ 2 Day Rush ☐ 3 Day Rush ☐ STD X Quote #
J-Flag / MDL ☐ ESL ☐ Cleanup Approved ☐ Bottle Order #
Delivery Format: GeoTracker EDF X PDF ☐ EDD ☐ Write On (DW) ☐ EQuIS ☐

Report To: Elizabeth Avery Bill To: Pangea
Company: Pangea Env. Svs.
Email: eavery@pangeaenv.com
Alt Email: Tele: 510-836-3700
Project Name/#: Douglas Parking
Project Location: 1721 Webster St, Oakland PO #
Sampler Signature: [signature]

Analysis Requested

	SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	BTEX & TPH as Gas (8021/8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis
+5	MW-1	01.20.17	1315	3	GW	HCl	X														
+	MW-2	|	1205	3	|	|	X														
+	MW-3	|	1230	3	|	|	X														
+	MW-5	|	1400	3	|	|	X														
+	MW-6	01.20.17	1145	3	GW	HCl	X														

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
[signature]	01.23.17	0800	Yen Cao @ MAI	1/23/17	8am

Comments / Instructions

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp 10.8 °C Initials YC

Page 1 of 1

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name:	**Pangea Environmental Svcs., Inc.**	Date and Time Received	**1/23/2017 08:00**
Project Name:	**Douglas Parking**	Date Logged:	**1/23/2017**
		Received by:	Yen Cao
WorkOrder №:	**1701920** Matrix: Water	Logged by:	Maria Venegas
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	NA ☐
Sample/Temp Blank temperature	Temp: 10.8°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

Comments: