



RECEIVED

2:39 pm, Aug 06, 2008

Alameda County
Environmental Health

July 28, 2008

VIA ALAMEDA COUNTY FTP SITE

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

Re: **Groundwater Monitoring and Remediation Summary Report – Second Quarter 2008**
Douglas Parking Company
1721 Webster Street
Oakland, California
ACEH File No. 129

Dear Ms. Jakub:

On behalf of the Douglas Parking Company, Pangea Environmental Services, Inc. has prepared this *Groundwater Monitoring and Remediation Summary Report – Second Quarter 2008* for the above-referenced site. The report describes groundwater monitoring and sampling, site remediation, and other site activities.

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

Sincerely,
Pangea Environmental Services, Inc.

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

Bob Clark-Riddell, P.E.
Principal Engineer

Attachment: *Groundwater Monitoring and Remediation Summary Report – Second Quarter 2008*

cc: Mr. Lee Douglas, Douglas Parking Company, 1721 Webster Street, Oakland, California 94612 (2 copies)
SWRCB Geotracker Database (electronic copy)



**GROUNDWATER MONITORING AND REMEDIATION SUMMARY REPORT
– SECOND QUARTER 2008**

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

July 28, 2008

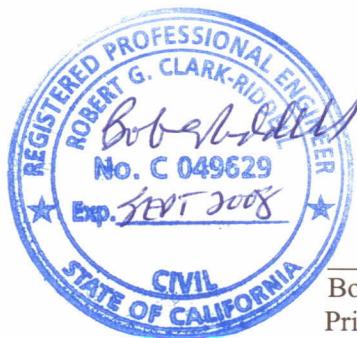
Prepared for:

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:



Bob Gillies for

Morgan Gillies
Project Manager

Bob Clark-Riddell

Bob Clark-Riddell, P.E.
Principal Engineer

PANGEA Environmental Services, Inc.

INTRODUCTION

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

SITE BACKGROUND

The site is currently being utilized as a parking garage, and is located between 17th and 19th Streets in downtown Oakland, California, approximately five miles east of San Francisco Bay and half 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.

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 June 27, 2003 Cambria installed two additional offsite monitoring wells (MW-6 and MW-7).

Limited site remediation has been conducted at the site. In January 1998, Cambria installed ORC socks in well MW-2 to enhance the natural attenuation of dissolved-phase hydrocarbons. Dissolved oxygen (DO) concentrations temporarily increased in well MW-2 following the ORC sock installation. In February and March 1999, a total of 120 gallons of 7.5% hydrogen peroxide solution was added into monitoring wells MW-2 and MW-3 to oxidize hydrocarbons and also increase DO levels to enhance biodegradation of

dissolved-phase hydrocarbons. The hydrogen peroxide *temporarily* increased groundwater DO levels, but hydrocarbon concentrations remained at elevated levels.

On March 4, 2003, Cambria installed a co-axial air sparging/soil vapor extraction well (SV-1/AS-1) and two angled air sparging wells (AS-2 and AS-3) to approximately 30 ft bgs (Figure 3). The wells were installed to facilitate feasibility testing and future site remediation. Site remediation via soil vapor extraction and air sparging began in October 2007.

GROUNDWATER MONITORING AND SAMPLING

On April 9, 2008, Pangea conducted groundwater monitoring and sampling at the site. Site monitoring wells were gauged for depth to water. Groundwater samples were collected from monitoring wells MW-2 through MW-7.

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

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, 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 B. Dissolved oxygen concentrations in groundwater monitoring wells ranged from 0.29 mg/L (MW-5) to 0.82 mg/L (MW-1).

Groundwater Flow Direction

Based on depth-to-water measurements collected on April 9, 2008, groundwater beneath the site flowed towards the north-northeast (Figure 2). The groundwater depth measurements and inferred flow direction this quarter are consistent with historical site conditions. Groundwater depths at the site have historically ranged from approximately 14 to 23 ft bgs, equivalent to a groundwater elevation range from 5 to 13 feet above msl over nine years of monitoring (Table 1).

Hydrocarbon and MTBE Distribution in Groundwater

TPHg, benzene and MTBE concentrations in groundwater at the site are shown on Figure 2. The maximum TPHg (51,000 µg/L) and benzene (3,000 µg/L) concentrations this quarter were detected in well MW-2. No hydrocarbons were detected in perimeter wells MW-5 or MW-7. Detected hydrocarbon concentrations in site wells this quarter were within historical ranges. In general, TPHg and BTEX concentrations in site monitoring wells exhibit a stable long-term trend. MTBE was not detected above reporting limits in any of the sampled wells this quarter. The only apparent historical MTBE detection at the site (48 µg/L in well MW-3 by EPA Method 8020) was interpreted to be a false positive, based on the results of confirmation testing using EPA Method 8260 on July 21, 2003. Since the tank was removed in 1992 and because of the lack of confirmed detectable historical MTBE, MTBE is not a compound of concern at this site.

REMEDIATION SYSTEM SUMMARY

Soil Vapor Extraction/Air Sparge System

The soil vapor extraction (SVE) remediation system consists of a blower that extracts soil vapor from well SVE-1. The SVE equipment is a Solleco 100 cubic foot per minute (cfm) vapor extraction unit with a 7.5-hp positive-displacement blower (Roots Universal Model No. 56 URAI). Extracted vapors are routed through a moisture separator to remove entrained water. Extracted vapor is treated by two 2,000-lb canisters of granular activated carbon plumbed in series prior to discharge to the atmosphere in accordance with the Bay Area Air Quality Management District (BAAQMD) requirements. The air sparging (AS) system consists of a compressor for injecting air into wells AS-1, AS-2 and/or AS-3. Injection into AS wells is controlled by timer-activated solenoid valves. The air compressor is a 0.6-hp Reitschle-Thomas DLT 10 rotary vane oil-less compressor capable of injecting approximately 8 cfm of air. 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 3. The remediation system layout is shown on Figure 4.

Operation and Performance

SVE system operation commenced on October 29, 2007, and AS system operation started on November 12, 2007. During initial SVE system operation, the system was monitored *daily* in accordance with air permit requirements of the *Authority to Construct* issued by the Bay Area Air Quality Management District (BAAQMD). On November 27, 2007, the BAAQMD approved Pangea's request to reduce the monitoring frequency from *daily* to *weekly* to help control costs. System operation and performance data are summarized on Table 2.

As of June 27, 2008, the SVE/AS system had been in operation for a total of 4529.7 hours (approximately 188.7 days). The SVE/AS system was shut down on February 29, 2008, because analytical results indicated that vapor-phase hydrocarbons in the effluent of the first carbon vessel were present at concentrations that necessitated carbon changeout for permit compliance. The system was restarted on April 7, 2008 following carbon changeout. Based on laboratory analytical data, the TPHg removal rates observed during the Second Quarter 2008 ranged from a low of 5.8 pounds per day (lbs/day) (April 30, 2008) to a high of 15.5 lbs/day (April 7, 2008). Benzene removal rates ranged from a low of 0.01 lbs/day (April 23 and 30, 2008) to a high of 0.03 lbs/day (April 10, 2008). Pangea technicians adjusted the system to optimize hydrocarbon removal. As of June 27, 2008, laboratory analytical data indicates the system has removed a total of approximately 1,944.3 lbs TPHg and 3.70 lbs benzene. The laboratory analytical reports for soil vapor are included in Appendix B.

OTHER SITE ACTIVITIES

Groundwater Monitoring

Pangea will continue quarterly groundwater monitoring and sampling at the site in accordance with the approved sampling frequency. Well MW-1 will be sampled annually during the first quarter of each year to help control costs. All other site monitoring wells will be gauged for depth to water and groundwater samples will be analyzed for TPHg, BTEX and MTBE by EPA Method 8015Cm/8021B.

Remediation System Operation

Pangea will continue weekly monitoring of the remediation system in accordance with air permit requirements. System operation and performance will be summarized within quarterly monitoring reports.

ELECTRONIC REPORTING

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

ATTACHMENTS

Figure 1 – Vicinity Map

Figure 2 – Groundwater Elevations and Hydrocarbon Concentration Map

Figure 3 – Cross Section of Remediation Wells

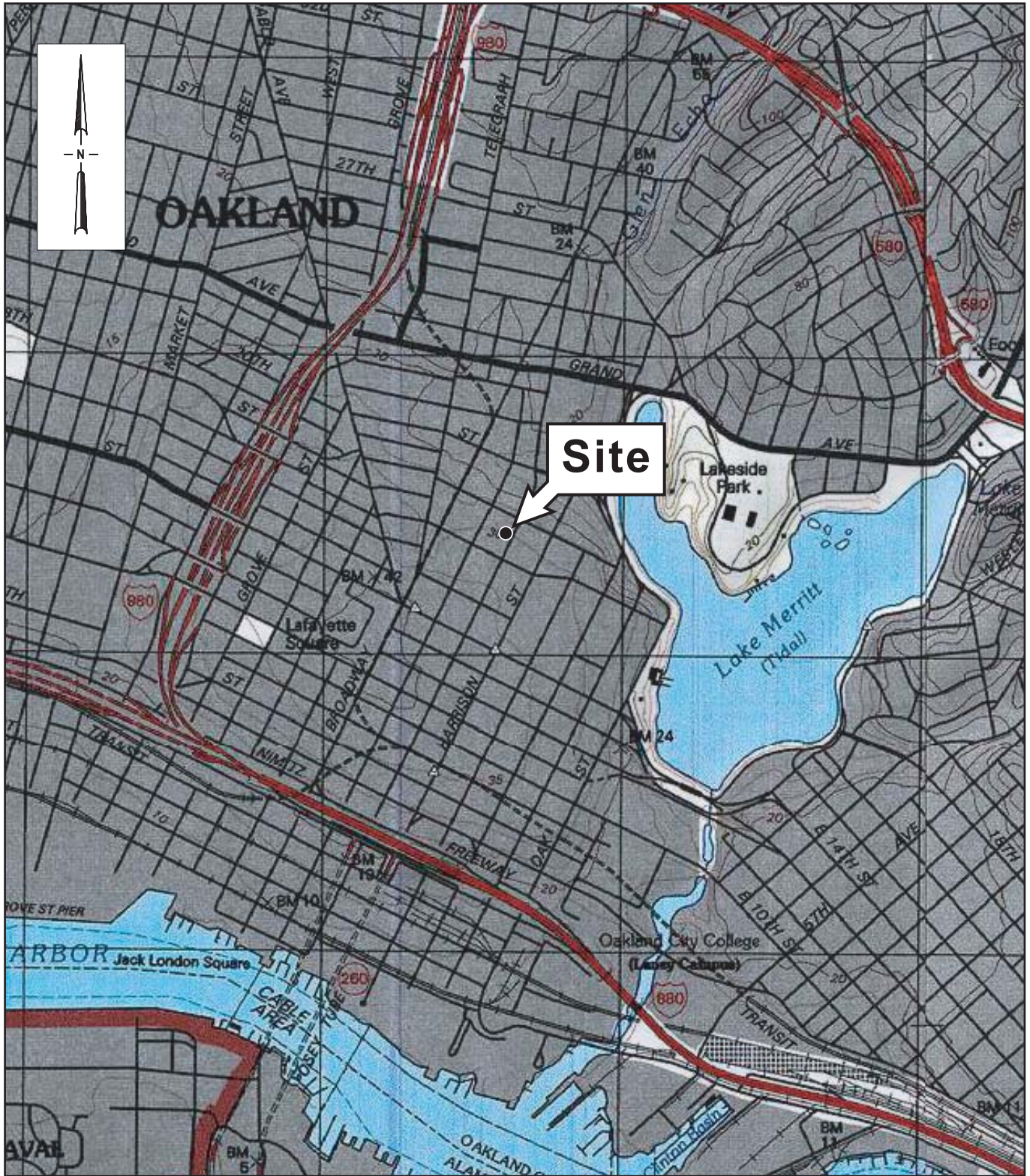
Figure 4 – Remediation System Layout

Table 1 – Groundwater Elevation and Analytical Data

Table 2 – SVE System Performance Summary

Appendix A – Groundwater Monitoring Field Data Sheets

Appendix B – Laboratory Analytical Reports



SOURCE: TOPOI MAPS



SCALE : 1" = 1/4 MILE

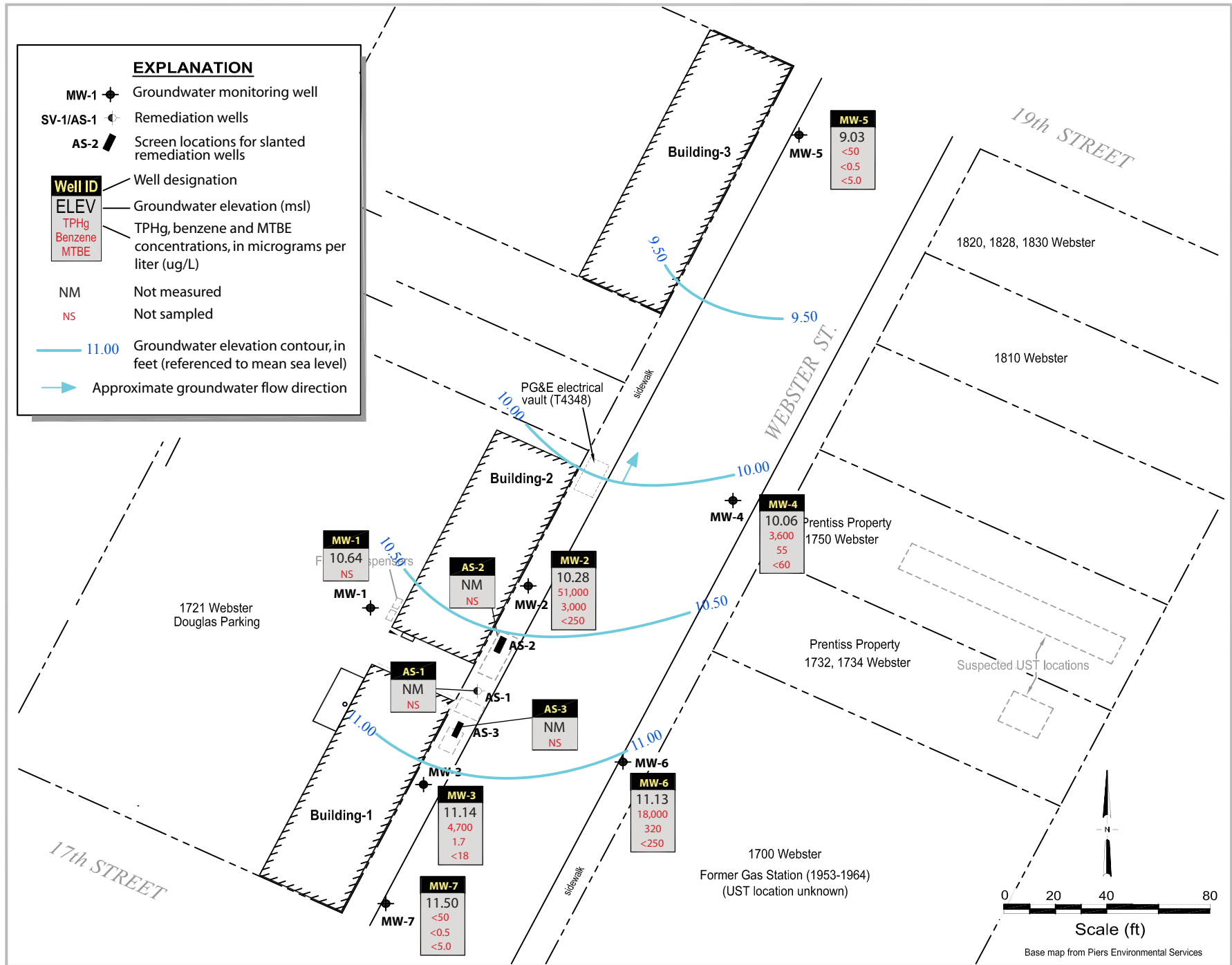
Figure

1

Vicinity Map

Douglas Parking Facility
 1721 Webster Street
 Oakland, California





Douglas Parking
 1721 Webster Street
 Oakland, California



**Groundwater Elevations and
 Hydrocarbon Concentration Map**
 April 9, 2008

FIGURE
2

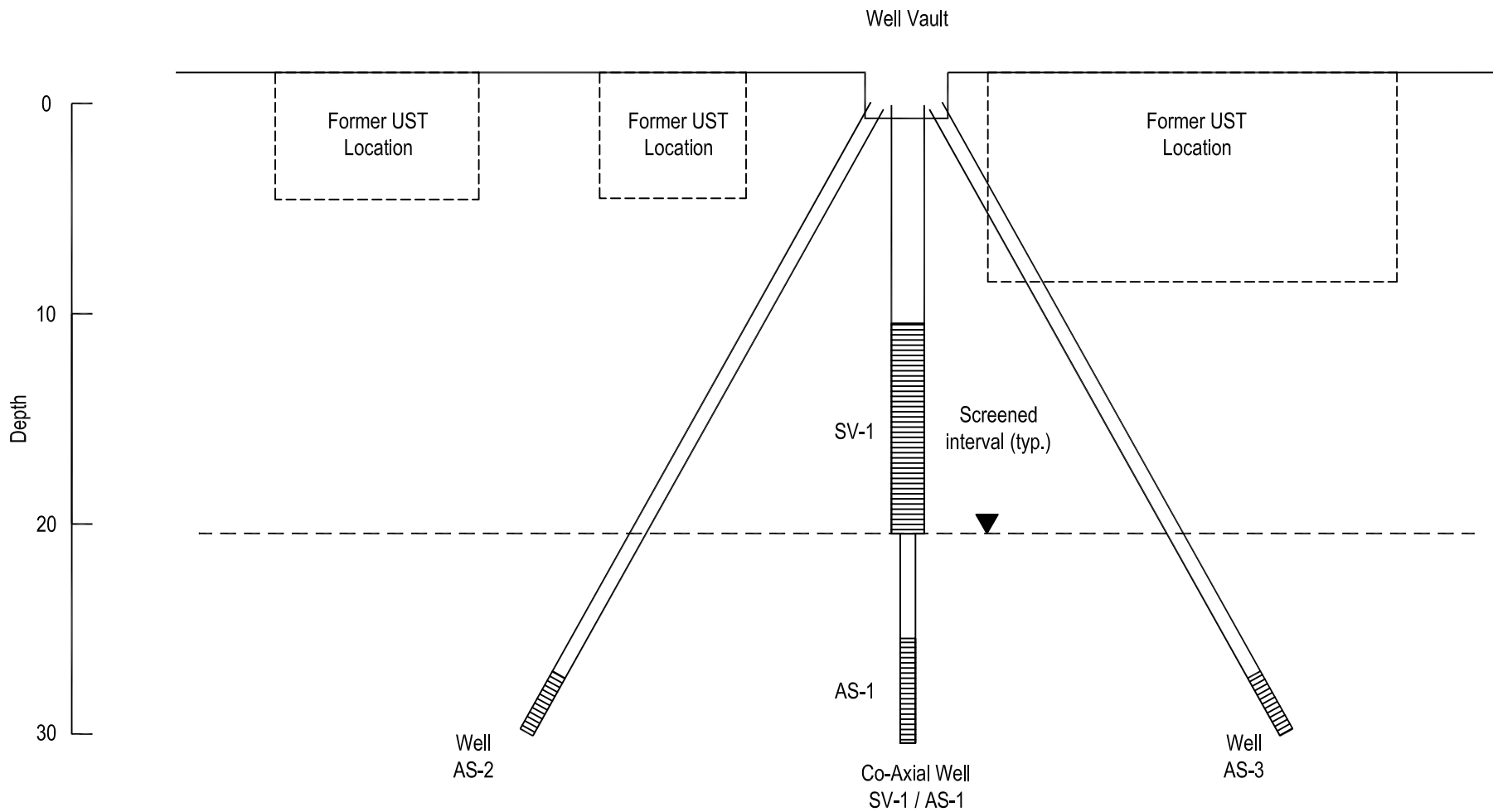



Figure
3

EXPLANATION	
MW-1	Groundwater monitoring well
SV-1, AS-1	Remediation Wells
	Former Underground Storage Tanks / Dispensers

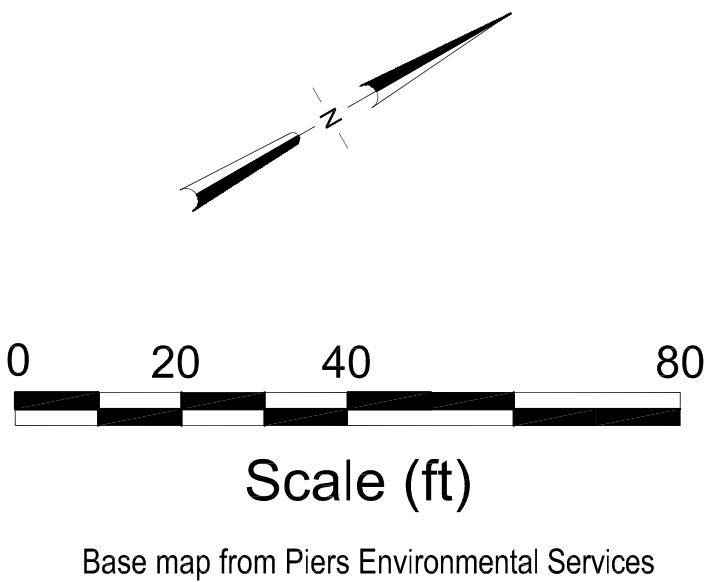
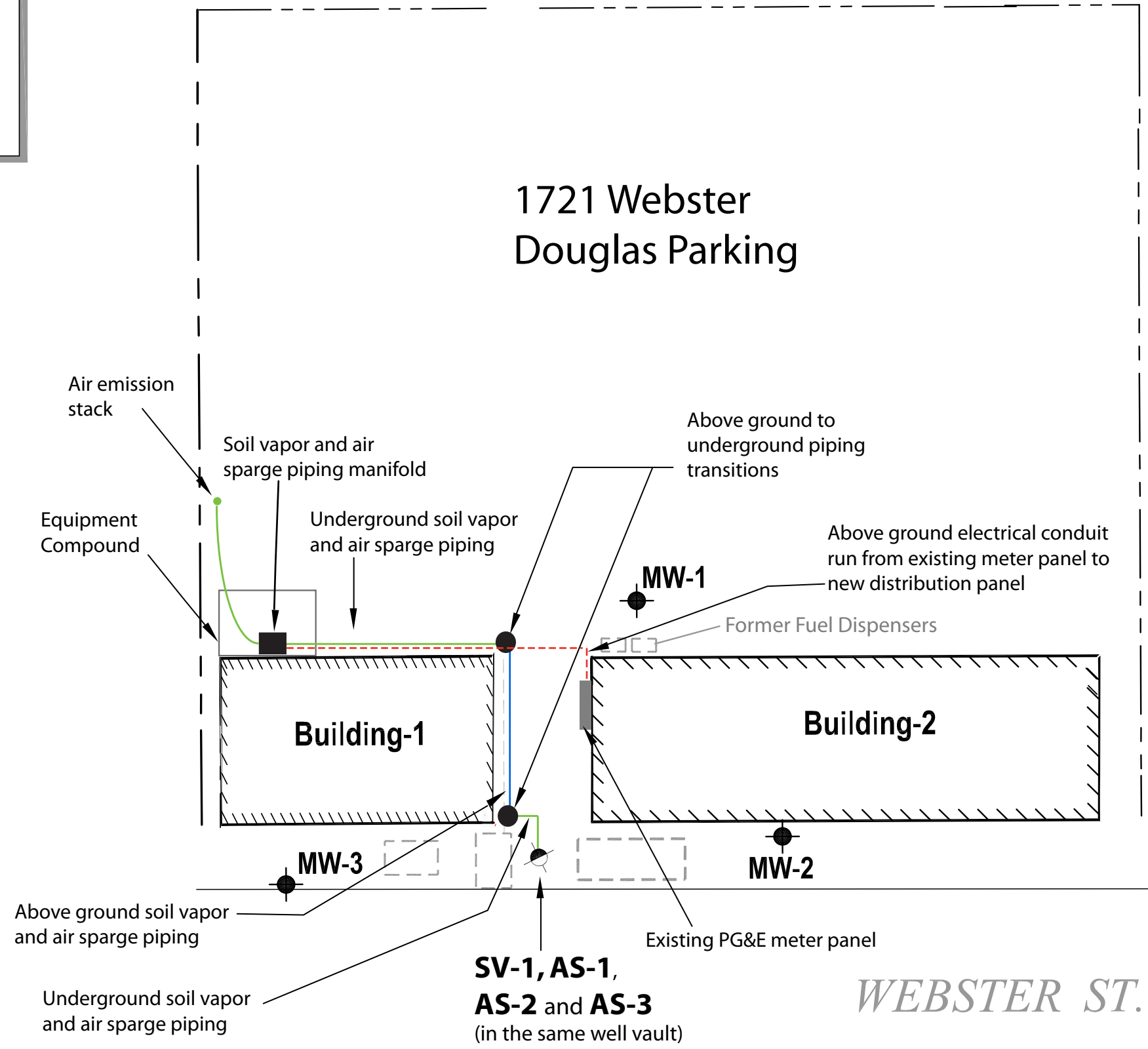


Figure 4

Douglas Parking
 1721 Webster Street
 Oakland, California



**Remediation System
 Layout**

PANGEA

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

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

PANGEA

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	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	
	1/15/2004	19.93	10.47	8,100	6.1	23	44		530	<50	
	4/5/2004	18.99	11.41	14,000	1,600	2,100	550		2,500	<500	
	8/9/2004	19.79	10.61	1,200	210	16	14		100	<20	
	10/7/2004	20.26	10.14	1,100	2.3	9.8	2.9		36	<5.0	
	2/7/2005	18.80	11.60	45,000	4,400	4,800	1,400		5,800	<200	
	4/5/2005	18.40	12.00	34,000	3,700	3,600	1,200		5,300	<500 (<5.0)	
	7/6/2005	18.48	11.92	24,000	1,600	1,700	570		2,800	<500	
	10/10/2005	19.00	11.40	25,000	1,700	2,100	710		3,200	<500	
	1/26/2006	18.58	11.82	60,000	4,600	7,200	1,600		6,900	<1,000	
	4/10/2006	17.84	12.56	56,000	4,900	7,500	1,200		7,400	<500	
	7/6/2006	18.76	11.64	28,000	1,900	1,700	720		2,900	<500	
	10/26/2006	19.60	10.80	43,000	2,800	2,500	1,700		7,600	<500	
	1/19/2007	19.84	10.56	31,000	2,700	2,400	1,400		5,800	<150	
	4/17/2007	19.90	10.50	37,000	3,200	2,900	1,600		6,400	<400	
	7/6/2007	19.63	10.77	30,000	3,200	2,000	1,500		5,200	<250	
	10/15/2007	20.11	10.29	20,000	1,200	990	650		2,300	<500	
	1/17/2008	20.10	10.30	38,000	2,900	5,100	1,200		5,000	<210	
	4/9/2008	20.12	10.28	51,000	3,000	6,400	1,700		6,500	<250	

PANGEA

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	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
	7/20/1999	20.68	8.88	11,000	<0.5	3.1	13	88	<80
	10/5/1999	20.81	8.75	31,000	62	<0.5	21	170	<90
	1/7/2000	21.09	8.47	13,000	<0.5	<2	21	140	<80
	4/6/2000	20.48	9.08	5,300	1.5	1.4	9.8	60	<30
	7/31/2000	20.62	8.94	7,100	3.5	1.0	12	66	<5.0
	10/3/2000	21.13	8.43	8,000	<0.5	3.3	11	70	<40
	1/12/2001	21.45	8.11	11,000	4.3	6.7	11	73	<70
	4/11/2001	21.69	7.87	10,000	<0.5	<0.5	11	65	<10
	7/6/2001	21.60	7.96	13,000	5.3	1.6	11	58	<5.0
	10/25/2001	21.70	7.86	11,000	<0.5	3.0	15	70	<10
	3/4/2002	21.65	7.91	1,900	1.3	0.8	<0.5	15	<5.0
	4/18/2002	21.77	7.79	1,500	1.0	0.97	1.3	5.8	<5
	7/9/2002	22.03	7.53	13,000	6.8	5.7	13	59	<90
	10/4/2002	22.15	7.41	8,400	<10	<10	<10	42	<100
	1/12/2003	21.13	8.43	9,000	9.5	5.1	8.5	46	<90
	4/21/2003	20.63	8.93	10,000	<5.0	<5.0	8.5	32	<50
32.56	7/21/2003	20.68	11.88	9,600	<2.5	<2.5	7.4	39	48 (<1.0)
	10/2/2003	20.99	11.57	12,000	<5.0	<5.0	10	40	<90
	1/15/2004	20.74	11.82	13,000	37	41	78	930	<50
	4/5/2004	20.59	11.97	4,500	<1.7	<1.7	<1.7	12	<17
	8/9/2004	22.18	10.38	2,100	<1.0	3.7	<1.0	8.1	<10
	10/7/2004	22.79	9.77	2,400	6.5	26	7.5	89	<15
	2/7/2005	20.35	12.21	6,800	2.2	5.6	2.0	12	<30
	4/5/2005	19.95	12.61	6,100	2.3	2.6	1.3	8.3	<45 (<0.5)
	7/6/2005	19.93	12.63	4,500	<1.0	1.5	1.0	8.3	<10
	10/10/2005	20.45	12.11	3,800	0.73	<0.5	0.98	5.7	<15
	1/26/2006	20.05	12.51	5,100	<0.5	1.1	<0.5	6.6	<15
	4/10/2006	19.39	13.17	1,900	0.55	1.6	0.51	4.1	<10
	7/6/2006	20.25	12.31	5,600	<1.0	2.3	<1.0	6.4	<20
	10/26/2006	21.07	11.49	8,000	2.5	1.0	2.3	12	<35
	1/19/2007	21.38	11.18	77,000	19	40	9.5	130	<300
	4/17/2007	21.45	11.11	7,400	2.7	6.6	1.1	12	<40
	7/6/2007	21.29	11.27	7,100	2.4	5.6	0.85	10	<30
	10/15/2007	21.62	10.94	10,000	<5.0	<5.0	<5.0	14	<50
	1/17/2008	21.68	10.88	6,400	1.8	<0.5	1.0	8.4	23
	4/9/2008	21.42	11.14	4,700	1.7	2.2	<0.5	3.8	<18

PANGEA

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
							($\mu\text{g/L}$)				
MW-4 25.29	5/10/1996	16.98	8.31	14,000	ND	1,200	720		3,100	-	
	10/2/1996	17.65	7.64	12,000	ND	650	580		2,200	-	
	2/28/1997	16.80	8.49	13,000	ND	1,100	750		2,700	110	
	9/17/1997	17.93	7.36	13,000	<2.5	820	750		2,900	<190	
	2/5/1998	16.78	8.51	13,000	<1.0	690	690		2,900	<170	
	8/11/1998	16.59	8.70	15,000	<5	360	520		1,900	280	
	2/8/1999	17.10	8.19	9,800	<5	680	770		2,200	300	
	2/24/1999	18.95	6.34	-	-	-	-		-	-	
	3/3/1999	16.80	8.49	-	-	-	-		-	-	
	3/10/1999	16.86	8.43	-	-	-	-		-	-	
	3/17/1999	16.82	8.47	-	-	-	-		-	-	
	5/4/1999	16.86	8.43	11,000	46	600	620		1,900	<100	
	7/20/1999	17.30	7.99	13,000	<0.5	470	7.0		2,000	<150	
	10/5/1999	17.43	7.86	18,000	4.4	720	800		2,100	<120	
	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	

PANGEA

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)	←————— (µg/L) —————→						
				TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
MW-5 21.97	5/10/1996	14.60	7.37	ND	ND	ND	ND	ND	-	
	10/2/1996	15.25	6.72	ND	ND	ND	ND	ND	-	
	2/28/1997	14.31	7.66	ND	ND	ND	ND	ND	ND	
	9/17/1997	15.18	6.79	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/5/1998	13.64	8.33	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/11/1998	13.92	8.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/8/1999	14.19	7.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/24/1999	16.18	5.79	-	-	-	-	-	-	
	3/3/1999	14.23	7.74	-	-	-	-	-	-	
	3/10/1999	14.32	7.65	-	-	-	-	-	-	
	3/17/1999	14.25	7.72	-	-	-	-	-	-	
	5/4/1999	14.41	7.56	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/20/1999	14.44	7.53	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/5/1999	14.79	7.18	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/7/2000*	15.23	6.74	-	-	-	-	-	-	
	4/6/2000	14.74	7.23	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/31/2000	14.52	7.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/3/2000	15.37	6.60	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	24.99	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	
10/2/2003		16.33	8.66	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
1/15/2004		16.21	8.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
4/5/2004		15.01	9.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
8/9/2004		16.85	8.14	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
10/7/2004		17.48	7.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
2/7/2005		16.52	8.47	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
4/5/2005		14.45	10.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0 (<0.5)	
7/6/2005		14.85	10.14	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
10/10/2005		15.44	9.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
1/26/2006	14.96	10.03	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
4/10/2006	14.01	10.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
7/6/2006	15.17	9.82	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
10/26/2006	15.94	9.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
1/19/2007	16.05	8.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
4/17/2007	15.99	9.00	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
7/6/2007	15.50	9.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
10/15/2007	16.27	8.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
1/17/2008	15.10	9.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0		
4/9/2008	15.96	9.03	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	

PANGEA

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 (µg/L)	Xylenes	MTBE →
MW-6 30.99	6/30/2003	19.60	11.39	68,000	950	6,000	2,400	10,000	<1,000
	7/21/2003	19.67	11.32	120,000	170	1,400	1,100	10,000	<1,000
	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
MW-7 33.11	6/30/2003	21.40	11.71	170	<0.5	2.1	2.0	8.7	<5.0
	7/21/2003	21.44	11.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/2/2003	21.73	11.38	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/15/2004	21.57	11.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/5/2004	20.84	12.27	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	8/9/2004	22.68	10.43	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/7/2004	23.27	9.84	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	2/7/2005	20.60	12.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/5/2005	20.22	12.89	<50	<0.5	0.75	<0.5	<0.5	<5.0 (<0.5)
	7/6/2005	20.25	12.86	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/10/2005	20.70	12.41	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/26/2006	20.32	12.79	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/10/2006	19.62	13.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/6/2006	20.47	12.64	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/26/2006	21.30	11.81	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/19/2007	21.62	11.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/17/2007	21.67	11.44	<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
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	--	--	--	--	--	--	--	--

PANGEA

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)					
				←					→
AS-2	7/6/2006	22.26	--	2,100	6.1	<0.5	33	200	<20
	10/26/2006	23.25	--	280	1.1	<0.5	<0.5	6.0	<15
	1/19/2007	23.61	--	2,100	2.3	<0.5	96	310	<35
	4/17/2007	23.70	--	--	--	--	--	--	--
	7/16/2007	--	--	--	--	--	--	--	--
	10/15/2007	--	--	--	--	--	--	--	--
	1/17/2008	--	--	--	--	--	--	--	--
	4/9/2008	--	--	--	--	--	--	--	--
AS-3	7/6/2006	21.77	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/26/2006	22.66	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	1/19/2007	22.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/17/2007	23.06	--	--	--	--	--	--	--
	7/16/2007	--	--	--	--	--	--	--	--
	10/15/2007	--	--	--	--	--	--	--	--
	1/17/2008	--	--	--	--	--	--	--	--
	4/9/2008	--	--	--	--	--	--	--	--
Trip Blank	01/12/01	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	4/11/2001	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	7/6/2001	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	3/4/2002	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/2/2003	-	-	<50	<0.5	<0.5	<0.5	<0.5	<5.0
	10/15/2007	--	--	--	--	--	--	--	--

Notes and Abbreviations:

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

ft amsl = Measured in feet above mean sea level

µg/L = Micrograms per liter.

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

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

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

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

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

ND = Not detected.

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

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

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

Date	Sample ID	FIELD MEASUREMENTS				ANALYTICAL RESULTS		REMOVAL				Air Sparge Unit on? (yes/no)	Comments
		Hour Meter Reading (hours)	System Vapor Flow Rate (cfm)	Applied Vacuum ("H2O)	FID Reading (ppm)	TPHg Lab Data (ppmv)	Benzene Lab Data (ppmv)	SVE TPHg Removal Rate (lbs/day)	Cumulative SVE TPHg Removal (lbs)	SVE Benzene Removal Rate (lbs/day)	Cumulative SVE Benzene Removal (lbs)		
10/29/07	N/A	1.0	0	0	0	0	0	0	0	0	0	no	System start up
10/29/07	SYS-INF SYS-MID SYS-EFF	1.5	104	68	3,400 8 0	9,600 23 27	76 ND<0.077 0.15	320.3	6.7	2.30	0.14	no	
10/30/07	SYS-INF SYS-MID SYS-EFF	24.3	50	27	37,000 635 700	9,000 ND<7.0 60	74 ND<0.077 0.29	144.4	143.8	1.08	1.17	no	Readings upon arrival
10/30/07	SYS-INF SYS-MID SYS-EFF	25.2	45	27	3,200 620 530	1,500 ND<7.0 ND<7.0	11 ND<0.077 ND<0.077	21.7	144.6	0.14	1.17	no	Readings after dilution air introduced to reduce noise and limit hydrocarocarbon loading on carbon (prevent thermal
10/31/07	SYS-INF SYS-MID SYS-EFF	48.8	40	27	922* 0* 0*	880 ND<7.0 ND<7.0	8.6 ND<0.077 ND<0.077	11.3	155.7	0.10	1.27	no	Dilution airflow set at ~25% of total
11/01/07	SYS-INF SYS-MID SYS-EFF	78.8	39	27	1,475 14 9	--- --- ---	--- --- ---	--	--	--	--	no	
11/02/07	SYS-INF SYS-MID SYS-EFF	100.2	40	27	736 19 10	--- --- ---	--- --- ---	--	--	--	--	no	Shut system down at 100.5 hours for weekend
11/05/07	SYS-INF SYS-MID SYS-EFF	100.9	38	27	1,546 30 4	--- --- ---	--- --- ---	--	--	--	--	no	Restart system at 100.5 hours on 11/5/07
11/06/07	SYS-INF SYS-MID SYS-EFF	126.7	38	27	213 0 0	--- --- ---	--- --- ---	--	--	--	--	no	
11/07/07	SYS-INF SYS-MID SYS-EFF	154.7	45	27	170 0 0	--- --- ---	--- --- ---	--	--	--	--	no	
11/08/07	SYS-INF SYS-MID SYS-EFF	178.2	47	27	160 0 0	--- --- ---	--- --- ---	--	--	--	--	no	Lab analysis performed for methane; 2.4 ul/L detected in SYS EFF

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

Date	Sample ID	FIELD MEASUREMENTS				ANALYTICAL RESULTS		REMOVAL				Air Sparge Unit on? (yes/no)	Comments	
		Hour Meter Reading (hours)	System Vapor Flow Rate (cfm)	Applied Vacuum ("H2O)	FID Reading (ppm)	TPHg Lab Data (ppmv)	Benzene Lab Data (ppmv)	SVE TPHg Removal Rate (lbs/day)	Cumulative SVE TPHg Removal (lbs)	SVE Benzene Removal Rate (lbs/day)	Cumulative SVE Benzene Removal (lbs)			
11/09/07	SYS-INF SYS-MID SYS-EFF	200.3	45	31	163 0 0	--- --- ---	---	---	--	--	--	--	no	Shut system down at 200.3 hours for weekend
11/12/07	SYS-INF SYS-MID SYS-EFF	206.3	42	28	211 0 2	--- --- ---	---	---	--	--	--	--	yes	Restart system at 200.3 hours on 11/12/07; start air sparge system
11/13/07	SYS-INF SYS-MID SYS-EFF	225.6	46	28	2,937 0 4	--- --- ---	---	---	--	--	--	--	yes	
11/14/07	SYS-INF SYS-MID SYS-EFF	253.0	45	28	4,113 0 0	--- --- ---	---	---	--	--	--	--	yes	
11/15/07	SYS-INF SYS-MID SYS-EFF	278.4	45	28	2,810 0 0	--- --- ---	---	---	--	--	--	--	yes	
11/16/07	SYS-INF SYS-MID SYS-EFF	301.4	43	28	2,570 0 0	--- --- ---	---	---	--	--	--	--	yes	
11/17/07	SYS-INF SYS-MID SYS-EFF	327.1	42	41	11 0 0	--- --- ---	---	---	--	--	--	--	yes	
11/18/07	SYS-INF SYS-MID SYS-EFF	352.1	44	41	530 0 0	--- --- ---	---	---	--	--	--	--	yes	
11/19/07	SYS-INF SYS-MID SYS-EFF	375.2	42	41	24 0 0	--- --- ---	22 --- ---	<0.077	0.3	159.8	0.00	1.27	yes	
11/20/07	SYS-INF SYS-MID SYS-EFF	398.8	49	68	660 0 0	--- --- ---	---	---	--	--	--	--	yes	Increased system vacuum by closing off recirculation valve on blower.
11/26/07	SYS-INF SYS-MID SYS-EFF	NM	49	68	1,800 0 0	--- --- ---	---	---	--	--	--	--	yes	Received verbal approval from BAAQMD to decrease monitoring from daily to weekly.
12/03/07	SYS-INF SYS-MID SYS-EFF	593.5	48	61	1,300 0 0	--- --- ---	---	---	--	--	--	--	yes	

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

Date	Sample ID	FIELD MEASUREMENTS				ANALYTICAL RESULTS		REMOVAL				Air Sparge Unit on? (yes/no)	Comments
		Hour Meter Reading (hours)	System Vapor Flow Rate (cfm)	Applied Vacuum ("H2O)	FID Reading (ppm)	TPHg Lab Data (ppmv)	Benzene Lab Data (ppmv)	SVE TPHg Removal Rate (lbs/day)	Cumulative SVE TPHg Removal (lbs)	SVE Benzene Removal Rate (lbs/day)	Cumulative SVE Benzene Removal (lbs)		
12/14/07	SYS-INF SYS-MID SYS-EFF	853.0	52	54	280 0 0	280 <7.0 <7.0	0.17 <0.077 <0.077	4.7	252.8	0.00	1.32	yes	
12/21/07	SYS-INF SYS-MID SYS-EFF	1,021.5	58	54	0 0 0	170 <7.0 <7.0	0 <0.077 <0.077	3.2	275.0	0.00	1.34	yes	SVE shutdown after reading, restarted
12/27/07	SYS-INF SYS-MID SYS-EFF	1,163.5	--	--	-- -- --	-- -- --	-- -- --	--	--	--	--	yes	SVE shutdown on arrival, restart and monitor
12/28/07	SYS-INF SYS-MID SYS-EFF	1,188.5	50	54	14 0 0	14 <7.0 <7.0	<0.077 <0.077 <0.077	0.2	276.5	0.00	1.34	yes	
01/03/08	SYS-INF SYS-MID SYS-EFF	1,329.5	51	54	50 0 0	50 15 <7.0	<0.077 <0.077 <0.077	0.8	281.4	0.00	1.34	yes	
01/10/08	SYS-INF SYS-MID SYS-EFF	1,430.2	50	54	0 0 0	16 13 <7.0	<0.077 <0.077 <0.077	0.3	282.4	0.00	1.34	no	AS system off while sampling
01/15/08	SYS-INF SYS-MID SYS-EFF	1,546.0	50 ¹	81	--	1,200 7.7 <7.0	2.1 <0.077 <0.077	19.2	375.1	0.03	1.48	yes	
01/23/08	SYS-INF SYS-MID SYS-EFF	1,694.5	50 ¹	95	--	1,300 11 <7.0	1.6 <0.077 <0.077	--	--	--	--	yes	
01/30/08	SYS-INF SYS-MID SYS-EFF	1,864.6	49	81	--	2,300 24 <7.0	2.6 <0.077 <0.077	36.2	855.1	0.04	1.97	yes	
02/06/08	SYS-INF SYS-MID SYS-EFF	2,027.5	50	81	--	1,700 43 <7.0	2.9 <0.077 <0.077	27.3	1,040.2	0.04	2.26	yes	
02/12/08	SYS-INF SYS-MID SYS-EFF	2,173.3	60	95	--	1,500 520 28	1.7 1.1 <0.077	28.9	1,215.6	0.03	2.44	yes	

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

Date	Sample ID	FIELD MEASUREMENTS				ANALYTICAL RESULTS		REMOVAL				Air Sparge Unit on? (yes/no)	Comments	
		Hour Meter Reading (hours)	System Vapor Flow Rate (cfm)	Applied Vacuum ("H2O)	FID Reading (ppm)	TPHg Lab Data (ppmv)	Benzene Lab Data (ppmv)	SVE TPHg Removal Rate (lbs/day)	Cumulative SVE TPHg Removal (lbs)	SVE Benzene Removal Rate (lbs/day)	Cumulative SVE Benzene Removal (lbs)			
02/21/08	SYS-INF SYS-MID SYS-EFF	2,394.1	65	95	--	---	---	--	--	--	--	yes	Samples not picked up by the laboratory courier before hold time expired.	
02/29/08	SYS-INF SYS-MID SYS-EFF	2,580.5	27	95	--	1,100 890 <7.0	1.4 5.3 <0.077	9.5	1,377.3	0.01	2.63	yes		System shut down for future changeout of carbon in first vessel.
04/07/08	SYS-INF SYS-MID SYS-EFF	2,581.4	44	7.5	--	1,100 ---	1.4 ---	15.5	1,377.9	0.02	2.63	yes		
04/10/08	SYS-INF SYS-MID SYS-EFF	2,650.3	26	7	--	1,200 <7.0 <7.0	3.6 <0.077 <0.077	10.0	1,406.6	0.03	2.70	yes		
04/17/08	SYS-INF SYS-MID SYS-EFF	2,826.1	28	8	962 3 3	---	---	--	--	--	--	yes		
04/23/08	SYS-INF SYS-MID SYS-EFF	2,969.4	26	7.5	--	1,100 <7.0 <7.0	1.5 <0.077 <0.077	9.2	1,528.6	0.01	2.86	yes		
04/30/08	SYS-INF SYS-MID SYS-EFF	3,136.8	23	7.5	--	780 <7.0 <7.0	1.4 <0.077 <0.077	5.8	1,568.7	0.01	2.92	yes		
05/07/08	SYS-INF SYS-MID SYS-EFF	3,304.6	28	8	378 0 0	---	---	--	--	--	--	yes		
05/14/08	SYS-INF SYS-MID SYS-EFF	3,472.2	26	8	523 6 0	---	---	--	--	--	--	yes		
05/23/08	SYS-INF SYS-MID SYS-EFF	3,690.2	28	7	264 0 0	---	---	--	--	--	--	yes		
05/30/08	SYS-INF SYS-MID SYS-EFF	3,859.2	36	7	317 1 0	---	---	--	--	--	--	yes		
06/05/08	SYS-INF SYS-MID SYS-EFF	3,999.6	38	7	350 0 0	---	---	--	--	--	--	yes		

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

Date	Sample ID	FIELD MEASUREMENTS				ANALYTICAL RESULTS		REMOVAL				Air Sparge Unit on? (yes/no)	Comments
		Hour Meter Reading (hours)	System Vapor Flow Rate (cfm)	Applied Vacuum ("H2O)	FID Reading (ppm)	TPHg Lab Data (ppmv)	Benzene Lab Data (ppmv)	SVE TPHg Removal Rate (lbs/day)	Cumulative SVE TPHg Removal (lbs)	SVE Benzene Removal Rate (lbs/day)	Cumulative SVE Benzene Removal (lbs)		
06/13/08	SYS-INF	4,193.1	38	7	--	700	1.6	8.5	1,944.3	0.02	3.70	yes	
	SYS-MID				--	<7.0	<0.077						
	SYS-EFF				--	<7.0	<0.077						
06/19/08	SYS-INF	4336.7	25	7	349	---	---	--	--	--	--	yes	
	SYS-MID				--	---	---						
	SYS-EFF				0	---	---						
06/27/08	SYS-INF	4,529.7	25	7	335	---	---	--	--	--	--	yes	
	SYS-MID				0	---	---						
	SYS-EFF				0	---	---						

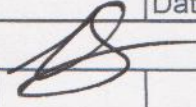
Notes:

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

APPENDIX A

Groundwater Monitoring Field Data Sheets

Well Gauging Data Sheet

Project.Task #: 1135.001 215				Project Name: Douglas Parking			
Address: 1721 Webster Street, Oakland, CA						Date: 04/09/08	
Name: Sanjiv Gill				Signature: 			
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"	6:30			22.11	26.65	TOC
MW-2	2"	3:00			20.12	25.95	
MW-3	2"	2:50			21.42	26.90	
MW-4	2"	2:45			18.23	29.42	
MW-5	2"	2:40			15.96	24.50	
MW-6	2"	2:55			19.86	25.79	
MW-7	2"	2:45			21.61	28.46	

Comments: MW-1 DO = 0.82 mg/L

MONITORING FIELD DATA SHEET

Well ID: MN-2

Project Task #: 1135.001 215 Project Name: Douglas Parking

Address: 1721 Webster Street, Oakland, CA

Date: 04/09/08

Weather: Clear

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): 25.95

Depth to Product:

Depth to Water (DTW): 20.12

Product Thickness:

Water Column Height: 5.83

1 Casing Volume: 0.93 gallons

Reference Point: TOC

3 Casing Volumes: 2.79 gallons

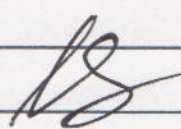
Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>4:50</u>	<u>16.9</u>	<u>7.18</u>	<u>529</u>				<u>1</u>	
<u>4:52</u>	<u>16.7</u>	<u>7.27</u>	<u>510</u>				<u>2</u>	
<u>4:55</u>	<u>16.1</u>	<u>7.24</u>	<u>504</u>				<u>3</u>	

Comments: YSI 550A DO meter pre purge DO = 0.57 mg/l
 post purge DO = mg/l

very turbid, silty

Sample ID: <u>MN-2</u>	Sample Time: <u>5:00</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: 04/09/08
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: **MW-3**

Project Task #: 1135.001 215 Project Name: Douglas Parking

Address: 1721 Webster Street, Oakland, CA

Date: 04/09/08 Weather: **Clear**

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): **26.90** Depth to Product:

Depth to Water (DTW): **21.42** Product Thickness:

Water Column Height: **5.48** 1 Casing Volume: **0.87** gallons

Reference Point: TOC **3** Casing Volumes: **2.61** gallons

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Time	Temp @	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
5:40	17.1	7.55	780				1	
5:47	17.4	7.46	764				1.5	
5:50	17.4	7.41	768				2.5	

Comments: YSI 550A DO meter pre purge DO = **0.74** mg/l

post purge DO = mg/l


odor, very turbid

Sample ID: **MW-3** Sample Time: **5:55**

Laboratory: McCampbell Analytical, INC. Sample Date: 04/09/08

Containers/Preservative: Voa/HCl

Analyzed for: 8015, 8021

Sampler Name: Sanjiv Gill Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-4

Project Task #: 1135.001 215 | Project Name: Douglas Parking

Address: 1721 Webster Street, Oakland, CA

Date: 04/09/08 | Weather: clear

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): 29.42 | Depth to Product:

Depth to Water (DTW): 18.23 | Product Thickness:

Water Column Height: 11.19 | 1 Casing Volume: 1.79 gallons

Reference Point: TOC | 3 Casing Volumes: 5.37 gallons

Purging Device: Disposables Bailer

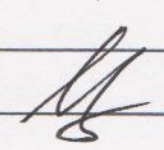
Sampling Device: Disposable Bailer

Time	Temp (°C)	pH	Cond (µs)	NTU	DO (mg/L)	ORP (mV)	Vol (gal)	DTW
<u>4:20</u>	<u>18.6</u>	<u>6.92</u>	<u>497</u>				<u>1.5</u>	
<u>4:25</u>	<u>17.9</u>	<u>6.99</u>	<u>513</u>				<u>3</u>	
<u>4:30</u>	<u>17.7</u>	<u>7.00</u>	<u>510</u>				<u>5</u>	

Comments: YSI 550A DO meter | pre purge DO = 0.80 mg/l

post purge DO = _____ mg/l

odor, turbid

Sample ID: <u>MW-4</u>	Sample Time: <u>4:35</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: 04/09/08
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 


MONITORING FIELD DATA SHEET

Well ID: MW-5

Project Task #: 1135.001 215		Project Name: Douglas Parking						
Address: 1721 Webster Street, Oakland, CA								
Date: 04/09/08		Weather: Cloudy Clear						
Well Diameter: <u>2"</u>		Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius ² * 0.163						
Total Depth (TD): <u>24.50</u>		Depth to Product:						
Depth to Water (DTW): <u>15.96</u>		Product Thickness:						
Water Column Height: <u>8.54</u>		1 Casing Volume: <u>1.36</u> gallons						
Reference Point: TOC		<u>3</u> Casing Volumes: <u>4.09</u> gallons						
Purging Device: Disposbale Bailer								
Sampling Device: Disposable Bailer								
Time	Temp (°C)	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>3:20</u>	<u>17.8</u>	<u>7.21</u>	<u>615</u>				<u>1.5</u>	
<u>3:25</u>	<u>18.0</u>	<u>7.23</u>	<u>618</u>				<u>3</u>	
<u>3:30</u>	<u>18.2</u>	<u>7.26</u>	<u>639</u>				<u>4</u>	

Comments: YSI 550A DO meter pre purge DO = 0.29 mg/l
 post purge DO = mg/l

very turbid, silty

Sample ID: <u>MW-5</u>	Sample Time: <u>3:35</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: 04/09/08
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-6

Project Task #: 1135.001 215 Project Name: Douglas Parking

Address: 1721 Webster Street, Oakland, CA

Date: 04/09/08 Weather: Clear

Well Diameter: 2'' Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47
2" = 0.16 4" = 0.65 radius** 0.163

Total Depth (TD): 25.79 Depth to Product:

Depth to Water (DTW): 19.86 Product Thickness:

Water Column Height: 5.93 1 Casing Volume: 0.94 gallons

Reference Point: TOC 3 Casing Volumes: 2.82 gallons

Purging Device: Disposable Bailer

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>5:15</u>	<u>17.1</u>	<u>7.19</u>	<u>622</u>				<u>1</u>	
<u>5:17</u>	<u>16.8</u>	<u>7.10</u>	<u>634</u>				<u>2</u>	
<u>5:20</u>	<u>17.4</u>	<u>7.12</u>	<u>630</u>				<u>3</u>	

Comments: YSI 550A DO meter pre purge DO = 0.71 mg/l
post purge DO = mg/l

very turbid, silty

Sample ID: MW-6 Sample Time: 5:25

Laboratory: McCampbell Analytical, INC. Sample Date: 04/09/08

Containers/Preservative: Voa/HCl

Analyzed for: 8015, 8021

Sampler Name: Sanjiv Gill Signature: 

APPENDIX B

Laboratory Analytical Report



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1135.001; Douglas Parking 1721 Webster Street	Date Sampled: 07/17/08
	Client Contact: Celia Costarella	Date Received: 07/17/08
	Client P.O.:	Date Reported: 07/23/08
		Date Completed: 07/22/08

WorkOrder: 0807398

July 23, 2008

Dear Celia:

Enclosed within are:

- 1) The results of the **6** analyzed samples from your project: **#1135.001; Douglas Parking 1721**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

0807398

Pangea Environmental Services, Inc.

1710 Franklin Street
Oakland, CA 94612

Website: www.pangeaenv.com

Telephone: (510) 836-3700

Fax: (510) 836-3709

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

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

Report To: Celia Costarella Bill To: Pangea
Company: Pangea Environmental Technology, Inc.
1710 Franklin Street, Suite 200, Oakland, CA 94612
E-Mail: ccostarella@pangeaenv.com
Tele: (510) 735-1751 Fax: (510) 836-3709
Project #: 1135001 Project Name: Douglas Parking
Project Location: 1721 Webster St, Oakland, CA
Sampler Signature: Muskan Environmental Sampling

Analysis Request														Other	Comments			
BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LAUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)	TO3 / TO15	Filter Samples for Metals analysis: Yes / No	

SAMPLE ID (Field Point Name)	LOCATION (1721 Webster / Douglas Parking)	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED						
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other			
MW-2		7-17-08	6:10	3	VOC	X						X	X				
MW-3			5:20			X						X	X				
MW-4			4:55			X						X	X				
MW-5			4:10			X						X	X				
MW-6			5:45			X						X	X				
MW-7			4:35			X						X	X				

+
+
+
+
+
+

Relinquished By: [Signature] Date: 7/17/08 Time: 8:08am Received By: [Signature] The Vall
Relinquished By: Date: Time: Received By:
Relinquished By: Date: Time: Received By:

ICE/T 15.8°C
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB
VOAS O&G METALS OTHER
PRESERVATION pH<2

COMMENTS:

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0807398

ClientCode: PEO

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:		Bill to:	Requested TAT: 5 days
Celia Costarella	Email: ccostarella@pangeaenv.com	Bob Clark-Riddell	
Pangea Environmental Svcs., Inc.	cc:	Pangea Environmental Svcs., Inc.	Date Received: 07/17/2008
1710 Franklin Street, Ste. 200	PO:	1710 Franklin Street, Ste. 200	Date Printed: 07/17/2008
Oakland, CA 94612	ProjectNo: #1135.001; Douglas Parking 1721	Oakland, CA 94612	
	Webster Street		
(510) 836-3700 FAX (510) 836-3709			

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	
0807398-001	MW-2	Water	7/17/2008 6:10	<input type="checkbox"/>	A	A											
0807398-002	MW-3	Water	7/17/2008 5:20	<input type="checkbox"/>	A												
0807398-003	MW-4	Water	7/17/2008 4:55	<input type="checkbox"/>	A												
0807398-004	MW-5	Water	7/17/2008 4:10	<input type="checkbox"/>	A												
0807398-005	MW-6	Water	7/17/2008 5:45	<input type="checkbox"/>	A												
0807398-006	MW-7	Water	7/17/2008 4:35	<input type="checkbox"/>	A												

Test Legend:

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

Prepared by: Melissa Valles

Comments:

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



Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.** Date and Time Received: **07/17/08 11:03:15 AM**
 Project Name: **#1135.001; Douglas Parking 1721 Webster Street** Checklist completed and reviewed by: **Melissa Valles**
 WorkOrder N°: **0807398** Matrix Water Carrier: Client Drop-In

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: 15.8°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
 Sample labels checked for correct preservation? Yes No
 TTLC Metal - pH acceptable upon receipt (pH<2)? Yes No NA

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

Client contacted: Date contacted: Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1135.001; Douglas Parking 1721 Webster Street	Date Sampled: 07/17/08
	Client Contact: Celia Costarella	Date Received: 07/17/08
	Client P.O.:	Date Extracted: 07/19/08-07/21/08
		Date Analyzed 07/19/08-07/21/08

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

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0807398

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-2	W	22,000,d1	ND<250	180	500	660	2100	50	107
002A	MW-3	W	7700,d1	ND<60	2.9	3.1	1.4	11	1	117
003A	MW-4	W	6500,d1	ND<180	210	47	510	180	10	110
004A	MW-5	W	ND	ND	ND	ND	ND	ND	1	103
005A	MW-6	W	18,000,d1	ND<500	320	510	420	1200	100	98
006A	MW-7	W	ND	ND	ND	ND	ND	ND	1	105

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 36979

WorkOrder 0807398

EPA Method SW8021B/8015Cm		Extraction SW5030B							Spiked Sample ID: 0807428-005			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	103	100	2.42	103	103	0	70 - 130	20	70 - 130	20
MTBE	ND	10	104	103	0.749	90	90.4	0.508	70 - 130	20	70 - 130	20
Benzene	ND	10	96.3	95.6	0.729	91.1	94.1	3.25	70 - 130	20	70 - 130	20
Toluene	ND	10	95.6	93.9	1.74	88.7	91.7	3.30	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	104	100	3.77	91.1	91.7	0.641	70 - 130	20	70 - 130	20
Xylenes	ND	30	114	112	1.44	86.7	87.7	1.17	70 - 130	20	70 - 130	20
%SS:	93	10	91	92	1.12	103	103	0	70 - 130	20	70 - 130	20

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

BATCH 36979 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0807398-001A	07/17/08 6:10 AM	07/19/08	07/19/08 10:28 AM	0807398-002A	07/17/08 5:20 AM	07/19/08	07/19/08 7:30 AM
0807398-003A	07/17/08 4:55 AM	07/21/08	07/21/08 7:44 PM	0807398-004A	07/17/08 4:10 AM	07/19/08	07/19/08 3:32 PM
0807398-005A	07/17/08 5:45 AM	07/19/08	07/19/08 11:53 PM	0807398-006A	07/17/08 4:35 AM	07/19/08	07/19/08 8:27 AM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1135.001; Douglas Parking	Date Sampled: 04/10/08
	Client Contact: Greg Bentley	Date Received: 04/10/08
	Client P.O.:	Date Reported: 04/15/08
		Date Completed: 04/14/08

WorkOrder: 0804251

April 15, 2008

Dear Greg:

Enclosed within are:

- 1) The results of the **3** analyzed samples from your project: **#1135.001; Douglas Parking,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY
EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Greg Bentley Bill To: Pangea
Company: Pangea Environmental Technology, Inc.
1710 Franklin Street, Suite 200, Oakland, CA 94612
E-Mail: gbentley@pangeaenv.com
Tele: (510) 409-8980 Fax: (510) 836-3709
Project #: 1135-001 Project Name: Douglas Parking
Project Location: 1721 Webster St, Oakland
Sampler Signature: [Signature]

Analysis Request Other Comments

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)	Filter Samples for Metals analysis: Yes / No					
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other																						
INF		4/10/08	845	1	BAG			X																												
MID		↓	↓	↓	↓																															
EFF																																				

Relinquished By: [Signature] Date: 4/10/08 Time: 1:50 PM Received By: [Signature]
Relinquished By: [Signature] Date: 4/20/08 Time: 2:30 PM Received By: [Signature]
Relinquished By: [Signature] Date: [] Time: [] Received By: [Signature]

ICE/t° 100
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB ✓
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB ✓
COMMENTS: Please report in PPMV.
VOAS O&G METALS OTHER
PRESERVATION pH<2

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0804251

ClientCode: PEO

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to: Greg Bentley Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Email: gbbentley@pangeaenv.com TEL: (510) 409-8980 FAX: (510) 836-3709 PO: ProjectNo: #1135.001; 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: 04/10/2008 Date Printed: 04/10/2008
---	--	--	---

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	
0804251-001	INF	Air	4/10/2008 8:45	<input type="checkbox"/>	A	A											
0804251-002	MID	Air	4/10/2008 8:45	<input type="checkbox"/>	A												
0804251-003	EFF	Air	4/10/2008 8:45	<input type="checkbox"/>	A												

Test Legend:

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

The following SampIDs: 001A, 002A, 003A contain testgroup.

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.



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1135.001; Douglas Parking	Date Sampled: 04/10/08
		Date Received: 04/10/08
	Client Contact: Greg Bentley	Date Extracted: 04/11/08
	Client P.O.:	Date Analyzed 04/11/08

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

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0804251

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	INF	A	4400,a	ND<50	12	31	24	290	20	123
002A	MID	A	ND	ND	ND	ND	ND	ND	1	94
003A	EFF	A	ND	ND	ND	ND	ND	ND	1	109

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	0.25	1	µg/L
	S	NA	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Client Project ID: #1135.001; Douglas
Parking

Client Contact: Greg Bentley

Client P.O.:

Date Sampled: 04/10/08

Date Received: 04/10/08

Date Extracted: 04/11/08

Date Analyzed 04/11/08

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

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0804251

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	INF	A	1200,a	ND<14	3.6	8.2	5.5	66	20	123
002A	MID	A	ND	ND	ND	ND	ND	ND	1	94
003A	EFF	A	ND	ND	ND	ND	ND	ND	1	109

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air

QC Matrix: Water

WorkOrder 0804251

EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 34908			Spiked Sample ID: 0804239-006A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	112	95.2	16.1	91.5	93.5	2.20	70 - 130	20	70 - 130	20
MTBE	ND	10	123	104	17.1	109	107	2.14	70 - 130	20	70 - 130	20
Benzene	ND	10	102	96.4	5.24	94.3	98.1	3.95	70 - 130	20	70 - 130	20
Toluene	ND	10	114	108	5.41	86.9	89.7	3.16	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	109	104	4.67	96.8	99.7	3.02	70 - 130	20	70 - 130	20
Xylenes	ND	30	122	115	5.78	93.7	96	2.39	70 - 130	20	70 - 130	20
%SS:	93	10	93	95	1.95	91	91	0	70 - 130	20	70 - 130	20

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

BATCH 34908 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804251-001A	04/10/08 8:45 AM	04/11/08	04/11/08 3:02 PM	0804251-001A	04/10/08 8:45 AM	04/11/08	04/11/08 3:02 PM
0804251-002A	04/10/08 8:45 AM	04/11/08	04/11/08 3:33 PM	0804251-002A	04/10/08 8:45 AM	04/11/08	04/11/08 3:33 PM
0804251-003A	04/10/08 8:45 AM	04/11/08	04/11/08 7:05 PM	0804251-003A	04/10/08 8:45 AM	04/11/08	04/11/08 7:05 PM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: # 1135.001 Task 520; Douglas Parking	Date Sampled: 04/23/08
	Client Contact: Greg Bentley	Date Received: 04/24/08
	Client P.O.:	Date Reported: 04/29/08
		Date Completed: 04/28/08

WorkOrder: 0804605

April 29, 2008

Dear Greg:

Enclosed within are:

- 1) The results of the **3** analyzed samples from your project: **# 1135.001 Task 520; Douglas Park**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

0804605

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com

Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

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

Report To: Greg Bentley Bill To: Pangea
Company: Pangea Environmental Technology, Inc.
1710 Franklin Street, Suite 200, Oakland, CA 94612
E-Mail: gbentley@pangeaenv.com
Tele: (510) 409-8980 Fax: (510) 836-3709
Project #: 1135.001 Task 520 Project Name: Douglas Park King
Project Location: 1721 Webster
Sampler Signature: *[Signature]*

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED			
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other
JNF MID EFF		4/25	1600	11	BAG			X					X	X
		↓	↓	↓	↓			↓					↓	X

Analysis Request												Other	Comments				
BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)		Filter Samples for Metals analysis: Yes / No

Relinquished By: *[Signature]* Date: 4/25/08 Time: 225
Relinquished By: *[Signature]* Date: 4/25/08 Time: 330
Relinquished By: _____ Date: _____ Time: _____
Received By: *[Signature]*
Received By: K. Burkard

ICE/r° _____
GOOD CONDITION _____
HEAD SPACE ABSENT _____
DECHLORINATED IN LAB _____
APPROPRIATE CONTAINERS _____
PRESERVED IN LAB _____
COMMENTS: Please report in PPMV
VOAS O&G METALS OTHER
PRESERVATION pH<2

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0804605

ClientCode: PEO

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to: Greg Bentley Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Email: gbbentley@pangeaenv.com TEL: (510) 409-8980 FAX: (510) 836-3709 PO: ProjectNo: # 1135.001 Task 520; 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: 04/24/2008 Date Printed: 04/24/2008
---	--	--	---

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	
0804605-001	INF	Air	4/23/2008 16:00	<input type="checkbox"/>	A	A											
0804605-002	MID	Air	4/23/2008 16:00	<input type="checkbox"/>	A												
0804605-003	EFF	Air	4/23/2008 16:00	<input type="checkbox"/>	A												

Test Legend:

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

The following SampIDs: 001A, 002A, 003A contain testgroup.

Prepared by: Kimberly Burks

Comments:

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



Sample Receipt Checklist

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

Date and Time Received: **4/24/2008 4:13:38 PM**

Project Name: **# 1135.001 Task 520; Douglas Parking**

Checklist completed and reviewed by: **Kimberly Burks**

WorkOrder N°: **0804605** Matrix Air

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

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

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: # 1135.001 Task 520; Douglas Parking	Date Sampled: 04/23/08
	Client Contact: Greg Bentley	Date Received: 04/24/08
	Client P.O.:	Date Extracted: 04/24/08-04/25/08
		Date Analyzed: 04/24/08-04/25/08

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

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0804605

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	INF	A	3900,b,m	ND<17	4.9	14	14	140	6.7	111
002A	MID	A	ND	ND	ND	ND	ND	ND	1	104
003A	EFF	A	ND	ND	ND	ND	ND	ND	1	106

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	0.25	1	µg/L
	S	NA	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: # 1135.001 Task 520; Douglas Parking	Date Sampled: 04/23/08
	Client Contact: Greg Bentley	Date Received: 04/24/08
	Client P.O.:	Date Extracted: 04/24/08-04/25/08
		Date Analyzed: 04/24/08-04/25/08

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

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0804605

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	INF	A	1100,b,m	ND<4.5	1.5	3.7	3.2	32	6.7	111
002A	MID	A	ND	ND	ND	ND	ND	ND	1	104
003A	EFF	A	ND	ND	ND	ND	ND	ND	1	106

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air

QC Matrix: Water

WorkOrder 0804605

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 35181			Spiked Sample ID: 0804580-001B			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	79.4	76.5	3.66	80.2	73	9.52	70 - 130	20	70 - 130	20
MTBE	ND	10	93.9	92.9	1.07	104	104	0	70 - 130	20	70 - 130	20
Benzene	ND	10	88.7	86.9	2.05	92.7	91.4	1.41	70 - 130	20	70 - 130	20
Toluene	ND	10	90.6	85.9	5.31	93.6	92.7	0.956	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	88.5	87	1.68	90.9	90.5	0.470	70 - 130	20	70 - 130	20
Xylenes	ND	30	83.3	81.5	2.23	85.7	84.7	1.18	70 - 130	20	70 - 130	20
%SS:	102	10	104	104	0	101	99	2.33	70 - 130	20	70 - 130	20

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

BATCH 35181 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0804605-001A	04/23/08 4:00 PM	04/25/08	04/25/08 7:53 PM	0804605-002A	04/23/08 4:00 PM	04/24/08	04/24/08 7:03 PM
0804605-003A	04/23/08 4:00 PM	04/24/08	04/24/08 7:33 PM				

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: INF,MID,EFF	Date Sampled: 04/30/08
		Date Received: 05/01/08
	Client Contact: Greg Bentley	Date Reported: 05/07/08
	Client P.O.:	Date Completed: 05/07/08

WorkOrder: 0805023

May 07, 2008

Dear Greg:

Enclosed within are:

- 1) The results of the **3** analyzed samples from your project: **INF,MID,EFF**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

0805023

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

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

Report To: Greg Bentley Bill To: Pangea
Company: Pangea Environmental Technology, Inc.
1710 Franklin Street, Suite 200, Oakland, CA 94612
E-Mail: gbentley@pangeaenv.com
Tele: (510) 409-8980 Fax: (510) 836-3709
Project #: Project Name:
Project Location:
Sampler Signature:

Analysis Request											Other	Comments					
BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)		Filter Samples for Metals analysis: Yes / No

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED							
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other				
INF MID EFF		4/30/08		1	BAG		X											
		4/30/08		↓	↓		↓											
		7/2/08																

Relinquished By: Date: 5/10/10 Time: Received By:
Relinquished By: Date: 5/10/10 Time: Received By:
Relinquished By: Date: Time: Received By:

ICE/VA
GOOD CONDITION _____
HEAD SPACE ABSENT _____
DECHLORINATED IN LAB _____
APPROPRIATE CONTAINERS _____
PRESERVED IN LAB _____
VOAS O&G METALS OTHER
PRESERVATION pH<2
COMMENTS: Please report in PPMV

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0805023

ClientCode: PEO

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Greg Bentley
 Pangea Environmental Svcs., Inc.
 1710 Franklin Street, Ste. 200
 Oakland, CA 94612
 (510) 409-8980 FAX (510) 836-3709

Email: gbbentley@pangeaenv.com
cc:
PO:
ProjectNo: INF,MID,EFF

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

Requested TAT: 5 days
Date Received: 05/01/2008
Date Printed: 05/01/2008

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	
0805023-001	INF	Air	4/30/2008	<input type="checkbox"/>	A												
0805023-002	MID	Air	4/30/2008	<input type="checkbox"/>	A	A											
0805023-003	EFF	Air	4/30/2008	<input type="checkbox"/>	A												

Test Legend:

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

The following SampIDs: 001A, 002A, 003A contain testgroup.

Prepared by: Ana Venegas

Comments:

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



Sample Receipt Checklist

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

Date and Time Received: **5/1/2008 4:27:16 PM**

Project Name: **INF,MID,EFF**

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

WorkOrder N°: **0805023** Matrix Air

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

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

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: INF,MID,EFF	Date Sampled: 04/30/08
		Date Received: 05/01/08
	Client Contact: Greg Bentley	Date Extracted: 05/01/08-05/02/08
	Client P.O.:	Date Analyzed 05/01/08-05/02/08

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

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0805023

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	INF	A	2800,b,m	ND<25	4.5	14	12	130	10	101
002A	MID	A	ND	ND	ND	ND	ND	ND	1	99
003A	EFF	A	ND	ND	ND	ND	ND	ND	1	102

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	0.25	1	µg/L
	S	NA	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Client Project ID: INF,MID,EFF

Date Sampled: 04/30/08

Date Received: 05/01/08

Client Contact: Greg Bentley

Date Extracted: 05/01/08-05/02/08

Client P.O.:

Date Analyzed 05/01/08-05/02/08

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

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0805023

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	INF	A	780,b,m	ND<6.8	1.4	3.7	2.8	30	10	101
002A	MID	A	ND	ND	ND	ND	ND	ND	1	99
003A	EFF	A	ND	ND	ND	ND	ND	ND	1	102

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air

QC Matrix: Water

WorkOrder 0805023

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 35326			Spiked Sample ID: 0805011-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	106	105	0.521	91.8	93.3	1.56	70 - 130	20	70 - 130	20
MTBE	ND	10	79.4	75.8	4.72	70.7	73.7	4.16	70 - 130	20	70 - 130	20
Benzene	ND	10	96.2	92.6	3.76	94.5	94.3	0.196	70 - 130	20	70 - 130	20
Toluene	ND	10	89.9	88	2.13	91	91.2	0.269	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	92.9	88.5	4.85	93.8	93.4	0.463	70 - 130	20	70 - 130	20
Xylenes	ND	30	88	83.7	5.07	88.8	89	0.162	70 - 130	20	70 - 130	20
%SS:	103	10	100	101	0.469	102	104	1.27	70 - 130	20	70 - 130	20

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

BATCH 35326 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0805023-001A	04/30/08	05/02/08	05/02/08 12:22 AM	0805023-002A	04/30/08	05/01/08	05/01/08 10:50 PM
0805023-003A	04/30/08	05/01/08	05/01/08 10:20 PM				

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: Douglas Parking; 1721 Webster, Oakland, CA	Date Sampled: 06/13/08
	Client Contact: Brian Busch	Date Received: 06/13/08
	Client P.O.:	Date Reported: 06/18/08
		Date Completed: 06/16/08

WorkOrder: 0806384

June 19, 2008

Dear Brian:

Enclosed within are:

- 1) The results of the **3** analyzed samples from your project: **Douglas Parking; 1721 Webster, Oa**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

0806384

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

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

Report To: BRIAN BUSCH Bill To: Pangea

Company: Pangea Environmental Technology, Inc.
1710 Franklin Street, Suite 200, Oakland, CA 94612

Tele: (510) 836-3700 Fax: (510) 836-3709

Project #: Project Name: DOUGLAS PARKING

Project Location: 1721 Webster, Oakland, CA

Sampler Signature: R. Mc

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED															
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other												
<u>INF</u>		<u>6-13-08</u>	<u>1130</u>	<u>1</u>	<u>bag</u>			X						X												
<u>MID</u>		<u>↓</u>	<u>↓</u>	<u>1</u>	<u>↓</u>			X						X												
<u>EFF</u>		<u>↓</u>	<u>↓</u>	<u>1</u>	<u>↓</u>			X						X												

Analysis Request													Other	Comments			
BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB'S ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)		Filter Samples for Metals analysis: Yes / No

Relinquished By: [Signature] Date: 6-13-08 Time: 1159 Received By: [Signature]

Relinquished By: [Signature] Date: 6-13-08 Time: 330 Received By: [Signature]

Relinquished By: _____ Date: _____ Time: _____ Received By: _____

COMMENTS: ICE/T° NA GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB ✓
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB ✓
VOAS O&G METALS OTHER
PRESERVATION pH<2

report results in PPMV

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0806384

ClientCode: PEO

WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

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

Email: bbusch@pangeaenv.com
cc:
PO:
ProjectNo: Douglas Parking; 1721 Webster,
Oakland, CA

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

Requested TAT: **5 days**
Date Received: 06/13/2008
Date Printed: 06/13/2008

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	
0806384-001	INF	Air	6/13/2008 11:30	<input type="checkbox"/>	A	A											
0806384-002	MID	Air	6/13/2008 11:30	<input type="checkbox"/>	A												
0806384-003	EFF	Air	6/13/2008 11:30	<input type="checkbox"/>	A												

Test Legend:

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

The following SampIDs: 001A, 002A, 003A contain testgroup.

Prepared by: Ana Venegas

Comments:

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



Sample Receipt Checklist

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

Date and Time Received: **06/13/08 5:18:35 PM**

Project Name: **Douglas Parking; 1721 Webster, Oakland, CA**

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

WorkOrder N°: **0806384** Matrix Air

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

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

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

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Client Project ID: Douglas Parking;
1721 Webster, Oakland, CA
Client Contact: Brian Busch
Client P.O.:

Date Sampled: 06/13/08
Date Received: 06/13/08
Date Extracted: 06/13/08-06/14/08
Date Analyzed 06/13/08-06/14/08

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0806384

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	INF	A	2500,d2	ND<5.0	5.1	18	7.4	98	2	120
002A	MID	A	ND	ND	ND	ND	ND	ND	1	100
003A	EFF	A	ND	ND	ND	ND	ND	ND	1	98

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

d2) heavier gasoline range compounds are significant (aged gasoline?)



McC Campbell Analytical, Inc.

"When Quality Counts"

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

Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Client Project ID: Douglas Parking;
1721 Webster, Oakland, CA

Client Contact: Brian Busch

Client P.O.:

Date Sampled: 06/13/08

Date Received: 06/13/08

Date Extracted: 06/13/08-06/14/08

Date Analyzed 06/13/08-06/14/08

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

Extraction method SW5030B

Analytical methods SW8021B/8015Cm

Work Order: 0806384

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	INF	A	700,d2	ND<1.4	1.6	4.6	1.7	22	2	120
002A	MID	A	ND	ND	ND	ND	ND	ND	1	100
003A	EFF	A	ND	ND	ND	ND	ND	ND	1	98

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

d2) heavier gasoline range compounds are significant (aged gasoline?)



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Air

QC Matrix: Water

WorkOrder: 0806384

EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 36291			Spiked Sample ID: 0806382-002A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	96.7	93.1	3.79	94.7	98.7	4.10	70 - 130	20	70 - 130	20
MTBE	ND	10	113	104	7.47	109	105	3.76	70 - 130	20	70 - 130	20
Benzene	ND	10	96.1	98.9	2.86	97	94.4	2.69	70 - 130	20	70 - 130	20
Toluene	ND	10	91.5	93.8	2.38	95.6	94.2	1.53	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	98.8	102	3.52	100	99.2	1.11	70 - 130	20	70 - 130	20
Xylenes	ND	30	109	111	1.77	112	112	0	70 - 130	20	70 - 130	20
%SS:	95	10	92	99	6.54	93	91	1.58	70 - 130	20	70 - 130	20

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

BATCH 36291 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0806384-001A	06/13/08 11:30 AM	06/14/08	06/14/08 1:56 PM	0806384-002A	06/13/08 11:30 AM	06/14/08	06/14/08 10:46 PM
0806384-003A	06/13/08 11:30 AM	06/13/08	06/13/08 6:38 PM				

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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