

Andy Saberi
1045 Airport Boulevard
South San Francisco, CA 94080

RECEIVED

By Alameda County Environmental Health at 11:57 am, Oct 09, 2014

Mr. Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Groundwater Monitoring and Remediation Report**
1230 14th Street, Oakland, California
ACEH Case No. 433

Dear Mr. Wickham:

I, Mr. Andy Saberi, have retained Pangea Environmental Services, Inc. (Pangea) as an environmental consultant for the project referenced above. Pangea is submitting the attached *Groundwater Monitoring and Remediation Report* on my behalf.

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

If you have any questions, please call me at (650) 588-3088.

Sincerely,



Andy Saberi



October 8, 2014

VIA ALAMEDA COUNTY FTP SITE

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Verification Monitoring Report – Second Quarter 2014**
Former Shell Service Station
1230 14th Street
Oakland, California
Fuel Leak Case No. RO0000433

Dear Mr. Wickham:

On behalf of property owner Andy Saberi, Pangea Environmental Services, Inc has prepared this *Verification Monitoring Report – Second Quarter 2014*. Consistent with the July 11, 2013 ACEH letter, Pangea has discontinued DPE/AS remediation pending the results of post-remediation verification monitoring. This report presents data from the *fourth* verification monitoring event.

If you have any questions, please contact me at (510) 435-8664 or email briddell@pangeaenv.com.

Sincerely,
Pangea Environmental Services, Inc.

A handwritten signature in blue ink, appearing to read "Bob Clark-Riddell".

Bob Clark-Riddell, P.E.
Principal Engineer

Attachment: *Verification Monitoring Report – Second Quarter 2014*

cc: Andy Saberi (electronic copy)
Perry Pineda, Shell Oil Products US (electronic copy)
SWRCB Geotracker (electronic copy)

PANGEA Environmental Services, Inc.

1710 Franklin Street, Suite 200, Oakland, CA 94612 Telephone 510.836.3700 Facsimile 510.836.3709 www.pangeaenv.com



**VERIFICATION MONITORING REPORT –
SECOND QUARTER 2014**

**Former Shell Service Station
1230 14th Street
Oakland, California
Fuel Leak Case No. RO0000433**

October 8, 2014

Prepared for:


Andy Saberi
1045 Airport Boulevard
South San Francisco, California 94080


Prepared by:

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

Written by:




Morgan Gillies
Project Manager


Bob Clark-Riddell, P.E.
Principal Engineer

PANGEA Environmental Services, Inc.

1710 Franklin Street, Suite 200, Oakland, CA 94612 Telephone 510.836.3700 Facsimile 510.836.3709 www.pangeaenv.com

INTRODUCTION

On behalf of Andy Saberi, Pangea Environmental Services, Inc. (Pangea) conducted groundwater monitoring and sampling at the subject site (Figure 1). The purpose of the monitoring to evaluate post-remediation groundwater conditions. This report describes other site activities performed to pursue regulatory case closure.

SITE BACKGROUND

The former Shell-branded service station is located at the northeast corner of 14th Street and Union Street in Oakland, California (Figure 1). Currently, an abandoned one-story station building and a pump-island canopy occupy the site, and much of the property is paved except for the former UST excavation. Land use in the surrounding area is currently residential to the north, south, and east, and is commercial/industrial to the west and southwest. The site topography is essentially flat.

Site History

According to prior reports, the current site building was constructed in 1958 and gas station operations at the site reportedly began in 1958 and ceased in 1993. Petroleum hydrocarbons were first discovered in site soil near the underground storage tanks (USTs) during the completion of three borings at the site in February 1991. Four gasoline USTs and one waste oil storage tank were removed from the site on August 24, 1993. The current property owner, Mr. Andy Saberi, purchased the property in the mid 1980s.

Previous Environmental Work

Previous environmental work has included site assessment, a sensitive receptor evaluation/well survey, risk evaluation, two rounds of feasibility testing (in 2000 and 2006), and several remedial actions. Remedial action included injection of oxygen releasing compound (ORC) into site wells in 1997, groundwater extraction (GWE) and dual-phase extraction (DPE) from 2002 to 2004 (performed with mobile equipment for approximately 11 separate days removing 6.0 lbs aqueous phase and 5.6 lbs vapor phase hydrocarbons), and hydrogen peroxide injection into site wells in 2003. Groundwater monitoring has been performed at the site since 1996.

In January 2008, Pangea submitted a *Draft Corrective Action Plan and Pilot Test Work Plan* (Draft CAP/Test Workplan) as required by Alameda County Environmental Health (ACEH). In June 2008, with ACEH approval, Pangea installed new remediation test wells, repaired damaged remediation wells, and destroyed one remediation well, as detailed in the *Well Installation and Destruction Report* dated October 6, 2008. In early July 2008, Pangea conducted the approved pilot testing using the newly installed remediation test wells to determine whether SVE or DPE would most effectively remove contaminants and capture hydrocarbon vapors

resulting from air sparging. In the *SVE/DPE Pilot Test Report* dated October 7, 2008, Pangea recommended DPE/AS as the most effective remedial approach for the site. In a letter dated October 29, 2008, ACEH approved implementation of DPE/AS remediation at the site. On June 15, 2009, the California UST Cleanup Fund completed a 5-year review of the claim and recommended implementation of site remediation. DPE remediation system operation started in April 2011 and AS system operation commenced in October 2011.

To enhance DPE/AS remedial effectiveness, Pangea began pilot testing bio-organic catalyst (BOC) injection in select site wells. The pilot testing was performed as detailed in the *Workplan for Enhanced Site Remediation* dated March 6, 2012, and as approved by the ACEH in a letter dated April 17, 2012. In a letter dated September 10, 2012, ACEH rescinded their BOC pilot test approval due to concerns about offsite migration of site contaminants. On September 25, 2012, Pangea submitted the *Groundwater Monitoring and Remediation Report – First Half 2012*, which described Pangea's efforts to demonstrate control of any hydrocarbon migration initiated by desorption affects of BOC. Continued implementation of enhanced site remediation using BOC was approved by ACEH in a letter dated October 8, 2012. Site remediation was temporarily discontinued on February 15, 2013 to conduct post-remediation groundwater monitoring.

GROUNDWATER MONITORING AND SAMPLING

Groundwater monitoring was performed initially on May 22 and 23, 2014, with supplemental sampling on July 3, 2014 following weed abatement to access remaining site wells. Eighteen site wells were sampled in accordance with the approved groundwater monitoring program shown on Table A in Appendix A. Site monitoring wells were gauged for depth-to-water and inspected for separate-phase hydrocarbons (SPH) prior to collection of groundwater samples. Well caps were removed from all monitoring wells and technicians allowed at least 15 minutes for water level equilibration before measuring depth to water.

Before and after 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. In one-inch diameter air sparge wells AS-1 through AS-5 DO was measured in a cup above hole because the DO probe would not fit down the well. Prior to sample collection, approximately three casing volumes of water were purged from each monitoring well using disposable bailers, an electric submersible pump, check valve with tubing, a clean PVC bailer, or a peristaltic pump. During well purging, field technicians measured pH, temperature, conductivity and oxygen-reduction potential (ORP). 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. Groundwater monitoring field data sheets, including purge volumes and field parameter measurements, are presented in Appendix B.

MONITORING RESULTS

Current and historical groundwater elevation data and analytical results are described below and summarized on Figure 2 and Table 1. Groundwater samples were collected from wells MW-1 through MW-4, MW-5R, MW-7, AS-1 through AS-4, VW/MW-2, VW/MW-4, and DP-1 through DP-5 in accordance with the approved groundwater monitoring program. Samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8015Cm/8021B. Samples were analyzed by McCampbell Analytical, Inc., of Pittsburg, California, a State-certified laboratory. The laboratory analytical report is included in Appendix C. Pre-purge dissolved oxygen concentrations in site wells ranged from 0.23 mg/L (AS-1) to 7.47 mg/L (MW-4).

Groundwater Flow Direction

Based on depth-to-water data collected on May 22, 2014, groundwater generally flows toward the *northeast*, as shown on Figure 2. This inferred groundwater flow direction is similar to groundwater flow observed prior to remediation system operation. Depth-to-water and groundwater elevation data are presented in Table 1.

Hydrocarbon Distribution in Groundwater

The maximum contaminant concentrations detected this monitoring event were 2,800 µg/L TPHg (well MW-5R) and 68 µg/L benzene (well DP-5). Contaminant concentrations in key site wells DP-5, MW-5R and VW/MW-4 exhibit decreasing trends and are at or near historical lows. The estimated distribution of TPHg and benzene in groundwater is shown on Figures 3 and 4, respectively.

Fuel Oxygenate Distribution in Groundwater

MTBE was not detected in any site wells this event. Historically, MTBE has been detected only sporadically in site wells. Since 2003, detected MTBE concentrations have been below the Maximum Contaminant Level (MCL) for drinking water of 13 µg/L, except for a concentration of 20 µg/L detected in well MW-5 in February 2008. This MTBE result could be a false positive result; EPA Method 8260 was not used to confirm the MTBE detected by EPA Method 8021B. MTBE is not a primary constituent of concern at this site due to limited and sporadic (and potentially false) MTBE detections. MTBE concentrations are shown in Table 1 and on Figure 2.

REMEDIATION SUMMARY

Dual Phase Extraction/Air Sparging

As documented in prior reports, dual phase extraction (DPE) remediation was operated intermittently from April 2011 to February 2013. The DPE system operated for a total of approximately 182 days. The vapor-phase portion of the DPE system removed a total of approximately 1,580 lbs TPHg and 17.8 lbs benzene, while the groundwater portion of the DPE system has removed a total of approximately 2.7 lbs TPHg and 0.1 lbs benzene. The associated AS system operated for a total of approximately 145 days. The focus of the air sparging system had been on wells AS-1, AS-2 and AS-4, located near the primary hydrocarbon source area in the middle of the site. The remediation system layout is shown on Figure 5.

Enhanced DPE Using Bio-Organic Catalyst (BOC)

To enhance DPE effectiveness, Pangea used BOC in July through October 2012. BOC helped desorb and breakdown petroleum hydrocarbons to improve product recovery efforts and accelerate biodegradation of petroleum hydrocarbons. BOC is relatively inexpensive and is considered ‘green’ remedial technology. BOC use is documented in prior reports.

FUTURE SITE ACTIVITIES

Soil and Soil Gas Assessment

As directed by Alameda County Environmental Health (ACEH) in a March 3, 2014 letter, Pangea submitted a *Soil and Soil Gas Sampling Workplan* (Workplan) dated June 27, 2014. The ACEH conditionally approved the workplan in a letter dated July 14, 2014. On September 11 and 18, 2014, Pangea installed two and four soil gas probes, respectively, and collected shallow soil samples to evaluate potential human health impacts via direct contact with contaminated soil. Pangea has commenced coordination of the approved soil gas sampling to evaluate potential human health impacts via petroleum vapor intrusion to indoor air under reasonably expected future site uses.

Groundwater Monitoring

Unless otherwise directed, Pangea does not plan to conduct additional groundwater monitoring.

Electronic Reporting

This report will be uploaded to the Alameda County FTP site. The report, laboratory data, and other applicable information will also be uploaded to the State Water Resource Control Board's Geotracker database. As requested, report hard copies will no longer be provided to the local agencies.

ATTACHMENTS

Figure 1 – Vicinity Map

Figure 2 – Groundwater Elevation and Hydrocarbon Concentration Map

Figure 3 – TPHg Distribution in Groundwater

Figure 4 – Benzene Distribution in Groundwater

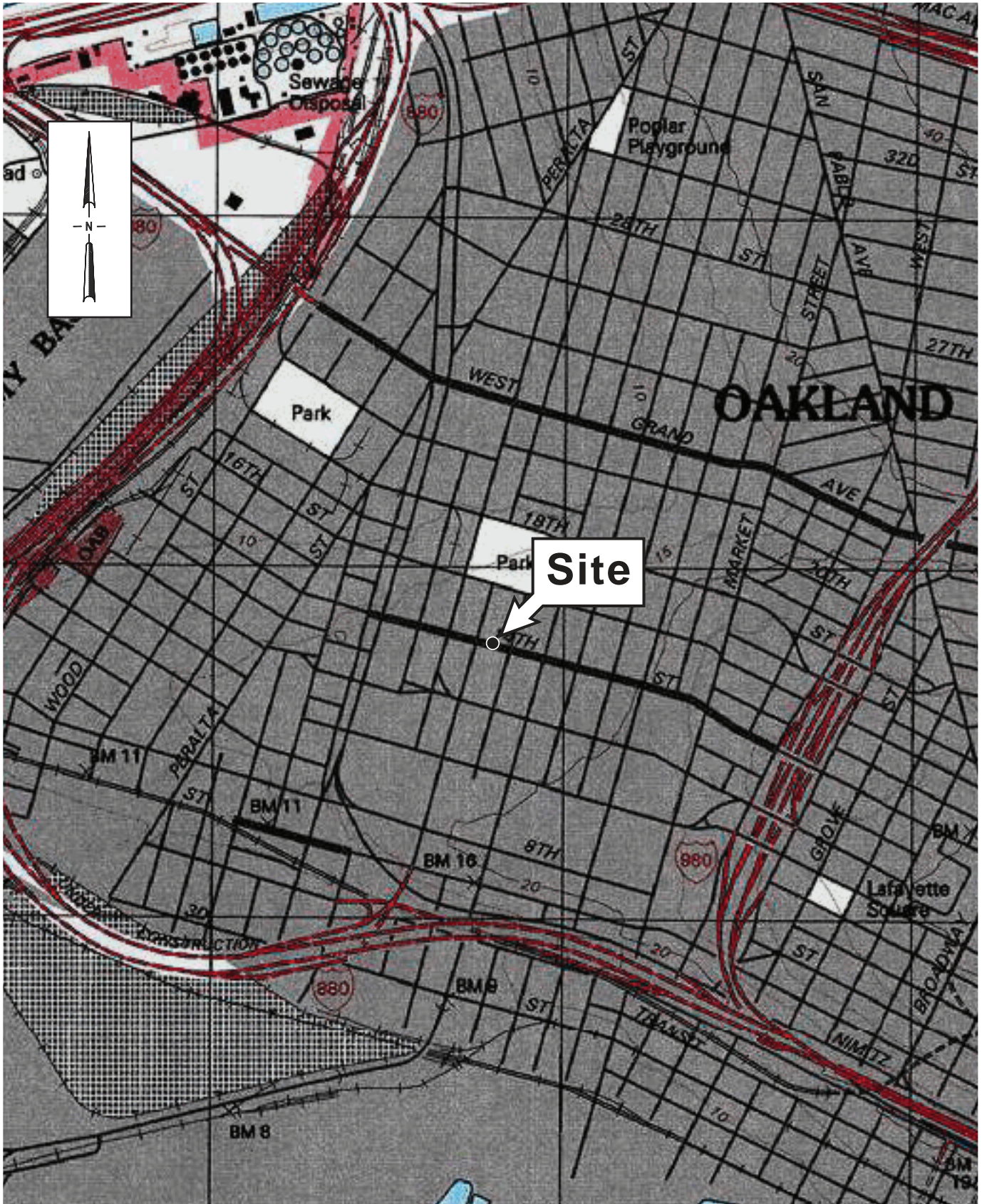
Figure 5 – Remediation System Layout

Table 1 – Groundwater Elevation and Analytical Data

Appendix A – Groundwater Monitoring Program

Appendix B – Groundwater Monitoring Field Data Sheets

Appendix C – Laboratory Analytical Reports



Figure

1

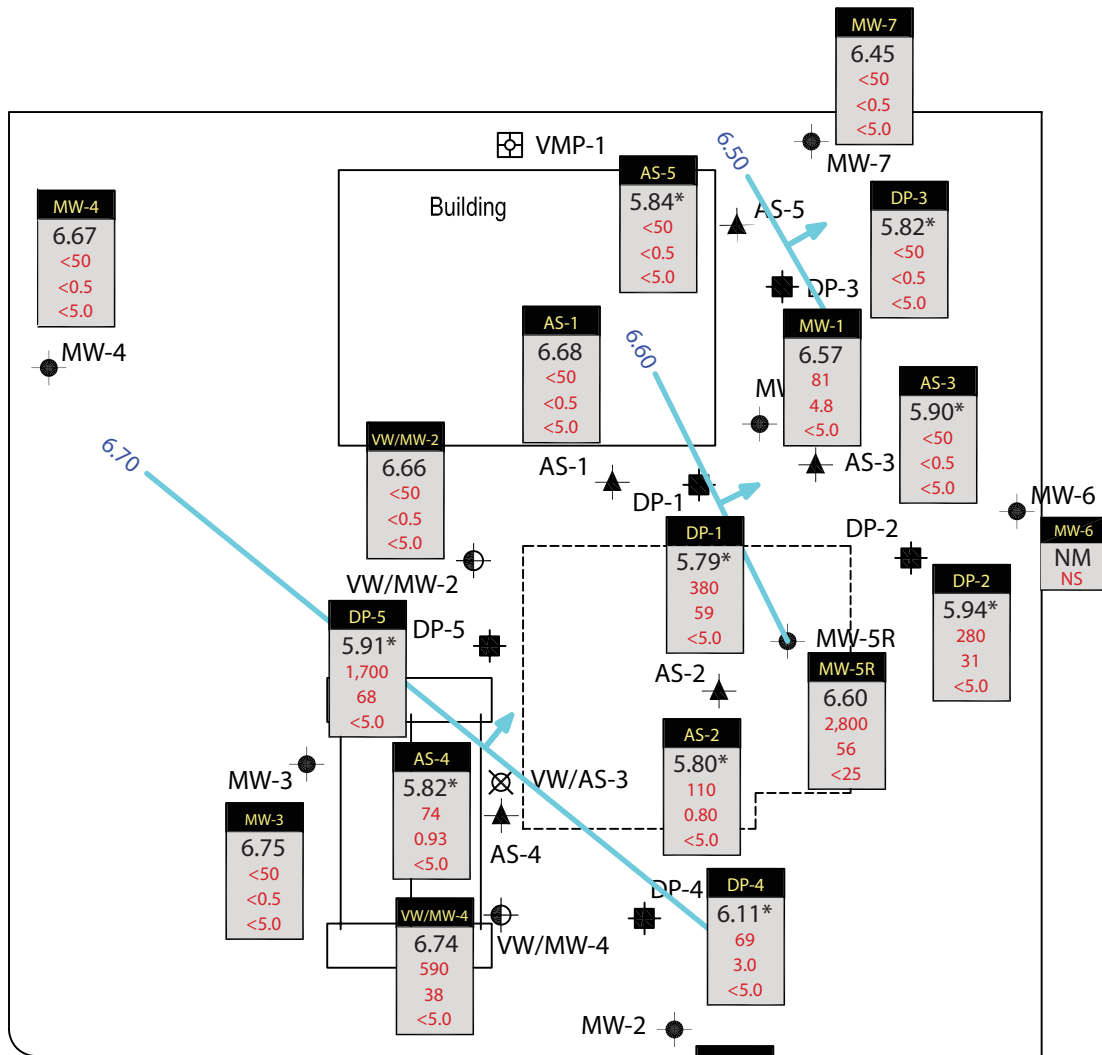
Former Shell Service Station

1230 14th Street
Oakland, California



Vicinity Map

UNION STREET



EXPLANATION

- DP-1 Dual phase extraction (DPE) well
- AS-1 Air sparge well (AS)
- MW-1 Groundwater monitoring well
- VW/MW-4 Combination soil vapor extraction well/monitoring well
- VW/AS-3 Destroyed Well

Well ID	Well designation
ELEV	Groundwater elevation
TPHg	Hydrocarbon concentrations in groundwater in micrograms per liter (ug/L)
Benzene	
MTBE	

* Data from July 3, 2014; not used for contouring

NM Not measured NS Not sampled

6.60 Groundwater elevation contour, in feet

Approximate groundwater flow direction

MW-2	6.73	<.50	<.50	<.50
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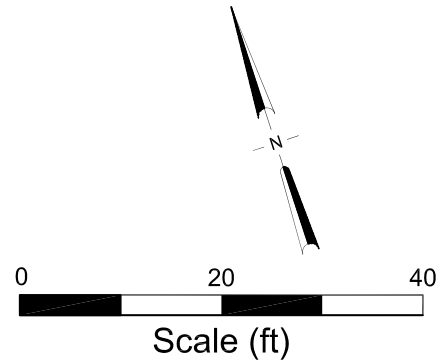
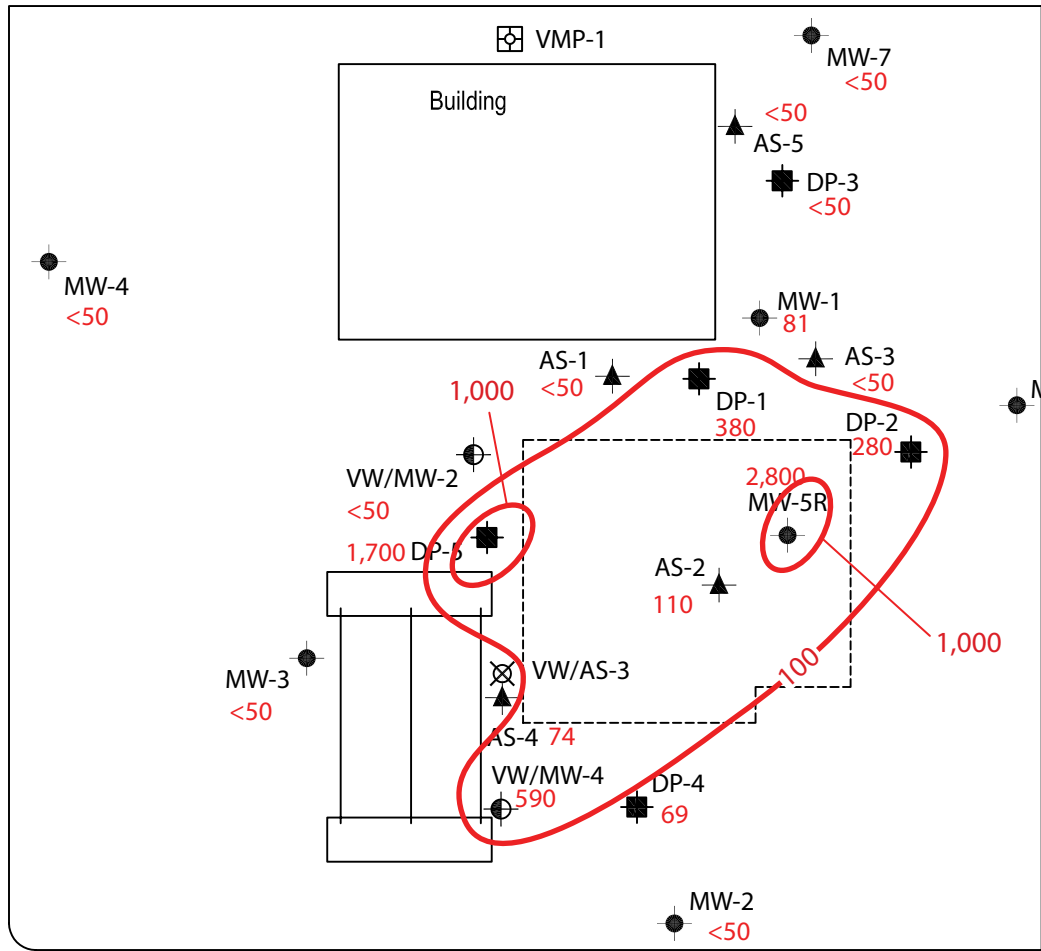


Figure 2



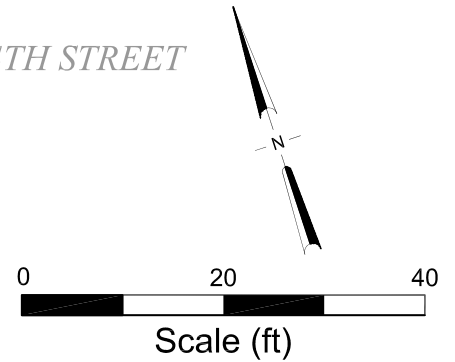
UNION STREET



EXPLANATION

- DP-1 Dual phase extraction (DPE) well
- AS-1 Air sparge well (AS)
- VMP-1 Vapor monitoring point
- MW-1 Groundwater monitoring well
- VW/MW-4 Combination soil vapor extraction well/monitoring well
- VW/AS-3 Destroyed Well
- Estimated groundwater flow direction
- 81 TPHg in groundwater, concentrations in µg/L
- TPHg isoconcentration contour in groundwater, concentrations in µg/L

14TH STREET

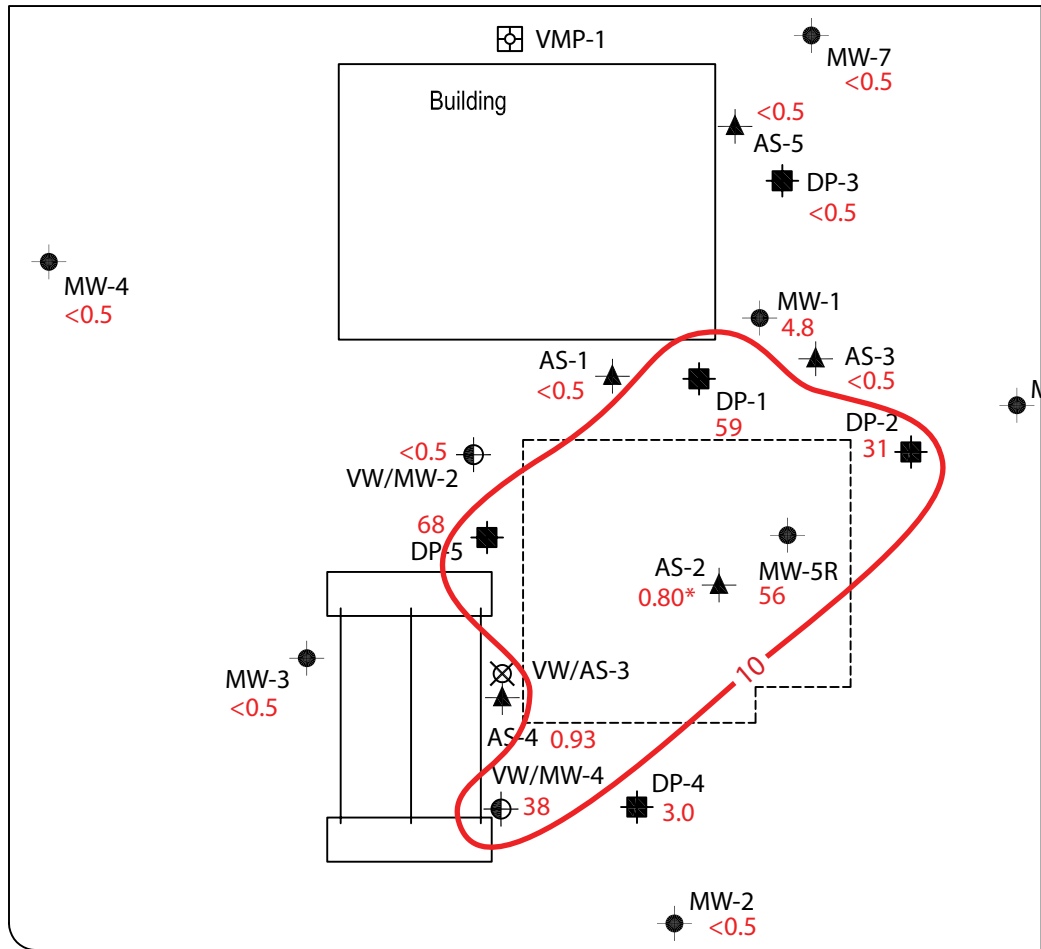


Figure









3



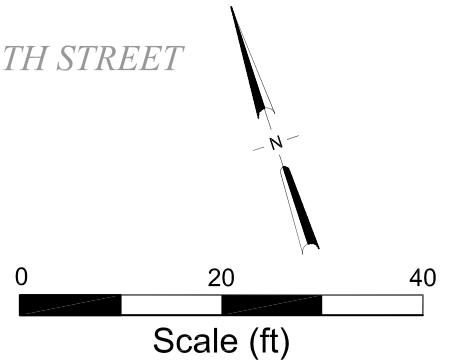
UNION STREET



EXPLANATION

- DP-1  Dual phase extraction (DPE) well
- AS-1  Air sparge well (AS)
- VMP-1  Vapor monitoring point
- MW-1  Groundwater monitoring well
- VW/MW-4  Combination soil vapor extraction well/monitoring well
- VW/AS-3  Destroyed Well
-  Estimated groundwater flow direction
- 4.8 Benzene in groundwater, concentrations in µg/L
- * Not used for contouring
- 10  Benzene isoconcentration contour in groundwater, concentrations in µg/L

14TH STREET



Figure

4

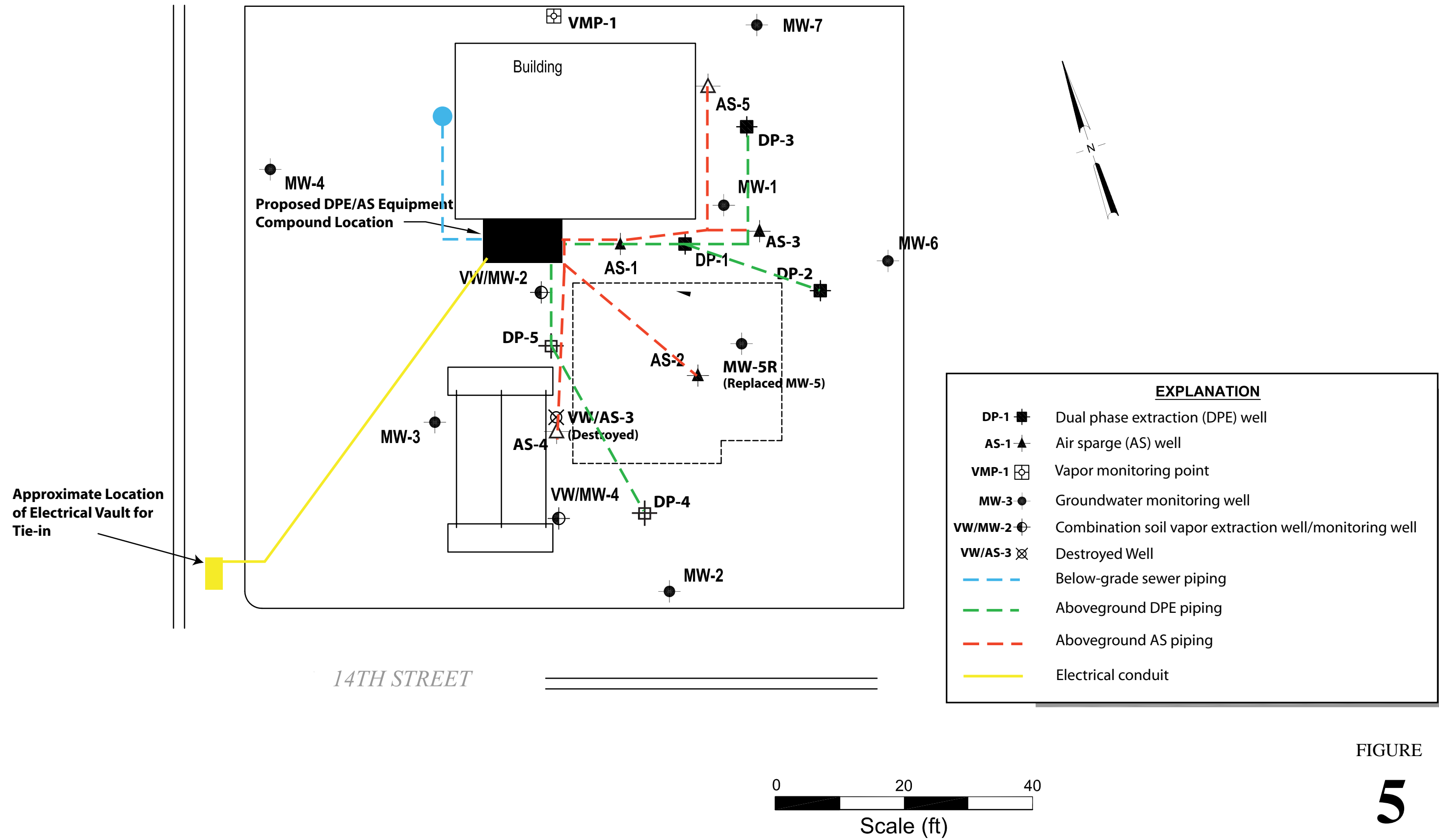


FIGURE
5

Pangea

Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)	
REMEDATION WELLS											
AS-1	07/02/08	12.08	--	28,000	390	350	620	2,500	<500	--	
	08/18/08	13.05	--	1,500	12	6.1	6.7	91	<17	1.94/2.41	
	11/20/08	13.69	--	640	2.4	2.7	1.0	8.5	<5.0	2.51/2.91	
	02/18/09	12.09	--	270	1.1	2.2	<0.5	<0.5	<5.0	2.94/2.99	
	05/26/09	11.40	--	250	1.7	0.70	<0.5	3.5	<5.0	3.01/2.94	
	11/23/09	13.38	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.94/2.65	
	05/26/10	10.97	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.6/2.78	
	12/30/10										
	05/23/11										
	19.69	12/27/11	14.02	5.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.69/0.75
	06/30/12	24.29	-4.60	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	
	05/23/14	13.01	6.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.23	
AS-2	07/02/08	11.98	--	9,600	380	620	170	1,000	<50	--	
	19.22	7/3/2014	13.42	5.80	110	0.80	<0.5	<0.5	2.8	<5.0	0.52/0.83
AS-3	07/02/08	12.42	--	2,800	340	7.2	20	37	<50	--	
	19.5	7/3/2014	13.60	5.90	<50	<0.5	<0.5	<0.5	<5.0	0.34/0.84	
AS-4	04/16/10	8.82	---	31,000	1,300	330	400	6,600	<500	--	
	18.93	07/25/13	12.75	6.18	200	1.8	0.63	1.3	7.5	<5.0	1.06/2.20
		10/20/13	13.51	5.42	180	2.4	0.65	1.8	8.8	<5.0	1.12/2.01
		07/03/14	13.11	5.82	74	0.93	<0.5	0.54	2.7	<5.0	0.47/0.63
AS-5	04/16/10	10.03	---	120	2.5	1.3	1.2	17	<5.0	--	
	19.99	07/03/14	14.15	5.84	<50	<0.5	<0.5	<0.5	<5.0	2.78/1.14	
DP-1	07/03/08	12.43	--	34,000	5,100	1,800	1,300	4,900	<350	--	
	18.49	12/27/11	13.03	5.46	41,000	4,400	1,200	780	4,600	<1,000	0.83/0.91
		06/30/12	11.25	7.24	2,800	66	41	43	420	<50	0.08
		09/01/12	13.63	4.86	7,300	360	180	68	1,700	<250	2.09
		09/30/12	13.47	5.02	--	--	--	--	--	--	--
		12/14/12	10.98	7.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.4
		03/24/13	11.30	7.19	5,000	420	82	200	500	<50	1.17/2.40
		07/25/13	12.29	6.20	1,300	140	21	43	130	<10	1.12/2.17
		10/20/13	13.05	5.44	1,700	180	15	53	140	<50	1.25/1.93
		07/03/14	12.70	5.79	380	59	3.2	5.3	20	<5.0	0.46
	DP-2	07/03/08	12.92	--	15,000	2,800	300	560	1,600	<150	--
19.04		12/27/11	13.57	5.47	9,100	820	46	320	790	<80	0.60/0.58
		09/01/12	13.83	5.21	2,300	100	17	61	440	<50	1.17
		09/30/12	9.15	9.89	--	--	--	--	--	--	--
		12/14/12	10.74	8.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.86
		07/03/14	13.10	5.94	280	31	2.4	4.6	9.0	<5.0	0.56/0.41
DP-3	07/02/08	13.21	--	14,000	4,400	100	720	150	<350	--	
	19.35	12/27/11	13.92	5.43	<50	<0.5	<0.5	<0.5	<5.0	0.59/0.66	
		09/30/12	14.35	5.00	--	--	--	--	--	--	
		12/14/12	11.67	7.68	--	--	--	--	--	--	
		07/03/14	13.53	5.82	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.41/0.38
DP-4	04/16/10	8.95	--	4,700	300	45	260	570	<100	--	
	18.21	12/27/11	12.57	5.64	4,500	430	48	67	150	<300	0.79/0.80
		09/01/12	12.26	5.95	590	3.6	15	2.6	140	<5.0	1.21
		09/30/12	13.10	5.11	--	--	--	--	--	--	--
		12/14/12	10.82	7.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.95
		07/03/14	12.10	6.11	69	3.0	<0.5	0.96	2.5	<5.0	0.76/0.48

Pangea

Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
DP-5	04/16/10	9.11	--	19,000	810	1,900	680	3,100	<350	--
<i>18.36</i>	12/27/11	12.78	5.58	2,300	1900	1,700	960	3,000	<500	0.66/0.63
	06/30/12	10.85	7.51	4,600	350	240	83	470	<50	0.14
	09/01/12	13.51	4.85	8,100	270	910	180	1,700	<50	0.29
	09/30/12	13.22	5.14	--	--	--	--	--	--	--
	12/14/12	11.30	7.06	2,100	17	42	25	340	<50	0.61
	03/24/13	11.32	7.04	1,600	55	72	24	190	<50	0.49/1.15
	07/25/13	12.40	5.96	1,300	90	87	55	240	<10	0.57/1.19
	10/20/13	12.89	5.47	4,200	290	420	98	770	<50	0.41/1.85
	07/03/14	12.45	5.91	1,700	68	82	71	280	<5.0	0.66/0.94

GROUNDWATER AND/OR REMEDIATION WELLS

MW-1	03/25/96	9.53	9.05	37,000	7,400	1,500	720	3,300	<500	--
<i>18.58</i>	06/21/96	10.72	7.86	35,000	9,900	460	340	3,500	890	--
	09/26/96	12.88	5.70	19,000	8,200	510	780	790	<250	--
	12/19/96	12.59	5.99	27,000	120	1,200	1,400	2,800	<100	--
	12/19/96	12.59	5.99	32,000	12,000	1,300	1,600	3,100	830	--
	03/25/97	11.10	7.48	39,000	13,000	1,600	840	3,100	730	1.2
	06/26/97	12.42	6.16	--	--	--	--	--	--	'--
	09/26/97	13.31	5.27	--	--	--	--	--	--	0.8
	12/05/97	12.65	5.93	--	--	--	--	--	--	0.3
	02/19/98	6.46	12.12	16,000	5,500	450	500	800	<500	2.4
	06/08/98	6.62	11.96	--	--	--	--	--	--	1.2
	08/25/98	11.83	6.75	--	--	--	--	--	--	2.8
	12/28/98	12.01	6.57	--	--	--	--	--	--	2.6
	03/26/99	9.15	9.43	--	--	--	--	--	--	2.2
	06/30/99	11.22	7.36	--	--	--	--	--	--	3.8
	09/30/99	11.89	6.69	--	--	--	--	--	--	3.0
	12/27/99	13.55	5.03	34,800	8,660	953	956	2,770	<1,000	2.4/2.1
	01/21/00	13.42	5.16	40,600	14,700	1,850	1,210	3,670	<500	2.8
	03/07/00	8.11	10.47	--	--	--	--	--	--	0.4
	04/17/00	9.78	8.80	--	--	--	--	--	--	3.0/3.4
	04/18/00	--	--	18,300	8,060	543	528	872	<50.0	--
	09/21/00	13.11	5.47	--	--	--	--	--	--	5.2
	10/17/00	12.61	5.97	15,800	6,720	435	587	887	351(<66.7)	1.2/0.8
	01/09/01	12.94	5.64	--	--	--	--	--	--	0.3
	04/27/01	10.73	7.85	1,400	650	28	58	48	(<10)	1.8/2.1
	07/03/01	12.00	6.58	--	--	--	--	--	--	1.8
	12/06/01	10.53	8.05	4,500	1,500	85	160	210	(<50)	2.5/2.9
	01/23/02	9.33	9.25	--	--	--	--	--	--	0.1
	04/17/02	10.49	8.09	230	12	<0.50	4.6	2.5	(<5.0)	6.3/5.3
	07/18/02	11.98	6.60	--	--	--	--	--	--	1.2
	11/11/02	13.00	5.58	12,000	2,600	240	470	640	(-8.5)	0.2/0.2
	01/16/03	9.68	8.90	--	--	--	--	--	--	4.4
	03/13/03	10.45	8.13	820	340	2.7	<2.0	3.2	(<20)	2.8/0.9
	04/23/03	10.32	8.26	900	550	19	49	49	(<50)	0.9/0.1
	05/13/03	10.28	8.30	740	510	18	43	46	(<50)	0.1/0.2
	06/13/03	11.16	7.42	<5,000	1,500	82	180	250	(<500)	0.3/0.8
	07/14/03	11.66	6.92	5,300	3,400	160	340	420	(<20)	0.6/0.3
	09/29/03	12.44	6.14	10,000	5,700	400	670	1,000	(<50)	0.6/0.7
	10/29/03	12.63	5.95	19,000	6,600	560	820	1,300	(26)	0.6/0.4
	01/05/04	10.17	8.41	380	140	7.1	6.2	16	(<1.0)	5.0/0.8
	04/01/04	9.57	9.01	79	0.59	<0.50	<0.50	<1.0	(<0.50)	4.6/1.2
	07/02/04	11.81	6.77	4,100	2,100	33	110	81	(<10)	0.6/0.5
	11/03/04	12.53	6.05	8,000	3,800	150	480	460	(<25)	1.45/2.1
	01/04/05	9.39	9.19	120	23	1.6	2.0	3.5	(<0.50)	4.21/2.82
	04/13/05	7.63	10.95	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	2.44/2.77
	07/13/05	10.85	7.73	930 e	400	6.1	<5.0	10	(<5.0)	0.84/0.66
	10/28/05	12.44	6.14	8,300	5,500	190	590	470	(<25)	0.2/0.2
	01/17/06	8.61	9.97	<50	2.2	1.1	1.4	4.8	(<0.50)	5.8/5.3

Pangea

Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
<i>(MW-1 cont'd)</i>	02/23/06	9.60	8.98	--	18.1	2.22	1.89	4.50	--	--
	03/09/06	7.65	10.93	--	1.80	<0.500	<0.500	1.82	--	--
	04/21/06	6.35	12.23	<50.0	1.54	1.03	4.20	5.82	(<0.500)	--
	05/01/06	7.38	11.20	268	41.3	4.62	3.83	26.1	(<0.500)	0.27/0.36
	06/23/06	10.09	8.49	3,990	362	13.1	12.4	71.5	(<0.500)	--
	07/11/06	10.09	8.49	6,190	3,740	52.0	67.8	982	(<0.500)	--
	08/30/06	11.55	7.03	29,200	7,380	596	443	1,680	(4.45)	0.39/0.52
	09/29/06	11.97	6.61	76,100	9,300	859 i	1,290	2,820 i	(<5.00)	--
	10/13/06	12.08	6.50	49,500	7,580	770	1,030	2,860	(2.75)	--
	11/03/06	12.47	6.11	42,600	8,450	592	869	1,970	(2.69)	2.60/1.15
	12/26/06	11.80	6.78	19,000	4,600	360	640	1,300	(<5.0)	--
	01/11/07	11.84	6.74	23,000	6,000	320	780	1,100	(<25)	--
	01/30/07	12.18	6.40	3,700	890	74	170	220	(<25)	1.18/0.76
	03/01/07	10.74	7.84	2,600	670	32	41	180	(<10)	--
	04/26/07	10.90	7.68	12,000 k,1	2,800	220	400	560	(<20)	--
	06/01/07	11.49	7.09	15,000 k	3,900	380	670	1,010	(1.8)	0.31/0.43
	06/21/07	12.07	6.51	13,000 k	3,800	400	620	1,060	(<50)	--
	07/03/07	12.00	6.58	21,000 k	6,100	510	960	1,760	(<50)	--
	08/16/07	12.55	6.03	20,000 k	5,800	460	1,100	1,730	(<50)	0.3/0.2
	12/06/07	13.00	5.58	53,000	9,400	560	1,400	3,000	(<25)	--
	02/25/08	9.91	8.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.74
	05/26/08	11.90	6.68	9,300	2,200	67	140	130	<250	1.96/1.13
	08/18/08	12.82	5.76	15,000	3,300	110	380	430	<250	0.97/0.77
	11/20/08	13.46	5.12	18,000	4,700	190	770	910	<100	1.04/1.27
	02/18/09	11.77	6.81	2,200	54	8.7	45	76	<10	1.21/1.40
	05/26/09	11.18	7.40	750	31	7.1	3.5	23	<5.0	0.90/1.21
	11/23/09	13.15	5.43	6,300	2,100	53	170	180	<250	1.12/1.85
	05/26/10	10.74	7.84	550	96	6.2	3.1	14	<10	0.86/1.13
	12/30/10	10.53	8.05	280	40	4.6	2.8	17	<5.0	0.88/1.07
	05/23/11	10.21	8.37	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.68
	12/27/11	13.15	5.43	6,900	140	51	54	370	<50	1.03/1.13
	06/30/12	11.67	6.91	260	0.58	0.99	3.4	13	<5.0	6.18
	09/01/12	13.56	5.02	220	0.60	1.0	7.8	13	<5.0	4.22
09/30/12	13.55	5.03	130	<0.5	0.61	2.9	1.4	<5.0	2.97/3.09	
12/14/12	11.05	7.53	<50	0.53	<0.5	0.55	1.0	<5.0	1.98/2.15	
03/24/13	11.43	7.15	240	0.93	1.5	5.7	6.2	<5.0	1.70/2.05	
07/25/13	12.40	6.18	520	140	2.7	2.4	1.2	<10	2.10/2.65	
10/20/13	13.10	5.48	340	14	2.6	7.5	14	<20	2.47/2.73	
	05/22/14	12.01	6.57	81	4.8	0.82	<0.5	<0.5	<5.0	0.41/0.84
MW-2 <i>17.90</i>	03/25/96	8.19	9.71	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	06/21/96	9.94	7.96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	09/26/96	12.15	5.75	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	12/19/96	11.70	6.20	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	03/25/97	9.25	8.65	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	06/26/97	11.36	6.54	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	09/26/97	12.56	5.34	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.1
	09/26/97	12.56	5.34	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.1
	12/05/97	11.15	6.75	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.7
	02/19/98	5.61	12.29	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.7
	06/08/98	5.58	12.32	<50	<0.30	<0.30	<0.30	<0.60	<10	3.2
	08/25/98	10.67	7.23	--	--	--	--	--	--	1.7
	12/28/98	11.65	6.25	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	0.4/0.8
	03/26/99	8.60	9.30	--	--	--	--	--	--	0.7
	06/30/99	10.30	7.60	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	2.3
	09/30/99	10.77	7.13	--	--	--	--	--	--	1.9
	12/27/99	12.21	5.69	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	0.7/0.7
	03/07/00	7.13	10.77	--	--	--	--	--	--	1.1
	04/17/00	8.35	9.55	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	1.8/1.8
	09/21/00	11.76	6.14	--	--	--	--	--	--	2.1
	10/17/00	11.80	6.10	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	0.9/0.6

Pangea

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Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
<i>(MW-2 cont'd)</i>	01/09/01	12.14	5.76	--	--	--	--	--	--	0.7
	04/27/01	9.85	8.05	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1/0.9
	07/03/01	11.20	6.70	--	--	--	--	--	--	1.2
	12/06/01	10.77	7.13	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.9/2.1
	01/23/02	8.64	9.26	--	--	--	--	--	--	2.5
	04/17/02	9.61	8.29	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.5/5.2
	07/18/02	11.09	6.81	--	--	--	--	--	--	1.4
	11/11/02	12.16	5.74	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.2/0.3
	01/16/03	8.92	8.98	--	--	--	--	--	--	1.7
	03/13/03	9.60	8.30	--	--	--	--	--	--	1.1
	04/23/03	9.48	8.42	<50	<0.50	<0.50	<0.50	<1.0	<0.50	0.4/0.2
	05/13/03	9.45	8.45	<50	<0.50	<0.50	<0.50	<1.0	<0.50	0.5/0.3
	06/13/03	10.28	7.62	<50	<0.50	<0.50	<0.50	<1.0	<0.50	0.6/0.9
	07/14/03	10.67	7.23	<50	<0.50	<0.50	<0.50	<1.0	<0.50	0.5/0.9
	09/29/03	11.58	6.32	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.9/1.3
	10/29/03	11.76	6.14	<50	<0.50	<0.50	<0.50	<1.0	<0.50	4.3/0.5
	01/05/04	9.36	8.54	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.2/0.8
	04/01/04	8.77	9.13	<50	<0.50	<0.50	<0.50	<1.0	<0.50	4.0/0.3
	07/02/04	11.04	6.86	<50	<0.50	<0.50	<0.50	<1.0	<0.50	0.4/0.3
	11/03/04	11.71	6.19	<50	<0.50	<0.50	<0.50	<1.0	(0.54)	6.4/1.40
	01/04/05	8.68	9.22	<50	<0.50	<0.50	<0.50	<1.0	(0.62)	4.41/2.88
	04/13/05	7.13	10.77	<50	<0.50	<0.50	<0.50	<0.50	(1.7)	0.71/0.23
	07/13/05	10.30	7.60	<50	<0.50	<0.50	<0.50	<1.0	(2.3)	0.90/0.33
	10/28/05	11.61	6.29	<50	<0.50	<0.50	<0.50	<1.0	(4.2)	0.4/0.1
	01/17/06	8.21	9.69	<50	<0.50	<0.50	<0.50	<0.50	(5.0)	0.8/0.2
	03/09/06	7.70	10.20	--	--	--	--	--	--	--
	04/21/06	5.83	12.07	--	--	--	--	--	--	--
	05/01/06	6.34	11.56	<50.0	<0.500	<0.500	<0.500	<0.500	(4.33)	0.52/0.18
	08/30/06	10.71	7.19	<50.0	<0.500	<0.500	<0.500	<0.500	(1.98)	0.51/1.04
	09/29/06	11.03	6.87	--	--	--	--	--	--	--
	11/03/06	11.62	6.28	<50.0	<0.500	<0.500	<0.500	<0.500	(3.08)	0.44/0.40
	01/30/07	11.30	6.60	<50	<0.50	<0.50	<0.50	<1.0	(2.9)	0.92/0.63
	06/01/07	10.52	7.38	<50 k	0.71	<1.0	0.20 m	0.39 m	(1.7)	0.71/0.56
	08/16/07	11.60	6.30	<50 k	<0.50	<1.0	<1.0	<1.0	(1.3)	0.5/0.2
	12/06/07	12.39	5.51	<50	0.97	<0.5	0.56	1.5	(0.99)	--
	02/25/08	9.15	8.75	<50	<0.5	<0.5	<0.5	<0.5	<0.5	2.82
	05/26/08	11.02	6.88	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.86/1.32
	08/18/08	11.97	5.93	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.45/1.12
	11/20/08	12.64	5.26	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.10/1.16
	02/18/09	11.14	6.76	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.98/1.11
	05/26/09	10.31	7.59	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.03/1.49
11/23/09	12.32	5.58	--	--	--	--	--	--	--	
05/26/10	9.92	7.98	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.99/1.43	
12/30/10	9.80	8.10	--	--	--	--	--	--	--	
05/23/11	9.37	8.53	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.48	
12/27/11	12.31	5.59	--	--	--	--	--	--	--	
06/30/12	10.49	7.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5	3.46	
09/30/12	12.80	5.10	--	--	--	--	--	--	--	
12/14/12	10.37	7.53	--	--	--	--	--	--	--	
03/24/13	10.59	7.31	--	--	--	--	--	--	--	
07/25/13	11.60	6.30	--	--	--	--	--	--	--	
10/20/13	12.31	5.59	--	--	--	--	--	--	--	
	05/22/14	11.17	6.73	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.48/5.53
MW-3 <i>18.18</i>	03/25/96	8.47	9.71	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	06/21/96	10.40	7.78	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	09/26/96	12.45	5.73	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	12/19/96	12.14	6.04	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	03/25/97	9.54	8.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	06/26/97	11.66	6.52	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.6
	09/26/97	12.85	5.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.1

Pangea

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Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
<i>(MW-3 cont'd)</i>	12/05/97	11.44	6.74	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.6
	02/19/98	6.78	11.40	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.6
	06/08/98	6.82	11.36	<50	<0.30	<0.30	<0.30	<0.60	<10	3.8
	06/08/98	6.82	11.36	<50	<0.30	<0.30	<0.30	<0.60	<10	3.8
	08/25/98	11.09	7.09	--	--	--	--	--	--	1.2
	12/28/98	11.84	6.34	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	0.9/0.6
	03/26/99	8.57	9.61	--	--	--	--	--	--	0.8
	06/30/99	10.61	7.57	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	4.8
	09/30/99	11.53	6.65	--	--	--	--	--	--	1.4
	12/27/99	12.35	5.83	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	1.4/2.5
	03/07/00	7.36	10.82	--	--	--	--	--	--	5.8
	04/17/00	8.39	9.79	<50.0	<0.500	<0.500	<0.500	<0.500	19.3	6.5/5.1
	09/21/00	12.01	6.17	--	--	--	--	--	--	3.0
	10/17/00	12.10	6.08	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	2.0/1.0
	01/09/01	12.43	5.75	--	--	--	--	--	--	1.9
	04/27/01	10.10	8.08	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	2.3/2.4
	07/03/01	11.45	6.73	--	--	--	--	--	--	1.4
	12/06/01	11.07	7.11	<50	<0.50	<0.50	<0.50	<0.50	(<5.0)	2.8/3.9
	01/23/02	8.89	9.29	--	--	--	--	--	--	3.1
	04/17/02	9.92	8.26	<50	<0.50	<0.50	<0.50	<0.50	(<5.0)	3.7/3.2
	07/18/02	11.42	6.76	--	--	--	--	--	--	1.6
	11/11/02	12.44	5.74	<50	<0.50	<0.50	<0.50	<0.50	(<5.0)	0.3/0.4
	01/16/03	9.25	8.93	--	--	--	--	--	--	2.1
	03/13/03	9.84	8.34	--	--	--	--	--	--	1.2
	04/23/03	9.71	8.47	<50	<0.50	<0.50	<0.50	<1.0	(<5.0)	0.7/0.2
	05/13/03	9.70	8.48	<50	<0.50	<0.50	<0.50	<1.0	(<5.0)	0.6/0.2
	06/13/03	10.58	7.60	<50	<0.50	<0.50	<0.50	<1.0	(<5.0)	0.4/1.3
	07/14/03	10.98	7.20	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	0.4/0.03
	09/29/03	11.84	6.34	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	1.4/1.1
	10/29/03	12.05	6.13	58 b	<0.50	<0.50	<0.50	<1.0	(<0.50)	0.8/0.4
	01/05/04	9.70	8.48	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	1.3/0.7
	04/01/04	9.03	9.15	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	1.2/0.6
	07/02/04	11.15	7.03	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	0.7/0.5
	11/03/04	11.98	6.20	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	1.65/2.75
	01/04/05	8.98	9.20	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	3.21/1.87
	04/13/05	7.22	10.96	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	4.92/5.28
	07/13/05	10.30	7.88	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	0.30/0.40
	10/28/05	11.81	6.37	<50 f	<0.50	<0.50	<0.50	<1.0	(<0.50)	0.8/0.2
	01/17/06	8.17	10.01	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	3.1/2.0
	03/09/06	6.45	11.73	--	--	--	--	--	--	--
	04/21/06	5.96	12.22	--	--	--	--	--	--	--
	05/01/06	6.40	11.78	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500(<0.500)	0.68/0.42
	08/30/06	10.95	7.23	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500(<0.500)	3.53/3.14
	09/29/06	11.40	6.78	--	--	--	--	--	--	--
	11/03/06	11.91	6.27	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500(<0.500)	7.0/6.8
	01/30/07	11.55	6.63	<50	<0.50	<0.50	<0.50	<1.0	<0.50(<0.50)	1.45/1.10
	06/01/07	10.86	7.32	<50 k	0.34 m	<1.0	<1.0	<1.0	<1.0(<1.0)	0.62/0.56
	08/16/07	11.87	6.31	<50 k	<0.50	<1.0	<1.0	<1.0	<1.0(<1.0)	0.2/0.2
	12/06/07	14.43	3.75	<50	1.8	1.0	0.90	4.4	(<0.5)	--
	02/25/08	9.37	8.81	<50	<0.5	<0.5	<0.5	<0.5	<5.0	4.91
	05/26/08	11.31	6.87	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.79/2.01
	08/18/08	12.28	5.90	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.57/1.52
	11/20/08	12.84	5.34	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.24/1.68
	02/18/09	11.45	6.73	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.16/1.38
	05/26/09	10.62	7.56	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.21/1.40
	11/23/09	12.59	5.59	--	--	--	--	--	--	--
	05/26/10	10.17	8.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.29/1.38
	12/30/10	10.08	8.10	--	--	--	--	--	--	--
	05/23/11	9.63	8.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.52
	12/27/11	12.58	5.60	--	--	--	--	--	--	--
	06/30/12	10.60	7.58	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.53

Pangea

Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
<i>(MW-3 cont'd)</i>	09/30/12	13.02	5.16	--	--	--	--	--	--	--
	12/14/12	10.58	7.60	--	--	--	--	--	--	--
	03/24/13	10.86	7.32	--	--	--	--	--	--	--
	07/25/13	11.85	6.33	--	--	--	--	--	--	--
	10/20/13	12.09	6.09	--	--	--	--	--	--	--
	05/22/14	11.43	6.75	<50	<0.5	<0.5	<0.5	<0.5	<0.5	3.63
MW-4 <i>18.01</i>	03/25/96	9.20	8.81	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	06/21/96	10.25	7.76	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	09/26/96	12.29	5.72	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
	12/19/96	12.47	5.54	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--
	03/25/97	9.44	8.57	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	06/26/97	11.57	6.44	<50	<0.50	<0.50	<0.50	<0.50	<2.5	6.2
	06/26/97	11.57	6.44	<50	<0.50	<0.50	<0.50	<0.50	<2.5	6.2
	09/26/97	12.75	5.26	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.1
	12/05/97	11.37	6.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	12/05/97	11.37	6.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	02/19/98	5.59	12.42	<50	<0.50	<0.50	<0.50	<0.50	<2.5	6.5
	06/08/98	5.65	12.36	<50	<0.30	<0.30	<0.30	<0.60	<10	2.6
	08/25/98	10.98	7.03	--	--	--	--	--	--	2.4
	12/28/98	11.83	6.18	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	1.3/1.2
	03/26/99	8.40	9.61	--	--	--	--	--	--	1.9
	06/30/99	10.53	7.48	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	7.6
	09/30/99	11.03	6.98	--	--	--	--	--	--	2.6
	12/27/99	12.53	5.48	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	1.9/0.8
	03/07/00	7.00	11.01	--	--	--	--	--	--	6.5
	04/17/00	8.57	9.44	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	5.1/5.1
	09/21/00	12.05	5.96	--	--	--	--	--	--	3.0
	10/17/00	11.96	6.05	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	5.5/1.2
	01/09/01	12.33	5.68	--	--	--	--	--	--	2.1
	04/27/01	9.96	8.05	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	5.3/3.8
	07/03/01	11.35	6.66	--	--	--	--	--	--	4.5
	12/06/01	10.99	7.02	<50	<0.50	<0.50	<0.50	<0.50	(<5.0)	10.23/6.5
	01/23/02	8.80	9.21	--	--	--	--	--	--	8.8
	04/17/02	9.75	8.26	<50	<0.50	<0.50	<0.50	<0.50	(<5.0)	7.0/5.1
	07/18/02	11.32	6.69	--	--	--	--	--	--	5.3
	11/11/02	12.36	5.65	<50	<0.50	<0.50	<0.50	<0.50	(<5.0)	3.6/2.0
	01/16/03	10.33	7.68	--	--	--	--	--	--	6.5
	03/13/03	10.06	7.95	--	--	--	--	--	--	6.5
04/23/03	9.57	8.44	<50	<0.50	<0.50	<0.50	<1.0	(<5.0)	5.1/5.7	
05/13/03	9.55	8.46	<50	<0.50	<0.50	<0.50	<1.0	(<5.0)	2.0/2.5	
06/13/03	10.50	7.51	<50	<0.50	<0.50	<0.50	<1.0	(<5.0)	5.0/5.6	
07/14/03	10.86	7.15	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	3.9/4.2	
09/29/03	11.74	6.27	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	1.6/1.4	
10/29/03	11.95	6.06	58 b	<0.50	<0.50	<0.50	<1.0	(<0.50)	2.4/1.0	
01/05/04	10.35	7.66	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	7.4/7.5	
04/01/04	8.81	9.20	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	6.0/6.4	
07/02/04	11.10	6.91	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	0.8/0.6	
11/03/04	11.85	6.16	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	1.3/2.84	
01/04/05	9.06	8.95	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	7.12/6.37	
04/13/05	6.84	11.17	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	5.81/5.66	
07/13/05	10.20	7.81	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	1.87/3.75	
10/28/05	11.75	6.26	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	1.4/0.8	
01/17/06	8.00	10.01	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	6.4/6.2	
03/09/06	6.55	11.46	--	--	--	--	--	--	--	
04/21/06	5.45	12.56	--	--	--	--	--	--	--	
05/01/06	6.14	11.87	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.50)	1.09/0.72	
08/30/06	10.82	7.19	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.50)	4.31/4.35	
09/29/06	11.29	6.72	--	--	--	--	--	--	--	
11/03/06	11.81	6.20	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.50)	3.30/2.40	
01/30/07	11.45	6.56	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	1.67/0.94	
06/01/07	10.72	7.29	67 k	<0.50	<1.0	<1.0	<1.0	(<1.0)	0.93/0.81	

Pangea

Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
<i>(MW-4 cont'd)</i>	08/16/07	11.81	6.20	<50 k	<0.50	<1.0	<1.0	<1.0	<1.0	0.5/1.3
	12/06/07	12.34	5.67	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--
	02/25/08	9.03	8.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0	6.84
	05/26/08	11.23	6.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0	6.59/5.22
	08/18/08	12.20	5.81	<50	<0.5	<0.5	<0.5	<0.5	<5.0	7.99/2.89
	11/20/08	12.83	5.18	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.51/3.18
	02/18/09	11.23	6.78	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.90/3.15
	05/26/09	10.47	7.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.78/2.85
	11/23/09	12.51	5.50	--	--	--	--	--	--	--
	05/26/10	10.05	7.96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.49/2.12
	12/30/10	10.11	7.90	--	--	--	--	--	--	--
	05/23/11	9.49	8.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	4.13
	12/27/11	12.48	5.53	--	--	--	--	--	--	--
	06/30/12	10.94	7.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	4.01
	09/30/12	12.82	5.19	--	--	--	--	--	--	--
	12/14/12	10.31	7.70	--	--	--	--	--	--	--
	03/24/13	10.80	7.21	--	--	--	--	--	--	--
	07/25/13	11.73	6.28	--	--	--	--	--	--	--
	10/20/13	12.50	5.51	--	--	--	--	--	--	--
		05/22/14	11.34	6.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0
MW-5 <i>18.47</i>	12/03/01	11.86	6.61	--	--	--	--	--	--	--
	12/06/01	11.40	7.07	31,000	3,000	2,000	1,100	3,000	<50	3.1/3.2
	01/23/02	9.24	9.23	--	--	--	--	--	--	0.9
	04/17/02	10.35	8.12	33,000	3,800	2,400	1,300	4,400	<200	5.3/3.8
	07/18/02	11.82	6.65	--	--	--	--	--	--	0.8
	11/11/02	12.86	5.61	100,000	7,100	12,000	3,000	17,000	(5.10)	1.2/1.4
	01/16/03	9.57	8.90	--	--	--	--	--	--	0.0
	03/13/03	10.30	8.17	33,000	2,800	2,200	980	4,600	<100	0.5/0.3
	04/07/03	10.29	8.18	--	--	--	--	--	--	--
	04/23/03	10.15	8.32	33,000	2,900	3,100	960	5,800	<250	0.1/0.1
	05/13/03	10.12	8.35	30,000	2,600	1,500	850	4,500	<250	0.4/0.3
	06/13/03	11.00	7.47	33,000	3,400	2,300	1,000	4,400	<500	0.3/0.3
	07/14/03	11.39	7.08	41,000	5,100	3,500	1,400	5,100	<50	0.5/0.5
	09/29/03	12.24	6.23	59,000	6,600	4,200	1,500	6,500	<50	0.6/0.5
	10/29/03	12.45	6.02	45,000	6,800	3,500	1,500	6,400	(21)	0.5/0.3
	01/05/04	9.97	8.50	26,000	4,900	1,700	1,100	3,300	<50	0.9/1.2
	04/01/04	9.43	9.04	29,000	5,300	2,700	880	2,900	<50	0.3/1.0
	07/02/04	11.62	6.85	19,000	5,300	740	1,100	1,400	<50	0.4/0.5
	11/03/04	12.26	6.21	31,000	7,500	2,300	1,400	4,400	<50	2.5/1.9
	01/04/05	9.13	9.34	18,000	3,500	1,200	730	2,300	<25	0.44/1.64
	04/13/05	7.60	10.87	7,000	100	460	180	880	<1.0	0.17/0.45
	07/13/05	10.63	7.84	9,400	2,400	840	440	1,100	<13	0.13/0.27
	10/28/05	12.14	6.33	28,000	16,000	2,900	1,400	3,100	<50	0.3/1.3
	01/17/06	8.52	9.95	6,700	1,200	720	400	1,500	(1.3)	0.6/2.6
	02/23/06	9.22	9.25	--	4,630	1,470	709	2,310	--	--
	03/09/06	7.15	11.32	--	474	90.3	63.3	169	--	--
	04/21/06	5.82	12.65	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	--
	05/01/06	7.23	11.24	779	6.77	41.1	20.0	130	<0.500	0.39/1.52
	06/23/06	10.06	8.41	22,600	2,830	557	469	1,210	<0.500	--
	07/11/06	10.06	8.41	31,100	3,880	2,080	857	3,700	<0.500	--
08/30/06	11.32	7.15	28,200	4,840	1,320	705	2,430	(5.35)	0.47/3.64	
09/29/06	11.81	6.66	94,900	10,100	2,960	1,810	5,310 i	(7.20)	--	
10/13/06	12.01	6.46	48,200	7,710	1,360	1,250	3,460	(5.64)	--	
11/03/06	12.31	6.16	50,600	11,300	1,730	1,250	3,840	<0.500	0.60/4.10	
12/26/06	11.58	6.89	32,000	11,000	780	1,200	2,800	<10	--	
01/11/07	11.61	6.86	35,000	11,000	1,100	1,200	3,100	<50	--	
01/30/07	11.95	6.52	27,000	9,800	610	860	2,400	<50	0.87/0.62	
03/01/07	10.95	7.52	23,000	9,400	640	1,200	3,100	<50	--	
04/26/07	10.69	7.78	48,000 k,l	14,000	1,300	1,600	3,600	<100	--	
06/01/07	11.25	7.22	54,000 k	15,000	2,800	2,200	6,100	<100	0.44/0.87	

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Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)	
<i>(MW-5 cont'd)</i>	06/21/07	11.96	6.51	32,000 k	12,000	1,200	1,400	2,780	<100	--	
	07/03/07	11.81	6.66	41,000 k	15,000	1,800	1,900	4,050	<100	--	
	08/16/07	12.36	6.11	43,000 k,l	13,000	2,000	2,000	4,150	<100	0.6/0.1	
	12/06/07	12.81	5.66	37,000	7,900	640	1,100	1,500	<17	--	
	02/25/08	9.75	8.72	3,000	640	9.7	52	77	20	2.19	
	05/26/08	11.69	6.78	39,000	9,600	1,100	1,400	2,400	<250	1.10/1.52	
	06/27/08				MW-5 drilled out and replaced with MW-5R						
MW-5R	07/02/08	11.91	--	22,000	4,100	710	750	2,300	<250	--	
	08/18/08	12.59	--	27,000	3,100	340	780	2,100	<100	0.57/3.23	
	11/20/08	13.24	--	23,000	5,200	470	1,200	1,500	<250	0.83/2.50	
	02/18/09	11.58	--	32,000	4,500	610	990	1,400	<500	1.04/2.11	
	05/26/09	10.92	--	15,000	3,500	520	680	1,500	<200	0.85/1.05	
	11/23/09	12.92	--	15,000	3,200	350	560	940	<250	0.98/2.30	
	05/26/10	10.51	--	15,000	3,400	310	460	1,300	<350	0.88/0.95	
	12/30/10	10.35	--	11,000	3,400	190	360	620	<250	0.89/1.02	
	<i>18.40</i>	05/23/11	9.98	8.42	7,000	1,000	49	320	190	<150	0.03
		12/27/11	12.92	5.48	9,900	1,100	160	480	740	<250	0.32/0.47
06/30/12		12.15	6.25	3,400	300	53	120	150	<25	2.30	
09/01/12		13.64	4.76	1,200	110	20	51	120	<10	1.94	
09/30/12		13.36	5.04	2,800	360	32	140	52	<50	1.29/1.60	
12/14/12		11.03	7.37	4,100	360	120	150	390	<50	2.11/2.51	
03/24/13		11.18	7.22	1,200	140	7.8	12	7.3	<5.0	1.49/2.68	
07/25/13		12.16	6.24	5,100	320	71	140	450	<50	0.92/1.56	
10/20/13		12.94	5.46	3,600	210	59	62	400	<50	0.80/1.23	
		05/22/14	11.80	6.60	2,800	56	60	69	370	<25	0.37
MW-6	12/03/01	12.19	6.65	--	--	--	--	--	--	--	
	<i>18.84</i>	12/06/01	11.70	7.14	76	5.7	3.8	1.4	7.0	<5.0	6.3/6.1
	01/23/02	9.57	9.27	--	--	--	--	--	--	8.7	
	04/17/02	10.73	8.11	<50	<0.50	<0.50	<0.50	<0.50	<5.0	9.8/9.1	
	07/18/02	12.27	6.57	--	--	--	--	--	--	1.7	
	11/11/02	13.24	5.60	580	55	<0.50	<0.50	2.8	<5.0	0.3/0.6	
	01/16/03	9.89	8.95	--	--	--	--	--	--	6.4	
	03/13/03	10.66	8.18	--	--	--	--	--	--	5.5	
	04/23/03	10.57	8.27	<50	<0.50	<0.50	<0.50	<1.0	<5.0	3.7/4.4	
	05/13/03	10.56	8.28	<50	<0.50	<0.50	<0.50	<1.0	<5.0	3.5/3.0	
	06/13/03	11.48	7.36	<50	<0.50	<0.50	<0.50	<1.0	<5.0	2.7/3.1	
	07/14/03	11.83	7.01	230 b	3.4	<0.50	<0.50	<1.0	<0.50	1.8/1.3	
	09/29/03	12.70	6.14	910 b	46	<2.5	<2.5	<5.0	<2.5	1.1/1.0	
	10/29/03	12.91	5.93	830	38	0.53	<0.50	3.3	(0.60)	1.2/0.9	
	01/05/04	10.35	8.49	93	0.92	<0.50	<0.50	<1.0	<0.50	6.2/4.3	
	04/01/04	9.80	9.04	<50	<0.50	<0.50	<0.50	<1.0	<0.50	3.5/3.4	
	07/02/04	12.09	6.75	370	3.0	<0.50	<0.50	<1.0	<0.50	0.6/1.0	
	11/03/04	12.84	6.00	540	22	0.73	<0.50	1.5	(0.82)	2.28/0.84	
	01/04/05	9.55	9.29	<50	<0.50	<0.50	<0.50	<1.0	<0.50	6.71/5.16	
	04/13/05	7.89	10.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.99/2.87	
	07/13/05	11.13	7.71	170	6.2	1.1	<0.50	<1.0	(0.71)	0.10/1.32	
	10/28/05	12.74	6.10	490	22	<0.50	<0.50	<1.0	<0.50	0.6/0.3	
	01/17/06	8.80	10.04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.3/4.9	
	02/23/06	9.54	9.30	--	<0.500	<0.500	<0.500	<0.500	--	--	
	03/09/06	7.25	11.59	--	<0.500	<0.500	<0.500	<0.500	--	--	
	04/21/06	6.34	12.50	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	--	
	05/01/06	7.32	11.52	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	0.72/0.63	
	06/23/06	10.12	8.72	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	--	
	07/11/06	10.12	8.72	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	--	
	08/30/06	11.79	7.05	<50.0	3.32	<0.500	<0.500	<0.500	<0.500	0.80/0.86	
	09/29/06	12.32	6.52	<50.0	1.59	<0.500	<0.500	<0.500	<0.500	--	
	10/13/06	12.38	6.46	934	3.14	<0.500	<0.500	<0.500	<0.500	--	
	11/03/06	12.77	6.07	112	10.6	<0.500	<0.500	<0.500	<0.500	3.80/1.10	
	12/26/06	12.05	6.79	690	62	<0.50	<0.50	4.5	<0.50	--	

Pangea

Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)	
<i>(MW-6 cont'd)</i>	01/11/07	12.12	6.72	660	11	<0.50	<0.50	2.3	(<0.50)	--	
	01/30/07	12.44	6.40	310	1.5	<0.50	<0.50	<1.0	(<0.50)	1.47/0.81	
	03/01/07	10.97	7.87	360	3.6	<0.50	<0.50	0.87	(<0.50)	--	
	04/26/07	11.18	7.66	210 k	0.72	<1.0	<1.0	<1.0	(<1.0)	--	
	06/01/07	11.72	7.12	640 k	3.1	<1.0	<1.0	0.27 m	(<1.0)	0.69/0.50	
	06/21/07	12.22	6.62	390 k	3.0	<1.0	<1.0	0.17 m	(<1.0)	--	
	07/03/07	12.22	6.62	360 k	3.0	<1.0	0.36 m	1.2	(<1.0)	--	
	08/16/07	12.74	6.10	400 k,l	2.8	<1.0	<1.0	<1.0	(<1.0)	0.4/0.1	
	12/06/07	13.24	5.60	130	<0.5	1.6	<0.5	<0.5	(<0.5)	--	
	02/25/08	10.26	8.58	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.81	
	05/26/08	12.20	6.64	<50	1.1	0.88	<0.5	<0.5	<5.0	6.77/6.59	
	08/18/08	13.10	5.74	160	11	2.4	<0.5	0.57	<5.0	1.13/3.35	
	11/20/08	13.73	5.11	120	1.1	1.7	<0.5	0.68	<5.0	0.98/2.11	
	02/18/09	11.95	6.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.70/1.92	
	05/26/09	11.46	7.38	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.72/1.65	
	11/23/09	13.42	5.42	220	1.3	2.6	<0.5	1.0	<15	0.91/1.51	
	05/26/10	11.04	7.80	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.82/1.49	
	12/30/10	10.83	8.01	150	0.73	2.4	<0.5	<0.5	<5.0	1.02/2.19	
	05/23/11	10.50	8.34	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.93	
	12/27/11	13.42	5.42	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.58/0.64	
06/30/12	11.74	7.10	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.47		
09/01/12	13.52	5.32	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.50		
09/30/12	13.60	5.24	--	--	--	--	--	--	1.73/1.98		
10/30/12	13.48	5.36	<50	1.1	<0.5	<0.5	3.5	<5.0	2.04/3.24		
12/14/12	11.13	7.71	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.29/1.90		
03/24/13	11.72	7.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.17/1.85		
07/25/13	12.69	6.15	63	<0.5	1.2	<0.5	<0.5	<5.0	1.21/1.90		
10/20/13	13.38	5.46	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.05/1.74		
07/03/14				Unable to locate							
MW-7 19.20	12/03/01	12.66	6.54	--	--	--	--	--	--	--	
	12/06/01	12.20	7.00	1,800	390	<2.0	6.2	<2.0	(<20)	3.9/3.8	
	01/23/02	10.00	9.20	--	--	--	--	--	--	9.4	
	04/17/02	11.21	7.99	<50	<0.50	<0.50	<0.50	<0.50	(<5.0)	8.8/7.3	
	07/18/02	12.69	6.51	--	--	--	--	--	--	0.8	
	11/11/02	13.69	5.51	3,000	190	<0.50	<0.50	4.3	(5.2)	0.4/0.8	
	01/16/03	10.36	8.84	--	--	--	--	--	--	7.9	
	03/13/03	11.16	8.04	--	--	--	--	--	--	5.2	
	04/23/03	11.02	8.18	250	48	<0.50	<0.50	<1.0	(<5.0)	3.2/1.3	
	05/13/03	11.00	8.20	1,700	550	<2.5	<2.5	<5.0	(<25)	2.0/1.5	
	06/13/03	11.90	7.30	1,500 b	470	<2.5	<2.5	<5.0	(<25)	1.8/1.6	
	07/14/03	12.29	6.91	1300 b	1,200	<10	<10	<20	(<10)	0.4/0.2	
	09/29/03	13.12	6.08	5,200	1,200	<10	<10	<20	(<10)	0.9/0.9	
	10/29/03	13.34	5.86	4,800	1,100	<5.0	<5.0	<10	(8.9)	0.4/0.3	
	01/05/04	10.85	8.35	53	6.7	<0.50	<0.50	<1.0	(<0.50)	1.4/2.3	
	04/01/04	10.28	8.92	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	5.5/6.2	
	07/02/04	12.48	6.72	8,100 d	3,400	<25	<25	<50	(<25)	0.8/0.8	
	11/03/04	13.25	5.95	3,700	1,200	<5.0	<5.0	<10	(<5.0)	1.9/0.8	
	01/04/05	10.02	9.18	<50	2.0	<0.50	<0.50	<1.0	(<0.50)	6.31/5.71	
	04/13/05	8.46	10.74	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	5.87/5.89	
07/13/05	11.57	7.63	1,100	380	9.2	<2.5	37	(<2.5)	0.30/0.33		
10/28/05	13.15	6.05	5,100	2,900	<13	<13	<25	(<13)	0.6/0.9		
01/17/06	9.30	9.90	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	6.4/7.4		
02/23/06	10.03	9.17	--	<0.500	<0.500	<0.500	<0.500	--	--		
03/09/06	7.70	11.50	--	<0.500	<0.500	<0.500	<0.500	--	--		
04/21/06	6.66	12.54	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.500)	--		
05/01/06	7.72	11.48	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.500)	0.67/0.98		
06/23/06	10.55	8.65	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.500)	--		
07/11/06	10.55	8.65	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.500)	--		
08/30/06	12.35	6.85	1,520	150	13.3	5.78	53.0	(0.640)	0.52/0.79		
09/29/06	12.66	6.54	2,420	384	1.80	<0.500	5.44	(0.850)	--		

see note n

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Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
<i>(MW-7 cont'd)</i>	10/13/06	12.85	6.35	5,980	549	0.540	0.680	11.7	(0.930)	--
	11/03/06	13.73	5.47	3,190	501	<0.500	<0.500	5.38	(0.560)	2.2/1.4
	12/26/06	12.51	6.69	4,600	570	<0.50	44	2.1	(<0.50)	--
	01/11/07	12.55	6.65	3,900	490	<2.5	46	<5.0	(<2.5)	--
	01/30/07	12.89	6.31	2,500	380	<2.5	40	<5.0	(<2.5)	1.37/0.90
	03/01/07	11.45	7.75	2,600	350	<2.5	35	3.5	(<2.5)	--
	04/26/07	11.62	7.58	2,300 k	290	<5.0	31	1.3 m	(<5.0)	--
	06/01/07	12.23	6.97	4,400 k	350	<2.0	19	<2.0	(1.1 m)	0.04/0.71
	06/21/07	12.67	6.53	2,600 k	260	<2.0	12	<2.0	(1.4 m)	--
	07/03/07	12.76	6.44	1,700 k	170	<1.0	7.7	0.86 m	(<1.0)	--
	08/16/07	13.20	6.00	1,900 k	44	<1.0	<1.0	<1.0	(<1.0)	0.5/1.1
	12/06/07	13.73	5.47	510	21	3.1	5.8	14	(1.2)	--
	02/25/08	10.65	8.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.11
	05/26/08	12.62	6.58	600	190	2.3	<0.5	<0.5	<35	1.31/3.52
	08/18/08	13.52	5.68	540	71	2.7	<0.5	0.85	<25	1.12/4.75
	11/20/08	14.14	5.06	160	2.2	1.3	<0.5	<0.5	<10	1.46/2.90
	02/18/09	12.48	6.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.08/2.70
	05/26/09	11.90	7.30	<50	2.8	0.60	<0.5	<0.5	<5.0	1.02/1.77
	11/23/09	13.85	5.35	230	3.8	3.5	<0.5	<0.5	<30	1.08/2.14
	05/26/10	11.46	7.74	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.88/1.61
	12/30/10	11.18	8.02	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.91/1.7
	05/23/11	8.98	10.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.91
	12/27/11	13.84	5.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.81/2.02
	06/30/12	12.29	6.91	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.92
	09/30/12	14.15	5.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.46/2.70
	12/14/12	11.61	7.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.90/2.25
03/24/13	12.15	7.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.80/1.97	
07/25/13	13.07	6.13	<50	0.65	<0.5	<0.5	<0.5	<5.0	1.68/2.04	
10/20/13	13.82	5.38	160	0.79	1.2	<0.5	<0.5	<10	1.19/1.95	
	05/22/14	12.75	6.45	<50	<0.5	0.73	<0.5	<0.5	<5.0	2.35/4.21
VW/MW-2 <i>18.30</i>	03/25/96	9.04	9.26	13,000	900	920	180	1,500	<250	--
	06/21/96	10.48	7.82	27,000	4,100	1,100	1,400	3,200	700	--
	09/26/96	12.52	5.78	27,000	5,300	1,900	980	2,200	<500	--
	09/26/96	12.52	5.78	29,000	5,800	2,200	1,100	2,500	<250	--
	12/19/96	12.42	5.88	50,000	6,200	5,100	1,700	5,600	590	--
	03/25/97	9.83	8.47	210	5.6	<0.50	0.52	<0.50	14	2.0
	03/25/97	9.83	8.47	250	1.7	0.58	0.51	<0.50	4.7	2.0
	06/26/97	12.43	5.87	--	--	--	--	--	--	'--
	09/26/97	12.98	5.32	--	--	--	--	--	--	0.9
	12/05/97	12.20	6.10	--	--	--	--	--	--	0.4
	02/19/98	5.83	12.47	<50	1.5	<0.50	<0.50	0.71	<2.5	3.6
	06/08/98	5.80	12.50	--	--	--	--	--	--	1.0
	08/25/98	11.72	6.58	--	--	--	--	--	--	4.8
	12/28/98	11.69	6.61	--	--	--	--	--	--	2.7
	03/26/99	8.75	9.55	--	--	--	--	--	--	2.8
	06/30/99	10.72	7.58	--	--	--	--	--	--	4.7
	09/30/99	12.24	6.06	--	--	--	--	--	--	4.9
	12/27/99	13.92	4.38	13,500	1,330	1,310	490	1,400	<250	2.1/1.9
	01/21/00	13.26	5.04	12,100	2,200	1,080	429	1,120	<250	2.8
	03/07/00	7.87	10.43	--	--	--	--	--	--	3.7
	04/17/00	9.65	8.65	--	--	--	--	--	--	3.7/4.1
	04/18/00	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--
	09/21/00	12.75	5.55	--	--	--	--	--	--	6.2
	10/17/00	12.21	6.09	4,070	763	589	214	501	<50.0	0.8/0.7
	01/09/01	12.51	5.79	--	--	--	--	--	--	0.7
	04/27/01	10.21	8.09	80	5.7	<0.50	2.7	4.9	(<0.50)	2.3/2.8
07/03/01	11.60	6.70	--	--	--	--	--	--	0.6	
12/06/01	11.15	7.15	160	1.7	1.0	1.8	4.6	(<5.0)	3.7/2.3	
01/23/02	9.07	9.23	--	--	--	--	--	--	0.5	
04/17/02	10.11	8.19	<50	2.1	<0.50	<0.50	<0.50	(<5.0)	4.9/4.4	

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Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
<i>(VW/MW-2 cont'd)</i>	07/18/02	11.61	6.69	--	--	--	--	--	--	0.9
	11/11/02	12.63	5.67	15,000	1,300	1,300	680	1,800	(<5.0)	0.2/0.2
	01/16/03	9.35	8.95	--	--	--	--	--	--	0.4
	03/13/03	10.09	8.21	--	--	--	--	--	--	0.8
	04/07/03	10.09	8.21	--	--	--	--	--	--	--
	04/23/03	9.95	8.35	1,100	76	29	45	66	(<5.0)	0.8/0.3
	05/13/03	9.90	8.40	1,200	38	16	16	24	(<5.0)	0.2/0.2
	06/13/03	10.80	7.50	9,600	1,300	1,100	440	890	(<250)	0.2/0.5
	07/14/03	11.20	7.10	11,000	1,300	1,800	430	1,500	(<5.0)	0.5/0.5
	09/29/03	12.05	6.25	12,000	860	980	410	1,100	(<10)	0.4/0.4
	10/29/03	12.29	6.01	12,000	1,100	940	530	1,200	(<10)	0.7/0.3
	01/05/04	9.82	8.48	190 b	<0.50	<0.50	<0.50	<1.0	(<0.50)	2.8/1.8
	04/01/04	9.24	9.06	410	1.4	0.54	1.6	1.0	(<0.50)	1.7/0.1
	07/02/04	11.33	6.97	5,500	440	370	170	410	(<2.5)	0.5/0.4
	11/03/04	12.14	6.16	3,800	260	210	150	600	(<2.5)	0.9/1.4
	01/04/05	9.03	9.27	280	5.8	20	7.8	26	(<0.50)	1.66/2.66
	04/13/05	7.38	10.92	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	0.79/0.58
	07/13/05	10.45	7.85	350	19	9.3	9.8	14	(<0.50)	0.10/0.08
	10/28/05	11.98	6.32	3,400	440	350	150	320	(<2.5)	0.4/0.1
	01/17/06	8.34	9.96	700	3.1	5.1	7.7	66	(<0.50)	2.7/1.6
	02/23/06	9.42	8.88	--	97.9	17.2	40.0	80.6	--	--
	03/09/06	7.35	10.95	--	<0.500	29.2	57.8	486	--	--
	04/21/06	5.99	12.31	<50.0	<0.500	0.960	<0.500	2.71	(<0.500)	--
	05/01/06	7.25	11.05	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.500)	0.43/0.10
	06/23/06	10.05	8.25	3,150	35.6	9.24	20.7	113	(<0.500)	--
	07/11/06	10.05	8.25	9,270	413	78.2	91.5	341	(2.40)	--
	08/30/06	11.12	7.18	4,900	135	45.5	73.3	180	(2.40)	0.37/0.62
	09/29/06	11.61	6.69	12,300	243	142	290	634	(2.50)	--
	10/13/06	12.01	6.29	19,300	292	169	384	1,080	(1.84)	--
	11/03/06	12.12	6.18	9,300	655	233	366	729	(4.15)	2.0/1.05
	12/26/06	11.41	6.89	2,600	61	50	74	250	(<0.50)	--
	01/11/07	11.45	6.85	5,200	160	190	170	570	(<0.50)	--
	01/30/07	12.21	6.09	2,200	160	20	84	200	(<2.5)	1.37/0.79
	03/01/07	10.40	7.90	520	0.50	0.53	3.3	15	(<0.50)	--
	04/26/07	10.51	7.79	5,700 k	220	140	170	420	(<2.0)	--
	06/01/07	11.00	7.30	4,300 k	150	150	140	380	(<2.0)	0.36/0.23
	06/21/07	11.78	6.52	9,000 k	540	500	350	870	(1.8 m)	--
	07/03/07	11.64	6.66	4,500 k	230	160	160	440	(<5.0)	--
	08/16/07	12.12	6.18	8,800 k	550	520	430	1,020	(<5.0)	0.3/0.1
	12/06/07	12.43	5.87	2,600	110	84	64	180	(2.4)	--
	02/25/08	9.55	8.75	620	100	4.1	4.9	2.0	<5.0	2.48
	05/26/08	11.53	6.77	7,200	350	200	220	510	<100	1.52/0.99
	08/18/08	12.45	5.85	7,000	420	160	180	460	<100	0.70/0.67
	11/20/08	13.09	5.21	3,400	86	84	75	230	<50	0.93/1.47
	02/18/09	11.35	6.95	1,400	3.5	16	7.2	28	<15	0.77/1.18
	05/26/09	10.76	7.54	1,000	9.5	26	17	56	<5.0	0.84/1.19
	11/23/09	12.77	5.53	270	2.7	5.0	1.5	3.5	<5.0	0.81/2.49
	05/26/10	10.36	7.94	490	3.5	12	4.3	23	<5.0	0.69/0.94
	12/30/10	10.11	8.19	180	0.75	4.0	1.2	4.8	<5.0	0.79/1.02
	05/23/11	9.83	8.47	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.68
	12/27/11	12.78	5.52	280	3.1	6.2	1.5	1.4	<10	0.72/0.77
	06/30/12	10.63	7.67	<50	<0.5	0.54	<0.5	3.1	<5.0	4.41
	09/30/12	13.35	4.95	<50	0.57	<0.5	<0.5	<0.5	<5.0	2.02/1.90
	12/14/12	10.90	7.40	110	<0.5	2.1	<0.5	0.96	<5.0	1.48/1.72
	03/24/13	11.10	7.20	--	--	--	--	--	--	--
	07/25/13	12.03	6.27	--	--	--	--	--	--	--
	10/20/13	12.80	5.50	--	--	--	--	--	--	--
	05/22/14	11.64	6.66	<50	<0.5	0.91	<0.5	<0.5	<5.0	0.49/1.03

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Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
VW/MW-4 18.14	03/25/96	8.45	9.69	83,000	6,500	7,000	2,000	11,000	<250	--
	03/25/96	8.45	9.69	84,000	6,400	7,000	2,100	12,000	<250	--
	06/21/96	10.38	7.76	110,000	14,000	15,000	3,700	17,000	1,700	--
	06/21/96	10.38	7.76	100,000	12,000	12,000	2,900	13,000	<1,000	--
	09/26/96	12.43	5.71	52,000	13,000	2,700	2,100	3,200	<500	--
	12/19/96	11.87	6.27	75,000	15,000	6,600	3,000	7,600	<1,250	--
	03/25/97	9.60	8.54	56,000	4,700	1,500	2,500	6,300	580	2.4
	06/26/97	12.36	5.78	--	--	--	--	--	--	--
	09/26/97	12.82	5.32	--	--	--	--	--	--	0.4
	12/05/97	12.15	5.99	--	--	--	--	--	--	0.3
	02/19/98	5.85	12.29	4,100	320	40	44	520	<50	1.8
	02/19/98	5.85	12.29	4,300	340	44	47	540	<50	1.8
	06/08/98	5.87	12.27	--	--	--	--	--	--	1.8
	08/25/98	10.96	7.18	--	--	--	--	--	--	2.5
	12/28/98	11.28	6.86	--	--	--	--	--	--	0.9
	03/26/99	8.45	9.69	--	--	--	--	--	--	1.9
	06/30/99	9.70	8.44	--	--	--	--	--	--	3.6
	09/30/99	11.78	6.36	--	--	--	--	--	--	2.6
	12/27/99	12.63	5.51	33,900	3,740	2,000	1,130	5,090	587	0.4/0.2
	01/21/00	13.07	5.07	13,900	1,560	568	227	1,990	<500(21.0a)	1.0
	03/07/00	7.82	10.32	--	--	--	--	--	--	0.9
	04/17/00	9.18	8.96	--	--	--	--	--	--	1.4/1.9
	04/18/00	--	--	757	103	8.59	30.8	84.2	<25.0	--
	09/21/00	12.18	5.96	--	--	--	--	--	--	5.0
	10/17/00	12.03	6.11	8,360	2,060	391	468	1,170	147	0.7/0.8
	01/09/01	12.42	5.72	--	--	--	--	--	--	0.9
	04/27/01	10.13	8.01	7,100	2,300	50	460	250	(<10)	1.0/1.4
	07/03/01	11.42	6.72	--	--	--	--	--	--	1.2
	12/06/01	11.02	7.12	7,700	750	90	300	350	(<25)	2.5/1.9
	01/23/02	8.89	9.25	--	--	--	--	--	--	0.4
	04/17/02	9.89	8.25	4,800	760	27	240	150	(<25)	4.7/5.1
	07/18/02	11.37	6.77	--	--	--	--	--	--	0.6
	11/11/02	12.41	5.73	14,000	2,800	480	700	1,300	(<100)	0.3/0.3
	01/16/03	9.17	8.97	--	--	--	--	--	--	0.8
	03/13/03	9.85	8.29	--	--	--	--	--	--	1.1
	04/23/03	9.74	8.40	2,400	710	28	160	100	(<50)	0.2/0.05
05/13/03	9.70	8.44	3,300	720	35	170	160	(<50)	0.2/0.2	
06/13/03	10.55	7.59	8,200	1,700	220	460	790	(<250)	0.3/0.3	
07/14/03	10.90	7.24	3,700	900	190	220	540	(<10)	0.5/0.4	
09/29/03	11.83	6.31	7,500	1,800	300	390	860	(<20)	0.5/0.6	
10/29/03	12.03	6.11	10,000	2,600	400	510	1,200	(<13)	0.5/0.4	
01/05/04	9.60	8.54	1,000	70	12	30	56	(<1.0)	1.7/1.2	
04/01/04	9.00	9.14	1,000	64	7.0	22	18	(<1.0)	0.6/0.1	
07/02/04	11.00	7.14	5,600	1,500	57	380	180	(<10)	0.4/0.4	
11/03/04	11.85	6.29	9,400	2,400	210	560	890	(<10)	1.5/2.1	
01/04/05	8.89	9.25	110	12	<0.50	2.3	<1.0	(<0.50)	2.40/1.05	
04/13/05	7.25	10.89	<50	<0.50	<0.50	<0.50	<0.50	(<0.50)	1.55/0.52	
07/13/05	10.20	7.94	1,300	520	5.1	100	17	(<2.5)	0.08/0.08	
10/28/05	11.84	6.30	2,500	830	44	170	140	(5.4)	0.6/0.2	
01/17/06	8.05	10.09	<50	<0.50	<0.50	0.56	<0.50	(<0.50)	2.7/0.6	
02/23/06	8.77	9.37	--	1.42	0.930	0.580	<0.500	--	--	
03/09/06	6.75	11.39	--	<0.500	<0.500	<0.500	0.680	--	--	
04/21/06	5.69	12.45	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.500)	--	
05/01/06	6.65	11.49	<50.0	<0.500	<0.500	<0.500	<0.500	(<0.500)	0.51/0.37	
06/23/06	9.22	8.92	920	8.69	1.32	5.63	9.68	(<0.500)	--	
07/11/06	9.22	8.92	<50.0	109	<0.500	3.91	<0.500	(<0.500)	--	
08/30/06	10.87	7.27	2,360	331	12.8	65.4	29.3	(2.64)	0.24/0.56	
09/29/06	11.40	6.74	5,920	327	23.2 i	146	112 i	(2.63)	--	
10/13/06	11.53	6.61	6,560	299	16.6	134	90.4	(3.58)	--	
11/03/06	11.87	6.27	3,530	212	9.14	87.8	52.8	(5.11)	2.60/4.0	
12/26/06	11.17	6.97	960	43	1.0	17	2.7	(<0.50)	--	

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Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
<i>(VW/MW-4 cont'd)</i>	01/11/07	11.18	6.96	830	86	1.8	41	3.9	(1.40)	--
	01/30/07	11.53	6.61	2,100	450	15	99	46	(3.0)	1.13/0.91
	03/01/07	10.00	8.14	700	4.8	<0.50	1.8	0.77	(<0.50)	--
	04/26/07	10.26	7.88	930 k	84	5.2	21	9.5	(<1.0)	--
	06/01/07	10.80	7.34	2,000 k	340	7.6	58	17.6	(1.7 m)	0.46/0.42
	06/21/07	11.32	6.82	1,400 k	360	9.7	46	26.1	(2.2)	--
	07/03/07	11.39	6.75	2,700 k	650	24	91	65	(<2.0)	--
	08/16/07	11.87	6.27	1,400 k	240	8.8	32	42.3	(<5.0)	0.3/0.1
	12/06/07	12.40	5.74	3,600	480	16	39	29	(3.5)	--
	02/25/08	9.39	8.75	56	22	<0.5	<0.5	0.50	<5.0	4.61
	05/26/08	11.27	6.87	650	76	7.9	4.9	<0.5	<5.0	0.95/0.96
	08/18/08	12.23	5.91	2,700	540	28	28	71	<25	0.78/0.79
	11/20/08	12.87	5.27	2,000	390	19	13	49	<50	1.17/0.95
	02/18/09	11.29	6.85	850	17	11	3.6	25	<15	0.82/1.02
	05/26/09	10.55	7.59	540	16	11	1.3	1.1	<10	0.81/1.06
	11/23/09	12.55	5.59	1,200	200	12	3.5	12	<5.0	0.84/1.66
	05/26/10	10.15	7.99	410	26	6.3	2.3	3.7	<5.0	0.77/0.84
	12/30/10	9.96	8.18	520	14	8.7	2.3	2.4	<5.0	0.8/1.26
	05/23/11	9.91	8.23	150	33	2.2	3.4	2.1	<5.0	0.50
	12/27/11	12.57	5.57	460	24	4.0	0.99	<0.5	<5.0	0.61
	06/30/12	11.01	7.13	3,400	640	42	39	190	<50	1.29
	09/30/12	13.10	5.04	4,100	1,000	39	130	250	<50	1.06/1.24
	12/14/12	10.71	7.43	2,200	33	23	0.62	190	<25	0.75/1.02
03/24/13	10.84	7.30	1,800	140	11	27	76	<50	0.41/1.35	
07/25/13	11.80	6.34	2,800	480	31	79	180	<90	1.08/1.96	
10/20/13	12.61	5.53	1,400	250	8.5	25	63	<50	1.18/2.06	
05/22/14	11.40	6.74	6.74	590	38	3.6	14	38	<5.0	0.27/0.81
VW/AS-1 <i>18.60</i>	03/25/96	8.98	9.62	--	--	--	--	--	--	--
	06/21/96	10.95	7.65	--	--	--	--	--	--	--
	09/26/96	12.98	5.62	--	--	--	--	--	--	--
	12/19/96	12.67	5.93	--	--	--	--	--	--	--
	03/25/97	10.12	8.48	--	--	--	--	--	--	--
	06/26/97	12.34	6.26	--	--	--	--	--	--	--
	09/26/97	13.40	5.20	--	--	--	--	--	--	--
	12/05/97	11.96	6.64	--	--	--	--	--	--	5.2
	02/19/98	6.22	12.38	--	--	--	--	--	--	1.3
	06/08/98	6.20	12.40	--	--	--	--	--	--	1.0
	08/25/98	11.59	7.01	--	--	--	--	--	--	1.6
	12/28/98	11.74	6.86	--	--	--	--	--	--	1.3
	03/26/99	9.20	9.40	--	--	--	--	--	--	1.3
	06/30/99	11.08	7.52	--	--	--	--	--	--	2.1
	09/30/99	11.94	6.66	--	--	--	--	--	--	1.9
	12/27/99	11.01	7.59	8,940	2,000	95.7	1,200	570	606	1.6/1.8
	03/07/00	7.35	11.25	--	--	--	--	--	--	--
	04/17/00	9.08	9.52	--	--	--	--	--	--	1.9/2.0
	04/18/00	--	--	20,800	6,550	1,220	2,270	1,720	<250	--
	09/21/00	11.98	6.62	--	--	--	--	--	--	2.1
	10/17/00	12.62	5.98	38,400	7,240	5,980	1,960	5,730	534(72.4)	2.5/1.0
	01/09/01	13.03	5.57	--	--	--	--	--	--	1.9
	04/27/01	10.71	7.89	34,000	8,000	2,100	2,500	2,000	(<25)	2.9/2.1
07/03/01	12.03	6.57	--	--	--	--	--	--	2.0	
12/06/01	11.63	6.97	6,000	990	35	820	59	(<25)	1.2/0.8	
01/23/02	9.34	9.26	--	--	--	--	--	--	0.9	
04/17/02	10.41	8.19	12,000	2,900	57	1,400	98	(<200)	3.3/2.9	
07/18/02	12.13	6.47	--	--	--	--	--	--	0.3	
11/11/02	13.15	5.45	2,200	340	7.3	250	24	(<20)	1.2/1.3	
01/16/03	9.73	8.87	--	--	--	--	--	--	2.3	
03/13/03	10.45	8.15	11,000	2,500	55	1,800	170	(<100)	2.1/1.9	

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Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)	
<i>(VW/AS-1 cont'd)</i>	04/07/03	10.40	8.20	--	--	--	--	--	--	--	
	04/23/03	10.28	8.32	9,500	4,100	200	1,400	200	(<250)	1.2/0.4	
	05/13/03	10.26	8.34	9,700	2,300	110	1,100	140	(<250)	0.5/2.0	
	06/13/03	11.15	7.45	9,300	2,300	77	820	<100	(<500)	1.0/0.5	
	07/15/03	11.62	6.98	5,500	2,000	230	620	360	(20)	1.8/1.9	
	09/29/03	12.48	6.12	9,600	2,300	100	1,200	670	(<20)	2.3/3.6	
	10/29/03	12.73	5.87	10,000	2,000	39	1,000	370	(16)	3.3/3.6	
	01/05/04	10.25	8.35	2,000	710	18	410	18	(13)	3.0/2.8	
	04/01/04	9.60	9.00	27,000	9,100	1,200	2,200	1,400	(<50)	1.0/1.4	
	07/02/04	11.80	6.80	18,000	6,500	170	1,200	1,200	(<50)	3.2/0.8	
	11/03/04	12.56	6.04	4,500	1,700	23	280	55	(9.8)	1.7/1.9	
	01/04/05	9.50	9.10	7,500	2,500	74	540	110	(<13)	1.19/0.53	
	04/13/05	7.84	10.76	34,000	6,600	290	930	2,100	(<15)	1.60/1.88	
	07/13/05	10.90	7.70	--	--	--	--	--	--	--	
	07/22/05	10.96	7.64	8,200	5,900	86	340	320	(<25)	1.7/1.0	
	10/28/05	12.30	6.30	2,100	1,300	18	63	21	(<5.0)	0.5/1.6	
	01/17/06	8.65	9.95	6,200 g	2,900	190	400	600	(4.70)	1.4/1.0	
	02/23/06	9.33	9.27	--	3,080	222	414	778	--	--	
	03/09/06	7.40	11.20	--	1,350	88.5	128	164	--	--	
	04/21/06	6.44	12.16	18,200	4,460	167	419	717	(2.79)	--	
	05/01/06	7.22	11.38	19,700	5,300	261	664	1,050	(<0.500)	0.71/1.23	
	06/23/06	9.73	8.87	20,600	3,820	305	259	435	(3.31 h)	--	
	07/11/06	9.73	8.87	9,130	6,200	108	232	254	(<0.500)	--	
	08/30/06	11.60	7.00	164,000	3,190	6,240	3,780	17,900	(<10.0)	0.4	
	09/29/06	11.97	6.63	130,000	6,160	6,370 i	2,910	11,600 i	(<25.0)	--	
	10/13/06	12.18	6.42	144,000	6,320	5,710	2,930	13,100	(1.03)	--	
	11/03/06	12.21	6.39	112,000	8,290	5,670	2,760	12,100	(<0.500)	0.80	
	12/26/06	11.74	6.86	94,000	6,900	5,100	3,100	13,000	(<50)	--	
	01/11/07	11.83	6.77	73,000	6,600	5,500	3,000	12,000	(<50)	--	
	01/30/07	12.12	6.48	54,000	6,800	4,500	2,200	8,800	(<50)	1.16/1.16	
	03/01/07	10.71	7.89	52,000	6,300	3,700	3,400	12,000	(<50)	--	
	04/26/07	10.84	7.76	72,000 k	7,200	4,500	3,000	10,900	(<50)	--	
	06/01/07	11.40	7.20	70,000 k	7,600	4,900	3,200	12,100	(<50)	0.60/1.09	
	06/21/07	11.92	6.68	59,000 k	7,300	3,700	3,200	12,100	(<50)	--	
	07/03/07	11.98	6.62	70,000 k	8,800	4,700	3,500	13,500	(<50)	--	
	08/16/07	12.53	6.07	67,000 k	9,000	5,500	3,900	14,200	(<50)	0.2/0.1	
	12/06/07	12.97	5.63	180,000	9,500	5,000	4,100	16,000	(<17)	--	
	02/25/08	9.84	8.76	47,000	3,500	1,200	1,500	4,400	<350	2.39	
	05/26/08	11.88	6.72	82,000	8,100	3,000	3,100	12,000	<500	1.65/1.05	
	06/27/08			VW/AS-1 drilled out and replaced with AS-1							
VW/AS-2	03/09/06	6.95	--	--	--	--	--	--	--	--	
VW/AS-3	03/25/96	8.50	9.67	--	--	--	--	--	--	--	
<i>18.17</i>	06/21/96	10.42	7.75	--	--	--	--	--	--	--	
	09/26/96	12.49	5.68	--	--	--	--	--	--	--	
	12/19/96	12.28	5.89	--	--	--	--	--	--	--	
	03/25/97	9.61	8.56	--	--	--	--	--	--	--	
	06/26/97	11.80	6.37	--	--	--	--	--	--	--	
	09/26/97	12.89	5.28	--	--	--	--	--	--	--	
	12/05/97	11.38	6.79	--	--	--	--	--	--	1.8	
	02/19/98	6.24	11.93	--	--	--	--	--	--	1.3	
	06/08/98	6.25	11.92	--	--	--	--	--	--	1.2	
	08/25/98	11.43	6.74	--	--	--	--	--	--	1.3	
	12/28/98	11.63	6.54	--	--	--	--	--	--	1.7	
	03/26/99	8.92	9.25	--	--	--	--	--	--	1.5	
	06/30/99	10.71	7.46	--	--	--	--	--	--	2.5	
	09/30/99	11.78	6.39	--	--	--	--	--	--	1.5	
	12/27/99	12.57	5.60	488	47.9	2.60	16.9	8.50	35.4	1.5/2.1	

Pangea

Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
<i>(VW/AS-3 cont'd)</i>	03/07/00	4.82	13.35	--	--	--	--	--	--	--
	04/17/00	8.69	9.48	--	--	--	--	--	--	2.0/2.4
	04/18/00	--	--	3,110	871	<5.00	141	56.8	78.2	--
	09/21/00	11.65	6.52	--	--	--	--	--	--	2.5
	10/17/00	12.13	6.04	7,730	2,700	<50.0	542	344	<250(42.1)	1.6/1.0
	01/09/01	12.51	5.66	--	--	--	--	--	--	2.2
	04/27/01	10.20	7.97	14,000	3,900	62	690	560	(46)	2.8/1.6
	07/03/01	11.55	6.62	--	--	--	--	--	--	2.6
	12/06/01	11.10	7.07	5,000	1,200	19	380	320	(<50)	0.9/1.1
	01/23/02	8.93	9.24	--	--	--	--	--	--	1.1
	04/17/02	10.00	8.17	17,000	5,000	<25	1,100	390	(<250)	3.2/3.2
	07/18/02	11.49	6.68	--	--	--	--	--	--	0.4
	11/11/02	12.43	5.74	1,700	290	1.5	150	2.8	(<10)	1.0/1.1
	01/16/03	9.32	8.85	--	--	--	--	--	--	4.7
	03/13/03	9.88	8.29	--	--	--	--	--	--	2.7
	04/23/03	9.85	8.32	150	47	0.67	8.5	3.2	(<5.0)	2.1/0.7
	05/13/03	9.81	8.36	440	35	<0.50	1.7	<1.0	(<5.0)	1.4/1.8
	06/13/03	10.77	7.40	580	71	<2.5	40	<5.0	(<25)	1.1/0.6
	07/14/03	11.12	7.05	1,100	120	4.9	63	9.3	(16)	2.0/2.2
	09/29/03	12.02	6.15	160	54	2.2	6.9	8.7	(1.1)	4.1/1.6
	10/29/03	12.25	5.92	350	16	<0.50	1.1	<1.0	(6.3)	3.2/1.6
	01/05/04	9.74	8.43	2,700	870	39	130	250	(5.5)	3.6/2.8
	04/01/04	9.06	9.11	1,300	240	4.1	36	45	(12.0)	1.1/1.0
	07/02/04	11.29	6.88	610	59	<1.0	3.6	<2.0	(10.0)	2.0/2.2
	11/03/04	12.02	6.15	200	<0.50	<0.50	<0.50	<1.0	(10.0)	2.1/2.3
	01/04/05	8.99	9.18	2,500	730	42	36	190	(<10)	1.72/1.36
	04/13/05	7.25	10.92	<50	1.6	<0.50	<0.50	<0.50	(0.61)	2.85/3.04
	07/13/05	10.30	7.87	--	--	--	--	--	--	--
	07/22/05	10.51	7.66	160	36	0.65	<0.50	2.5	(2.60)	1.4/1.3
	10/28/05	11.93	6.24	100	<0.50	<0.50	<0.50	<1.0	(1.70)	1.6/0.9
	01/17/06	8.25	9.92	1,400	510	29	16	47	(5.40)	1.9/0.8
	04/21/06	6.06	12.11	--	--	--	--	--	--	--
	05/01/06	6.83	11.34	1,350	74.4	<0.500	12.5	0.520	(3.30)	1.35/0.78
	08/30/06	11.00	7.17	940	77.7	2.67	2.94	5.57	(3.45)	0.80/0.98
	09/29/06	11.30	6.87	--	--	--	--	--	--	--
	11/03/06	12.29	5.88	346 j	83.6 j	5.17 j	2.34 j	13.5 j	(3.47 j)	1.10/0.80
	01/30/07	12.59	5.58	130	13	0.64	<0.50	7.2	(3.4)	0.76/0.64
	06/01/07	10.82	7.35	2,200 k	650	13	3.2 m	143	(7.8)	1.21/0.93
	08/16/07	11.95	6.22	1,000 k	200	4.0	1.1	47.7	(3.3)	0.8/0.2
	12/06/07	12.43	5.74	<50	<0.5	<0.5	<0.5	<0.5	(<0.5)	--
	02/25/08	9.40	8.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.14
	05/26/08	11.20	6.97	1,800	260	6.0	4.3	35	<17	0.86/4.39
	6/26/2008					Well Destroyed				

Pangea

Table 1. Groundwater Elevation and Analytical Data - Saberi, 1230 14th Street, Oakland, CA

Well ID	Date Measured	DTW (feet)	GWE (feet) (MSL)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Dissolved Oxygen (mg/L)
---------	---------------	------------	------------------	-------------	----------------	----------------	---------------------	----------------	-------------	-------------------------

Notes:

- a = Sample was analyzed outside of the EPA recommended holding time.
 - b = Hydrocarbon reported does not match the pattern of the laboratory's standard.
 - c = Top of casing change due to maintenance.
 - d = Sample contains discrete peak in addition to gasoline.
 - e = Quantity of unknown hydrocarbon(s) in sample based on gasoline.
 - f = The concentration reported reflects individual or discrete unidentified peaks not matching a typical fuel pattern.
 - g = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
 - h = Secondary ion abundances were outside method requirements. Identification based on a'-lytical judgement.
 - i = Analyte was detected in the associated Method Blank.
 - j = pH>2
 - k = Analyzed by EPA Method 8015B (M).
 - l = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
 - m = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
 - n = MW-6 sample analysis from 9/30/12 not listed due to anomalous results; re-sampled 10/30/12 to confirm anomalous results and concentrations from 10/30 are representative.
 - o = CTAS/Non-ionic Surfactants by EPA Method 5540D detected at 1,800 µg/L (BOC).
- Site surveyed November 1, 2001 by Virgil Chavez Land Surveying of Vallejo, CA.
 Site remediation wells surveyed March 21, 2011 by Virgil Chavez Land Surveying of Vallejo, CA.
 TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015C.
 Benzene, Toluene, Ethylbenzene, and Xylenes by EPA Method 8260B from April 27, 2001 through August 16, 2007. Concentrations prior to April 27, 2001 and after August 16, 2007 by EPA Method 8021B.
 MTBE = Methyl tert-butyl ether by EPA Method 8021B, concentrations in parentheses by EPA Method 8260B
 -- = Not applicable
 ug/L = micrograms per liter (Parts per billion)
 mg/L = milligrams per liter (Parts per million)
 MSL = Mean sea level
 ft. = Feet
 <n = Below detection limit
 (D) = Duplicate sample
 n/n = Pre-purge/Post-purge Dissolved Oxygen Readings
 BOC = Bio-Organic Catalyst

APPENDIX A

Groundwater Monitoring Program

Table A - Quarterly Groundwater Monitoring Program: 2013

1230 14th Street, Oakland, CA

Well ID	Well Type	Screened Interval (ft bgs)	Well Location for Monitoring	Casing Diam. (in)	Gauge Frequency	Sample Frequency ¹
Monitoring Wells						
MW-1	Mon	7-22	Downgradient	2	Q	Q
MW-2	Mon	7.5-22.5	S Upgradient	2	Q	2nd
MW-3	Mon	7-21.5	W Upgradient	2	Q	2nd
MW-4	Mon	7-22	NW Crossgradient	2	Q	2nd
MW-5R	Mon	5-20	Source	4	Q	Q
MW-6	Mon	5-20	E Downgradient	4	Q	Q
MW-7	Mon	5-20	NE Downgradient	4	Q	Q
VMP-1	Vapor Monitoring	4.25-4.75	N Boundary (Downgradient)	1/2	--	2nd
Remediation/Monitoring Wells						
AS-1	Mon/Air Sparging	22-25	N Source	1	2nd	2nd
AS-2	Air Sparging	22-25	--	1	2nd	2nd
AS-3	Air Sparging	22-25	--	1	2nd	2nd
AS-4	Air Sparging	22-25	--	1	2nd, 4th	2nd, 4th
AS-5	Air Sparging	21.5-25	--	1	2nd	2nd
VW/MW-2	Mon/Vapor Extraction	6-22	W Crossgradient	2	Q	2nd
VW/MW-4	Mon/Vapor Extraction	5-20	SW Downgradient	2	Q	Q
DP-1	Dual Phase Extraction (Rem)	8-20	--	4	Q	Q
DP-2	Dual Phase Extraction (Rem)	8-20	--	4	2nd	2nd
DP-3	Dual Phase Extraction (Rem)	8-20	--	4	2nd	2nd
DP-4	Dual Phase Extraction (Rem)	8-20	--	4	2nd	2nd
DP-5	Dual Phase Extraction (Rem)	8-20	--	4	Q	Q

Notes and Abbreviations:

1= Sample Analytes: Total Petroleum Hydrocarbons as Gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8015Cm/8021B.

Q = Quarterly, typically March, June, September, December

2nd = Annually during third quarter, typically June

Mon = Groundwater Monitoring Well

Rem= Remediation Well

VW = Vapor Extraction Well

VMP= Vapor Monitoring Well

DP = Dual Phase Extraction

N, S, W, E = Cardinal directions North, South, West, East and other directions (e.g., Northeast = NE)

-- = Not applicable, gauged or sampled.

APPENDIX B

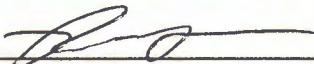
Groundwater Monitoring Field Data Sheets

MONITORING FIELD DATA SHEET

Well ID: *MW-1*

Project.Task #: 1150.001		Project Name:Saberi 1230 14th Street							
Address: 1230 14th Street Oakland, CA									
Date: <i>5-20-14</i>		Weather :							
Well Diameter: <i>2"</i>		Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47				
			2" = 0.16	4" = 0.65	radius ² * 0.163				
Total Depth (TD): <i>20.90'</i>		Depth to Product: <i>-</i>							
Depth to Water (DTW): <i>12.01'</i>		Product Thickness: <i>-</i>							
Water Column Height: <i>8.89'</i>		1 Casing Volume:	<i>1.42</i>						gallons
Reference Point: <i>North</i>		Casing Volumes:	<i>4.26</i>						gallons
Purging Device: Disposable Bailer									
Sampling Device: Disposable Bailer									
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW	
				<i>Pre Purge</i>	<i>0.41</i>				
<i>15:26</i>	<i>18.7</i>	<i>6.85</i>	<i>546.0</i>	<i>-</i>	<i>-</i>	<i>167</i>	<i>1.0</i>		
<i>15:41</i>	<i>"</i>	<i>6.71</i>	<i>599.1</i>	<i>-</i>	<i>-</i>	<i>125</i>	<i>4.50</i>		
				<i>Post Purge</i>	<i>0.84</i>				

Comments: *Mild Hydrocarbon odor*

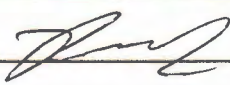
Sample ID: <i>MW-1</i>		Sample Time: <i>11:41</i>	
Laboratory: McCampbell		Sample Date: <i>5-22-14</i>	
Containers/Preservative: 3 HCl Voas			
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B			
Sampler Name: <i>R. Johnson</i>		Signature: 	

MONITORING FIELD DATA SHEET

Well ID: MW-2

Project.Task #: 1150.001				Project Name:Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: 5-21-14				Weather :				
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): 22' 21.70'				Depth to Product: -				
Depth to Water (DTW): 11.17'				Product Thickness: -				
Water Column Height: 10.53'				1 Casing Volume: 1.68		gallons		
Reference Point: North				Casing Volumes: 5.05		gallons		
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
					0.55			
				Pre Purge	0.48			
14:51	19.8	6.53	645.4	-	-	34	1.0	
14:58	19.6	6.58	607.6	-	-	60	5.0	
				Post Purge	5.53			

Comments:

Sample ID: MW-2		Sample Time: 11:30	
Laboratory: McCampbell		Sample Date: 5-22-14	
Containers/Preservative: 3 HCl Voas			
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B			
Sampler Name: Z. Johnson		Signature: 	

MONITORING FIELD DATA SHEET

Well ID: *MW-3*

Project.Task #: 1150.001		Project Name: Saberi 1230 14th Street							
Address: 1230 14th Street Oakland, CA									
Date: <i>5-22-14</i>		Weather :							
Well Diameter: <i>2"</i>		Volume/ft. <table border="1"> <tr> <td>1" = 0.04</td> <td>3" = 0.37</td> <td>6" = 1.47</td> </tr> <tr> <td>2" = 0.16</td> <td>4" = 0.65</td> <td>radius²* 0.163</td> </tr> </table>		1" = 0.04	3" = 0.37	6" = 1.47	2" = 0.16	4" = 0.65	radius ² * 0.163
1" = 0.04	3" = 0.37	6" = 1.47							
2" = 0.16	4" = 0.65	radius ² * 0.163							
Total Depth (TD): <i>18.40' 12.20'</i>		Depth to Product: <i>-</i>							
Depth to Water (DTW): <i>11.43'</i>		Product Thickness: <i>-</i>							
Water Column Height: <i>6.77' 0.77'</i>		1 Casing Volume: <i>4.11</i> gallons							
Reference Point: <i>North</i>		Casing Volumes: <i>3.54</i> gallons							
Purging Device: Disposable Bailer									
Sampling Device: Disposable Bailer									
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW	
				<i>7ra Purge</i>	<i>3.63</i>				
<i>14:36</i>	<i>19.6</i>	<i>6.31</i>	<i>622.1</i>	<i>-</i>	<i>-</i>	<i>-31</i>			

Comments: *Total Depth 12.20 Well appears to be filled in with fines*
Grab Sample

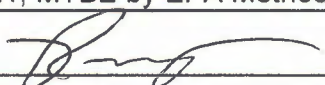
Sample ID: <i>MW-3</i>	Sample Time: <i>11:20</i>
Laboratory: McCampbell	Sample Date: <i>5-22-14</i>
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: <i>R. Johnson</i>	Signature: <i>[Signature]</i>

MONITORING FIELD DATA SHEET

Well ID: *MW-4*

Project.Task #: 1150.001				Project Name:Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: <i>5-22-14</i>				Weather: <i>Sunny - Hot</i>				
Well Diameter: <i>2"</i>				Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47	
				2" = 0.16	4" = 0.65	radius ² * 0.163		
Total Depth (TD): <i>19.60'</i>				Depth to Product: <i>-</i>				
Depth to Water (DTW): <i>11.34</i>				Product Thickness: <i>-</i>				
Water Column Height: <i>8.26</i>				1 Casing Volume: <i>1.32</i>		gallons		
Reference Point: <i>North</i>				Casing Volumes: <i>3.96</i>		gallons		
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
					<i>Pre Purge</i> ↓			
<i>13:17</i>					<i>7.47</i>			
<i>14:25</i>	<i>20.3</i>	<i>5.94</i>	<i>202.8</i>	<i>-</i>	<i>-</i>	<i>256</i>	<i>0.5</i>	
<i>14:30</i>	<i>19.7</i>	<i>6.34</i>	<i>174.8</i>	<i>-</i>	<i>-</i>	<i>229</i>	<i>4.0</i>	
				<i>Post Purge</i>	<i>6.98</i>			

Comments: *4 gal purged total*

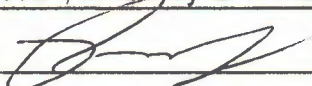
Sample ID: <i>MW-4</i>		Sample Time: <i>11:12</i>	
Laboratory: McCampbell		Sample Date: <i>5-22-14</i>	
Containers/Preservative: 3 HCl Voas			
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B			
Sampler Name: <i>Z. Johnson</i>		Signature: 	

MONITORING FIELD DATA SHEET

Well ID: MW-5R

Project.Task #: 1150.001		Project Name:Saberi 1230 14th Street						
Address: 1230 14th Street Oakland, CA								
Date: 5-22-14		Weather :						
Well Diameter: 4"		Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius ² * 0.163						
Total Depth (TD): 22.46'		Depth to Product: -						
Depth to Water (DTW): 11.80'		Product Thickness: -						
Water Column Height: 10.66'		1 Casing Volume: 6.9 gallons						
Reference Point: North		Casing Volumes: 20.78 gallons						
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
				Pre purge	0.32			
16:37	18.7	6.62	1024	-	-	-75	5.0	

Comments:


Sample ID: MW-5R	Sample Time: 12:35
Laboratory: McCampbell	Sample Date: 5-22-14
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: R. Johnson	Signature: 

MONITORING FIELD DATA SHEET

Well ID: *MW-7*

Project.Task #: 1150.001				Project Name: Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: <i>5-21-14</i>				Weather :				
Well Diameter: <i>4"</i>				Volume/ft.		1" = 0.04 3" = 0.37 6" = 1.47		
						2" = 0.16 4" = 0.65 radius ² * 0.163		
Total Depth (TD): <i>19.61'</i>				Depth to Product: <i>—</i>				
Depth to Water (DTW): <i>12.75'</i>				Product Thickness: <i>—</i>				
Water Column Height: <i>6.86'</i>				1 Casing Volume: <i>4.45</i>		gallons		
Reference Point: <i>North</i>				Casing Volumes: <i>13.37</i>		gallons		
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
				<i>Pre Purge</i>	<i>2.35</i>			
<i>15:55</i>	<i>18.4</i>	<i>7.12</i>	<i>541.3</i>	<i>—</i>	<i>—</i>	<i>127</i>	<i>1.5</i>	
<i>15:59</i>	<i>18.1</i>	<i>6.88</i>	<i>536.6</i>	<i>—</i>	<i>—</i>	<i>134</i>	<i>6.0</i>	
<i>16:06</i>	<i>17.6</i>	<i>6.83</i>	<i>544.1</i>	<i>—</i>	<i>—</i>	<i>135</i>	<i>15.00</i>	
				<i>Post Purge</i>	<i>4.21</i>			

Comments:

Sample ID: <i>MW-7</i>	Sample Time: <i>11:55</i>
Laboratory: McCampbell	Sample Date: <i>5-22-14</i>
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: <i>R. Johnson</i>	Signature: 



MONITORING FIELD DATA SHEET

Well ID: VM/MW-2

Project.Task #: 1150.001				Project Name: Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: 5-21-14				Weather :				
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): 21.35'				Depth to Product: -				
Depth to Water (DTW): 11.64'				Product Thickness: -				
Water Column Height: 9.71'				1 Casing Volume: 1.55		gallons		
Reference Point: North				Casing Volumes: 4.66		gallons		
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
				Pre Purge	0.49			
15:07	18.7	6.63	655.4	-	-	85	1.0	
15:14	18.6	6.73	647.9	-	-	63	5.00	
				Post Purge	1.03			

Comments:

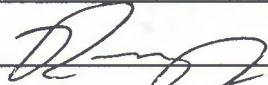
Sample ID: VM/MW-2	Sample Time: 12:10
Laboratory: McCampbell	Sample Date: 5-22-14
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: R. Johnson	Signature:

MONITORING FIELD DATA SHEET

Well ID: VM/MW-4

Project.Task #: 1150.001				Project Name:Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: 5-22-14				Weather :				
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): 17.40'				Depth to Product: -				
Depth to Water (DTW): 11.40'				Product Thickness: -				
Water Column Height: 6.0'				1 Casing Volume: 0.96		gallons		
Reference Point: North				Casing Volumes: 2.88		gallons		
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp (°C)	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
				Pre Purge	0.27			
16:18	19.1	6.64	692.8	-	-	-102	1.0	
16:26	18.9	6.53	687.7	-	-	-115	3.0	
				Post Purge	0.81			

Comments:

Sample ID: VM/MW-4	Sample Time: 12:22
Laboratory: McCampbell	Sample Date: 5-22-14
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: R. Johnson	Signature: 

MONITORING FIELD DATA SHEET

Well ID: *AS-1*

Project.Task #: 1150.001				Project Name: Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: <i>5-22-14</i>				Weather :				
Well Diameter: <i>1"</i>				Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47	
					2" = 0.16	4" = 0.65	radius ² * 0.163	
Total Depth (TD): <i>25.75'</i>				Depth to Product: <i>-</i>				
Depth to Water (DTW): <i>13.01'</i>				Product Thickness: <i>-</i>				
Water Column Height: <i>12.74'</i>				1 Casing Volume: <i>0.50</i>		gallons		
Reference Point: <i>North</i>				Casing Volumes: <i>1.52</i>		gallons		
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp @	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
				<i>Pic Purge</i>	<i>0.25</i>			
<i>14:15</i>	<i>19.8</i>	<i>6.09</i>	<i>1811</i>	<i>-</i>	<i>-</i>	<i>220</i>	<i>0.5</i>	
<i>14:20</i>	<i>19.8</i>	<i>7.09</i>	<i>1570</i>	<i>-</i>	<i>-</i>	<i>134</i>	<i>1.5</i>	

Comments: *Post Purge 13.80' Done w/ peri pump*


Sample ID: <i>AS-1</i>	Sample Time: <i>14:40</i>
Laboratory: <i>McC Campbell</i>	Sample Date: <i>5-23-14</i>
Containers/Preservative: <i>3 HCl Voas</i>	
Analyzed for: <i>TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B</i>	
Sampler Name: <i>R. Johnson</i>	Signature: <i>[Signature]</i>

MONITORING FIELD DATA SHEET

Well ID: DP-5

Project.Task #: 1150.001				Project Name: Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: 7-3-14				Weather :				
Well Diameter: 4"				Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47	
					2" = 0.16	4" = 0.65	radius ² * 0.163	
Total Depth (TD): 20'				Depth to Product: -				
Depth to Water (DTW): 12.45'				Product Thickness: -				
Water Column Height: 7.55'				1 Casing Volume: 4.90 ^{gal}			gallons	
Reference Point: NTOC				Casing Volumes: 14.72			gallons	
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
15:46					0.66	-179.0	Pro Purge	
15:55	20.4	6.79	1066	-	-	-96	12.00	
					0.94			Foot Purge

Comments: 15 gal removed total

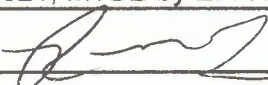
Sample ID: DP-5	Sample Time: 18:35
Laboratory: McCampbell	Sample Date: 7/3/14
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: R. Johnson	Signature: 

MONITORING FIELD DATA SHEET

Well ID: AS-4

Project.Task #: 1150.001				Project Name:Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: 7-3-14				Weather :				
Well Diameter: 1"				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'				Depth to Product: -				
Depth to Water (DTW): 13.11'				Product Thickness: -				
Water Column Height: 12.89'				1 Casing Volume: 0.51		gallons		
Reference Point: NTOC				Casing Volumes: 1.54		gallons		
Purging Device: Disposable Bailor Peristaltic Pump								
Sampling Device: Disposable Bailor								
Time	Temp @	pH	Cond (us)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
15:05	21.4	6.78	1312		0.47	-171.4	2.0	
					0.63			Post purge
							1.60 gal removed	
							total	

Comments: Post DO reading taken with storage cap

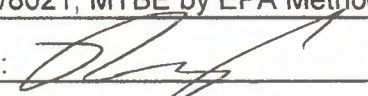
Sample ID: AS-4	Sample Time: 18:45
Laboratory: McCampbell	Sample Date: 7.3.14
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: P. Johnson	Signature: 

MONITORING FIELD DATA SHEET

Well ID: DP-4

Project.Task #: 1150.001		Project Name:Saberi 1230 14th Street						
Address: 1230 14th Street Oakland, CA								
Date: 7.3.14		Weather :						
Well Diameter: 4"		Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius ² * 0.163						
Total Depth (TD): 20'		Depth to Product: -						
Depth to Water (DTW): 12.10'		Product Thickness: -						
Water Column Height: 7.9'		1 Casing Volume: 5.13 gallons						
Reference Point: NITOC		Casing Volumes: 15.40 gallons						
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp (°C)	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
15:00					0.76	-165.0	Pre-purge	
15:15	20.7	6.83	1169	-		-89.0	12.0	
18:					0.48		Post Purge	

Comments: 16 gal removed total
Post-purge DO taken with sump pump down well

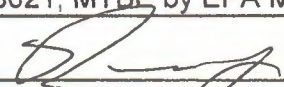
Sample ID: DP-4	Sample Time: 18:15
Laboratory: McCampbell	Sample Date: 7.3.14
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: R. Johnson	Signature: 

MONITORING FIELD DATA SHEET

Well ID: *DP-2*

Project Task #: 1150.001		Project Name: Saberi 1230 14th Street						
Address: 1230 14th Street Oakland, CA								
Date: <i>7-3-14</i>		Weather:						
Well Diameter: <i>4"</i>		Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius ² * 0.163						
Total Depth (TD): <i>22'</i>		Depth to Product: <i>-</i>						
Depth to Water (DTW): <i>13.10'</i>		Product Thickness: <i>-</i>						
Water Column Height: <i>8.9'</i>		1 Casing Volume: <i>5.78</i> gallons						
Reference Point: <i>NTOC</i>		Casing Volumes: <i>17.35</i> gallons						
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp (°C)	pH	Cond (µs)	NTU	DO (mg/L)	ORP (mV)	Vol (gal)	DTW
<i>14:40</i>	<i>21.4</i>	<i>7.85</i>	<i>1702</i>	<i>-</i>	<i>0.52</i>	<i>-62.5</i>	<i>0.3</i>	
<i>14:50</i>	<i>20.4</i>	<i>7.21</i>	<i>1058</i>	<i>-</i>	<i>-</i>	<i>-87</i>	<i>10.0</i>	
					<i>0.56</i>		<i>Pre Purge</i>	
					<i>0.41</i>		<i>Post Purge</i>	

Comments: *18 gal removed total*
Post Purge DO taken with storage cap down well

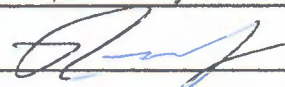
Sample ID: <i>DP-2</i>	Sample Time: <i>17:40</i>
Laboratory: McCampbell	Sample Date: <i>7/3/14</i>
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: <i>R. Johnson</i>	Signature: 

MONITORING FIELD DATA SHEET

Well ID: AS-2

Project.Task #: 1150.001				Project Name:Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: 7-3-14				Weather: Sunny				
Well Diameter: 1"				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'				Depth to Product: -				
Depth to Water (DTW): 13.42'				Product Thickness: -				
Water Column Height: 11.58'				1 Casing Volume: 0.46		gallons		
Reference Point: NTOC				Casing Volumes: 1.38		gallons		
Purging Device: Disposable Bailer Peristaltic pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
14:40	21.4	7.83	1702	-	0.52	-62.5	0.5	
14:48	20.0	7.75	1639	-	0.46	-79.2	1.0	
					0.83			Post Purge

Comments: 1.5 gal removal trial
Post Purge DO taken with Skye cap

Sample ID: AS-2	Sample Time: 19:05
Laboratory: McCampbell	Sample Date: 7-3-14
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: Z. Johnson	Signature: 

MONITORING FIELD DATA SHEET

Well ID: *AS-3*

Project Task #: 1150.001				Project Name: Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: <i>7-3-14</i>				Weather:				
Well Diameter: <i>1"</i>				Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47	
					2" = 0.16	4" = 0.65	radius ² * 0.163	
Total Depth (TD): <i>25'</i>				Depth to Product: <i>-</i>				
Depth to Water (DTW): <i>13.60'</i>				Product Thickness: <i>-</i>				
Water Column Height: <i>11.4'</i>				1 Casing Volume: <i>0.45</i>		gallons		
Reference Point: <i>NTOC</i>				Casing Volumes: <i>1.36</i>		gallons		
Purging Device: Disposable Bailer <i>Peristaltic Pump</i>								
Sampling Device: Disposable Bailer								
Time	Temp (°C)	pH	Cond (µs)	NTU	DO (mg/L)	ORP (mV)	Vol (gal)	DTW
<i>14:17</i>	<i>19.2</i>	<i>7.89</i>	<i>1012</i>	<i>-</i>	<i>0.34</i>	<i>-75.7</i>	<i>0.5</i>	
<i>14:27</i>	<i>19.3</i>	<i>8.09</i>	<i>1013</i>	<i>-</i>	<i>0.19</i>	<i>-93.9</i>	<i>1.50</i>	
					<i>0.84</i>			<i>Post Purge</i>

Comments: *1.5 gal removed from*
Post Purge DO taken with storage cup

Sample ID: <i>AS-3</i>	Sample Time: <i>18:56</i>
Laboratory: McCampbell	Sample Date: <i>7-3-14</i>
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: <i>R. Johnson</i>	Signature: <i>[Signature]</i>



MONITORING FIELD DATA SHEET

Well ID: *DP-1*

Project Task #: 1150.001				Project Name: Saberi 1230 14th Street				
Address: 1230 14th Street Oakland, CA								
Date: <i>7-3-14</i>				Weather:				
Well Diameter: <i>4"</i>				Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47	
					2" = 0.16	4" = 0.65	radius ² * 0.163	
Total Depth (TD): <i>22'</i>				Depth to Product: <i>-</i>				
Depth to Water (DTW): <i>12.70</i>				Product Thickness: <i>-</i>				
Water Column Height: <i>9.3'</i>				1 Casing Volume: <i>6.04</i>		gallons		
Reference Point: <i>NTOL</i>				Casing Volumes: <i>18.13</i>		gallons		
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
					<i>0.46</i>	<i>78.8</i>	<i>Pre Purge</i>	
<i>14:23</i>	<i>17.2</i>	<i>6.22</i>	<i>820</i>	<i>-</i>	<i>-</i>	<i>20.0</i>	<i>10.0</i>	

Comments: *20 gal removed total*
Post Purge DO taken down well

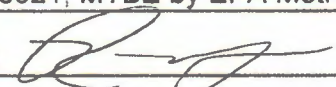
Sample ID: <i>DP-1</i>	Sample Time: <i>18:25</i>
Laboratory: McCampbell	Sample Date: <i>7-3-14</i>
Containers/Preservative: 3 HCl Voas	
Analyzed for: TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B	
Sampler Name: <i>R. Johnson</i>	Signature:

MONITORING FIELD DATA SHEET

Well ID: DP-3

Project Task #: 1150.001		Project Name: Saberi 1230 14th Street						
Address: 1230 14th Street Oakland, CA								
Date: <u>7-6-14</u>		Weather: <u>warm, clear</u>						
Well Diameter: <u>4"</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>22'</u>		Depth to Product: <u>-</u>						
Depth to Water (DTW): <u>13.53'</u>		Product Thickness: <u>-</u>						
Water Column Height: <u>8.47'</u>		1 Casing Volume: <u>5.50</u>		gallons				
Reference Point: <u>NTOC</u>		Casing Volumes: <u>16.51</u>		gallons				
Purging Device: Disposable Bailer								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
					<u>0.41</u>	<u>-140.6</u>	<u>Pre Purge</u>	
<u>13:58</u>	<u>21.1</u>	<u>8.27</u>	<u>1027</u>	<u>-</u>	<u>-</u>	<u>-114.6</u>	<u>10.0</u>	
					<u>0.38</u>			<u>Post Purge</u>

Comments: 18 gal removed total
Post Purge DO taken down well

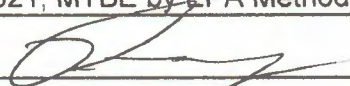
Sample ID: <u>DP-3</u>	Sample Time: <u>18:00</u>
Laboratory: <u>McC Campbell</u>	Sample Date: <u>7-3-14</u>
Containers/Preservative: <u>3 HCl Voas</u>	
Analyzed for: <u>TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B</u>	
Sampler Name: <u>Z. Johnson</u>	Signature: 

MONITORING FIELD DATA SHEET

Well ID: *AS-5*

Project.Task #: 1150.001		Project Name:Saberi 1230 14th Street							
Address: 1230 14th Street Oakland, CA									
Date: <i>7-3-14</i>		Weather: <i>Sunny, Warm</i>							
Well Diameter: <i>1"</i>		Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47	2" = 0.16		4" = 0.65	radius ² * 0.163
Total Depth (TD): <i>25'</i>		Depth to Product: <i>-</i>							
Depth to Water (DTW): <i>14.15'</i>		Product Thickness: <i>-</i>							
Water Column Height: <i>11.85</i>		1 Casing Volume:	<i>0.47</i>						gallons
Reference Point: <i>NTOC</i>		Casing Volumes:	<i>1.42</i>						gallons
Purging Device: <i>Disposable Bailer Peristaltic Pump</i>									
Sampling Device: <i>Disposable Bailer</i>									
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW	
<i>13:20</i>	<i>19.2</i>	<i>8.29</i>	<i>816</i>	<i>-</i>	<i>2.78</i>	<i>-109.3</i>	<i>start</i>		
<i>13:35</i>	<i>19.3</i>	<i>7.79</i>	<i>910</i>	<i>-</i>	<i>0.70</i>	<i>-87.9</i>	<i>1.0</i>		
					<i>1.14</i>			<i>Post Purge</i>	

Comments: *1.5 gal removed*
Post Purge DO fallen with stray cap

Sample ID: <i>AS-5</i>		Sample Time: <i>17:55</i>	
Laboratory: <i>McC Campbell</i>		Sample Date: <i>7-3-14</i>	
Containers/Preservative: <i>3 HCl Voas</i>			
Analyzed for: <i>TPHg and BTEX by EPA Method 8015Cm/8021; MTBE by EPA Method 8260B</i>			
Sampler Name: <i>R. Johnson</i>		Signature: 	

APPENDIX C

Laboratory Analytical Report



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1405A04

Report Created for: Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Project Contact: Elizabeth DeDeRubeis
Project P.O.:
Project Name: #1150.001; 1230 14th St

Project Received: 05/27/2014

Analytical Report reviewed & approved for release on 06/02/2014 by:

*Question about
your data?*

[Click here to email
McC Campbell](#)

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Pangea Environmental Svcs., Inc.
Project: #1150.001; 1230 14th St
WorkOrder: 1405A04

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, 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.
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
TEQ	Toxicity Equivalence

Analytical Qualifiers

S	spike recovery outside accepted recovery limits
c4	surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
d1	weakly modified or unmodified gasoline is significant



Analytical Report

Client: Pangea Environmental Svcs., Inc.	WorkOrder: 1405A04
Project: #1150.001; 1230 14th St	Extraction Method: SW5030B
Date Received: 5/27/14 17:08	Analytical Method: SW8021B/8015Bm
Date Prepared: 5/28/14-5/30/14	Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	1405A04-001A	Water	05/22/2014 11:41	GC3	90861
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	81		50	1	05/28/2014 02:44
MTBE	ND		5.0	1	05/28/2014 02:44
Benzene	4.8		0.50	1	05/28/2014 02:44
Toluene	0.82		0.50	1	05/28/2014 02:44
Ethylbenzene	ND		0.50	1	05/28/2014 02:44
Xylenes	ND		0.50	1	05/28/2014 02:44
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: d1	
aaa-TFT	99		70-130		05/28/2014 02:44
MW-2	1405A04-002A	Water	05/22/2014 11:30	GC3	90861
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	05/28/2014 03:13
MTBE	ND		5.0	1	05/28/2014 03:13
Benzene	ND		0.50	1	05/28/2014 03:13
Toluene	ND		0.50	1	05/28/2014 03:13
Ethylbenzene	ND		0.50	1	05/28/2014 03:13
Xylenes	ND		0.50	1	05/28/2014 03:13
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	93		70-130		05/28/2014 03:13
MW-3	1405A04-003A	Water	05/22/2014 11:20	GC3	90861
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	05/29/2014 05:34
MTBE	ND		5.0	1	05/29/2014 05:34
Benzene	ND		0.50	1	05/29/2014 05:34
Toluene	ND		0.50	1	05/29/2014 05:34
Ethylbenzene	ND		0.50	1	05/29/2014 05:34
Xylenes	ND		0.50	1	05/29/2014 05:34
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	98		70-130		05/29/2014 05:34

(Cont.)



Analytical Report

Client: Pangea Environmental Svcs., Inc.	WorkOrder: 1405A04
Project: #1150.001; 1230 14th St	Extraction Method: SW5030B
Date Received: 5/27/14 17:08	Analytical Method: SW8021B/8015Bm
Date Prepared: 5/28/14-5/30/14	Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	1405A04-004A	Water	05/22/2014 11:12	GC3	90919
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	05/28/2014 20:11
MTBE	ND		5.0	1	05/28/2014 20:11
Benzene	ND		0.50	1	05/28/2014 20:11
Toluene	ND		0.50	1	05/28/2014 20:11
Ethylbenzene	ND		0.50	1	05/28/2014 20:11
Xylenes	ND		0.50	1	05/28/2014 20:11
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	94		70-130		05/28/2014 20:11
MW-5R	1405A04-005A	Water	05/22/2014 12:35	GC3	90919
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	2800		50	1	05/29/2014 06:04
MTBE	ND		25	1	05/29/2014 06:04
Benzene	56		0.50	1	05/29/2014 06:04
Toluene	60		0.50	1	05/29/2014 06:04
Ethylbenzene	69		0.50	1	05/29/2014 06:04
Xylenes	370		0.50	1	05/29/2014 06:04
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	Analytical Comments: d1,c4	
aaa-TFT	220	S	70-130		05/29/2014 06:04
MW-7	1405A04-006A	Water	05/22/2014 11:55	GC3	90919
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	05/29/2014 07:32
MTBE	ND		5.0	1	05/29/2014 07:32
Benzene	ND		0.50	1	05/29/2014 07:32
Toluene	0.73		0.50	1	05/29/2014 07:32
Ethylbenzene	ND		0.50	1	05/29/2014 07:32
Xylenes	ND		0.50	1	05/29/2014 07:32
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	110		70-130		05/29/2014 07:32

(Cont.)



Analytical Report

Client: Pangea Environmental Svcs., Inc.	WorkOrder: 1405A04
Project: #1150.001; 1230 14th St	Extraction Method: SW5030B
Date Received: 5/27/14 17:08	Analytical Method: SW8021B/8015Bm
Date Prepared: 5/28/14-5/30/14	Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
VW/MW-2	1405A04-007A	Water	05/22/2014 12:10	GC3	90919
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	05/29/2014 08:02
MTBE	ND		5.0	1	05/29/2014 08:02
Benzene	ND		0.50	1	05/29/2014 08:02
Toluene	0.91		0.50	1	05/29/2014 08:02
Ethylbenzene	ND		0.50	1	05/29/2014 08:02
Xylenes	ND		0.50	1	05/29/2014 08:02
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	103		70-130		05/29/2014 08:02
VW/MW-4	1405A04-008A	Water	05/22/2014 12:22	GC3	90930
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	590		50	1	05/29/2014 22:18
MTBE	ND		5.0	1	05/29/2014 22:18
Benzene	38		0.50	1	05/29/2014 22:18
Toluene	3.6		0.50	1	05/29/2014 22:18
Ethylbenzene	14		0.50	1	05/29/2014 22:18
Xylenes	38		0.50	1	05/29/2014 22:18
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: d1	
aaa-TFT	119		70-130		05/29/2014 22:18
AS-1	1405A04-009A	Water	05/23/2014 14:40	GC3	90930
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	05/30/2014 03:13
MTBE	ND		5.0	1	05/30/2014 03:13
Benzene	ND		0.50	1	05/30/2014 03:13
Toluene	ND		0.50	1	05/30/2014 03:13
Ethylbenzene	ND		0.50	1	05/30/2014 03:13
Xylenes	ND		0.50	1	05/30/2014 03:13
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	105		70-130		05/30/2014 03:13



Quality Control Report

Client: Pangea Environmental Svcs., Inc.
Date Prepared: 5/27/14
Date Analyzed: 5/27/14
Instrument: GC3
Matrix: Water
Project: #1150.001; 1230 14th St

WorkOrder: 1405A04
BatchID: 90861
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS-90861
 1405959-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	64.1	40	60	-	107	70-130
MTBE	ND	11.1	5.0	10	-	111	70-130
Benzene	ND	10.3	0.50	10	-	103	70-130
Toluene	ND	10.2	0.50	10	-	102	70-130
Ethylbenzene	ND	10.3	0.50	10	-	103	70-130
Xylenes	ND	31.1	0.50	30	-	104	70-130

Surrogate Recovery

aaa-TFT	9.81	9.67		10	98	97	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	65.4	65.4	60	ND	109	109	70-130	0	20
MTBE	10.2	10.2	10	ND	103	102	70-130	0.928	20
Benzene	9.47	9.81	10	ND	94.7	98.1	70-130	3.54	20
Toluene	9.62	9.91	10	ND	96.2	99.1	70-130	3.00	20
Ethylbenzene	9.43	9.77	10	ND	94.3	97.7	70-130	3.48	20
Xylenes	28.5	29.4	30	ND	95.1	98.1	70-130	3.11	20

Surrogate Recovery

aaa-TFT	9.20	9.31	10		92	93	70-130	1.24	20
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Quality Control Report

Client: Pangea Environmental Svcs., Inc.	WorkOrder: 1405A04
Date Prepared: 5/29/14	BatchID: 90919
Date Analyzed: 5/28/14	Extraction Method: SW5030B
Instrument: GC3	Analytical Method: SW8021B/8015Bm
Matrix: Water	Unit: µg/L
Project: #1150.001; 1230 14th St	Sample ID: MB/LCS-90919 1405A04-004AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	64.1	40	60	-	107	70-130
MTBE	ND	10.4	5.0	10	-	104	70-130
Benzene	ND	9.62	0.50	10	-	96.2	70-130
Toluene	ND	9.82	0.50	10	-	98.2	70-130
Ethylbenzene	ND	9.83	0.50	10	-	98.3	70-130
Xylenes	ND	29.6	0.50	30	-	98.7	70-130

Surrogate Recovery

aaa-TFT	9.20	9.18		10	92	92	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	61.7	62.6	60	ND	103	104	70-130	1.55	20
MTBE	9.49	9.70	10	ND	94.9	97	70-130	2.14	20
Benzene	9.34	9.67	10	ND	93.4	96.7	70-130	3.42	20
Toluene	9.41	9.73	10	ND	94.1	97.3	70-130	3.36	20
Ethylbenzene	9.42	9.74	10	ND	94.2	97.4	70-130	3.43	20
Xylenes	28.2	29.1	30	ND	93.9	97	70-130	3.34	20

Surrogate Recovery

aaa-TFT	9.10	9.38	10		91	94	70-130	3.08	20
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Quality Control Report

Client: Pangea Environmental Svcs., Inc.
Date Prepared: 5/29/14
Date Analyzed: 5/29/14
Instrument: GC3
Matrix: Water
Project: #1150.001; 1230 14th St

WorkOrder: 1405A04
BatchID: 90930
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS-90930
 1405A84-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	65.3	40	60	-	109	70-130
MTBE	ND	9.62	5.0	10	-	96.2	70-130
Benzene	ND	8.97	0.50	10	-	89.7	70-130
Toluene	ND	9.16	0.50	10	-	91.6	70-130
Ethylbenzene	ND	9.10	0.50	10	-	91	70-130
Xylenes	ND	27.5	0.50	30	-	91.8	70-130

Surrogate Recovery

aaa-TFT	9.34	9.25		10	93	92	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	59.7	61.6	60	ND	99.4	103	70-130	3.18	20
MTBE	12.0	12.8	10	ND	120	128	70-130	6.36	20
Benzene	9.36	9.53	10	ND	93.6	95.3	70-130	1.85	20
Toluene	9.36	9.53	10	ND	93.6	95.3	70-130	1.83	20
Ethylbenzene	9.47	9.63	10	ND	94.7	96.3	70-130	1.69	20
Xylenes	28.5	29.2	30	ND	95	97.5	70-130	2.60	20

Surrogate Recovery

aaa-TFT	9.83	9.44	10		98	94	70-130	4.10	20
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1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1405A04

ClientCode: PEO

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

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

Email: ederubeis@pangeaenv.com
 cc/3rd Party:
 PO:
 ProjectNo: #1150.001; 1230 14th St

Bill to:

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

Requested TAT:

5 days

Date Received: 05/27/2014

Date Printed: 05/28/2014

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	
1405A04-001	MW-1	Water	5/22/2014 11:41	<input type="checkbox"/>	A	A											
1405A04-002	MW-2	Water	5/22/2014 11:30	<input type="checkbox"/>	A												
1405A04-003	MW-3	Water	5/22/2014 11:20	<input type="checkbox"/>	A												
1405A04-004	MW-4	Water	5/22/2014 11:12	<input type="checkbox"/>	A												
1405A04-005	MW-5R	Water	5/22/2014 12:35	<input type="checkbox"/>	A												
1405A04-006	MW-7	Water	5/22/2014 11:55	<input type="checkbox"/>	A												
1405A04-007	VW/MW-2	Water	5/22/2014 12:10	<input type="checkbox"/>	A												
1405A04-008	VW/MW-4	Water	5/22/2014 12:22	<input type="checkbox"/>	A												
1405A04-009	AS-1	Water	5/23/2014 14:40	<input type="checkbox"/>	A												

Test Legend:

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

Prepared by: Jena Alfaro

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.



