Andy Saberi
1045 Airport Boulevard
South San Francisco, CA 94080

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

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

May 31, 2013

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: **Groundwater Monitoring and Remediation Report – First Quarter 2013**
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 *Groundwater Monitoring and Remediation Report – First Quarter 2013*.

Based on seasonally high water levels limiting remedial effectiveness, low removal rates, and Fund budget limitations, Pangea temporarily discontinued DPE/AS and BOC remediation in February 2013. Pangea plans to restart the DPE/AS system in the summer when water levels have decreased to evaluate for rebounding conditions. Due to budget limitations for fiscal year 2013/14, Pangea plans to submit a budget change request to allow several additional months of site remediation. Depending on budget availability, Pangea may recommend modification of the remedial approach (e.g., biosparging) and associated groundwater monitoring program.

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

Sincerely,
Pangea Environmental Services, Inc.

Bob Clark-Riddell, P.E.
Principal Engineer

Attachment: *Groundwater Monitoring and Remediation Report – First Quarter 2013*

cc: Andy Saberi, 1045 Airport Blvd., South San Francisco, California 94080
Denis Brown, Shell Oil Products US, 20945 S. Wilmington Avenue, Carson, CA 90810-1039
SWRCB Geotracker (electronic copy)

GROUNDWATER MONITORING AND REMEDIATION REPORT – FIRST QUARTER 2013

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

May 31, 2013

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:

REGISTERED PROFESSIONAL ENGINEER
ROBERT G. CLARK-RIDDELL
No. C 049629
Exp. SEPT 2014
CIVIL
STATE OF CALIFORNIA

FOR

Morgan Gillies
Project Manager

Bob Clark-Riddell, P.E.
Principal Engineer

INTRODUCTION

On behalf of Andy Saberi, Pangea Environmental Services, Inc. (Pangea) conducted groundwater monitoring and sampling, and remediation system maintenance and sampling at the subject site (Figure 1). The purpose of the monitoring and sampling is to evaluate dissolved contaminant concentrations and groundwater flow direction. The purpose of the remediation is to remove residual petroleum hydrocarbon from site soil and groundwater. Groundwater analytical results and elevation data are shown on Figure 2. Current and historical analytical data are summarized on Table 1. Site remediation data are summarized on Tables 2, 3 and 4.

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.

GROUNDWATER MONITORING AND SAMPLING

Groundwater monitoring was performed on March 24, 2013. Seven site wells were sampled according to 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. The remediation system was shutdown on February 15, 2013, allowing subsurface equilibration for 37 days before groundwater monitoring.

Before well purging, the dissolved oxygen (DO) concentration was measured in each well. DO was measured by lowering a downwell sensor to the approximate middle of the water column and allowing the reading to stabilize during gentle height adjustment. Prior to sample collection, approximately three casing volumes of water were purged 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 and conductivity. A groundwater sample was collected from each well with a disposable bailer, and decanted into the appropriate containers supplied by the analytical laboratory. Groundwater samples

were labeled, placed in protective plastic bags, and stored on crushed ice at or below 4°C. All samples were transported under chain-of-custody to the State-certified analytical laboratory. Purge water was pumped through the remediation system. 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. For routine monitoring, groundwater samples were collected from wells MW-1, MW-5R, MW-6, MW-7, VW/MW-4, DP-1 and 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. Additionally, select samples were analyzed for residual BOC compounds as cobalt thiocyanante active substances/non-ionic surfactants (CTAS) by EPA Method 5540D and 2-propanol (IPA) by EPA Method 8260B. Samples were analyzed by McCampbell Analytical, Inc., of Pittsburg, California, a State-certified laboratory. The laboratory analytical report is included in Appendix C.

Groundwater Flow Direction

Based on depth-to-water data collected on March 24, 2013, 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

No SPH was observed in any of the site wells. During monitoring on March 24, 2013, the maximum TPHg (5,000 µg/L) and benzene (420 µg/L) concentrations were detected in DPE well DP-1. These concentrations are significantly higher than the non-detect concentrations detected in December 2012, but are within historic ranges. This rebound is likely due to the shutdown of the remediation system in February 2013 about 37 days before monitoring. Groundwater analytical data are summarized on Table 1 and on Figure 2. 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 System

The dual phase extraction (DPE) remediation system simultaneously extracts groundwater and soil vapor from site remediation wells. The remediation system layout is shown on Figure 5. The DPE system installed at the site consists of a 250 cfm electric catalytic oxidizer equipped with a 7.5 hp positive-displacement blower. To maximize groundwater depression, a "stinger" (vacuum tube inserted below the water table) is used to both depress the water table and extract soil vapor in each of the remediation wells (DP-1 through DP-5). Extracted vapors are routed through an air/water separator and then treated by the electric catalytic oxidizer. The treated vapor is discharged to the atmosphere in accordance with Bay Area Air Quality Management District (BAAQMD) requirements. Groundwater captured within the air/water separator is pumped through two 1,000-lb canisters of granular activated carbon plumbed in series. The treated groundwater is discharged into the sewer in accordance with East Bay Municipal Utility District's (EBMUD) requirements.

The air sparging (AS) system consists of a 5-hp piston air compressor for injecting air into sparge wells AS-1 through AS-5. Air flow to the sparge wells is controlled by timer-activated solenoid valves and individual well flow meters. The air sparging system is enclosed within a small shed to help reduce noise from the compressor.

The DPE/AS system is monitored in accordance with air permit requirements of the *Permit to Operate* issued by the Bay Area Air Quality Management District (BAAQMD) and groundwater discharge requirements of the *Wastewater Discharge Permit* issued by East Bay Municipal Utility District.

Operation and Performance

The DPE remediation system was started up on April 27, 2011 but only operated for approximately three weeks in April/May 2011 and two weeks in December 2011 due to equipment issues and budget limitations from the UST Cleanup Fund. The AS system also only operated intermittently during this time due to equipment malfunction. Following recent repair of the DPE/AS equipment, continuous operation of DPE/AS resumed on February 23, 2012. On March 16, 2012 the DPE/AS system was shutdown due to the DPE unit overheating.

On June 15, 2012, continuous operation of the DPE/AS system resumed with a new DPE unit. Current DPE is focused on wells DP-1, DP-2, DP-4 and DP-5 to optimize hydrocarbon removal, to capture vapors created by

air sparging, and to capture hydrocarbon desorption caused by injected BOC. Due to noise concerns, the air compressor is cycled intermittently between 9 am and 9 pm.

Operation and performance data for the vapor-phase and aqueous-phase portions of the DPE system are summarized on Tables 2 and 3, respectively. Tables 2 and 3 present system operation time, extraction flow rates, influent TPHg and benzene concentrations, and contaminant removal rates and cumulative mass removal. Air sparge system data is summarized on Table 4.

As of February 15, 2013, the DPE system operated for a total of approximately 182 days. Based on laboratory analytical and performance data, Pangea estimates that soil vapor removal rates during this reporting period peaked near 3.1 lbs/day TPHg and 0.02 lbs/day benzene (February 6 and 15, 2013). As of February 15, 2013, the vapor-phase portion of the DPE system removed a total of approximately 1,580 lbs TPHg and 17.8 lbs benzene. As of February 15, 2013, the groundwater portion of the DPE system has removed a total of approximately 2.7 lbs TPHg and 0.1 lbs benzene.

As of February 15, 2013, the AS system operated for a total of approximately 145 days. The focus of the air sparging system has been on wells AS-1, AS-2 and AS-4, located near the primary hydrocarbon source area in the middle of the site. As shown on Table 4, the flow rate to each well is typically approximately 2 cfm.

Enhanced DPE Using Bio-Organic Catalyst (BOC)

The ACEH approved BOC use to enhance DPE effectiveness on April 17, 2012 and BOC use commenced in July 2012. To enhance DPE system effectiveness, Pangea has used a bio-organic catalyst (BOC) designed to help desorb and breakdown petroleum hydrocarbons to improve product recovery efforts and accelerate biodegradation of petroleum hydrocarbons. BOC is a highly concentrated liquid "NONTOX™-TPH Eliminator." BOC has been used effectively on open water spills of petroleum crude oil and is enjoying increasing use for subsurface hydrocarbon remediation applications. BOC is often introduced into existing wells using water flushing and/or air sparging for added BOC distribution and increased dissolved oxygen supply. Petroleum hydrocarbons are decomposed, eventually degrading to carbon dioxide and water as end products. BOC is non-toxic, 100% biodegradable, and safe to human, animals and plant life. BOC is mostly water, proteins, and enzymes derived from plant and mineral sources (primarily yeast). BOC works in concert with indigenous bacteria. BOC behaves similar to a surfactant and forms small bubbles when agitated by air injection (or shaking of product within a jar or treatment cell). BOC is relatively inexpensive and is considered 'green' remedial technology.

Prior BOC use at this site is summarized below on Table A. No BOC addition to site wells was performed during 1st quarter 2013. BOC has been previously added to wells AS-2, AS-4, DP-4, DP-5 and VW/MW-4. To increase BOC distribution into the subsurface, BOC has been added to site wells followed by treated

groundwater in an approximate ratio of 1:5 or 1:10 (BOC/water). The BOC/water mixture is allowed to equilibrate within the site subsurface for a few days before resumption of DPE to extract desorbed hydrocarbons. Upon resumption of DPE, system influent data is obtained to facilitate evaluation of BOC enhancement of DPE remediation. Additional notes about BOC use are included on Table 2 (DPE *vapor*-phase performance data) and Table 3 (DPE *aqueous*-phase performance data).

Table A – Cumulative BOC Addition Volume in Site Wells

Well	BOC Volume (gal)	Water Volume (gal)
AS-2	6.5	40
AS-4	6.5	40
DP-4	2	10
DP-5	2	10
VW/MW-4	8	40
Total	25 gallons	140 gallons

Evaluation of DPE and BOC Effectiveness

System performance and groundwater monitoring data indicates that BOC injection may have slightly increased aqueous and vapor phase removal rates. Pangea offers the following evaluation of DPE/BOC effectiveness.

- The hydrocarbon and benzene plume appears to be shrinking as illustrated by Figures 4, 5, 6, and 7. The benzene concentration in well VW/MW-4 decreased from 1,000 µg/L to 33 µg/L between the third and fourth quarter monitoring events. For well DP-1, the benzene concentration decreased from 360 µg/L to <0.5 µg/L, while TPHg concentrations decreased from 7,300 µg/L to <50 µg/L between third and fourth quarter monitoring events. While these concentration reductions could be due to remedial activities, these reductions could be due to seasonal water level changes between monitoring events. Historical data indicates that contaminant concentrations are highest when groundwater levels are seasonally low, and conversely, contaminant concentrations are lowest when groundwater levels are seasonally high.

- Prior hydrocarbon concentration rebound in groundwater in select wells may be a temporary result of hydrocarbon desorption provided by BOC use or could be a natural fluctuation. For example, benzene concentrations increased from 110 µg/L to 360 µg/L in MW-5R from June 2012 to September 2012. The

110 µg/L benzene concentration in MW-5R was a historic low, so some rebound is not surprising, especially given the water table change.

- BOC injection apparently increased *vapor*-phase hydrocarbon removal achieved by DPE (Table 2). Following the October 15 injection of BOC, TPHg removal rates increased from 3.8 lbs/day to 8.1 lbs/day and benzene removal rates increased from 0.03 lbs/day to 0.04 lbs/day. This increase is based on system vapor influent samples collected on October 18 (about 72 hours after BOC injection) and approximately 24 hours after commencing DPE from wells DP-4 and DP-5.

- BOC injection increased *aqueous*-phase hydrocarbon removal achieved by DPE (Table 3). Following the October 15 BOC injection, influent concentrations to the water treatment system increased as follows: from 1.0 µg/L to 4.2 µg/L benzene (4 fold increase) and 230 µg/L to 2,300 µg/L TPHg (10 fold increase). This increase is based on system water influent samples collected on October 17 (about 48 hours after BOC injection) and a few hours commencing DPE from wells DP-4 and DP-5.

- Future groundwater monitoring will help determine if recent contaminant reductions are due to seasonal water level fluctuation or remedial effectiveness.

Hydrocarbon and BOC Capture Monitoring

Since no BOC was injected into site wells during 1st quarter 2013, Pangea did not conduct any additional special monthly BOC sampling events. Therefore, to evaluate BOC migration in the subsurface, Pangea analyzed the March 24, 2013 samples from downgradient well MW-6 and source area well MW-5R for 2-propanol and CTAS. No 2-propanol or CTAS was reported in these wells. This suggests that the DPE system appears to be effectively capturing injected BOC through the subsurface.

For comparison purposes, Pangea previoulsy had a sample of BOC analyzed for ethanol, methanol, 2-propanol and CTAS/non-ionic surfactants for baseline data. The BOC sample contained ethanol (250,000 µg/L), 2-propanol (940,000 µg/L), and CTAS (56,000,000 µg/L).

FUTURE SITE ACTIVITIES

Enhanced DPE/AS Remediation

Based on seasonally high water level limiting remedial effectiveness, low removal rates, and Fund budget limitations, Pangea temporarily discontinued DPE/AS remediation in February 2013. To date, the system has operated for approximately 6 months. Pangea plans to restart the DPE/AS system in the summer when water levels have decreased to check for possible rebounding removal rates. Pangea plans limited BOC use in conjunction with DPE/AS.

Due to the Fund's limited site budget of $20,000 budget for fiscal year 2013/14, Pangea plans to submit a budget change request to allow a few additional months of site remediation and associated BOC use and monitoring. If vapor-phase removal rates are very low within the DPE system, Pangea may recommend performing low-cost biosparging (low flow air sparging), and discontinue more costly DPE with AS. Depending on budget availability, Pangea may recommend modification of the remedial approach (e.g., biosparging) and associated groundwater monitoring program.

Planned Remediation and Monitoring Schedule

Pangea plans the following schedule for continued site remediation and associated groundwater monitoring:

- June 2013 – No Groundwater Monitoring due to Inactive Remediation and Budget Limitations
- Summer 2013 – Resume DPE/AS Remediation and Limited BOC Use.
- September 2013 – Perform Groundwater Monitoring
- Fall 2013 – Continue Site Remediation and Consider Biosparging (Based on site data and budget availability).

Pending available budget from the Cleanup Fund, Pangea anticipates performing quarterly groundwater monitoring of the seven key impacted/observation wells (Table B, Appendix A). If BOC implementation continues in 2013, for cost control the monthly monitoring would be performed only on select wells (DP-2, MW-1 and MW-6) based on prior demonstrated BOC capture.

Electronic Reporting

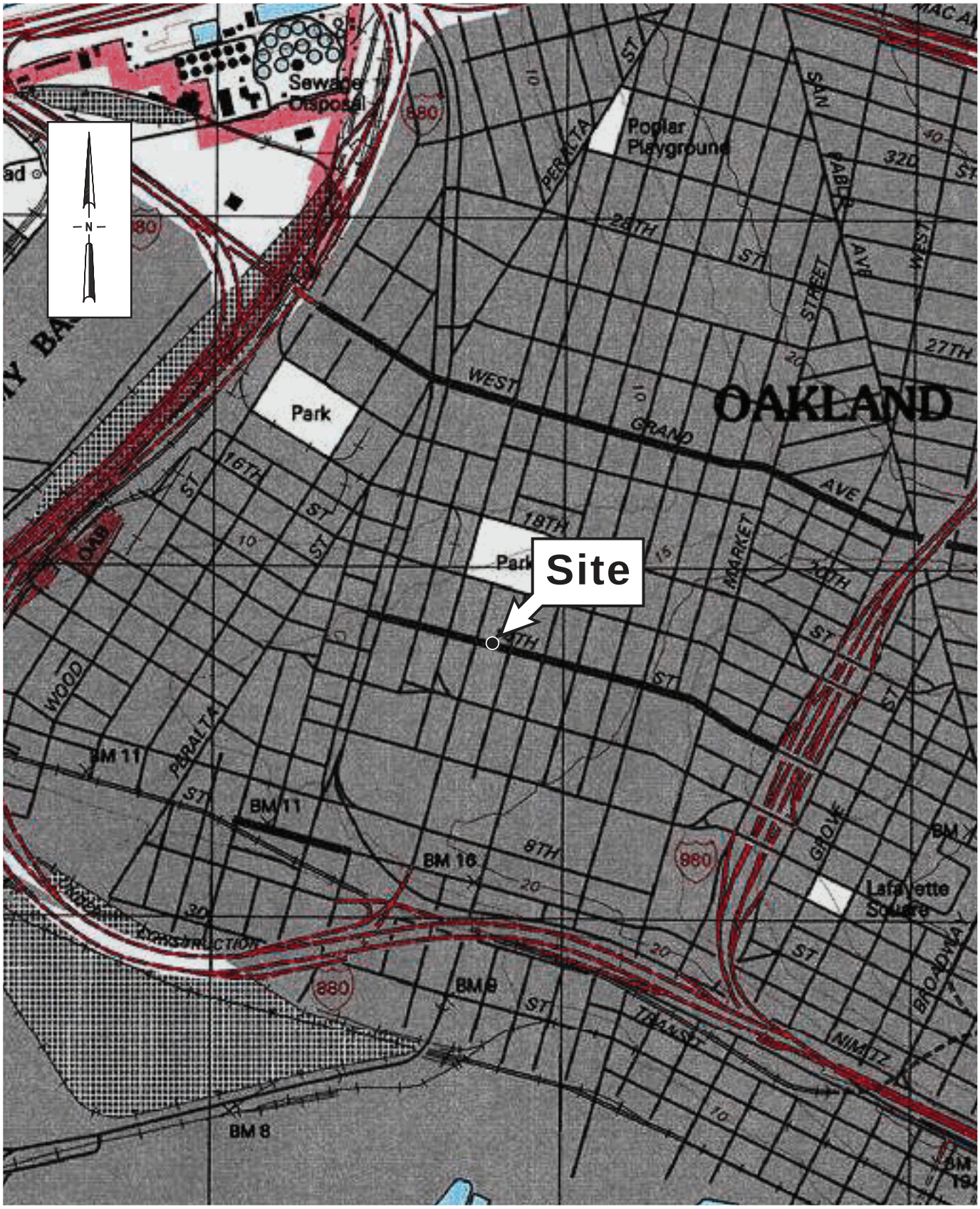
This report will be uploaded to the Alameda County FTP site. The report, laboratory data, and other applicable information will also be uploaded to the State Water Resource Control Board’s Geotracker database. As requested, report hard copies will no longer be provided to the local agencies.

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
Table 2 – SVE Performance Data
Table 3 – GWE Performance Data
Table 4 – AS Performance Data

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



0 1/8 1/4 1/2 1

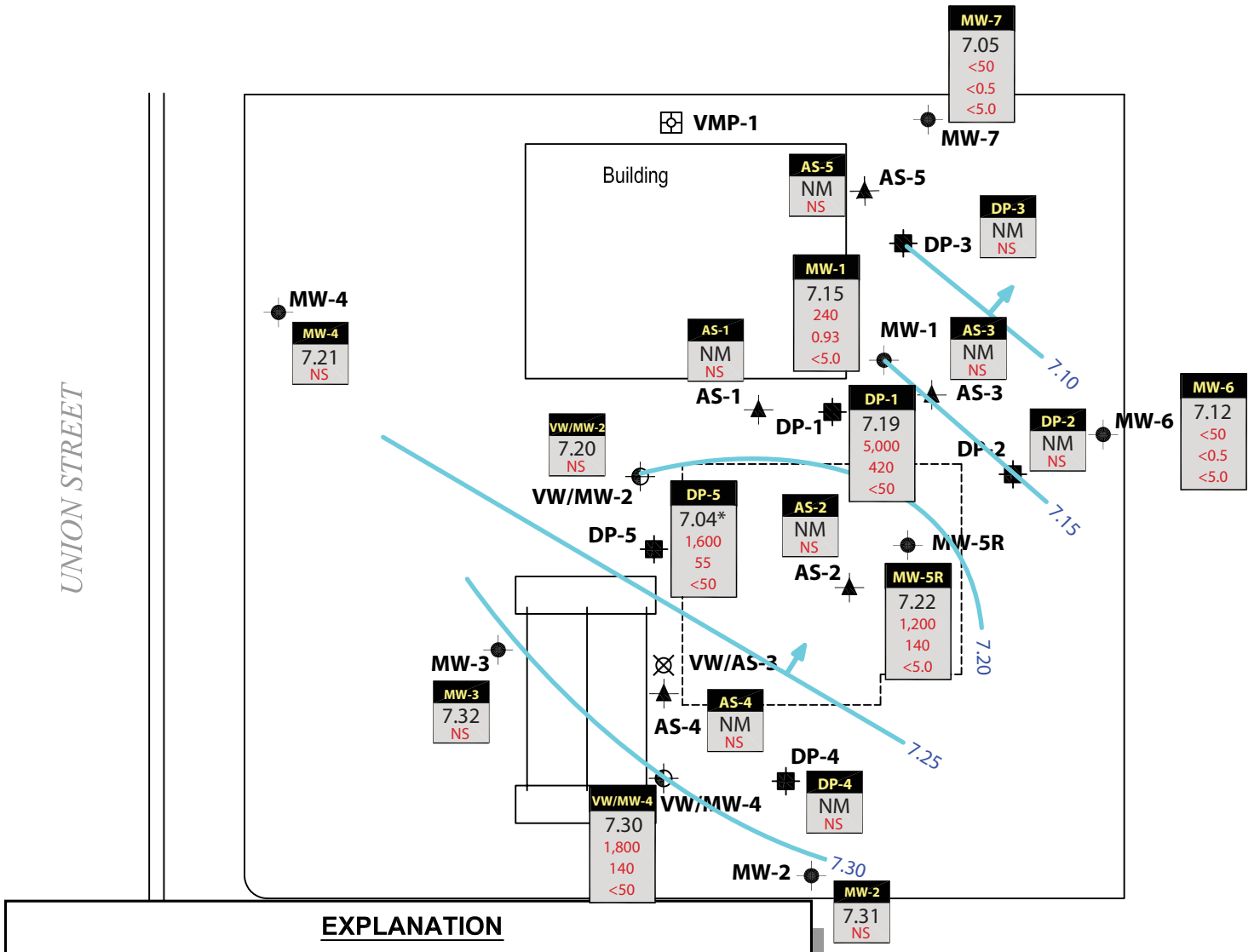
SCALE : 1" = 1/4 MILE

Figure 1

Former Shell Service Station
1230 14th Street
Oakland, California

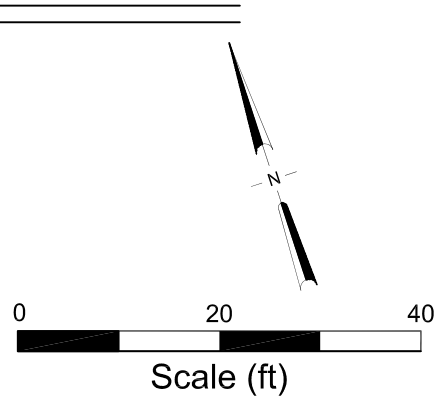
PANGEA

Vicinity Map



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
- Well ID / ELEV / TPHg / Benzene / MTBE — Well designation; Groundwater elevation; Hydrocarbon concentrations in groundwater in micrograms per liter (ug/L)
- NM — Not measured
- NS — Not sampled
- 7.10 — Groundwater elevation contour, in feet
- Approximate groundwater flow direction



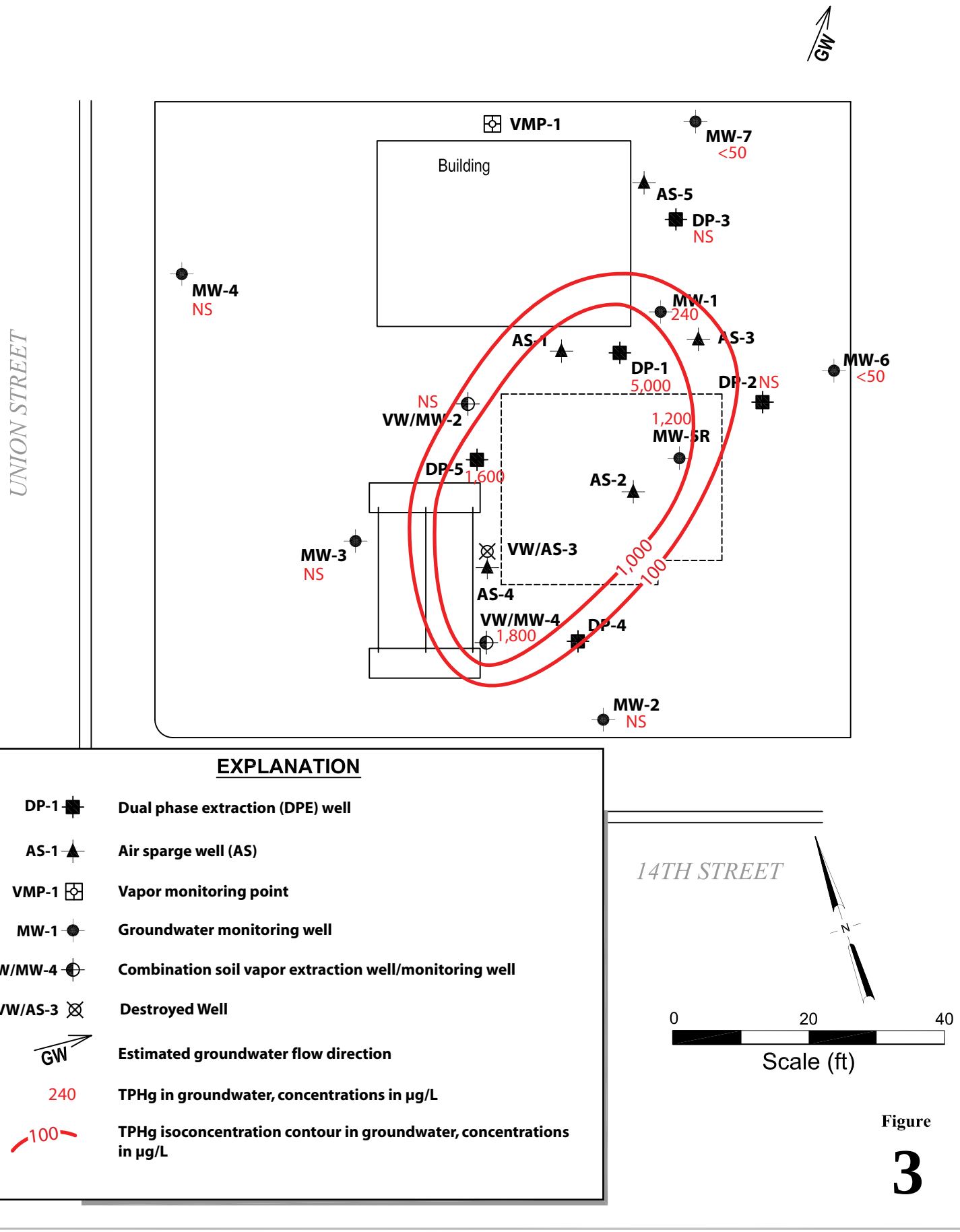
Figure

2

Former Shell Service Station
1230 14th Street
Oakland, California

PANGEA

Groundwater Elevation Contour and Hydrocarbon Concentration Map
March 24, 2013



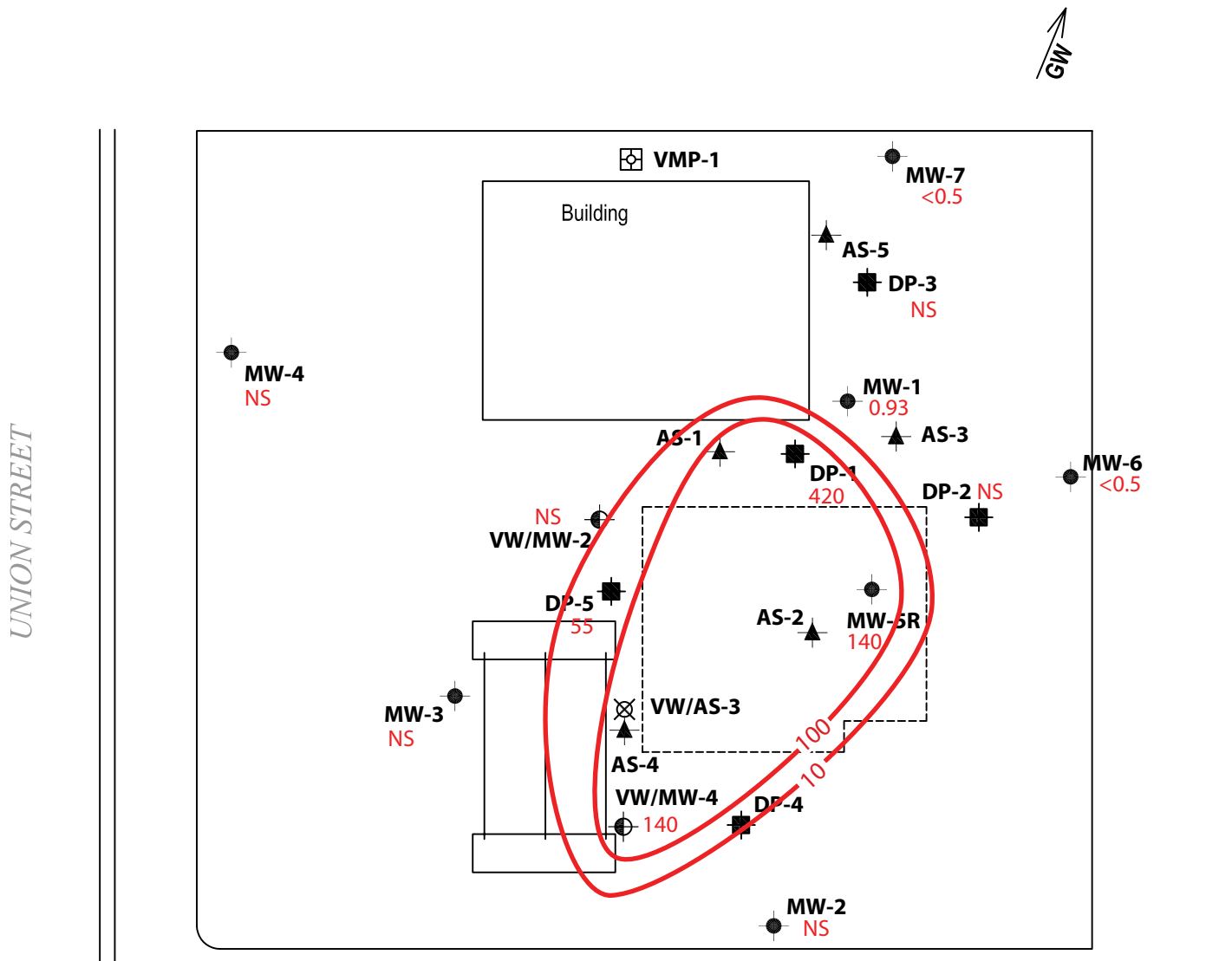
Figure

3

Former Shell Service Station
1230 14th Street
Oakland, California

PANGEA

TPHg Distribution in Groundwater
March 24, 2013



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
GW	Estimated groundwater flow direction
0.93	Benzene in groundwater, concentrations in µg/L
100	Benzene isoconcentration contour in groundwater, concentrations in µg/L

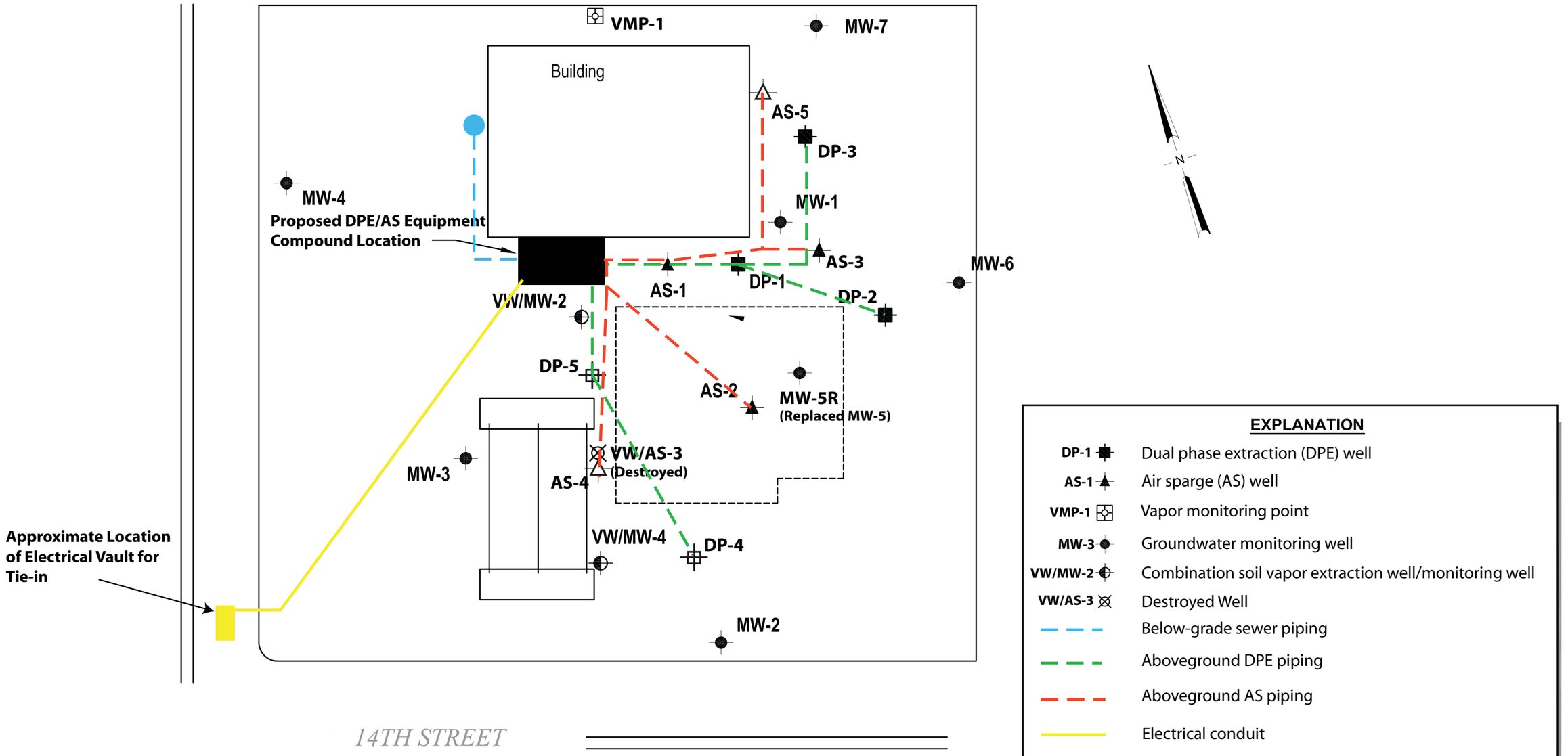
Figure

4

Former Shell Service Station
1230 14th Street
Oakland, California

PANGEA

Benzene Distribution in Groundwater
March 24, 2013



FIGURE

5

Former Shell Service Station
1230 14th Street
Oakland, California

PANGEA

Remediation System Layout

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)
REMEDIATION 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					Well Inaccessible				
19.69	05/23/11					Well Inaccessible				
	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	--
AS-2	07/02/08	11.98	--	9,600	380	620	170	1,000	<50	--
19.22										
AS-3	07/02/08	12.42	--	2,800	340	7.2	20	37	<50	--
19.5										
AS-4	04/16/10	8.82	---	31,000	1,300	330	400	6,600	<500	--
18.93										
AS-5	04/16/10	10.03	---	120	2.5	1.3	1.2	17	<5.0	--
19.99										
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**
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
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	<0.5	<5.0	0.59/0.66
	09/30/12	14.35	5.00	--	--	--	--	--	--	--
	12/14/12	11.67	7.68	--	--	--	--	--	--	--
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
DP-5	04/16/10	9.11	--	19,000	810	1,900	680	3,100	<350	--
18.36	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**
GROUNDWATER AND/OR REMEDIATION WELLS										
MW-1	03/25/96	9.53	9.05	37,000	7,400	1,500	720	3,300	<500	--
18.58	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	--

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)
(MW-1 cont'd)	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
	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,l	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)	--

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)
(MW-1 cont'd)	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**
MW-2	03/25/96	8.19	9.71	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
17.90	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
	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	(<5.0)	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	(<5.0)	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	(<5.0)	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	(<5.0)	0.4/0.2
	05/13/03	9.45	8.45	<50	<0.50	<0.50	<0.50	<1.0	(<5.0)	0.5/0.3
	06/13/03	10.28	7.62	<50	<0.50	<0.50	<0.50	<1.0	(<5.0)	0.6/0.9
	07/14/03	10.67	7.23	<50	<0.50	<0.50	<0.50	<1.0	(<0.50)	0.5/.09
	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

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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)
(MW-2 cont'd)	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	<5.0	2.82
	05/26/08	11.02	6.88	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.86/1.32
	08/18/08	11.97	5.93	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.45/1.12
	11/20/08	12.64	5.26	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.10/1.16
	02/18/09	11.14	6.76	<50	<0.5	<0.5	<0.5	<0.5	<5.0	0.98/1.11
	05/26/09	10.31	7.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0	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	<5.0	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	<5.0	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	<5.0	3.46
	09/30/12	12.80	5.10	--	--	--	--	--	--	--
	12/14/12	10.37	7.53	--	--	--	--	--	--	--
	03/24/13	**10.59**	**7.31**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	03/25/96	8.47	9.71	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
18.18	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	<050	<0.50	<0.50	<2.5	1.1
	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

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)
(MW-3 cont'd)	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/.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
	09/30/12	13.02	5.16	--	--	--	--	--	--	--
	12/14/12	10.58	7.60	--	--	--	--	--	--	--
	03/24/13	**10.86**	**7.32**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	03/25/96	9.20	8.81	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--
18.01	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

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)
(MW-4 cont'd)	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
	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**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	12/03/01	11.86	6.61	--	--	--	--	--	--	--
18.47	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

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)
(MW-5 cont'd)	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
	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
18.40	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**
MW-6	12/03/01	12.19	6.65	--	--	--	--	--	--	--
18.84	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

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)	
(MW-6 cont'd)	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)	--	
	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	see note n
	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**	
MW-7	12/03/01	12.66	6.54	--	--	--	--	--	--	--	
19.20	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	

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)
(MW-7 cont'd)	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)	--
	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**
VW/MW-2	03/25/96	9.04	9.26	13,000	900	920	180	1,500	<250	--
18.30	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

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-2 cont'd)	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
	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

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-2 cont'd)	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**	--	--	--	--	--	--	**1.48/1.72**
VW/MW-4	03/25/96	8.45	9.69	83,000	6,500	7,000	2,000	11,000	<250	--
18.14	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	--	--

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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)	
(VW/MW-4 cont'd)	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)	--	
	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	see note o
	03/24/13	**10.84**	**7.30**	**1,800**	**140**	**11**	**27**	**76**	**<50**	**0.41/1.35**	
VW/AS-1	03/25/96	8.98	9.62	--	--	--	--	--	--	--	
18.60	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	

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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)
(VW/AS-1 cont'd)	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
	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	--	--	--	--	--	--	--
18.17	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

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/AS-3 cont'd)	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
	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				

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.

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)

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 represenative.

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

Pangea

Table 2. SVE (DPE) Performance Data - 1230 14th Street, Oakland, CA

Date	Wells	Oxidizer Hr Meter Reading (hours)	Total Time (days)	Interval Time (days)	System Vapor Flow (cfm)	App Vac ("Hg)	Lab Sample ID	Influent TPHg Lab (ppmv)	Influent Benzene Lab (ppmv)	Influent OVA Reading (ppmv)	Air Sparge (status)	Removal: SVE TPHg Removal Rate (lbs/day)	Removal: SVE Benzene Removal Rate (lbs/day)	Removal: Cumulativ SVE TPH Removal (lbs)	Removal: Cumulative SVE Benz Removal (lbs)	Emission Reporting: Effluent OVA Reading (ppmv)	Abate Effic OVA (%)	Effluent TPHg Lab)	Effluent Lab (ppmv)	TPHg Abate Effic (%)	Benzene Abate Effic (%)	Benzene Emission Rate (lbs/day)	Cumulative Vapor Flow (cf)	Notes
04/27/11	DP-1,2,4,5	10730.2	0.0	0.0	107	9	---	32	2.0	34	Off	1.1	0.06	0.0	0	6	**82.4**	---	---	---	---	---	0	Startup Test
05/05/11	DP-1,2,4,5	10895.3	6.9	6.9	107	7	INF-V	**28**	**1.5**	23	Off	1.0	0.05	6.6	0.32	11	**52.2**	**22**	**1.0**	**21.4**	**33.3**	**0.031**	1,059,942	On
05/16/11	DP-1,2,4,5	11164.0	18.1	11.2	107	4	---	20	1.0	---	Off	0.7	0.03	14.3	0.67	---	---	---	---	---	---	---	2,784,996	On
05/24/11	DP-1,2,4,5	11239.0	21.2	3.1	107	4	---	20	1.0	12	Off	0.7	0.03	16.4	0.77	4	**66.7**	---	---	---	---	---	3,266,496	On. **Shutdown** due to high EFF-V conc in lab report.
07/13/11	DP-1,2,4,5	11241.4	21.3	0.1	107	7	---	20	1.0	31	Off	0.7	0.03	16.5	0.77	15	**51.6**	---	---	---	---	---	3,281,904	Off. Restart, **check cat cell, send for repair**.
09/06/11	DP-1,2,4,5	11250.6	21.7	0.4	55	5	---	400	10.0	451	Test	7.1	0.16	19.2	0.83	336	**25.5**	---	---	---	---	---	3,312,385	Off. Test with air sparging and HVOCs. Off at departure.
10/24/11	DP-1,2,4,5	11251.7	21.7	0.0	79	7	---	1,800	20.0	1906	Test	45.8	0.46	21.3	0.85	905	**52.5**	---	---	---	---	---	3,317,621	Off. Test new cat cell. Heat exchgr issue. Off at departure.
11/23/11	DP-1,2,4,5	11261.3	22.1	0.4	43	5	---	3,500	40.0	3670	Test	47.9	0.50	40.5	1.05	156	**95.7**	---	---	---	---	---	3,342,170	Off. **Install repaired heat exch and repaired cat cell.**
11/28/11	DP-1,2,4,5	11287.4	23.2	1.1	76	8	---	600	13.0	693	Test	14.6	0.29	56.4	1.36	3	**99.6**	---	---	---	---	---	3,461,186	Off. Test for lead in influent with sparging. **Meets permit.**
11/29/11	DP-1,2,4,5	11295.3	23.5	0.3	151	6	---	600	13.0	693	Test	29.1	0.57	66.0	1.55	19	**97.3**	---	---	---	---	---	3,532,760	Off. Restart to test. **Meets permit. Left on for testing.**
12/01/11	DP-1,2,4,5	11342.8	25.5	2.0	68	6	---	500	10.0	548	Test	10.9	0.20	87.5	1.94	16	**97.1**	---	---	---	---	---	3,726,560	On. **Meets permit. Left on for testing.**
12/14/11	DP-1,2,4,5	11653.4	38.5	12.9	64	5	---	200	5.0	203	Test	4.1	0.09	140.7	3.15	11	**94.6**	---	---	---	---	---	4,919,264	On. **<97% dest so turn off.** Test another unit 12/21/11: similar.
01/05/12	DP-1,2,4,5	11659.2	38.7	0.2	93	6	---	600	13.0	695	Test	17.8	0.35	145.0	3.23	56	**91.9**	---	---	---	---	---	4,951,485	Off. Test with dilution air for oxygen. Off at departure.
01/23/12	DP-1,2,4,5	11659.8	38.7	0.0	93	9	---	700	13.0	726	Test	20.9	0.35	145.5	3.24	58	**92.0**	---	---	---	---	---	4,954,842	Off. Restart to test with dilution and prep for lab test.
01/24/12	DP-1,2,4,5	11680.0	39.6	0.8	95	8	INF-V	**1,500**	**24.0**	2290	Test	45.5	0.66	183.8	3.80	230	**90.0**	**180**	**2.8**	**88.0**	**88.3**	**0.077**	5,069,522	On. Collect lab. Off at departure.
02/08/12	DP-1,2,4,5	11683.0	39.7	0.1	95	8	---	1,500	24.0	---	Test	45.5	0.66	189.5	3.88	---	---	---	---	---	---	---	5,086,553	Cat Cell Testing
02/15/12	DP-1,2,4,5	11690.0	40.0	0.3	118	5	INF-V	**180**	**2.1**	156	Off	6.8	0.07	191.5	3.90	10	**93.6**	**< 7.0**	**< 0.077**	**> 96.1**	**> 96.3**	**< 0.003**	5,136,113	Test destruction efficiency with new cat cell.
02/23/12	DP-1,2,4,5	11705.0	40.6	0.6	131	11	INF-V	**860**	**8.5**	749	On	36.1	0.32	214.1	4.10	6	**99.2**	**7.9**	**< 0.077**	**99.1**	**> 99.1**	**< 0.003**	5,254,013	**Restart DPE/AS. DPE/AS units repaired.**
02/27/12	DP-1,2,4,5	11741.0	42.1	1.5	131	5	INF-V	**73**	**0.8**	---	On	3.1	0.03	218.7	4.15	---	---	---	---	---	---	---	5,536,973	Off. High Enclosure Temp. Restart.
02/28/12	DP-1,2,4,5	11765.6	43.1	1.0	188	5	---	130	5.0	142	On	7.9	0.27	226.8	4.43	---	---	---	---	---	---	---	5,815,052	On. **Limit AS to AS-2, AS-4**. Monitor influence.
02/29/12	DP-1,2,4,5	11777.0	43.6	0.5	188	5	---	130	5.0	---	Off	7.9	0.27	230.5	4.56	---	---	---	---	---	---	---	5,943,917	Off. Restaft DPE/AS
03/01/12	DP-1,2,4,5	11800.7	44.6	1.0	141	8	INF-V	**450**	**7.7**	350	On	20.4	0.32	250.6	4.88	3	**99.1**	---	---	---	---	---	6,144,419	On. Increased vacuum to 8" Hg.
03/02/12	DP-1,2,4,5	11825.7	45.6	1.0	132	10	---	400	7.7	422	On	16.9	0.30	268.2	5.18	---	---	---	---	---	---	---	6,342,419	On.
03/04/12	DP-1,2,4,5	11880.0	47.9	2.3	132	9	---	400	7.7	422	On	16.9	0.30	306.6	5.85	---	---	---	---	---	---	---	6,772,475	On.
03/09/12	DP-1,2,4,5	11994.3	52.7	4.8	146	8	---	700	12.0	740	On	32.8	0.51	462.9	8.28	6	**99.2**	---	---	---	---	---	7,775,115	On.
03/13/12	DP-1,2,4,5	12087.7	56.6	3.9	141	8	INF-V	**990**	**11.0**	545	On	44.7	0.45	636.7	10.04	5	**99.1**	---	---	---	---	---	8,563,037	On.
03/16/12	DP-1,2,4,5	12159.0	59.5	3.0	141	8	---	990	11.0	---	On	44.7	0.45	769.4	11.37	5	---	---	---	---	---	---	9,164,524	On. Shutdown due to element meltdown - SVE unit replaced.
06/15/12	DP-1,2,5	14701.4	59.5	0.0	229	10	---	240	3.0	245	Off	17.6	0.20	821.1	11.96	2	**99.2**	---	---	---	---	---	9,153,551	**Startup of new SVE unit.**
06/19/12	DP-1,2,5	14740.9	61.1	1.6	165	10	---	500	4.4	498	On	26.4	0.21	864.6	12.31	3	**99.4**	---	---	---	---	---	9,543,890	Off. Restart
06/20/12	DP-1,2,4,5	14760.6	62.0	0.8	160	10	INF-V	**450**	**4.4**	337	On	23.1	0.20	883.5	12.47	5	**98.5**	**< 7**	**< 0.077**	**> 98.4**	**> 98.3**	**< 0.004**	9,732,774	On.
07/03/12	DP-1,2,4,5	14823.5	64.6	2.6	164	10	---	350	4.0	372	On	18.4	0.19	931.8	12.97	2	**99.5**	---	---	---	---	---	10,351,710	Off 7/1 for QM. Restart
07/05/12	DP-1,2,4,5	14873.9	66.7	2.1	152	10	---	180	2.0	184	On	8.8	0.09	950.2	13.16	0	**100.0**	---	---	---	---	---	10,811,358	On. Inject Nontox in VW/MW-4, AS-2, AS-4.
07/06/12	DP-1,2,4,5	14891.3	67.4	0.7	170	10	---	190	2.0	195	On	10.4	0.10	957.7	13.23	12	**93.8**	---	---	---	---	---	10,988,838	On.
07/10/12	DP-1,2,4,5	14992.1	71.6	4.2	168	10	---	160	2.0	173	On	8.6	0.10	994.0	13.64	7	**96.0**	---	---	---	---	---	12,004,902	On.
07/11/12	DP-1,2,4,5	15014.1	72.5	0.9	161	10	---	160	2.0	165	On	8.3	0.09	1001.6	13.73	6	**96.4**	---	---	---	---	---	12,217,818	On.
07/17/12	DP-1,2,4,5	15075.7	75.1	2.6	168	10	---	180	2.0	186	On	9.7	0.10	1026.5	13.98	5	**97.3**	---	---	---	---	---	12,840,224	Off. Turn off AS. Inject Nontox in VW/MW-4,AS-2,AS-4 on 7/18; restart.
07/19/12	DP-1,2,4,5	15088.9	75.6	0.5	168	9	---	160	2.0	---	On	8.6	0.10	1031.3	14.03	---	---	---	---	---	---	---	12,973,597	Off. Restart.
07/20/12	DP-1,2,4,5	15109.2	76.5	0.8	168	9	---	160	2.0	---	On	8.6	0.10	1038.6	14.12	---	---	---	---	---	---	---	13,178,708	On.
07/21/12	DP-1,2,4,5	15124.0	77.1	0.6	168	9	---	160	2.0	---	On	8.6	0.10	1043.9	14.18	---	---	---	---	---	---	---	13,328,248	Off. Restart.
08/03/12	DP-1,2,4,5	15365.7	87.2	10.1	168	9	---	160	2.0	---	On	8.6	0.10	1131.0	15.16	---	---	---	---	---	---	---	15,770,384	Off. Transfer pump not working. Coordinate repair. Restart later 8/3.
08/07/12	DP-1,2,4,5	15398.7	88.6	1.4	133	10	---	160	2.0	159	On	6.8	0.08	1140.3	15.27	5	**96.9**	---	---	---	---	---	16,033,328	Off. Restart.
08/31/12	DP-1,2,4,5	15556.9	95.1	6.6	155	11	---	140	1.0	140	On	7.0	0.05	1186.2	15.57	4	**97.1**	---	---	---	---	---	17,504,588	Off. Restart.
09/20/12	DP-1,2,4,5	15595.1	96.7	1.6	111	10	---	180	1.0	187	On	6.4	0.03	1196.4	15.62	4	**97.9**	---	---	---	---	---	17,759,000	Off. Restart.
10/03/12	DP-1,2,4,5	15832.0	106.6	9.9	100	10	---	120	1.0	126	Off	3.8	0.03	1234.4	15.91	10	**92.1**	---	---	---	---	---	19,180,400	Off. Restart. Inject Nontox VW/MW-4, AS-2, AS-4, DP-4 & DP-5 on 10/15.
10/18/12	DP-1,2,4,5	16143.0	119.6	13.0	110	13	INF-V	**230**	**1.1**	144	On	8.1	0.04	1339.6	16.36	12	**91.7**	---	---	---	---	---	21,233,000	On.
11/05/12	DP-1,2,4,5	16581.0	137.8	18.3	110	11	---	200	1.1	---	On	7.1	0.04	1468.4	17.00	---	---	---	---	---	---	---	24,123,800	Off. Inject Nontox in VW/MW-4, AS-2, AS-4, DP-4 and DP-5. Restart.

Pangea

Table 2. SVE (DPE) Performance Data - 1230 14th Street, Oakland, CA

Date	Wells	Oxidizer Hr Meter Reading (hours)	Total Time (days)	Interval Time (days)	System Vapor Flow (cfm)	App Vac ("Hg)	Lab Sample ID	Influent TPHg Lab (ppmv)	Influent Benzene Lab (ppmv)	Influent OVA Reading (ppmv)	Air Sparge (status)	Removal: SVE TPHg Removal Rate (lbs/day)	Removal: SVE Benzene Removal Rate (lbs/day)	Removal: Cumulativ SVE TPH Removal (lbs)	Removal: Cumulative SVE Benz Removal (lbs)	Emission Reporting: Effluent OVA Reading (ppmv)	Emission Reporting: Abate Effic **OVA** (%)	Emission Reporting: Effluent TPHg Lab)	Emission Reporting: Effluent Lab (ppmv)	Emission Reporting: **TPHg** Abate Effic (%)	Emission Reporting: Benzene Abate Effic (%)	Emission Reporting: Benzene Emission Rate (lbs/day)	Emission Reporting: Cumulative Vapor Flow (cf)	Notes
11/13/12	DP-1,2,4,5	16724.2	143.8	6.0	109	13	---	150	1.1	160	On	5.2	0.03	1499.7	17.21	12	**92.5**	---	---	---	---	---	25,060,328	Off. Restart.
11/26/12	DP-1,2,4,5	16776.0	145.9	2.2	116	13	INF-V	**70**	**0.48**	49	Off	2.6	0.02	1505.4	17.25	2	**95.9**	---	---	---	---	---	25,420,856	Off. Restart.
12/31/12	DP-1,2,4,5	17190.0	163.2	17.3	115	13	---	45	0.4	47	On	1.7	0.01	1534.0	17.48	3	**93.6**	---	---	---	---	---	28,277,456	Off. Restart.
01/09/13	DP-1,2,4,5	17410.8	172.4	9.2	115	13	---	45	0.4	47	Off	1.7	0.01	1549.3	17.60	---	---	---	---	---	---	---	29,800,976	On. AS off. Restart.
02/06/13	DP-1,2,4,5	17433.8	173.4	1.0	140	13	---	70	0.4	79	On	3.1	0.02	1552.3	17.62	3	**96.2**	---	---	---	---	---	29,993,900	DPE/AS off. Restart.
02/15/13	DP-1,2,4,5	17651.0	182.4	9.1	136	13	---	70	0.4	79	On	3.1	0.02	1579.9	17.76	---	---	---	---	---	---	---	31,766,252	On. Temporary Shutdown.

Notes:

ALL = Wells DP-1, DP-2, DP-3, DP-4 and DP-5.

NA = not analyzed; NM = not measured; --- = not available

System data estimated when specific data not available.

cfm = actual cubic feet (cf) per minute based on anemometer readings (from vacuum side of vacuum pump during SVE).

ppmv = parts per million on volume to volume basis. Actual lab data shown in **bold.** Lab data estimated for dates without lab data to allow mass removal calculation.

lbs = Pounds

"Hg = Inches of mercury vacuum

SVE = Soil Vapor Extraction

OVA = Organic Vapor Analyzer (Horiba Model MEXA 324JU)

TPHg and Benzene Removal Rates = For dates where no laboratory analytical data was collected, the lab data is estimated based on prior lab data and OVA readings to calculate period and cumulative mass removal.

Hydrocarbon Removal/Emission Rate = Rate based on Bay Area Air Quality Management District's Manual of Procedures for Soil Vapor Extraction dated July 17, 1991.

Rate = lab concentration (ppmv) x system flowrate (scfm) x (1lb-mole/386 ft³) x molecular weight (86 lb/lb-mole for TPH-Gas hexane) x 1440 min/day x 1/1,000,000.

Table 3. GWE (DPE) System Performance Summary - 1230 14th Street, Oakland, California

Well ID	Date	Totalizer Reading[1] (gallons)	Interval Flow Volume (gallons)	Interval Duration (days)	Average Flow Rate (gpm)	**TPHg** Concentration (ug/L)	**Benzene** Concentration (ug/L)	**MTBE** Concentration (ug/L)	TPHg Removed (Lbs)	Benzene Removed (Lbs)	MTBE Removed (Lbs)	Comments
System	04/27/11	2,090	0	0	--	**960**	**120**	**ND (<5.0)**	0.000	0.000	0.000	Starup water sampling of influent (3/7/11)
Influent	05/05/11	62,822	60,732	8	5.27	---	---	---	0.485	0.061	0.000	On.
	05/16/11	100,689	37,867	11	2.39	---	---	---	0.302	0.038	0.000	On.
	05/24/11	101,686	997	8	0.09	---	---	---	0.008	0.001	0.000	On. Shutdown due to high EFF-V conc.
	07/13/11	101,686	0	50	0.00	---	---	---	0.000	0.000	0.000	Off. Restart, check cat cell. Send for repair.
	09/06/11	102,753	1,067	55	0.01	---	---	---	0.009	0.001	0.000	Off. Restart, off at departure.
	10/24/11	102,753	0	48	0.00	---	---	---	0.000	0.000	0.000	Off. Restart, install new cat cell. Off at departure.
	11/22/11	103,480	727	29	0.02	---	---	---	0.006	0.001	0.000	Off. Restart.
	11/23/11	103,593	113	1	0.08	---	---	---	0.001	0.000	0.000	Off. Restart.
	11/28/11	104,011	418	5	0.06	---	---	---	0.003	0.000	0.000	Off. Restart.
	11/29/11	104,105	94	1	0.07	---	---	---	0.001	0.000	0.000	Off. Restart.
	12/01/11	105,995	1,890	2	0.66	---	---	---	0.015	0.002	0.000	On.
	12/14/11	107,707	1,712	13	0.09	**320**	**8.9**	**ND (<5.0)**	0.005	0.000	0.000	Off. Restart.
	01/05/12	108,203	496	22	0.02	---	---	---	0.001	0.000	0.000	Off. Restart, off at departure.
	01/23/12	108,303	100	18	0.00	---	---	---	0.000	0.000	0.000	Off. Restart.
	01/24/12	112,516	4,213	1	2.93	---	---	---	0.011	0.000	0.000	Off. Restart, off at departure.
	02/23/12	113,710	1,194	30	0.03	---	---	---	0.003	0.000	0.000	Off. Restart.
	02/28/12	118,833	5,123	5	0.71	---	---	---	0.014	0.000	0.000	On.
	02/29/12	119,300	467	1	0.32	---	---	---	0.001	0.000	0.000	Off. Restart.
	03/01/12	119,956	656	1	0.46	---	---	---	0.002	0.000	0.000	On.
	03/02/12	123,447	3,491	1	2.42	---	---	---	0.009	0.000	0.000	On.
	03/09/12	146,799	23,353	7	2.32	---	---	---	0.062	0.002	0.000	On.
	03/13/12	160,104	13,305	4	2.31	**2,100**	**70**	**ND (<5.0)**	0.232	0.008	0.000	On. Shutdown 3/16 due to overheating - SVE unit replaced.
	06/15/12	167,592	7,488	94	0.06	---	---	---	0.131	0.004	0.000	Startup of new SVE unit.
	06/19/12	169,669	2,077	4	0.36	---	---	---	0.036	0.001	0.000	Off. Restart.
	06/20/12	172,212	2,543	1	1.77	---	---	---	0.044	0.001	0.000	Off. Restart.
	07/03/12	179,966	7,754	13	0.41	---	---	---	0.135	0.005	0.000	Off 7/1 for QM. Restart.
	07/06/12	188,780	8,814	3	2.04	**1,000**	**26**	**ND (<5.0)**	0.073	0.002	0.000	On. Inject BOC 7/5.
	07/10/12	193,738	4,958	4	0.86	**900**	**16**	**ND (<5.0)**	0.037	0.001	0.000	On.
	07/17/12	207,286	13,548	7	1.34	---	---	---	0.101	0.002	0.000	Off. Inject BOC, leave off. Restart 7/18.
	07/19/12	209,077	1,791	2	0.62	---	---	---	0.013	0.000	0.000	Off. Restart.
	07/20/12	211,310	2,233	1	1.55	---	---	---	0.017	0.000	0.000	On.
	07/21/12	212,880	1,570	1	1.09	---	---	---	0.012	0.000	0.000	Off. Restart.
	08/03/12	256,581	43,701	13	2.33	---	---	---	0.327	0.006	0.000	Off. Restart.
	08/07/12	258,157	1,577	4	0.27	---	---	---	0.012	0.000	0.000	Off. Restart.
	08/31/12	284,048	25,891	24	0.75	---	---	---	0.194	0.003	0.000	Off. Restart.
	09/20/12	286,963	2,915	20	0.10	---	---	---	0.022	0.000	0.000	Off. Restart.
	10/03/12	304,780	17,817	13	0.95	---	---	---	0.133	0.002	0.000	Off. Restart.
	10/15/12	331,065	26,285	12	1.52	**230**	**1.0**	**ND (<5.0)**	0.050	0.000	0.000	On. Inject BOC.
	10/17/12	331,675	610	2	0.21	**2,000**	**4.2**	**ND (<5.0)**	0.010	0.000	0.000	On.
	10/18/12	333,335	1,660	1	1.15	**130**	**ND (<0.5)**	**ND (<5.0)**	0.002	0.000	0.000	On.
	10/19/12	334,580	1,245	1	0.86	**130**	**ND (<0.5)**	**ND (<5.0)**	0.001	0.000	0.000	On.
	11/05/12	348,740	14,160	17	0.58	---	---	---	0.015	0.000	0.000	On. Close DP-4 & DP-5 and Inject BOC.
	11/12/12	352,220	3,480	7	0.35	**330**	**2.5**	**ND (<5.0)**	0.010	0.000	0.000	On. Open DP-4 & DP-5.
	11/13/12	352,520	300	1	0.21	---	---	---	0.001	0.000	0.000	Off. Restart.
	11/26/12	354,560	2,040	13	0.11	---	---	---	0.006	0.000	0.000	Off. Restart.
	12/31/12	382,940	28,380	35	0.56	---	---	---	0.078	0.001	0.000	Off. Restart.
	01/09/13	390,779	7,839	9	0.60	---	---	---	0.022	0.000	0.000	On.
	02/06/13	391,345	567	28	0.01	---	---	---	0.002	0.000	0.000	Off. Restart.
	02/15/13	407,735	16,390	9	1.26	---	---	---	0.045	0.000	0.000	On. Temporary Shutdown of System.
									2.700	**0.145**	**0.000**	**Total Cumulative Removal (Lbs)**

Table 3. GWE (DPE) System Performance Summary - 1230 14th Street, Oakland, California

Well ID	Date	Totalizer Reading[1] (gallons)	Interval Flow Volume (gallons)	Interval Duration (days)	Average Flow Rate (gpm)	**TPHg** Concentration (ug/L)	**Benzene** Concentration (ug/L)	**MTBE** Concentration (ug/L)	TPHg Removed (Lbs)	Benzene Removed (Lbs)	MTBE Removed (Lbs)	Comments
System Effluent	04/27/11	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	Startup water sampling of effluent (3/7/11)
	12/14/11	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	
	07/10/12	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	
	10/30/12	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	

Discharge Limits (ug/L):	***5***	***5***	***5***	***5***
	Benzene	***Toluene***	***Ethylbenzene***	***Total Xylenes***

ABBREVIATIONS AND NOTES:

1 = Initial totalizer reading was 2,090.

gpm = Gallons per minute

TPHd = Total Petroleum Hydrocarbon as Diesel analyzed by EPA Method 8015B with silica gel cleanup

TPHg = Total Petroleum Hydrocarbon as Gasoline analyzed by EPA Method 8015B

Benzene analyzed by EPA Method 8021B

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021 Cm

Toulene, Ethylbenzene and Total Xylenes analyzed by EPA Method 8015B

-- = not measured/not available

* Estimated contaminant mass calculated by multiplying average concentration detected during period (Table 1) by volume of extracted groundwater. Uses most recent lab data.

**Unless noted Toulene, Ethylbenzene and Total Xylenes non-detect (<0.5)

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Table 4. Air Sparge Performance Data - 1230 14th Street, Oakland, CA

Date	Sparge Wells	Compressor Hr Meter Reading[1] (hours)	Total Time[1] (days)	Interval Time (days)	AS-1 Flow Rate (scfm)	AS-1 Injection Pressure (PSI)	AS-2 Flow Rate (scfm)	AS-2 Injection Pressure (PSI)	AS-3 Flow Rate (scfm)	AS-3 Injection Pressure (PSI)	AS-4 Flow Rate (scfm)	AS-4 Injection Pressure (PSI)	AS-5 Flow Rate (scfm)	AS-5 Injection Pressure (PSI)	Notes
04/27/11	---	---	0.0	0.0	---	---	---	---	---	---	---	---	---	---	Startup Test of DPE System
05/05/11	---	---	0.0	0.0	---	---	---	---	---	---	---	---	---	---	Off
05/16/11	---	---	0.0	0.0	---	---	---	---	---	---	---	---	---	---	Off
05/24/11	---	---	0.0	0.0	---	---	---	---	---	---	---	---	---	---	Off.
07/13/11	---	---	0.0	0.0	---	---	---	---	---	---	---	---	---	---	Off.
09/06/11	AS-1,3,4,5	---	0.1	0.1	---	---	---	---	---	---	---	---	---	---	Off. Compressor on for test with sparging. Off at departure.
10/24/11	AS-1,3,4,5	---	0.2	0.1	1.8	9	---	---	2.0	8	1.6	10	1.0	10	Off. Test.
11/23/11	AS-1,3,4	---	0.3	0.1	2.5	8	---	---	2.5	6	2.6	10	---	---	Off. Test
11/28/11	AS-1,3,4	---	0.4	0.1	NM	NM	---	---	NM	NM	NM	NM	---	---	Off. Test for lead in influent with sparging.
11/29/11	AS-1,3,4	---	0.5	0.1	2.0	NM	---	---	2.0	NM	2.0	NM	---	---	Off. Restart. DPE/AS left on for testing.
12/01/11	AS-1,3,4	---	2.0	1.5	2.0	NM	---	---	2.0	NM	2.0	NM	---	---	On. Meets permit. Left on for testing.
12/14/11	AS-1,3,4	---	3.0	1.0	2.0	NM	---	---	2.0	NM	2.0	NM	---	---	Off. Restart. <97% dest so turn off.
01/05/12	AS-1,3,4	---	4.0	1.0	2.0	NM	---	---	2.0	NM	2.0	NM	---	---	Off. Restart. Shutdown.
01/23/12	AS-1,3,4	---	4.5	0.5	2.0	NM	---	---	2.0	NM	2.0	NM	---	---	Off. Restart.
01/24/12	ALL	---	5.5	1.0	1.8	NM	1.8	NM	1.8	NM	1.8	NM	1.8	NM	On. Turned Off.
02/15/12	AS-1, 2, 3,4	---	6.0	0.5	3.0	NM	3.0	NM	3.0	NM	3.0	NM	---	---	Off. Restart.
02/22/12	AS-1, 2, 3,4	---	6.0	0.0	3.0	NM	3.0	NM	3.0	NM	3.0	NM	---	---	Off. Replace capacitors. Restart
02/23/12	AS-2,4	---	7.0	1.0	---	---	3.0	NM	---	---	3.0	NM	---	---	On.
02/24/12	AS-2,4	---	8.0	1.0	---	---	3.0	NM	---	---	3.0	NM	---	---	On.
02/28/12	AS-2,4	---	12.0	4.0	---	---	3.0	13	---	---	3.0	9	---	---	On.
02/29/12	AS-2,4	2.0	13.0	1.0	---	---	3.0	13	---	---	3.0	9	---	---	On.
03/01/12	AS-2,4	3.3	13.3	0.3	---	---	3.0	13	---	---	3.0	12	---	---	On.
03/02/12	AS-2,4	7.0	14.3	0.9	---	---	3.0	12	---	---	3.0	12	---	---	On.
03/09/12	AS-2,4	34.7	21.2	6.9	---	---	3.4	7	---	---	3.0	14	---	---	On.
03/13/12	AS-2,4	51.4	25.4	4.2	---	---	3.0	5	---	---	3.0	13	---	---	On.
03/16/12	AS-2,4	62.0	28.0	2.7	---	---	3.0	5	---	---	3.0	13	---	---	On. Shut down - SVE unit overheated - SVE unit replaced.
06/15/12	AS-1,2,4	62.2	28.1	0.1	1.8	14	1.8	13	---	---	1.8	11	---	---	Start up new SVE unit. Restart AS
06/19/12	AS-2,4	72.4	30.6	2.6	---	---	1.8	13	---	---	1.8	11	---	---	Off. Restart.
06/20/12	AS-2,4	74.8	31.2	0.6	---	---	2.0	4	---	---	2.0	10	---	---	On.
07/03/12	AS-2,4	114.5	41.1	9.9	---	---	2.0	4	---	---	2.0	10	---	---	Off 7/1 for QM. Restart
07/05/12	AS-1,2,4	125.1	43.8	2.7	2.5	5	2.2	8	---	---	2.0	10	---	---	On. Inject Nontox VW/MW-4, AS-2, AS-4.
07/06/12	AS-1,2,4	127.0	44.3	0.5	2.4	10	2.2	13	---	---	2.0	22	---	---	On.
07/10/12	AS-1,2,4	147.6	48.5	4.3	2.0	7	2.0	5	---	---	2.0	11	---	---	On.
07/11/12	AS-1,2,4	151.4	49.3	0.8	2.0	14	2.0	9	---	---	2.0	15	---	---	On.
07/18/12	AS-1,2,4	169.2	53.8	4.5	2.0	14	2.0	9	---	---	2.0	15	---	---	Off. Restart. Inject Nontox VW/MW-4, AS-2, AS-4.
07/19/12	AS-1,2,4	172.0	54.5	0.7	2.0	11	2.0	7	---	---	2.0	11	---	---	On.
08/03/12	AS-1,2,4	229.5	66.5	12.0	2.0	11	2.0	7	---	---	2.0	11	---	---	Off. Restart.
08/07/12	AS-1,2,4	245.0	69.7	3.2	2.4	10	2.2	10	---	---	1.8	22	---	---	Off. Restart.
08/31/12	AS-1,2,4	276.3	76.2	6.5	2.0	9	2.2	8	---	---	2.0	18	---	---	Off. Restart.
09/20/12	AS-1,2,4	282.0	77.4	1.2	1.8	8	2.0	6	---	---	2.0	18	---	---	Off. Restart.
10/03/12	AS-1,2,4	321.4	85.6	8.2	2.0	12	2.0	10	---	---	2.0	18	---	---	Off. Restart. Inject Nontox VW/MW-4, AS-2, AS-4, DP-4, DP-5 on 10/15.
10/18/12	AS-1,2,4	383.3	98.5	12.9	2.0	8	2.0	6	---	---	2.0	27	---	---	On.
11/13/12	AS-1,2,3,4	684.2	123.6	25.1	1.0	10	1.0	2	1.0	9	1.0	18	---	---	On.

Pangea

Table 4. Air Sparge Performance Data - 1230 14th Street, Oakland, CA

Date	Sparge Wells	Compressor Hr Meter Reading[1] (hours)	Total Time[1] (days)	Interval Time (days)	AS-1 Flow Rate (scfm)	AS-1 Injection Pressure (PSI)	AS-2 Flow Rate (scfm)	AS-2 Injection Pressure (PSI)	AS-3 Flow Rate (scfm)	AS-3 Injection Pressure (PSI)	AS-4 Flow Rate (scfm)	AS-4 Injection Pressure (PSI)	AS-5 Flow Rate (scfm)	AS-5 Injection Pressure (PSI)	Notes
11/26/12	AS-1,2,3,4	687.7	124.3	0.7	2.0	11	2.0	11	2.0	12	2.0	18	---	---	Off. Restart
12/31/12	AS-1,2,3,4	755.4	138.4	14.1	2.0	11	2.0	11	2.0	12	2.0	18	---	---	Off.
02/06/13	AS-3,4	755.6	138.5	0.0	---	---	---	---	2.0	12	2.0	13	---	---	Off. Restart.
02/15/13	AS-3,4	786.7	144.9	6.5	---	---	---	---	---	---	---	----	---	---	On. Turn off for Temporary System Shutdown.

Notes:

1 = Compressor hour meter records run time of compressor when filling air tank: does not record air injection into wells when compressor idle. Actual sparging time exceeds hour meter reading by a factor of 5 to 6 (except for 10/18/12 to 11/13/12 interval when compressor hours were multiplied by a factor of 2). Hours before 2/29/12 estimated.

ALL = Wells AS-1, AS-2, AS-3, AS-4 and AS-5.

scfm = standard cubic feet per minute based on in-line visi-float air meter.

PSI = pounds per square inch

NA = not analyzed; NM = not measured; --- = not available

System data estimated when specific data not available.

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	2nd
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

Pangea
ENVIRONMENTAL SERVICES, INC.

Well Gauging Data Sheet

Project.Task #:1150.001 234 | Project Name: Saberi - 1230 14th St.

1230 14th Street, Oakland, CA | Date 3/24/13

Name: Sanjiv Gill | Signature:

Well ID	Well Size (in.)	Time	Depth to Immiscible Liquid (ft)	Thickness of Immiscible Liquid (ft)	Depth to Water (ft)	Total Depth (ft)	Measuring Point
MW-1	2	07:28			11.43	21.32	TOC
MW-2	2	07:13			10.59	22.02	
MW-3	2	07:10			10.86	18.65	
MW-4	2	07:05			10.80	19.80	
MW-5R	4	07:45			11.18	22.60	
MW-6	4	07:18			11.72	19.70	
MW-7	4	07:22			12.15	19.81	
VW/MW-2	2	07:31			11.10	21.90	
VW/MW-4	2	07:34			10.84	18.23	
DP-1	4	07:38			11.30	22.50	
DP-5	4	07:42			11.32	20.01	*

Comments:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-1

Project.Task #: 1150.001 234	Project Name: Saberi - 1230 14th St.
Address: 1230 14th Street, Oakland, CA	
Date: 3/24/13	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 21.32	Depth to Product:
Depth to Water (DTW): 11.43	Product Thickness:
Water Column Height: 9.89	1 Casing Volume: 1.58 gallons
Reference Point: TOC	3 Casing Volumes: 4.74 gallons

Purging Device: Disposable Bailer, 3" PVC Bailer, Parastaltic Pump, Whal Pump

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
10:20	17.3	7.12	589				1.5	
10:25	17.9	7.16	620				3.0	
10:30	18.0	7.20	614				5.0	

Comments: YSI 550A DO meter

pre purge DO = 1.70 mg/l

post purge DO = 2.05 mg/l

turbid

Sample ID: MW-1	Sample Time: 10:35
Laboratory: McCampbell Analytical, INC.	Sample Date: 3/24/13
Containers/Preservative: VOA/HCl	
Analyzed for: TPHg.BTEX, MTBE	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-5R

Project.Task #: 1150.001 234	Project Name: Saberi - 1230 14th St.
Address: 1230 14th Street, Oakland, CA	
Date: 3/24/13	Weather: Sunny
Well Diameter: 4"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 22.60	Depth to Product:
Depth to Water (DTW): 11.18	Product Thickness:
Water Column Height: 11.42	1 Casing Volume: 7.42 gallons
Reference Point: TOC	3 Casing Volumes: 22.26 gallons
Purging Device: Disposable Bailer, 3" PVC Bailer, Parastaltic Pump, Whal Pump	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
12:25	18.6	7.29	895				7.5	
12:30	18.4	7.20	817				14.0	
12:35	18.4	7.23	850				22.0	

Comments: YSI 550A DO meter turbid

pre purge DO = 1.49 mg/l

post purge DO = 2.68 mg/l

Sample ID: MW-5R	Sample Time: 12:40
Laboratory: McCampbell Analytical, INC.	Sample Date: 3/24/13
Containers/Preservative: VOA/HCl	
Analyzed for: TPHg.BTEX, MTBE	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES INC.

MONITORING FIELD DATA SHEET

Well ID: MW-6

Project.Task #: 1150.001 234	Project Name: Saberi - 1230 14th St.
Address: 1230 14th Street, Oakland, CA	
Date: 3/24/13	Weather: Sunny
Well Diameter: 4"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 19.70	Depth to Product:
Depth to Water (DTW): 11.72	Product Thickness:
Water Column Height: 7.98	1 Casing Volume: 5.18 gallons
Reference Point: TOC	3 Casing Volumes: 15.54 gallons
Purging Device: Disposable Bailer, (3" PVC Bailer), Parastaltic Pump, Whal Pump	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
08:15	18.0	6.93	1153				5.0	
08:20	17.6	6.90	1127				10.0	
08:25	17.9	6.98	1141				15.5	

Comments: YSI 550A DO meter — pre purge DO = 1.17 mg/l

post purge DO = 1.85 mg/l

turbid

Sample ID: MW-6	Sample Time: 08:30
Laboratory: McCampbell Analytical, INC.	Sample Date: 3/24/13
Containers/Preservative: VOA/HCl	
Analyzed for: TPHg, BTEX, MTBE	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-7

Project.Task #: 1150.001 234	Project Name: Saberi - 1230 14th St.
Address: 1230 14th Street, Oakland CA	
Date: 3/24/13	Weather: Sunny
Well Diameter: 4"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 19.81	Depth to Product:
Depth to Water (DTW): 12.15	Product Thickness:
Water Column Height: 7.66	1 Casing Volume: 4.97 gallons
Reference Point: TOC	3 Casing Volumes: 14.91 gallons
Purging Device: Disposable Bailer, 3" PVC Bailer, Parastaltic Pump, Whal Pump	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
08:55	18.3	7.20	819				5.0	
09:00	18.0	7.24	836				10.0	
09:05	17.7	7.27	849				15.0	

Comments: YSI 550A DO meter
pre purge DO = 1.80 mg/l
post purge DO = 1.97 mg/l
turbid

Sample ID: MW-7	Sample Time: 09:10
Laboratory: McCampbell Analytical, INC.	Sample Date: 3/24/13
Containers/Preservative: VOA/HCl	
Analyzed for: TPHg,BTEX, MTBE	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES INC.

MONITORING FIELD DATA SHEET

Well ID: VW/MW-4

Project.Task #: 1150.001 234	Project Name: Saberi - 1230 14th St.
Address: 1230 14th Street, Oakland CA	
Date: 3/24/13	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 18.23	Depth to Product:
Depth to Water (DTW): 10.84	Product Thickness:
Water Column Height: 7.39	1 Casing Volume: 1.18 gallons
Reference Point: TOC	3 Casing Volumes: 3.54 gallons

Purging Device: Disposable Bailer, 3" PVC Bailer, Parastaltic Pump, Whal Pump

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
09:40	18.6	7.15	865				1.5	
09:45	18.8	7.12	881				2.5	
09:50	18.7	7.10	893				3.5	

Comments: YSI 550A DO meter

pre purge DO = 0.41 mg/l

post purge DO = 1.35 mg/l

turbid

Sample ID: VW/MW-4	Sample Time: 09:55
Laboratory: McCampbell Analytical, INC.	Sample Date: 3/24/13
Containers/Preservative: VOA/HCl	
Analyzed for: TPHg, BTEX, MTBE	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: DP-1

Project.Task #: 1150.001 234	Project Name: Saberi - 1230 14th St.
Address: 1230 14th Street, Oaklane, CA	
Date: 3/24/13	Weather: Sunny
Well Diameter: 4"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 22.50	Depth to Product:
Depth to Water (DTW): 11.30	Product Thickness:
Water Column Height: 11.20	1 Casing Volume: 7.28 gallons
Reference Point: TOC	3 Casing Volumes: 21.84 gallons
Purging Device: Disposable Bailer, 3" PVC Bailer, Parastaltic Pump, Whal Pump	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
11:00	17.8	7.90	926				7.0	
11:05	17.9	7.89	914				14.0	
11:15	17.4	7.85	920				22.0	

Comments: YSI 550A DO meter
pre purge DO = 1.17 mg/l
post purge DO = 2.40 mg/l
very turbid, silty

Sample ID: DP-1	Sample Time: 11:20
Laboratory: McCampbell Analytical, INC.	Sample Date: 3/24/13
Containers/Preservative: VOA/HCl	
Analyzed for: TPHg,BTEX, MTBE	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: DP-5

Project.Task #: 1150.001 234	Project Name: Saberi - 1230 14th St.
Address: 1230 14th Street, Oakland CA	
Date: 3/24/13	Weather: Sunny
Well Diameter: 4"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 20.01	Depth to Product:
Depth to Water (DTW): 11.32	Product Thickness:
Water Column Height: 8.69	1 Casing Volume: 5.64 gallons
Reference Point: TOC	3 Casing Volumes: 16.92 gallons

Purging Device: Disposable Bailer, 3" PVC Bailer, Parastaltic Pump, Whal Pump

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
11:45	17.5	7.59	950				5.5	
~~11:50~~	Dewatered after 6 gallons						~~11.0~~	
~~12:05~~							~~17.0~~	
13:05								16.28

Comments: YSI 550A DO meter

pre purge DO = 0.49 mg/l

post purge DO = 1.15 mg/l

very turbid, silty

Sample ID: DP-5	Sample Time: 13:10
Laboratory: McCampbell Analytical, INC.	Sample Date: 3/24/13
Containers/Preservative: VOA/HCl	
Analyzed for: TPHg.BTEX, MTBE	
Sampler Name: Sanjiv Gill	Signature:

APPENDIX C

Laboratory Analytical Report

McCampbell Analytical, Inc.
"When Quality Counts"

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

Analytical Report

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1150.001 234; Saberi-1230 14th St.	Date Sampled: 03/24/13-03/25/13
		Date Received: 03/25/13
	Client Contact: Tina De La Fuente	Date Reported: 03/28/13
	Client P.O.:	Date Completed: 03/27/13

WorkOrder: 1303672

March 29, 2013

Dear Tina:

Enclosed within are:

1) The results of the **7** analyzed samples from your project: **#1150.001 234; Saberi-1230 14th St.,**
2) QC data for the above samples, and
3) A copy of the chain of custody.

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

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1303672

McCampbell Analytical, Inc.

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

CHAIN OF CUSTODY RECORD

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

GeoTracker EDF ☒ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ **UST Clean Up Fund Project** ☐ ; **Claim #**_____

Report To: Tina de la Fuente **Bill To:** Pangea

Company: Pangea Environmental Services
1710 Franklin St. Ste 200
Oakland, CA

E-Mail: tdelafuente@pangeaenv.com

Tele: (510) 836-3702 **Fax:** (510) 836-3709

Project #: 1150.001.234 **Project Name:** Saberi - 1230 14th St.

Project Location: 1230 14th St, Oakland, CA **Purchase Order#**

Sampler Signature: Mandana Environmental Sampling

Analysis Request

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea \ Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other	BTEX & TPH as Gas (8021/ 8015 or 8260) / MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	MTBE / BTEX ONLY (EPA 8260/ 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)	LUFT 5 Metals (200.8 / 6020)	Metals (200.8 / 6020)	Filter sample for DISSOLVED metals analysis	CTAS by SM5540BD	2 groups of by 8260		
MW-1		3/21/13	10:35	3	X								X			X																			
MW-5R			12:40	5																												X	X		
MW-6			08:30	5																												X	X		
MW-7			09:10	3																															
VW/MW-4			09:55	3																															
DP-1			11:20	3																															
DP-5			13:10	3	X								X			X																			

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

Relinquished By:	Date:	Time:	Received By:
	3/25/13	1130	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 1.6
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

COMMENTS:

PRESERVATION VOAS ✓ O&G METALS OTHER HAZARDOUS: pH<2

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1303672 **ClientCode: PEO**

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

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

Email: tdelafuente@pangeaenv.com
cc:
PO:
ProjectNo: #1150.001 234; Saberi-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: **03/25/2013**
Date Printed: **03/25/2013**

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
1303672-001	MW-1	Water	3/24/2013 10:35	☐			A	A								
1303672-002	MW-5R	Water	3/25/2013 12:40	☐	B	C	A									
1303672-003	MW-6	Water	3/24/2013 8:30	☐	B	C	A									
1303672-004	MW-7	Water	3/24/2013 9:10	☐			A									
1303672-005	VW/MW-4	Water	3/24/2013 9:55	☐			A									
1303672-006	DP-1	Water	3/24/2013 11:20	☐			A									
1303672-007	DP-5	Water	3/24/2013 13:10	☐			A									

Test Legend:

1	8260VOC_W	2	CTAS_W	3	G-MBTEX_W	4	PREDF REPORT	5	
6		7		8		9		10	
11		12							

Prepared by: Maria Venegas

Comments:

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

McCampbell Analytical, Inc.
"When Quality Counts"

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

Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**
Date and Time Received: **3/25/2013 11:35:48 AM**

Project Name: **#1150.001 234; Saberi-1230 14th St.**
LogIn Reviewed by: Maria Venegas

WorkOrder N°: **1303672** 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: 1.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

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

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

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Pangea Environmental Svcs., Inc.	Client Project ID: #1150.001 234; Saberi-1230 14th St.	Date Sampled: 03/24/13-03/25/13
		Date Received: 03/25/13
1710 Franklin Street, Ste. 200	Client Contact: Tina De La Fuente	Date Extracted 03/26/13-03/27/13
Oakland, CA 94612	Client P.O.:	Date Analyzed 03/26/13-03/27/13

Volatile Organics by P&T and GC/MS*

Extraction method: SW5030B | Analytical methods: SW8260B | Work Order: 1303672

Lab ID	Client ID	Matrix	2-Propanol	DF	% SS	Comments
002B	MW-5R	W	ND	1	101	
003B	MW-6	W	ND	1	106	b1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

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

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

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

b1) aqueous sample that contains greater than ~1 vol. % sediment

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Angela Rydelius, Lab Manager

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Oakland, CA 94612	Client P.O.:	Date Analyzed: 03/26/13

CTAS (Cobalt Thiocyanate Active Subtances)/Non-ionic Surfactants

Analytical Method: SM5540D Work Order: 1303672

Lab ID	Client ID	Matrix	CTAS	DF	Comments
1303672-002C	MW-5R	W	ND	1	
1303672-003C	MW-6	W	ND	1	b1

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	0.1 mg/L	
	S	NA	

*water samples are reported in mg/L.

b1) aqueous sample that contains greater than ~1 vol. % sediment

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Pangea Environmental Svcs., Inc.	Client Project ID: #1150.001 234; Saberi-1230 14th St.	Date Sampled: 03/24/13-03/25/13
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1710 Franklin Street, Ste. 200	Client Contact: Tina De La Fuente	Date Extracted: 03/26/13-03/27/13
Oakland, CA 94612	Client P.O.:	Date Analyzed: 03/26/13-03/27/13

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1303672

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1	W	240	ND	0.93	1.5	5.7	6.2	1	125	d1,b1
002A	MW-5R	W	1200	ND	140	7.8	12	7.3	1	88	d1
003A	MW-6	W	ND	ND	ND	ND	ND	ND	1	102	b1
004A	MW-7	W	ND	ND	ND	ND	ND	ND	1	105	b1
005A	VW/MW-4	W	1800	ND<50	140	11	27	76	10	111	d1,b1
006A	DP-1	W	5000	ND<50	420	82	200	500	10	93	d1
007A	DP-5	W	1600	ND<50	55	72	24	190	10	104	d1,b1

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

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

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

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

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 75834 | WorkOrder: 1303672

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1303620-007A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	105	96.9	7.88	108	70 - 130	20	70 - 130
MTBE	ND	10	101	96	5.44	104	70 - 130	20	70 - 130
Benzene	ND	10	94.2	91	3.52	97.3	70 - 130	20	70 - 130
Toluene	ND	10	96.6	88.3	8.90	101	70 - 130	20	70 - 130
Ethylbenzene	ND	10	96.3	92.3	4.22	97.9	70 - 130	20	70 - 130
Xylenes	ND	30	100	96.3	4.12	100	70 - 130	20	70 - 130
%SS:	102	10	91	90	1.91	92	70 - 130	20	70 - 130

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

BATCH 75834 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1303672-001A	03/24/13 10:35 AM	03/26/13	03/26/13 6:56 AM	1303672-002A	03/25/13 12:40 PM	03/26/13	03/26/13 6:31 PM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 75844 | WorkOrder: 1303672

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1303686-006B**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	98.8	99.3	0.521	96.2	70 - 130	20	70 - 130
MTBE	ND	10	80.9	82.9	2.43	86.8	70 - 130	20	70 - 130
Benzene	ND	10	83.5	84.6	1.30	88.8	70 - 130	20	70 - 130
Toluene	ND	10	84.2	84.7	0.530	88.6	70 - 130	20	70 - 130
Ethylbenzene	ND	10	83.8	84.8	1.14	87.6	70 - 130	20	70 - 130
Xylenes	ND	30	84.3	86.1	2.07	87.9	70 - 130	20	70 - 130
%SS:	99	10	97	98	1.68	98	70 - 130	20	70 - 130

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

BATCH 75844 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1303672-003A	03/24/13 8:30 AM	03/27/13	03/27/13 4:58 AM	1303672-004A	03/24/13 9:10 AM	03/27/13	03/27/13 5:27 AM
1303672-005A	03/24/13 9:55 AM	03/26/13	03/26/13 7:33 PM	1303672-007A	03/24/13 1:10 PM	03/27/13	03/27/13 3:29 AM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 75854 | WorkOrder: 1303672

EPA Method: SW8260B **Extraction: SW5030B** **Spiked Sample ID: 1303704-002B**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	10	98.4	98.1	0.305	91.1	70 - 130	20	70 - 130
Benzene	ND	10	97.2	96.3	0.959	97.8	70 - 130	20	70 - 130
t-Butyl alcohol (TBA)	ND	40	100	95.7	4.50	87	70 - 130	20	70 - 130
Chlorobenzene	ND	10	93.7	92.9	0.911	93.7	70 - 130	20	70 - 130
1,2-Dibromoethane (EDB)	ND	10	101	99.4	1.24	95.4	70 - 130	20	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	99.7	99.4	0.210	99.5	70 - 130	20	70 - 130
1,1-Dichloroethene	ND	10	85.8	85.9	0.100	85.3	70 - 130	20	70 - 130
Diisopropyl ether (DIPE)	ND	10	105	106	1.06	104	70 - 130	20	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	101	101	0	96.8	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	99.5	103	3.28	95	70 - 130	20	70 - 130
Toluene	ND	10	89.2	89.5	0.321	91.3	70 - 130	20	70 - 130
Trichloroethene	ND	10	90	89.2	0.916	90.2	70 - 130	20	70 - 130
%SS1:	108	25	108	109	0.936	107	70 - 130	20	70 - 130
%SS2:	100	25	99	101	1.76	102	70 - 130	20	70 - 130
%SS3:	89	2.5	92	92	0	89	70 - 130	20	70 - 130

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

BATCH 75854 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1303672-002B	03/25/13 12:40 PM	03/27/13	03/27/13 12:15 AM	1303672-003B	03/24/13 8:30 AM	03/26/13	03/26/13 2:03 PM

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

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

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 75887 | WorkOrder: 1303672

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1303704-002A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	98.5	107	8.26	105	70 - 130	20	70 - 130
MTBE	ND	10	97.5	106	8.26	98	70 - 130	20	70 - 130
Benzene	ND	10	87.7	94.4	7.33	92.8	70 - 130	20	70 - 130
Toluene	ND	10	86	97.9	13.0	90.7	70 - 130	20	70 - 130
Ethylbenzene	ND	10	90.6	97.4	7.23	94.2	70 - 130	20	70 - 130
Xylenes	ND	30	96.3	103	7.15	99.6	70 - 130	20	70 - 130
%SS:	96	10	88	88	0	89	70 - 130	20	70 - 130

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

BATCH 75887 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1303672-006A	03/24/13 11:20 AM	03/26/13	03/26/13 10:29 PM				

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

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QC SUMMARY REPORT FOR SM5540D

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 75806 | WorkOrder: 1303672

EPA Method: SM5540D **Extraction: SM5540D** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
CTAS	N/A	1	N/A	N/A	N/A	101	N/A	N/A	85 - 115

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

BATCH 75806 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1303672-002C	03/25/13 12:40 PM	03/25/13	03/26/13 3:49 PM	1303672-003C	03/24/13 8:30 AM	03/25/13	03/26/13 3:55 PM

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

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

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

N/A = not applicable to this method.

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

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