March 9, 2007

VIA ALAMEDA COUNTY FTP SITE

Mr. Don Hwang
Alameda County Environmental Health
1331 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: **Groundwater Monitoring Report – Fourth Quarter 2006**
5175 Broadway Street
Oakland, California
ACEH Fuel Leak Case No. RO0000139

Dear Mr. Hwang:

On behalf of Rockridge Heights LLC, Pangea Environmental Services, Inc., has prepared this *Groundwater Monitoring Report – Fourth Quarter 2006*. The report describes groundwater monitoring, sampling, and other site activities.

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 your agency. A hard copy will be forwarded to the Regional Water Quality Control Board-San Francisco Bay Region.

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

Sincerely,
Pangea Environmental Services, Inc.

Bob Clark-Riddell, P.E.
Principal Engineer

Attachment: *Groundwater Monitoring Report – Fourth Quarter 2006*

cc: Rockridge Heights, LLC, C/O Gary Feiner, 34 Schooner Hill, Oakland, California, 94618
RWQCB – SF Bay Region, Cherie McCaulou, 1515 Clay Street, Oakland, California 94612
SWRCB Geotracker (Electronic copy)

GROUNDWATER MONITORING REPORT – FOURTH QUARTER 2006

5175 Broadway
Oakland, California

March 9, 2007

Prepared for:

Rockridge Heights, LLC
C/O Gary Feiner
34 Schooner Hill
Oakland, California 94618

Prepared by:

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

Written by:

Morgan Gillies
Project Manager

Bob Clark-Riddell, P.E.
Principal Engineer

Groundwater Monitoring Report – Fourth Quarter 2006
5175 Broadway
Oakland, California
March 9, 2007

INTRODUCTION

On behalf of Rockridge Heights, LLC, Pangea Environmental Services, Inc. (Pangea) conducted groundwater monitoring and sampling at the subject site (Figure 1). The purpose of the monitoring and sampling is to evaluate dissolved contaminant concentrations, determine the groundwater flow direction, and inspect site wells for separate-phase hydrocarbons (SPH). Current groundwater analytical results and elevation data are shown on Figure 2. Current and historical data are summarized on Table 1.

SITE BACKGROUND

The site is a former Exxon gas station located at the southwest corner of Broadway and Coronado Avenue in Oakland, California (Figure 1), and is situated on top of a ridge extending from the base of the East Bay Berkeley Hills into the East Bay Plain. The topography slopes gently away from the site in all directions except northeast. The site has not been operated as a gas station since at least 1979, and is currently vacant and surrounded by a locked fence. Surrounding land use is mixed residential and light commercial.

Environmental compliance work commenced when the site USTs were removed in January 1990. Three 8,000-gallon steel single-walled USTs, associated piping, and a 500-gallon steel single-walled waste oil tank were removed. Tank Project Engineering, Inc. (TPE) conducted the tank removal and observed holes in all four tanks. Approximately 700 tons of contaminated soil was excavated during tank removal and was subsequently remediated and reused for onsite backfill by TPE. In April 1990, TPE installed and sampled monitoring wells MW-1, MW-2 and MW-3. In June 1991, Soil Tech Engineering (STE, subsequently renamed Environmental Soil Tech Consultants [ESTC]) installed monitoring wells STMW-4 and STMW-5. Groundwater monitoring was conducted on the site intermittently until October 2002. Golden Gate Tank Removal (GGTR) performed additional assessment in January and February 2006. In June 2006, the property was purchased by Rockridge Heights, LLC. Pangea commenced quarterly groundwater monitoring at the site in July 2006.

GROUNDWATER MONITORING AND SAMPLING

On October 16, 2006, Pangea conducted groundwater monitoring and sampling at the site. Site monitoring wells were gauged for depth to water and total well depth. Groundwater samples were obtained from four of the five site monitoring wells (MW-1, MW-2, STMW-4 and STMW-5). Well MW-3 could not be located.

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

MONITORING RESULTS

Groundwater elevation and analytical data are described below and summarized on Table 1 and Figure 2. Field measurements of dissolved oxygen concentrations ranged from 0.17 (MW-1) to 0.26 (STMW-4) mg/L. Groundwater samples were analyzed for total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015C with silica gel cleanup; total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015C; and benzene, toluene, ethylene, xylenes (BTEX) by EPA Method 8021B; and fuel oxygenates, including tert-amyl methyl ether (TAME), t-butyl alcohol (TBA), 1,2-dibromoethane (EDB), 1,2-dichloroethane (1,2-DCA), diisopropyl ether (DIPE), ethanol, ethyl tert-butyl ether (ETBE), methanol, and methyl tertiary butyl ether (MTBE), 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 B.

Groundwater Flow Direction

Based on depth-to-water measurements collected on October 16, 2006, the inferred groundwater flow direction was toward the south-southwest to southwest at a gradient of approximately 0.04 ft/ft (Figure 2). The current inferred flow direction is generally consistent with previous quarterly monitoring events.

Hydrocarbon and Fuel Oxygenate Distribution in Groundwater

After removing approximately 7 gallons of groundwater from well STMW-4, SPH were observed on the bailer. Purging was stopped, SPH were measured at a thickness of 0.06 ft, and a groundwater sample was collected. TPHg, TPHd and BTEX concentrations were detected in all four of the sampled wells (MW-1, MW-2, STMW-4 and STMW-5), as shown on Table 1 and Figure 2. Detected TPHg concentrations ranged from 150 µg/L (MW-2) to 14,000 ug/L (STMW-4), while TPHd concentrations ranged from 76 µg/L (MW-2)

to 14,000 µg/L (STMW-4) and benzene concentrations ranged from 14 µg/L (STMW-5) to 790 µg/L (STMW-4).

No MTBE was detected in sampled groundwater and is not a compound of concern at this site. The only fuel oxygenate detected in site groundwater was diisopropyl ether (DIPE), at concentrations ranging from 1.2 µg/L (MW-2) to 41 µg/L (MW-1). The lead scavenger 1,2-dichloroethane (1,2-DCA) was detected at 1.6 µg/L in well MW-1. Detected hydrocarbons and fuel oxygenate concentrations are within historical ranges.

OTHER SITE ACTIVITIES

Groundwater Monitoring

Groundwater monitoring and sampling will be conducted at the subject site on a quarterly basis. During the next quarter, Pangea will conduct gauging and sampling of all site groundwater monitoring wells. Groundwater samples will be analyzed for TPHg/BTEX/MTBE by EPA Method 8015Cm/8021B, and TPHd by EPA Method 8015C with silica gel cleanup. Pangea will also measure dissolved oxygen concentrations in site wells. Pangea will summarize groundwater monitoring activities and results in a groundwater monitoring report.

Site Assessment

In a letter dated January 11, 2007, Pangea notified ACEH of planned implementation of the workplan outlined in GGTR's report *Preliminary Results of Site Characterization: Proposed Additional Activities* dated May 8, 2006, and in Pangea's *Addendum to Preliminary Results of Site Characterization: Proposed Additional Activities* (Addendum) dated November 8, 2006.

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 – Site Vicinity Map
Figure 2 – Groundwater Elevation Contour and Hydrocarbon Concentration Map

Table 1 – Groundwater Elevation and Analytical Data

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

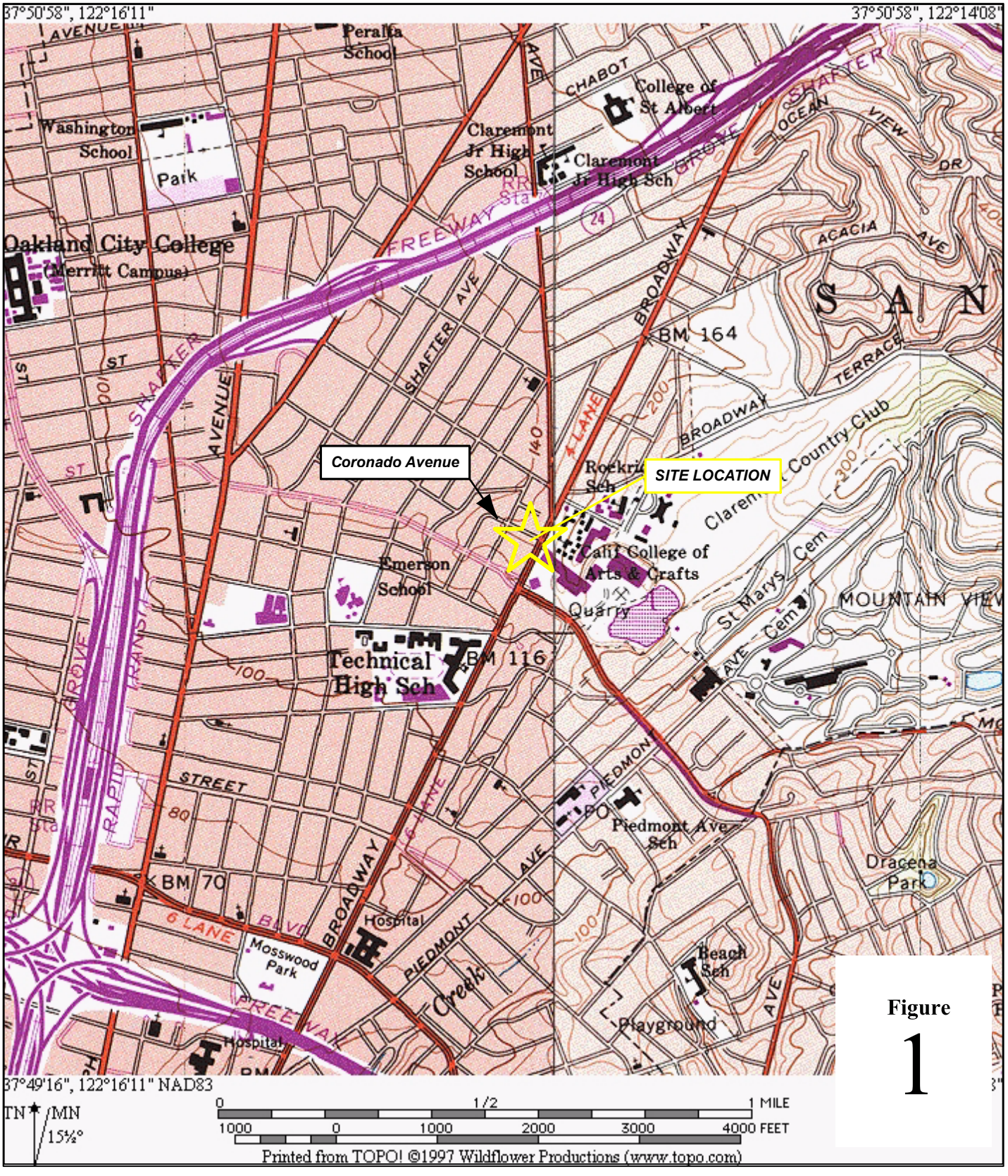


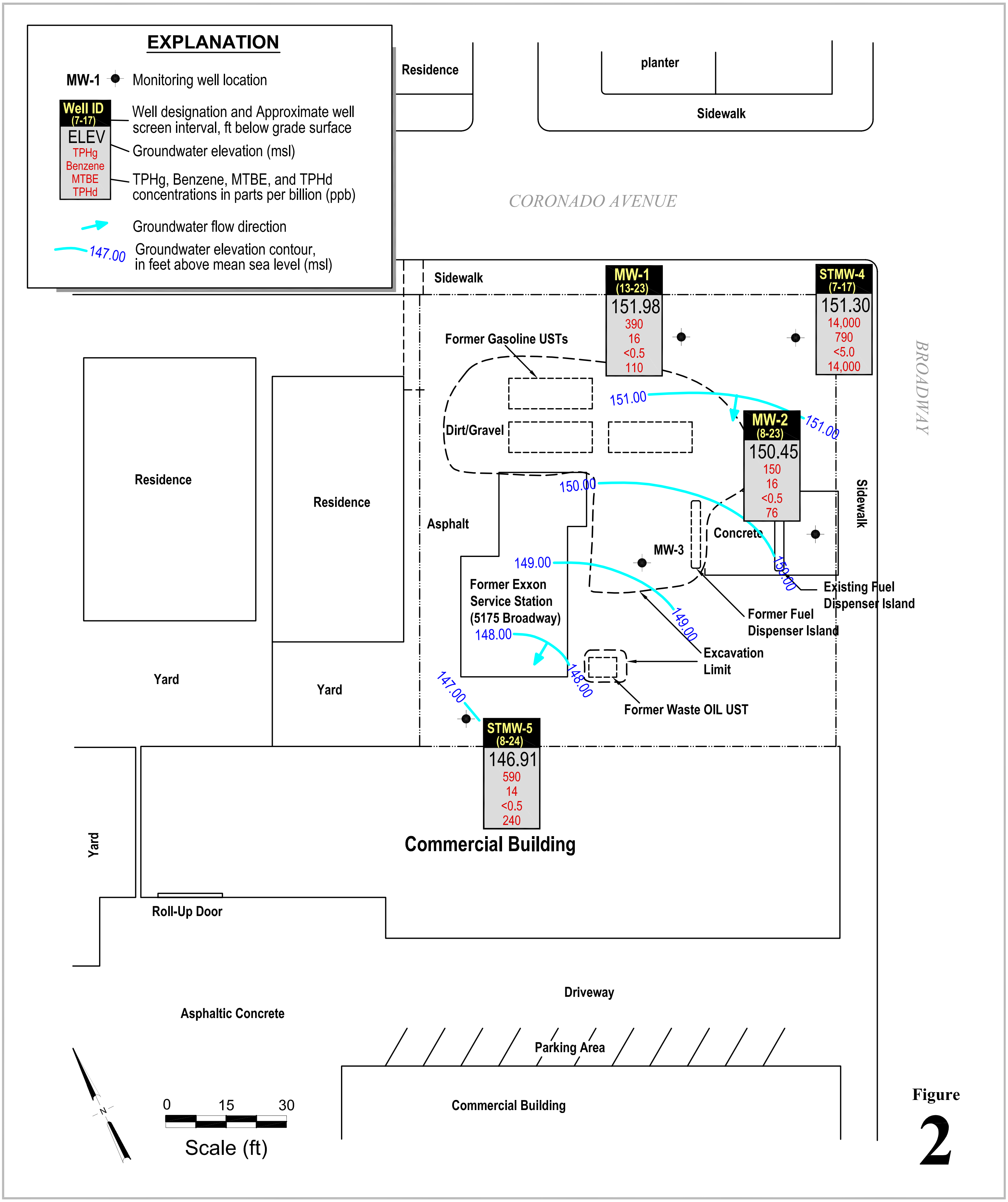
Figure 1

Former Exxon Station
5175 Broadway
Oakland, California

PANGEA

Site Location Map

FeinerBroadwaysite loc.ai 8/30/06



Former Exxon Station
5175 Broadway
Oakland, California

PANGEA

Groundwater Elevation Contour and Hydrocarbon Concentration Map

October 16, 2006

Table 1. Groundwater Analytical Data - Former Exxon Station, 5175 Broadway, Oakland, CA

Well ID *TOC Elev* *(ft)*	Date Sampled	SPH (ft)	Groundwater Elevation (ft)	Depth to Water (ft)	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	1,2-DCA	Dissolved Oxygen mg/L
					←			µg/L					→	
MW-1	4/30/89	--	--	--	--	200	18	5	2	12	--	--	--	--
(97.71)	5/17/90	--	88.45	9.26	--	--	--	--	--	--	--	--	--	--
	9/26/90	--	87.79	9.92	--	1,300	55	31	120	100	--	--	--	--
	1/14/91	--	88.17	9.54	--	3,100	350	83	86	130	--	--	--	--
(102.04)	7/3/91	--	92.62	9.42	--	580	32	41	40	55	--	--	--	--
	11/11/91	--	92.59	9.45	--	330	20	2	2	11	--	--	--	--
(101.83)	3/4/92	--	93.90	7.93	--	810	11	5	10	23	--	--	--	--
	6/2/92	--	92.85	8.98	--	2,200	93	32	40	120	--	--	--	--
	9/28/92	--	92.54	9.29	--	2,900	24	78	19	37	--	--	--	--
	1/11/93	--	94.27	7.56	--	1,700	5.7	6	11	28	--	--	--	--
	8/15/94	--	92.64	9.19	--	2,000	120	3	6	16	--	--	--	--
(97.50)	11/7/96	--	88.77	8.73	270	1,200	3	1.1	1.5	3.8	<0.5	--	--	--
	2/12/97	--	89.58	7.92	<50	1,800	13	5.7	4.8	17	<0.5	--	--	--
	6/16/97	--	88.46	9.04	<50	330	27	<0.5	<0.5	1.2	<0.5	--	--	--
	9/30/97	--	89.94	7.56	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
(97.50)	1/27/98	--	89.54	7.96	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	4/24/98	--	89.52	7.98	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	8/17/98	--	88.52	8.98	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	11/16/98	--	88.60	8.90	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	2/16/99	--	88.86	8.64	<50	110	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	5/17/99	--	89.00	8.50	--	280	1.1	0.6	<0.5	<0.5	<0.5	--	--	--
	8/17/99	--	88.26	9.24	86	790	5.6	4.3	4.5	11	<5.0	--	--	--
	11/17/99	--	87.06	10.44	--	1,300	3.6	1.9	2.7	6.6	<1.0	--	--	--
	2/17/00	--	89.02	8.48	--	580	1.1	2.3	3.6	4.9	<5.0	--	--	--
	5/17/00	--	89.26	8.24	--	1,500	130	6.8	6.1	<5.0	<5.0	--	--	--
	8/17/00	--	88.73	8.77	--	550	160	<25	<25	<25	<25	--	--	--
	11/15/00	--	88.46	9.04	--	130	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	--
	2/16/01	--	89.90	7.60	--	400	26	<5.0	<5.0	<5.0	<5.0	--	--	--
	1/11/02	--	89.42	8.08	160	600	74	53	14	52	110	--	--	--
(161.03)	7/1/02	--	152.01	9.02	280	670	25	<5.0	<5.0	<5.0	<5.0	--	--	--
	10/4/02	--	151.29	9.74	520	1,800	130	7.8	8.1	14	<5.0	--	--	--
	7/28/06	--	151.93	9.10	86	250	42	1.7	1.4	3.1	<1.0	51	1.5	0.21
	10/16/06	--	**151.98**	**9.05**	**110**	**390**	**16**	**<0.5**	**1.5**	**2.2**	**<0.5**	**41**	**1.6**	**0.17**
MW-2	4/30/89	--	--	--	--	230	39	18	5	23	--	--	--	--
(97.78)	5/17/90	--	87.78	10.00	--	--	--	--	--	--	--	--	--	--
	9/29/90	--	86.95	10.83	--	850	970	5	25	47	--	--	--	--
	1/14/91	--	87.15	10.63	--	3,100	30	52	24	34	--	--	--	--
(102.02)	7/3/91	--	91.94	10.08	--	1,590	30	52	24	34	--	--	--	--
	11/11/91	--	91.81	10.21	--	960	320	15	4	29	--	--	--	--
	3/4/92	--	93.32	8.70	--	1,500	9.5	8.4	9.8	22	--	--	--	--
	6/2/92	--	92.50	9.52	--	2,800	84	41	59	95	--	--	--	--
	9/28/92	--	91.93	10.09	--	1,600	47	20	47	97	--	--	--	--
	1/11/93	--	93.50	8.52	--	2,500	8.6	10	17	32	--	--	--	--
(97.49)	8/15/94	--	87.58	9.91	--	6,000	450	60	100	95	--	--	--	--

Table 1. Groundwater Analytical Data - Former Exxon Station, 5175 Broadway, Oakland, CA

Well ID *TOC Elev* *(ft)*	Date Sampled	SPH (ft)	Groundwater Elevation (ft)	Depth to Water (ft)	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	1,2-DCA	Dissolved Oxygen mg/L
					←				µg/L				→	
MW-2	11/7/96	--	87.47	10.02	780	4,200	25	4.9	8.1	14	<0.5	--	--	--
(continued)	2/12/97	--	88.58	8.91	5,700	1,800	16	3.1	3.4	8.8	<0.5	--	--	--
	6/16/97	--	87.74	9.75	<50	2,500	22	5.1	7.8	11	<0.5	--	--	--
	9/30/97	--	89.60	7.89	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	1/27/98	--	89.11	8.38	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	4/24/98	--	88.81	8.68	1,400	2,100	18	6.5	4.8	21	<0.5	--	--	--
	8/17/98	--	87.75	9.74	<50	2,900	5.1	4.5	5.8	17	<0.5	--	--	--
	11/16/98	--	87.35	10.14	<50	1,400	2.1	1.9	2.3	4.8	<0.5	--	--	--
	2/16/99	--	88.57	8.92	<50	1,600	82	16	<2.5	40	59	--	--	--
	5/17/99	--	88.23	9.26	--	8,200	43	73	140	100	<250	--	--	--
	8/17/99	--	87.45	10.04	260	2,900	20	81	17	38	<5.0	--	--	--
	11/17/99	--	85.97	11.52	<50	2,600	7	3.7	5.3	12.9	<1.0	--	--	--
	2/17/00	--	87.99	9.50	--	1,700	3.2	6.8	11	12.3	<5.0	--	--	--
	5/17/00	--	88.65	8.84	--	3,800	450	65	110	80	<25	--	--	--
	8/17/00	--	88.99	8.50	--	4,300	440	<50	78	<50	<50	--	--	--
	11/15/00	--	87.55	9.94	--	5,800	320	41	78	64	<25	--	--	--
	2/16/01	--	88.97	8.52	--	2,200	110	20	38	33	<5.0	--	--	--
	1/11/02	--	88.67	8.82	620	3,100	280	86	84	110	<50	--	--	--
(160.98)	7/1/02	--	151.34	9.64	940	2,600	300	29	45	27	<10	--	--	--
	10/4/02	--	150.46	10.52	390	4,000	440	66	140	120	<25	--	--	--
	7/28/06	--	150.96	10.02	340	1,300	150	9.9	6	18	<0.5	3.6	<0.5	0.17
	10/16/06	**--**	**150.45**	**10.53**	**76**	**150**	**16**	**1.0**	**3.5**	**2.2**	**<0.5**	**1.2**	**<0.5**	**0.19**
MW-3	4/30/90	--	--	--	--	56,000	3,600	8,600	1,300	7,200	--	--	--	--
(98.14)	5/17/90	--	85.72	12.42	--	--	--	--	--	--	--	--	--	--
	9/26/90	--	84.64	13.50	--	54,000	5,100	420	1,600	8,000	--	--	--	--
	1/14/91	--	85.56	12.58	--	35,000	2,600	6,600	1,500	5,700	--	--	--	--
(102.46)	7/3/91	--	90.38	12.08	--	33,000	4,120	4,300	1,400	4,800	--	--	--	--
	11/11/91	--	90.17	12.29	--	57,000	3,900	8,400	2,100	14,000	--	--	--	--
(102.18)	3/4/92	--	91.92	10.26	--	57,000	720	870	81	3,100	--	--	--	--
(97.94)	6/2/92	--	86.54	11.40	--	50,000	240	240	220	740	--	--	--	--
	9/28/92	--	85.30	12.64	--	64,000	110	93	97	250	--	--	--	--
	1/11/93	--	87.84	10.10	--	68,000	210	280	360	990	--	--	--	--
	8/15/94	--	85.74	12.20	--	50,000	870	1,200	1,300	3,000	--	--	--	--
	11/7/96	--	85.54	12.40	470	68,000	33	27	63	120	<0.5	--	--	--
	2/12/97	--	87.71	10.23	3,500	25,000	39	43	15	91	<0.5	--	--	--
	6/16/97	--	86.15	11.79	<50	9,700	26	29	45	81	<0.5	--	--	--
	9/30/97	--	88.54	9.40	1,600	6,000	43	36	12	11	<0.5	--	--	--
	1/27/98	--	88.14	9.80	560	380	5.7	4.1	1.7	9.1	<0.5	--	--	--
	4/24/98	--	88.04	9.90	680	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	8/17/98	--	86.48	11.46	<50	16,000	200	18	31	82	<0.5	--	--	--
	11/16/98	--	85.54	12.40	<50	68,000	86	54	69	130	<0.5	--	--	--
	2/16/99	--	87.22	10.72	<50	33,000	270	110	<5.0	770	170	--	--	--
	5/17/99	--	87.40	10.54	--	72,000	280	230	320	890	<250	--	--	--
	8/17/99	--	85.99	11.95	1,800	20,000	51	41	61	130	<5.0	--	--	--

Table 1. Groundwater Analytical Data - Former Exxon Station, 5175 Broadway, Oakland, CA

Well ID *TOC Elev* *(ft)*	Date Sampled	SPH (ft)	Groundwater Elevation (ft)	Depth to Water (ft)	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	1,2-DCA	Dissolved Oxygen mg/L
					←				µg/L				→	
MW-3	11/17/99	--	84.34	13.60	--	1,700	39	22	31	84	<1.0	--	--	--
(continued)	2/17/00	--	87.26	10.68	--	8,800	16	39	74	90	<5.0	--	--	--
	5/17/00	--	87.69	10.25	--	22,000	300	260	410	940	<5.0	--	--	--
	8/17/00	--	86.10	11.84	--	15,000	230	140	470	750	<50	--	--	--
	11/15/00	--	86.12	11.82	--	12,000	250	210	390	700	<25	--	--	--
	2/16/01	--	88.26	9.68	--	7,400	40	72	700	250	<25	--	--	--
	1/11/02	--	88.36	9.58	1,900	9,300	230	200	290	580	<25	--	--	--
(161.43)	7/1/02	--	150.29	11.14	5,200	13,000	230	220	450	890	<13	--	--	--
	10/4/02	--	148.61	12.82	4,900	11,000	280	170	450	730	<25	--	--	--
	7/28/06	--		Not Sampled - Unable to locate well										
	10/16/06	**--**		**Not Sampled - Unable to locate well**										
STMW-4	7/3/91	--	92.58	11.00	--	3,100	610	62	39	150	--	--	--	--
(103.58)	11/11/91	--	92.50	11.08	--	3,600	990	15	2.6	180	--	--	--	--
(101.08)	3/4/92	--	91.64	9.44	--	5,000	35	20	22	71	--	--	--	--
(98.80)	6/2/92	--	88.48	10.32	--	13,000	140	45	63	210	--	--	--	--
	9/28/92	--	88.04	10.76	--	40,000	35	20	48	110	--	--	--	--
	1/11/93	--	89.52	9.28	--	24,000	26	88	92	280	--	--	--	--
	8/15/94	--	88.26	10.54	--	9,000	500	34	46	130	--	--	--	--
	11/7/96	--	88.43	10.37	180	13,000	40	2.9	7.8	19	<0.5	--	--	--
	2/12/97	--	89.44	9.36	5,700	5,300	95	5.3	5.9	18	<0.5	--	--	--
	6/16/97	--	88.40	10.40	<50	5,300	37	6.2	1.7	11	<0.5	--	--	--
	9/30/97	--	90.30	8.50	<50	2,700	42	7.7	5.7	26	<0.5	--	--	--
	1/27/98	--	89.90	8.90	300	3,000	60	17	12	49	<0.5	--	--	--
	4/24/98	--	89.30	9.50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	8/17/98	--	88.44	10.36	<50	29,000	36	24	59	160	<0.5	--	--	--
	11/16/98	--	88.24	10.56	<50	13,000	26	21	20	41	--	--	--	--
	2/16/99	--	89.16	9.64	<50	32,000	660	16	16	150	<100	--	--	--
	5/17/99	--	88.84	9.96	--	13,000	1600	30	45	78	<250	--	--	--
	8/17/99	--	88.16	10.64	990	12,000	260	22	33	72	<5.0	--	--	--
	11/17/99	--	86.78	12.02	--	7,900	21	12	17	40	<1.0	--	--	--
	2/17/00	--	89.48	9.32	--	4,900	8.9	21	38	50	<5.0	--	--	--
	5/17/00	--	89.15	9.65	--	9,600	840	<50	61	<50	<50	--	--	--
	8/17/00	--	88.46	10.34	--	5,100	680	<50	62	<50	<50	--	--	--
	11/15/00	--	88.28	10.52	--	3,900	640	<25	26	27	<25	--	--	--
	2/16/01	--	89.60	9.20	--	5,700	560	<25	<25	<25	<25	--	--	--
	1/11/02	--	89.22	9.58	930	4,900	560	59	25	<25	<250	--	--	--
(162.13)	7/1/02	--	151.85	10.28	6,700	6,700	470	18	32	45	<13	--	--	--
	10/4/02	--	151.05	11.08	2,900	13,000	590	26	65	110	<25	--	--	--
	7/28/06	0.04	151.53	10.60	39,000	25,000	960	21	73	130	<5.0	65	<5.0	0.22
	10/16/06	**0.06**	151.30	**10.83**	**14,000**	**14,000**	**790**	**28**	**81**	**130**	**<5.0**	**30**	**<5.0**	**0.26**

Table 1. Groundwater Analytical Data - Former Exxon Station, 5175 Broadway, Oakland, CA

Well ID *TOC Elev* *(ft)*	Date Sampled	SPH (ft)	Groundwater Elevation (ft)	Depth to Water (ft)	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	1,2-DCA	Dissolved Oxygen mg/L
					←				µg/L				→	
STMW-5	7/3/91	--	88.70	13.29	--	690	99	81	19	98	--	--	--	--
(101.99)	11/11/91	--	87.99	14.00	--	410	61	2.4	1.4	20	--	--	--	--
(101.36)	3/4/92	--	89.56	11.80	--	460	13	6.5	11	18	--	--	--	--
	6/2/92	--	88.30	13.06	--	1,800	27	20	21	43	--	--	--	--
	9/28/92	--	87.32	14.04	--	1,500	14	6.1	18	22	--	--	--	--
	1/11/93	--	89.75	11.61	--	800	1.8	3	3.1	9.4	--	--	--	--
	8/15/94	--	87.51	13.85	--	3,000	320	62	34	220	--	--	--	--
(97.14)	11/7/96	--	83.47	13.67	330	1,200	11	1.7	4.4	13	<0.5	--	--	--
	2/17/97	--	85.07	12.07	3,700	1,000	11	17	1.7	9.7	<0.5	--	--	--
	6/19/97	--	83.81	13.33	2,300	950	7.4	1	1	7.2	<0.5	--	--	--
	9/30/97	--	85.90	11.24	1,100	710	5.8	4	1	1	<0.5	--	--	--
	1/27/98	--	85.50	11.64	1,100	340	2	1.8	1.6	8.2	<0.5	--	--	--
	4/24/98	--	85.30	11.84	<50	3,300	12	9.4	8.5	37	<0.5	--	--	--
	8/17/98	--	83.94	13.20	<50	5,300	26	17	14	39	<0.5	--	--	--
	11/16/98	--	83.40	13.74	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--
	2/16/99	--	84.92	12.22	<50	950	150	3.8	1.4	14	11	--	--	--
	5/17/99	--	84.56	12.58	--	2,800	67	9.4	<2.5	16	30	--	--	--
	8/17/99	--	83.66	13.48	230	2,800	18	17	18	36	<5.0	--	--	--
	11/17/99	--	82.26	14.88	--	1,600	3.9	2.3	3.2	7.5	<1.0	--	--	--
	2/17/00	--	84.58	12.56	--	770	1.5	3.2	5.8	7	<5.0	--	--	--
	5/17/00	--	85.06	12.08	--	4,500	<25	<25	<25	<25	<25	--	--	--
	8/17/00	--	83.58	13.56	--	2,900	170	64	100	250	<10	--	--	--
	11/15/00	--	83.86	13.28	--	2,100	120	24	40	54	<5.0	--	--	--
	2/16/01	--	85.54	11.60	--	850	58	9.8	9.4	18	<5.0	--	--	--
	1/11/02	--	85.42	11.72	<50	920	76	16	16	28	13	--	--	--
(160.65)	7/1/02	--	147.51	13.14	1,500	4,300	71	14	14	36	<5.0	--	--	--
	10/4/02	--	146.13	14.52	60	1,400	71	17	26	35	<5.0	--	--	--
	7/28/06	--	147.30	13.35	370	700	22	4.3	1.2	6.6	<0.5	<0.5	<0.5	0.24
	10/16/06	--	**146.91**	**13.74**	**240**	**590**	**14**	**1.6**	**1.3**	**3.2**	**<0.5**	**<0.5**	**<0.5**	**0.21**

Abbreviations:

µg/L = micrograms per liter - approximately equal to parts per billion = ppb

mg/L = milligrams per liter - approximately equal to parts per million = ppm

SPH = Separate-phase hydrocarbons encountered in well (value in parentheses is thickness in feet)

Groundwater elevation is calculated according to the relationship: groundwater elevation = TOC (elevation) - (depth to water) + (0.8)(SPH thickness)

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

TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015C - with silica gel cleanup (SGC)

BTEX by EPA Method 8021B.

MTBE = Methyl tertiary-butyl ether by EPA Method 8021B. (Concentrations in parentheses are by EPA Method 8260B).

DIPE = Diisopropyl ether by EPA Method 8260B.

1,2-DCA = 1,2-Dichloroethane by EPA Method 8260B.

APPENDIX A

Groundwater Monitoring Field Data Sheets

Pangea
ENVIRONMENTAL SERVICES, INC.

Well Gauging Data Sheet

Project.Task #: 1145.001 209				Project Name: Feiner			
Address: 5175 Broadway Oakland, CA						Date: 10-16-06	
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	4"	7:05			9.05	23.00	TOC
MW-2	4"	7:15			10.53	22.91	
MW-3			unable to locate				
STMW-4	4"	7:20			10.83	19.09	
STMW-5	2"	7:10			13.74	23.96	

Comments:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-1

Project.Task #: 1145.001	Project Name: Feiner
Address: 5175 Broadway, Oakland, CA	
Date: 10-16-06	Weather: Misty
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): 23.00	Depth to Product:
Depth to Water (DTW): 9.05	Product Thickness:
Water Column Height: 13.95	1 Casing Volume: 9.06 gallons
Reference Point: TOC	3 Casing Volumes: 27.18 gallons

Purging Device: Disposable Bailer, (3" PVC Bailer), Whal Pump

Sampling Device: (Disposable Bailer)

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
7:51	19.8	7.47	408				9	
7:56	19.3	7.49	412				18	
8:16	19.5	7.46	408				27	

Comments: Oakton DO meter — pre purge DO = 0.17 mg/l

post purge DO = mg/l

very turbid, silty, slow recharge

Sample ID: MW-1	Sample Time: 8:20
Laboratory: McCampbell Analytical, INC.	Sample Date: 10-16-06
Containers/Preservative: Voa/HCl, Amber Liter/HCl	
Analyzed for: 8015, 8021, 8260	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-2

Project.Task #: 1145.001	Project Name: Feiner
Address: 5175 Broadway, Oakland, CA	
Date: 10-16-06	Weather: Misty
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): 22.91	Depth to Product:
Depth to Water (DTW): 10.53	Product Thickness: 8
Water Column Height: 12.38	1 Casing Volume: 8.04 gallons
Reference Point: TOC	3 Casing Volumes: 24.14 gallons

Purging Device: Disposable Bailer, (3" PVC Bailer), Whal Pump

Sampling Device: (Disposable Bailer)

Time	Temp C	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
9:02	20.5	7.69	504				8	
9:07	19.9	7.57	522				16	
9:40	19.5	7.62	526				24	

Comments: Oakton DO meter

pre purge DO = 0.19 mg/l

post purge DO = mg/l

very turbid, silty, slow recharge

Sample ID: MW-2	Sample Time: 9:50
Laboratory: McCampbell Analytical, INC.	Sample Date: 10-16-06
Containers/Preservative: Voa/HCl, Amber Liter/HCl	
Analyzed for: 8015, 8021, 8260	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-3

Project.Task #: 1145.001	Project Name: Feiner			
Address: 5175 Broadway, Oakland, CA				
Date:	Weather:			
Well Diameter:	Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47
		2" = 0.16	4" = 0.65	radius^2 * 0.163
Total Depth (TD):	Depth to Product:			
Depth to Water (DTW):	Product Thickness:			
Water Column Height:	1 Casing Volume:			gallons
Reference Point: TOC	Casing Volumes:			gallons

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

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
	unable to locate							

Comments: Oakton DO meter

pre purge DO = mg/l

post purge DO = mg/l

Sample ID:	Sample Time:
Laboratory: McCampbell Analytical, INC.	Sample Date:
Containers/Preservative: Voa/HCl, Amber Liter/HCl	
Analyzed for: 8015, 8021, 8260	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: STMW-4

Project.Task #: 1145.001	Project Name: Feiner
Address: 5175 Broadway, Oakland, CA	
Date: 10-16-06	Weather: Misty
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): 19.09	Depth to Product:
Depth to Water (DTW): 10.83	Product Thickness:
Water Column Height: 8.26	1 Casing Volume: 5.36 gallons
Reference Point: TOC	3 Casing Volumes: 16.10 gallons
Purging Device: Disposable Bailer, 3" PVC Bailer, Whal Pump	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
10:00	19.1	7.63	602				5.5	
							~~11~~	
							~~16~~	

Comments: Oakton DO meter — pre purge DO = 0.26 mg/l

post purge DO = mg/l — ~~SPH~~ = 16.14

very turbid, silty (SPH after bailing 7 gallons) DTW = 16.20

Sample ID: STMW-4	Sample Time: 10:15
Laboratory: McCampbell Analytical, INC.	Sample Date: 10-16-06
Containers/Preservative: Voa/HCl, Amber Liter/HCl	
Analyzed for: 8015, 8021, 8260	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: STMW-5

Project.Task #: 1145.001	Project Name: Feiner
Address: 5175 Broadway, Oakland, CA	
Date: 10-16-06	Weather: Misty
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): 23.96	Depth to Product:
Depth to Water (DTW): 13.74	Product Thickness:
Water Column Height: 10.22	1 Casing Volume: 1.63 gallons
Reference Point: TOC	3 Casing Volumes: 4.90 gallons
Purging Device: Disposable Bailer, 3" PVC Bailer, Whal Pump	
Sampling Device: Disposable Bailer	

Time	Temp ℃	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
8:39	18.3	7.16	720				1.5	
8:42	18.2	7.18	755				3	
8:46	17.9	7.13	764				5	

Comments: Oakton DO meter

pre purge DO = 0.21 mg/l

post purge DO = mg/l

very turbid, silty

Sample ID: STMW-5	Sample Time: 8:50
Laboratory: McCampbell Analytical, INC.	Sample Date: 10-16-06
Containers/Preservative: Voa/HCl, Amber Liter/HCl	
Analyzed for: 8015, 8021, 8260	
Sampler Name: Sanjiv Gill	Signature:

APPENDIX B

Laboratory Analytical Report

McCampbell Analytical, Inc.
"When Quality Counts"

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

Pangea Environmental Svcs., Inc.	Client Project ID: #1145.001; Feiner	Date Sampled: 10/16/06
1710 Franklin Street, Ste. 200		Date Received: 10/16/06
Oakland, CA 94612	Client Contact: Bob Clark-Riddell	Date Reported: 10/20/06
	Client P.O.:	Date Completed: 10/20/06

WorkOrder: 0610324

October 20, 2006

Dear Bob:

Enclosed are:

1). the results of **4** analyzed samples from your **#1145.001; Feiner project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Pangea Environmental Svcs., Inc.	Client Project ID: #1145.001; Feiner	Date Sampled: 10/16/06
1710 Franklin Street, Ste. 200		Date Received: 10/16/06
Oakland, CA 94612	Client Contact: Bob Clark-Riddell	Date Extracted 10/19/06
	Client P.O.:	Date Analyzed: 10/19/06

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0610324

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	390,c,e	ND	16	ND	1.5	2.2	1	94
002A	MW-2	W	150,c,e	ND	16	1.0	3.5	2.2	1	105
003A	STMW-4	W	14,000,c,e,h,i	ND<300	790	28	81	130	20	118
004A	STMW-5	W	590,c,e,i	ND	14	1.6	1.3	3.2	1	95
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	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

Pangea Environmental Svcs., Inc.	Client Project ID: #1145.001; Feiner	Date Sampled: 10/16/06
1710 Franklin Street, Ste. 200		Date Received: 10/16/06
Oakland, CA 94612	Client Contact: Bob Clark-Riddell	Date Extracted 10/16/06
	Client P.O.:	Date Analyzed 10/17/06

Diesel Range (C10-C23) Extractable Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C Analytical methods: SW8015C Work Order: 0610324

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0610324-001B	MW-1	W	110,n	1	105
0610324-002B	MW-2	W	76,n	1	106
0610324-003B	STMW-4	W	14,000,n,h,i	1	98
0610324-004B	STMW-5	W	240,n,i	1	109

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

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

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract/matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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Telephone: 877-252-9262 Fax: 925-252-9269

Pangea Environmental Svcs., Inc.	Client Project ID: #1145.001; Feiner	Date Sampled: 10/16/06
1710 Franklin Street, Ste. 200		Date Received: 10/16/06
Oakland, CA 94612	Client Contact: Bob Clark-Riddell	Date Extracted 10/17/06-10/18/06
	Client P.O.:	Date Analyzed: 10/17/06-10/18/06

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0610324

Lab ID	0610324-001C	0610324-002C	0610324-003C	0610324-004C	Reporting Limit for DF =1	
Client ID	MW-1	MW-2	STMW-4	STMW-5		
Matrix	W	W	W	W		
DF	1	1	10	1	S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND<5.0	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	ND	ND<50	ND	NA	5.0
1,2-Dibromoethane (EDB)	ND	ND	ND<5.0	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	1.6	ND	ND<5.0	ND	NA	0.5
Diisopropyl ether (DIPE)	41	1.2	30	ND	NA	0.5
Ethanol	ND	ND	ND<500	ND	NA	50
Ethyl tert-butyl ether (ETBE)	ND	ND	ND<5.0	ND	NA	0.5
Methanol	ND	ND	ND<5000	ND	NA	500
Methyl-t-butyl ether (MTBE)	ND	ND	ND<5.0	ND	NA	0.5
Surrogate Recoveries (%)						
%SS1:	98	102	92	100		
Comments			h,i	i		

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

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0610324

EPA Method: SW8021B/8015Cm **Extraction: SW5030B** **BatchID: 24308** **Spiked Sample ID: 0610316-037A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	105	100	4.75	102	97.9	4.44	70 - 130	30	70 - 130	30
MTBE	ND	10	95.2	98.1	2.97	100	106	5.79	70 - 130	30	70 - 130	30
Benzene	ND	10	99.2	96.6	2.70	98.8	108	9.24	70 - 130	30	70 - 130	30
Toluene	0.91	10	82.1	75.8	7.21	91.2	107	16.0	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	97.6	98.6	0.996	96.1	103	7.18	70 - 130	30	70 - 130	30
Xylenes	ND	30	90.3	90.3	0	86.3	94.7	9.21	70 - 130	30	70 - 130	30
%SS:	101	10	102	106	4.03	107	112	5.19	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 24308 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0610324-001A	10/16/06 8:20 AM	10/19/06	10/19/06 5:23 AM	0610324-002A	10/16/06 9:50 AM	10/19/06	10/19/06 6:22 AM
0610324-003A	10/16/06 10:15 AM	10/19/06	10/19/06 6:09 AM	0610324-004A	10/16/06 8:50 AM	10/19/06	10/19/06 6:52 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.

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0610324

EPA Method: SW8015C	Extraction: SW3510C/3630C				BatchID: 24282			Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	108	112	3.54	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	113	115	2.24	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 24282 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0610324-001B	10/16/06 8:20 AM	10/16/06	10/17/06 1:06 AM	0610324-002B	10/16/06 9:50 AM	10/16/06	10/17/06 2:11 AM
0610324-003B	10/16/06 10:15 AM	10/16/06	10/17/06 1:06 AM	0610324-004B	10/16/06 8:50 AM	10/16/06	10/17/06 7:01 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 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.

DHS ELAP Certification N° 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0610324

EPA Method: SW8260B	Extraction: SW5030B	BatchID: 24304	Spiked Sample ID: 0610310-001B

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	84	89.6	6.42	91.2	85.4	6.65	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	106	106	0	102	91.4	11.1	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	107	111	3.34	112	108	3.69	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	87.3	92.5	5.76	95.1	90.1	5.40	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	91.8	99.5	8.05	105	97	7.79	70 - 130	30	70 - 130	30
Ethanol	ND	500	117	114	2.65	109	111	2.25	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	80.7	88.8	9.57	93.3	84.8	9.51	70 - 130	30	70 - 130	30
Methanol	ND	2500	115	109	5.14	109	115	5.47	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	78	84.8	8.43	94	81.7	14.0	70 - 130	30	70 - 130	30
%SS1:	105	10	93	95	1.59	105	94	11.5	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 24304 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0610324-001C	10/16/06 8:20 AM	10/17/06	10/17/06 7:01 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 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.

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0610324

EPA Method: SW8260B **Extraction: SW5030B** **BatchID: 24317** **Spiked Sample ID: 0610338-015A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	90.1	98.2	8.65	87.4	92.2	5.36	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	101	117	14.7	94.6	106	11.0	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	110	118	7.25	112	113	1.25	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	94.2	102	7.55	92.1	96.7	4.85	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	101	111	9.41	99.1	104	5.25	70 - 130	30	70 - 130	30
Ethanol	ND	500	112	115	3.06	117	106	9.95	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	90.4	100	10.4	87.7	94.3	7.16	70 - 130	30	70 - 130	30
Methanol	ND	2500	119	116	2.36	105	111	5.73	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	88.4	101	12.9	82	91.8	11.3	70 - 130	30	70 - 130	30
%SS1:	107	10	100	102	2.04	95	100	5.21	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 24317 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0610324-002C	10/16/06 9:50 AM	10/17/06	10/17/06 7:44 PM	0610324-003C	10/16/06 10:15 AM	10/18/06	10/18/06 2:29 PM
0610324-004C	10/16/06 8:50 AM	10/18/06	10/18/06 1:45 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 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.

U610527

McCAMPBELL ANALYTICAL, INC.

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PACHECO, CA 94553-5560
Website: Email: main@mccampbell.com
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ■ 5 DAY

EDF Required? (Yes) No

Report To: Bob Clark-Riddel Bill To: Pangea Environmental
Company: Pangea Environmental Services Inc.
1710 Franklin Street Suite 200
Oakland, CA 94612 E-Mail: bcr@pangeaenv.com
Tele: 510-836-3702 Fax: 510-836-3709
Project #: 1145.001 Project Name: Feiner
Project Location: 5175 Broadway Oakland, CA
Sampler Signature: Muskan Environmental Sampling

	SAMPLE ID (Field Point Name)	LOCATION	Date	Time	# Containers	Type Containers	Water	Soil	Air	Sludge	Other	ICE	HCL	HNO_3	Other	BTEX & TPH as Gas (602 / 8021 + 8015)	MTBE / BTEX ONLY (EPA 602 / 8021)	TPH(d) (8015) with silica gel cleanup	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	Fuel Additives (MTBE, ETBE, TAME, DIPE, TBA, 1,2 DCA, 1,2 EDB, ethanol) by 8260B	If Mtbe is detected by 8021 confirm by 8260B	9 oxygenates by 8260B		Other	Comments
+	MW-1		10-16-06	820	3 / 2	VOA / Amb	X					X	X			X		X											X			
+	MW-2			950																												
+1	STMW-4			1015																												
+1	STMW-5			850												X		X											X			

Filter Samples for Metals analysis: Yes / No

Relinquished By:	Date:	Time:	Received By:
[signature]			
Relinquished By:	Date: 10/16/06	Time: 1208	Received By: [signature]

ICE/t° 1.4
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

PRESERVATION | VOAS | O&G | METALS | OTHER

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0610324 **ClientID: PEO**

[ ]EDF [ ]Fax [ ]Email [ ]HardCopy [ ]ThirdParty

Report to:
Bob Clark-Riddell
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612
Email: bcr@pangeaenv.com
TEL: (510) 836-3700 FAX: (510) 836-3709
ProjectNo: #1145.001; Feiner
PO:

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

Requested TAT: 5 days
Date Received: **10/16/2006**
Date Printed: **10/16/2006**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
0610324-001	MW-1	Water	10/16/06 8:20:00	☐	C	A	B									
0610324-002	MW-2	Water	10/16/06 9:50:00	☐	C	A	B									
0610324-003	STMW-4	Water	10/16/06 10:15:00	☐	C	A	B									
0610324-004	STMW-5	Water	10/16/06 8:50:00	☐	C	A	B									

Test Legend:

1	9-OXYS_W	2	G-MBTEX_W	3	TPH(D)WSG_W	4		5	
6		7		8		9		10	
11		12							

Prepared by: Maria Venegas

Comments:

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