WORK ORDER SUMMARY

Client Name: PANGEA ENVIRONMENTAL SVCS., INC.

QC Level: LEVEL 2

Work Order: 1405A04

Project: #1150.001; 1230 14th St

Client Contact: Elizabeth DeDeRubeis

Date Received: 5/27/2014

Comments:

Contact's Email: ederubeis@pangeaenv.com

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1405A04-001A	MW-1	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	<input type="checkbox"/>	5/22/2014 11:41	5 days	Present	<input type="checkbox"/>	
1405A04-002A	MW-2	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	<input type="checkbox"/>	5/22/2014 11:30	5 days	Present	<input type="checkbox"/>	
1405A04-003A	MW-3	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	<input type="checkbox"/>	5/22/2014 11:20	5 days	Present	<input type="checkbox"/>	
1405A04-004A	MW-4	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	<input type="checkbox"/>	5/22/2014 11:12	5 days	Present	<input type="checkbox"/>	
1405A04-005A	MW-5R	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	<input type="checkbox"/>	5/22/2014 12:35	5 days	Present	<input type="checkbox"/>	
1405A04-006A	MW-7	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	<input type="checkbox"/>	5/22/2014 11:55	5 days	Present	<input type="checkbox"/>	
1405A04-007A	VW/MW-2	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	<input type="checkbox"/>	5/22/2014 12:10	5 days	Present	<input type="checkbox"/>	
1405A04-008A	VW/MW-4	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	<input type="checkbox"/>	5/22/2014 12:22	5 days	Present	<input type="checkbox"/>	
1405A04-009A	AS-1	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	<input type="checkbox"/>	5/23/2014 14:40	5 days	Present	<input type="checkbox"/>	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

VOA w/ HCl = 43mL VOA w/ HCl

1405A04

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Road
Pittsburg, CA 94565

Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

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

Report To: Elizabeth DeDeRubeis Bill To: Pangea
Company: Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200, Oakland, CA 94612
E-Mail: ederubeis@pangeaenv.com
Tele: (510) 836-3702 Fax: (510) 836-3709
Project #: 1150.001 Project Name: 1230 14th St
Project Location: 1230 14th St., Oakland
Sampler Signature: *[Signature]*

Analysis Request										Other	Comments
											Filter Samples for Metals analysis: Yes / No
											Report EDF

SAMPLE ID	LOCATION (Field Point Name)	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED					
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other		
MW-1		5-22-14	11:41	3	VOA	X					X	X				
MW-2			11:30													
MW-3			11:20													
MW-4			11:12													
MW-5R			12:35													
MW-7			11:55													
VW MW-2			12:10													
VW MW-4			12:22													
AS-1		5-23-14	14:40													

BTEX & TPH as Gas (602/8020 + 8015)/MTBE
5 Oxygenates (8260)
Grab Samples

Changed to VW per email 05/28/14

Relinquished By: *[Signature]* Date: 5/27/14 Time: 11:20
Received By: *[Signature]*
Relinquished By: *[Signature]* Date: 5/27/14 Time: 1500
Received By: *[Signature]*
Relinquished By: *[Signature]* Date: Time: Received By: *[Signature]*

ICE/T° 3.0
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB
VOAS O&G METALS OTHER
PRESERVATION pH<2



Sample Receipt Checklist

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

Date and Time Received: **5/27/2014 5:08:44 PM**

Project Name: **#1150.001; 1230 14th St**

LogIn Reviewed by: **Jena Alfaro**

WorkOrder N°: **1405A04** Matrix: Water

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 3°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: pH<2; 522: pH<4)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

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

 Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1407187

Report Created for: Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Project Contact: Elizabeth DeRubeis
Project P.O.:
Project Name: #1150.001; 1230 14th Saberi

Project Received: 07/07/2014

Analytical Report reviewed & approved for release on 07/14/2014 by:

*Question about
your data?*

[Click here to email
McC Campbell](#)

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Pangea Environmental Svcs., Inc.
Project: #1150.001; 1230 14th Saberi
WorkOrder: 1407187

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, 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.
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
TEQ	Toxicity Equivalence

Analytical Qualifiers

S	spike recovery outside accepted recovery limits
d1	weakly modified or unmodified gasoline is significant



Analytical Report

Client: Pangea Environmental Svcs., Inc.
Project: #1150.001; 1230 14th Saberi
Date Received: 7/7/14 18:30
Date Prepared: 7/9/14-7/11/14

WorkOrder: 1407187
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
AS-2	1407187-001A	Water	07/03/2014 19:05	GC3	92619
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	110		50	1	07/11/2014 18:47
MTBE	ND		5.0	1	07/11/2014 18:47
Benzene	0.80		0.50	1	07/11/2014 18:47
Toluene	ND		0.50	1	07/11/2014 18:47
Ethylbenzene	ND		0.50	1	07/11/2014 18:47
Xylenes	2.8		0.50	1	07/11/2014 18:47
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: d1	
aaa-TFT_2	95		70-130		07/11/2014 18:47
AS-3	1407187-002A	Water	07/03/2014 19:05	GC3	92670
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	07/11/2014 15:16
MTBE	ND		5.0	1	07/11/2014 15:16
Benzene	ND		0.50	1	07/11/2014 15:16
Toluene	ND		0.50	1	07/11/2014 15:16
Ethylbenzene	ND		0.50	1	07/11/2014 15:16
Xylenes	ND		0.50	1	07/11/2014 15:16
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT_2	102		70-130		07/11/2014 15:16
AS-4	1407187-003A	Water	07/03/2014 18:56	GC3	92670
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	74		50	1	07/11/2014 20:47
MTBE	ND		5.0	1	07/11/2014 20:47
Benzene	0.93		0.50	1	07/11/2014 20:47
Toluene	ND		0.50	1	07/11/2014 20:47
Ethylbenzene	0.54		0.50	1	07/11/2014 20:47
Xylenes	2.7		0.50	1	07/11/2014 20:47
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: d1	
aaa-TFT_2	99		70-130		07/11/2014 20:47

(Cont.)



Analytical Report

Client: Pangea Environmental Svcs., Inc.
Project: #1150.001; 1230 14th Saberi
Date Received: 7/7/14 18:30
Date Prepared: 7/9/14-7/11/14

WorkOrder: 1407187
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
AS-5	1407187-004A	Water	07/03/2014 18:45	GC3	92619
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	07/11/2014 01:15
MTBE	ND		5.0	1	07/11/2014 01:15
Benzene	ND		0.50	1	07/11/2014 01:15
Toluene	ND		0.50	1	07/11/2014 01:15
Ethylbenzene	ND		0.50	1	07/11/2014 01:15
Xylenes	ND		0.50	1	07/11/2014 01:15
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT_2	106		70-130		07/11/2014 01:15
DP-1	1407187-005A	Water	07/03/2014 17:55	GC3	92619
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	380		50	1	07/11/2014 19:17
MTBE	ND		5.0	1	07/11/2014 19:17
Benzene	59		0.50	1	07/11/2014 19:17
Toluene	3.2		0.50	1	07/11/2014 19:17
Ethylbenzene	5.3		0.50	1	07/11/2014 19:17
Xylenes	20		0.50	1	07/11/2014 19:17
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: d1	
aaa-TFT_2	110		70-130		07/11/2014 19:17
DP-2	1407187-006A	Water	07/03/2014 18:25	GC3	92619
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	280		50	1	07/11/2014 19:47
MTBE	ND		5.0	1	07/11/2014 19:47
Benzene	31		0.50	1	07/11/2014 19:47
Toluene	2.4		0.50	1	07/11/2014 19:47
Ethylbenzene	4.6		0.50	1	07/11/2014 19:47
Xylenes	9.0		0.50	1	07/11/2014 19:47
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	Analytical Comments: d1	
aaa-TFT_2	139	S	70-130		07/11/2014 19:47

(Cont.)



Analytical Report

Client: Pangea Environmental Svcs., Inc.
Project: #1150.001; 1230 14th Saberi
Date Received: 7/7/14 18:30
Date Prepared: 7/9/14-7/11/14

WorkOrder: 1407187
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
DP-3	1407187-007A	Water	07/03/2014 17:40	GC3	92498
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND		50	1	07/09/2014 05:17
MTBE	ND		5.0	1	07/09/2014 05:17
Benzene	ND		0.50	1	07/09/2014 05:17
Toluene	ND		0.50	1	07/09/2014 05:17
Ethylbenzene	ND		0.50	1	07/09/2014 05:17
Xylenes	ND		0.50	1	07/09/2014 05:17
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT_2	102		70-130		07/09/2014 05:17
DP-4	1407187-008A	Water	07/03/2014 18:00	GC3	92617
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	69		50	1	07/11/2014 14:46
MTBE	ND		5.0	1	07/11/2014 14:46
Benzene	3.0		0.50	1	07/11/2014 14:46
Toluene	ND		0.50	1	07/11/2014 14:46
Ethylbenzene	0.96		0.50	1	07/11/2014 14:46
Xylenes	2.5		0.50	1	07/11/2014 14:46
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: d1	
aaa-TFT_2	102		70-130		07/11/2014 14:46
DP-5	1407187-009A	Water	07/03/2014 18:35	GC3	92670
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	1700		50	1	07/11/2014 21:16
MTBE	ND		5.0	1	07/11/2014 21:16
Benzene	68		0.50	1	07/11/2014 21:16
Toluene	82		0.50	1	07/11/2014 21:16
Ethylbenzene	71		0.50	1	07/11/2014 21:16
Xylenes	280		0.50	1	07/11/2014 21:16
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: d1	
aaa-TFT_2	125		70-130		07/11/2014 21:16



Quality Control Report

Client: Pangea Environmental Svcs., Inc.
Date Prepared: 7/9/14
Date Analyzed: 7/8/14
Instrument: GC3
Matrix: Water
Project: #1150.001; 1230 14th Saberi

WorkOrder: 1407187
BatchID: 92498
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS-92498
 1407186-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	62.7	40	60	-	105	70-130
MTBE	ND	11.0	5.0	10	-	109	70-130
Benzene	ND	10.2	0.50	10	-	102	70-130
Toluene	ND	9.89	0.50	10	-	98.9	70-130
Ethylbenzene	ND	9.94	0.50	10	-	99.5	70-130
Xylenes	ND	30.1	0.50	30	-	100	70-130

Surrogate Recovery

aaa-TFT_2	9.90	9.53		10	99	95	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	60.3	59.2	60	ND	100	98.7	70-130	1.73	20
MTBE	11.6	12.2	10	ND	116	122	70-130	4.98	20
Benzene	10.3	10.6	10	ND	97.1	101	70-130	3.35	20
Toluene	10.0	10.2	10	ND	100	102	70-130	1.87	20
Ethylbenzene	10.1	10.3	10	ND	101	103	70-130	2.01	20
Xylenes	30.7	31.5	30	ND	102	105	70-130	2.67	20

Surrogate Recovery

aaa-TFT_2	9.51	9.61	10		95	96	70-130	1.01	20
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(Cont.)



Quality Control Report

Client: Pangea Environmental Svcs., Inc.
Date Prepared: 7/11/14
Date Analyzed: 7/10/14
Instrument: GC7
Matrix: Water
Project: #1150.001; 1230 14th Saberi

WorkOrder: 1407187
BatchID: 92617
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS-92617
 1407107-009AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	57.7	40	60	-	96.1	70-130
MTBE	ND	9.84	5.0	10	-	98.4	70-130
Benzene	ND	11.0	0.50	10	-	110	70-130
Toluene	ND	11.1	0.50	10	-	111	70-130
Ethylbenzene	ND	11.0	0.50	10	-	110	70-130
Xylenes	ND	33.4	0.50	30	-	111	70-130

Surrogate Recovery

aaa-TFT_2	10.6	9.03		10	106	90	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR	0	ND<400	NR	NR	-	NR	
MTBE	NR	NR	0	3800	NR	NR	-	NR	
Benzene	NR	NR	0	3500	NR	NR	-	NR	
Toluene	NR	NR	0	17	NR	NR	-	NR	
Ethylbenzene	NR	NR	0	ND<5	NR	NR	-	NR	
Xylenes	NR	NR	0	7.7	NR	NR	-	NR	

Surrogate Recovery

aaa-TFT_2	NR	NR	0		NR	NR	-	NR	
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(Cont.)



Quality Control Report

Client: Pangea Environmental Svcs., Inc.
Date Prepared: 7/11/14
Date Analyzed: 7/10/14
Instrument: GC3
Matrix: Water
Project: #1150.001; 1230 14th Saberi

WorkOrder: 1407187
BatchID: 92619
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS-92619
 1407107-010AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	59.8	40	60	-	99.7	70-130
MTBE	ND	10.2	5.0	10	-	102	70-130
Benzene	ND	9.85	0.50	10	-	98.5	70-130
Toluene	ND	9.91	0.50	10	-	99	70-130
Ethylbenzene	ND	9.93	0.50	10	-	99.3	70-130
Xylenes	ND	30.0	0.50	30	-	100	70-130

Surrogate Recovery

aaa-TFT_2	9.92	9.49		10	99	95	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR	0	4800	NR	NR	-	NR	
MTBE	NR	NR	0	ND	NR	NR	-	NR	
Benzene	NR	NR	0	1700	NR	NR	-	NR	
Toluene	NR	NR	0	380	NR	NR	-	NR	
Ethylbenzene	NR	NR	0	ND<10	NR	NR	-	NR	
Xylenes	NR	NR	0	3900	NR	NR	-	NR	

Surrogate Recovery

aaa-TFT_2	NR	NR	0		NR	NR	-	NR	
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(Cont.)



Quality Control Report

Client: Pangea Environmental Svcs., Inc.
Date Prepared: 7/12/14
Date Analyzed: 7/11/14
Instrument: GC3
Matrix: Water
Project: #1150.001; 1230 14th Saberi

WorkOrder: 1407187
BatchID: 92670
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS-92670
 1407187-002AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	63.2	40	60	-	105	70-130
MTBE	ND	10.0	5.0	10	-	100	70-130
Benzene	ND	9.98	0.50	10	-	99.8	70-130
Toluene	ND	10.1	0.50	10	-	101	70-130
Ethylbenzene	ND	10.1	0.50	10	-	101	70-130
Xylenes	ND	30.5	0.50	30	-	102	70-130

Surrogate Recovery

aaa-TFT_2	10.2	9.79		10	102	98	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	63.5	62.4	60	ND	106	104	70-130	1.82	20
MTBE	10.3	10.1	10	ND	103	101	70-130	1.97	20
Benzene	10.2	10.6	10	ND	102	106	70-130	4.14	20
Toluene	10.1	10.7	10	ND	101	107	70-130	5.62	20
Ethylbenzene	10.3	10.8	10	ND	103	108	70-130	4.60	20
Xylenes	31.1	32.6	30	ND	104	109	70-130	4.78	20

Surrogate Recovery

aaa-TFT_2	9.72	9.78	10		97	98	70-130	0.637	20
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1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1407187

ClientCode: PEO

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

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

Email: ederubeis@pangeaenv.com
 cc/3rd Party:
 PO:
 ProjectNo: #1150.001; 1230 14th Saberi

Bill to:

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

Requested TAT:

5 days

Date Received: 07/07/2014

Date Printed: 07/07/2014

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	
1407187-001	AS-2	Water	7/3/2014 19:05	<input type="checkbox"/>	A	A											
1407187-002	AS-3	Water	7/3/2014 19:05	<input type="checkbox"/>	A												
1407187-003	AS-4	Water	7/3/2014 18:56	<input type="checkbox"/>	A												
1407187-004	AS-5	Water	7/3/2014 18:45	<input type="checkbox"/>	A												
1407187-005	DP-1	Water	7/3/2014 17:55	<input type="checkbox"/>	A												
1407187-006	DP-2	Water	7/3/2014 18:25	<input type="checkbox"/>	A												
1407187-007	DP-3	Water	7/3/2014 17:40	<input type="checkbox"/>	A												
1407187-008	DP-4	Water	7/3/2014 18:00	<input type="checkbox"/>	A												
1407187-009	DP-5	Water	7/3/2014 18:35	<input type="checkbox"/>	A												

Test Legend:

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

Prepared by: Catherine Burton

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.



WORK ORDER SUMMARY

Client Name: PANGEA ENVIRONMENTAL SVCS., INC.

QC Level: LEVEL 2

Work Order: 1407187

Project: #1150.001; 1230 14th Saberi

Client Contact: Elizabeth DeRubeis

Date Received: 7/7/2014

Comments:

Contact's Email: ederubeis@pangeaenv.com

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1407187-001A	AS-2	Water	SW8021B/8015Bm (G/MBTEX)	3	voa	<input type="checkbox"/>	7/3/2014 19:05	5 days	Present	<input type="checkbox"/>	
1407187-002A	AS-3	Water	SW8021B/8015Bm (G/MBTEX)	3	voa	<input type="checkbox"/>	7/3/2014 19:05	5 days	Present	<input type="checkbox"/>	
1407187-003A	AS-4	Water	SW8021B/8015Bm (G/MBTEX)	3	voa	<input type="checkbox"/>	7/3/2014 18:56	5 days	Present	<input type="checkbox"/>	
1407187-004A	AS-5	Water	SW8021B/8015Bm (G/MBTEX)	3	voa	<input type="checkbox"/>	7/3/2014 18:45	5 days	Present	<input type="checkbox"/>	
1407187-005A	DP-1	Water	SW8021B/8015Bm (G/MBTEX)	3	voa	<input type="checkbox"/>	7/3/2014 17:55	5 days	Present	<input type="checkbox"/>	
1407187-006A	DP-2	Water	SW8021B/8015Bm (G/MBTEX)	3	voa	<input type="checkbox"/>	7/3/2014 18:25	5 days	Present	<input type="checkbox"/>	
1407187-007A	DP-3	Water	SW8021B/8015Bm (G/MBTEX)	3	voa	<input type="checkbox"/>	7/3/2014 17:40	5 days	Present	<input type="checkbox"/>	
1407187-008A	DP-4	Water	SW8021B/8015Bm (G/MBTEX)	3	voa	<input type="checkbox"/>	7/3/2014 18:00	5 days	Present	<input type="checkbox"/>	
1407187-009A	DP-5	Water	SW8021B/8015Bm (G/MBTEX)	3	voa	<input type="checkbox"/>	7/3/2014 18:35	5 days	Present	<input type="checkbox"/>	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

voa = 43mL VOA, Unpreserved



Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.** Date and Time Received: **7/7/2014 6:30:25 PM**
 Project Name: **#1150.001; 1230 14th Saberi** Login Reviewed by: **Catherine Burton**
 WorkOrder No: **1407187** 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: 6.5°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 Sample labels checked for correct preservation? Yes No
 pH acceptable upon receipt (Metal: pH<2; 522: pH<4)? Yes No NA
 Samples Received on Ice? Yes No

(Ice Type: WET ICE)

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

 Comments: