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Alameda County Environmental Health



November 26, 2007

VIA ALAMEDA COUNTY FTP SITE

Ms. Donna Drogos Alameda County Environmental Health 1331 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Re: Groundwater Monitoring Report – Third Quarter 2007

5175 Broadway Street Oakland, California ACEH Fuel Leak Case No. RO#0000139

Dear Ms. Drogos:

On behalf of Rockridge Heights LLC, Pangea Environmental Services, Inc., has prepared this *Groundwater Monitoring Report – Third Quarter 2007*. The report describes groundwater monitoring, sampling, and other site activities.

The report will be uploaded to the Alameda County ftp site. As requested, Pangea will not submit a hard copy of this report to Alameda County Environmental Health.

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

Sincerely.

Pangea Environmental Services, Inc.

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Bob Clark-Riddell, P.E. Principal Engineer

Attachment: Groundwater Monitoring Report - Third Quarter 2007

cc: Rockridge Heights, LLC, C/O Gary Feiner, 34 Schooner Hill, Oakland, California, 94618 SWRCB Geotracker (Electronic copy)



GROUNDWATER MONITORING REPORT – THIRD QUARTER 2007

5175 Broadway Oakland, California

November 26, 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 No. C 049629

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Bob Clark-Riddell, P.E. Principal Engineer

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 Figures 2 and 3. Current and historical data are summarized on Table 1.

SITE BACKGROUND

The subject property is located at 5175 Broadway Street, at the southwest corner of the intersection of Broadway and Coronado Avenue in Oakland, California in Alameda County (Figure 1). The site is approximately 0.6 miles south-southeast of Highway 24 and approximately 2.3 miles east of Interstate 80 and the San Francisco Bay. The property is relatively flat lying, with a slight slope to the south-southwest, and lies at an elevation of approximately 160 feet above mean sea level. Topographic relief in the area surrounding the site also slopes generally towards the south-southwest. The western site boundary is the top of an approximately 10 foot high retaining wall that separates the site from an adjacent apartment complex.

The property has been vacant since 1979 and was formerly occupied by an Exxon Service Station used for fuel sales and automobile repair. The site is approximately 13,200 square feet in area with about 10% of the area occupied by a vacant station/garage structure. The majority of the ground surface is paved with concrete and/or asphalt, although the former tank location is not paved. Land use to the west and northwest is residential, including apartment buildings and single family homes. Properties to the northeast, east and south of the site are commercial. The site and adjacent properties are shown on Figure 2.

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. MTBE is not considered to be a contaminant of concern because use of the site for fuel sales

predates widespread use of MTBE in gasoline and because analytical results have not show significant detections of MTBE.

In January and March 2007, Pangea installed twelve wells (MW-2C, MW-3A, MW-3C, MW-4A, MW-5A, MW-5B, MW-5C, MW-6A, MW-7B, MW-7C, MW-8A and MW-8C) and three offsite soil borings to help define the vertical and lateral extent of groundwater contamination. Pangea also abandoned four monitoring wells (MW-2, MW-3, STMW-4 and STMW-5) to reduce the risk of vertical contaminant migration and improve the quality of monitoring data. New wells installed at the site were categorized according to the depths of their screen intervals. Shallow (A-zone) wells have screen intervals of approximately 10 to 15 feet bgs, which generally straddle the top of the water table and are generally screened in surficial fill and alluvium. Intermediate-depth (B-zone) wells are screened at approximately 15 to 20 feet bgs, either in surficial strata or underlying fractured bedrock, while deep (C-zone) wells are generally screened at approximately 20 to 25 feet bgs and into fractured bedrock. Well MW-1 is screened across both the A-zone and B-zone.

In April 2007, Pangea performed a dual-phase extraction (DPE) pilot test to evaluate whether DPE is an appropriate remedial technology to remove residual hydrocarbons from beneath the site. In July 2007, Pangea submitted an Interim Remedial Action Plan for site corrective action.

In August 2007, Pangea installed three offsite monitoring wells (MW-9A, MW-9C and MW-10A). The purpose of the offsite well installation was to determine the downgradient extent of contaminant migration, and to help evaluate downgradient effects of any future remediation conducted onsite. Offsite monitoring well installation is described in Pangea's *Soil Gas Sampling and Well Installation Report* dated October 23, 2007.

GROUNDWATER MONITORING AND SAMPLING

On September 29, 2007, Pangea conducted groundwater monitoring and sampling at the site. Site monitoring wells were gauged for depth-to-water and inspected for separate-phase hydrocarbons (SPH). To obtain water levels representative of the piezometric surface, technicians removed all well caps (allowing water levels to equilibrate) the night prior to sampling. Groundwater samples were collected from all site monitoring wells, except for MW-5A which had insufficient water to sample.

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 of the water. 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. Groundwater monitoring field data sheets, including purge volumes and field parameter measurements, are presented in Appendix A.

MONITORING RESULTS

Current and historical groundwater elevation and analytical data are described below and summarized on Table 1, Figure 2 and Figure 3. 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, ethylbenzene, xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8021B. Samples were analyzed by McCampbell Analytical, Inc., of Pittsburg, California, a State-certified laboratory. The laboratory analytical report is included in Appendix B.

Groundwater Flow Direction

Based on depth-to-water data collected September 29, 2007, shallow groundwater (A-zone) flows generally southwards to southwestwards at a gradient of approximately 0.06 ft/ft throughout most of the site and in the area immediately downgradient (southwest) of the site, as shown on Figure 2. However, the relatively low groundwater elevations measured in MW-1 and MW-4A suggest that groundwater is mounded in the former UST excavation and that the local flow direction in the northeast corner of the site radiates outwards away from the former excavation area. These observations are interpreted as indicating that the unpaved former UST excavation has acted as a collector for rainwater and that the asphalt pavement covering the remainder of the site serves to reduce infiltration elsewhere while directing rainwater to the unpaved UST excavation area. The current inferred flow direction in shallow groundwater is generally consistent with previous monitoring results.

Groundwater flow in the deep groundwater (C-zone) is generally southwestwards at approximately the same gradient as the A-zone wells, as shown on Figure 3. The elevation of the piezometric surface for C-zone wells is lower than elevations for A-zone wells indicating that a downward gradient is present. The inferred flow direction is generally consistent with previous monitoring results.

Hydrocarbon Distribution in Groundwater

No measurable thickness of separate phase hydrocarbons (SPH) was observed in any monitoring wells this quarter, although a light but immeasurable sheen of SPH was observed by the field technician in the sample from monitoring well MW-3C, and the laboratory reported the presence of immiscible sheen or product in

samples from wells MW-3C, MW-4A, MW-7B, MW-7C and MW-9C. During previous quarterly monitoring, a thin layer of SPH had been observed in well STMW-4, but no SPH were detected this quarter in well MW-4A, which was installed in the drilled out borehole of STMW-4 but screened over a shallower depth interval than STMW-4.

The maximum TPHg concentration detected this quarter in shallow A-zone groundwater was 130,000 μ g/L in well MW-4A, located just north of the former UST excavation area. In deeper B- and C-zone groundwater, the maximum TPHg concentration was detected in source area well MW-3C (48,000 μ g/L). The maximum benzene concentration was detected in well MW-3A (3, 500 μ g/L). The highest TPHd concentration was detected in well MW-4A (170,000 μ g/L). The newly installed offsite monitoring wells contained significantly lower hydrocarbon concentrations than onsite wells, with the highest hydrocarbon concentrations detected in MW-9A (2.6 μ g/L benzene) and MW-9C (390 μ g/L TPHd and 68 μ g/L TPHg) No hydrocarbons were detected in MW-10A.

Shallow (A-zone) groundwater contains petroleum hydrocarbons at elevated concentrations in two primary areas near the former UST excavation: a northern area in the vicinity of well MW-4A, and a southwestern area in the vicinity of wells MW-3A and MW-8A. Prior shallow grab groundwater sampling data also indicates that the southern area of contamination extends to the southern site boundary in the vicinity of wells MW-7B and MW-7C. The low to non-detect concentrations of hydrocarbons in newly installed wells MW-9A and MW-10A indicate that offsite migration of petroleum hydrocarbons in shallow groundwater is minimal. The observed distribution of hydrocarbons in A-zone groundwater is presumably due to plume migration radially away from the excavation area, likely caused by mounding of groundwater within the uncapped former UST excavation during the rainy season.

Contaminant distribution in deeper groundwater differs significantly from the distribution of hydrocarbons in shallow groundwater. High levels of contamination within deeper (B- and C-zone) groundwater only appear to be present in the vicinity of wells MW-3C, MW-7B and MW-7C in the central and southern portions of the site. The very low concentrations of petroleum hydrocarbons detected in newly installed offsite well MW-9C indicate that offsite plume migration is minimal.

Fuel Oxygenate Distribution in Groundwater

No measurable concentrations of MTBE were detected in any of the samples obtained from site monitoring wells this quarter. MTBE is not a contaminant of concern at this site.

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 summarize groundwater monitoring activities and results in a groundwater monitoring report.

Site Investigation

Pangea installed offsite monitoring wells MW-9A, MW-10A and MW-10C in August 2007 and completed soil vapor and subslab vapor sampling of adjacent downgradient properties in September 2007. These activities were reported in the *Soil Gas Sampling and Well Installation Report* dated October 23, 2007. Two of the vapor sampling locations had benzene concentrations exceeding Environmental Screening Levels (ESLs) published by the Regional Water Quality Control Board – San Francisco Region (RWQCB). The report included recommendations to further evaluate subsurface soil vapor by conducting additional soil gas sampling east of the apartment building located northwest of the site and by resampling subslab locations within the commercial building south of the site. Offsite groundwater contamination appears adequately defined by offsite wells MW-9A, MW-9C and MW-10A, so additional offsite groundwater characterization does not appear to be merited.

Site Remediation

The relatively low petroleum hydrocarbon concentrations detected in offsite soil gas and groundwater suggest that the hydrocarbon impact is primarily limited to the 5175 Broadway property. Pangea recommends implementing site remediation at the 5175 Broadway property. Pangea understands that Alameda County Environmental Health (ACEH) provided comments on Pangea's IRAP on September 11, 2007 to Rockridge Heights, LLC representative Lucy Armentrout and requested preparation of a Corrective Action Plan (CAP). The ACEH would like the CAP to include more aggressive remediation than the long-term biosparging proposed in the IRAP and the ACEH will provide public notice with the CAP. Pangea will prepare a CAP to address the ACEH requests.

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 Location Map

Figure 2 – Groundwater Elevation Contour and Hydrocarbon Concentration Map (Shallow)

Figure 3 – Groundwater Elevation Contour and Hydrocarbon Concentration Map (Deep)

Table 1 – Groundwater Analytical Data

Appendix A – Groundwater Monitoring Field Data Sheets

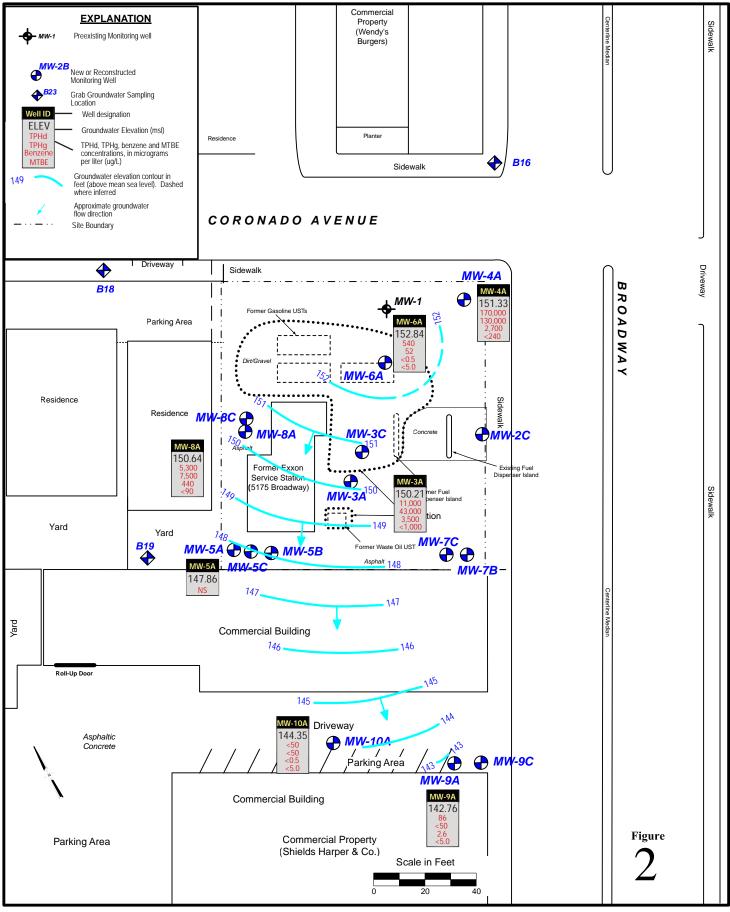
Appendix B – Laboratory Analytical Report

1

Former Exxon Station 5175 Broadway Oakland, California



Site Location Map

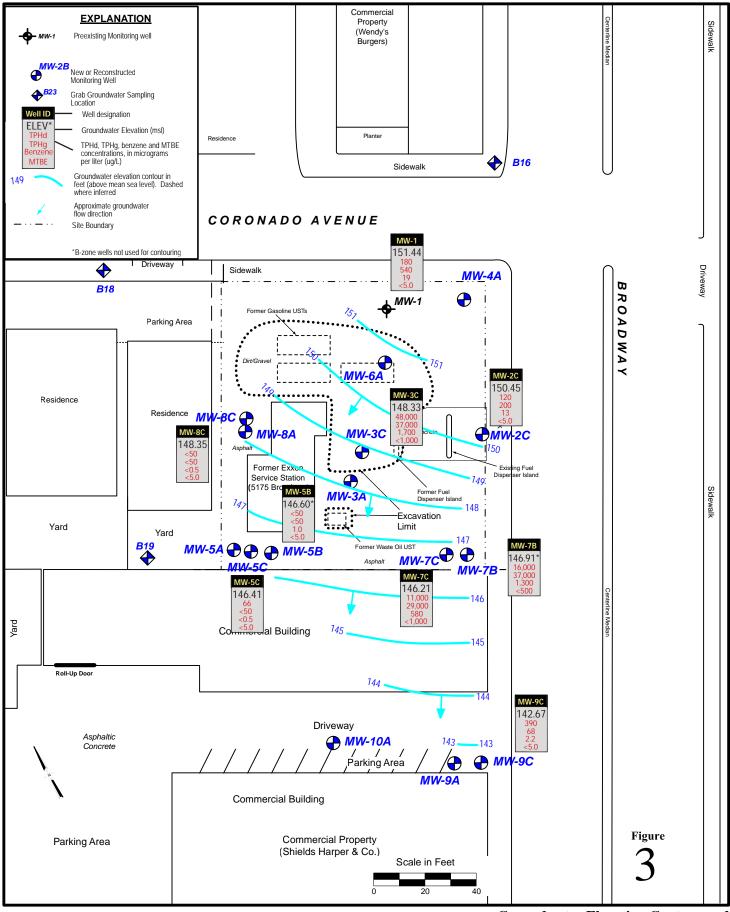


Former Exxon Station 5175 Broadway Oakland, California



Locations of Monitoring Wells and Grab Groundwater Boring Locations

September 29, 2007



Former Exxon Station 5175 Broadway Oakland, California Groundwater Elevation Contour and Hydrocarbon Concentration Map (Deep) September 29, 2007



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

Well ID	Date		Groundwater	Depth										Dissolved
TOC Elev	Sampled	SPH	Elevation	to Water	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	1,2-DCA	Oxygen
(ft)		(ft)	(ft)	(ft)	←				μg/L —				→	mg/L
MW-1	04/30/89					200	18	5	2	12				
(97.71)	05/17/90		88.45	9.26										
	09/26/90		87.79	9.92		1,300	55	31	120	100				
	01/14/91		88.17	9.54		3,100	350	83	86	130				
(102.04)	07/03/91		92.62	9.42		580	32	41	40	55				
	11/11/91		92.59	9.45		330	20	2	2	11				
(101.83)	03/04/92		93.90	7.93		810	11	5	10	23				
	06/02/92		92.85	8.98		2,200	93	32	40	120				
	09/28/92		92.54	9.29		2,900	24	78	19	37				
	01/11/93		94.27	7.56		1,700	5.7	6	11	28				
	08/15/94		92.64	9.19		2,000	120	3	6	16				
(97.50)	11/07/96		88.77	8.73	270	1,200	3	1.1	1.5	3.8	< 0.5			
	02/12/97		89.58	7.92	< 50	1,800	13	5.7	4.8	17	< 0.5			
	06/16/97		88.46	9.04	< 50	330	27	< 0.5	< 0.5	1.2	< 0.5			
	09/30/97		89.94	7.56	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			
(97.50)	01/27/98		89.54	7.96	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			
	04/24/98		89.52	7.98	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			
	08/17/98		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			
	02/16/99		88.86	8.64	< 50	110	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			
	05/17/99		89.00	8.50		280	1.1	0.6	< 0.5	< 0.5	< 0.5			
	08/17/99		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			
	02/17/00		89.02	8.48		580	1.1	2.3	3.6	4.9	< 5.0			
	05/17/00		89.26	8.24		1,500	130	6.8	6.1	< 5.0	< 5.0			
	08/17/00		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			
	02/16/01		89.90	7.60		400	26	< 5.0	< 5.0	< 5.0	< 5.0			
	01/11/02		89.42	8.08	160	600	74	53	14	52	110			
(161.03)	07/01/02		152.01	9.02	280	670	25	< 5.0	< 5.0	< 5.0	< 5.0			
	10/04/02		151.29	9.74	520	1,800	130	7.8	8.1	14	<5.0			
	07/28/06		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
(161.10)	01/09/07		152.90	8.20	160	530	21	1.7	2.8	5.1				0.22
	03/26/07		152.84	8.26										
	06/24/07		152.12	8.98	220	500	24	1.1	2.2	4.2	< 5.0			
	09/29/07		151.44	9.66	180	540	19	1.2	2.3	5.3	<5.0			
MW-2	04/30/89					230	39	18	5	23				
(97.78)	05/17/90		87.78	10.00										
	09/29/90		86.95	10.83		850	970	5	25	47				
	01/14/91		87.15	10.63		3,100	30	52	24	34				
(102.02)	07/03/91		91.94	10.08		1,590	30	52	24	34				
	11/11/91		91.81	10.21		960	320	15	4	29				
	03/04/92		93.32	8.70		1,500	9.5	8.4	9.8	22				
			92.50	9.52		2,800	84	41	59	95				

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

Well ID	Date		Groundwater	Depth										Dissolved
TOC Elev	Sampled	SPH	Elevation	to Water	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	1,2-DCA	Oxygen
(ft)		(ft)	(ft)	(ft)	←				μg/L				<u> </u>	mg/L
MW-2	09/28/92		91.93	10.09		1,600	47	20	47	97				
(continued)	01/11/93		93.50	8.52		2,500	8.6	10	17	32				
(97.49)	08/15/94		87.58	9.91		6,000	450	60	100	95				
	11/07/96		87.47	10.02	780	4,200	25	4.9	8.1	14	<0.5			
	02/12/97		88.58	8.91	5,700	1,800	16	3.1	3.4	8.8	<0.5			
	06/16/97		87.74	9.75	<50	2,500	22	5.1	7.8	11	<0.5			
	09/30/97		89.60	7.89	<50	<50	< 0.5	< 0.5	<0.5	<0.5	<0.5			
	01/27/98		89.11	8.38	<50	<50	< 0.5	< 0.5	<0.5	<0.5	<0.5			
	04/24/98		88.81	8.68	1,400	2,100	18	6.5	4.8	21	< 0.5			
	08/17/98		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			
	02/16/99		88.57	8.92	<50	1,600	82	16	<2.5	40	59			
	05/17/99		88.23	9.26		8,200	43	73	140	100	<250			
	08/17/99		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			
	02/17/00		87.99	9.50		1,700	3.2	6.8	11	12.3	<5.0			
	05/17/00		88.65	8.84		3,800	450	65	110	80	<25			
	08/17/00		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			
	02/16/01		88.97	8.52		2,200	110	20	38	33	< 5.0			
	01/11/02		88.67	8.82	620	3,100	280	86	84	110	<50			
(160.98)	07/01/02		151.34	9.64	940	2,600	300	29	45	27	<10			
	10/04/02		150.46	10.52	390	4,000	440	66	140	120	<25			
	07/28/06		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
	01/09/07		151.65	9.33	84	210	27	2.6	8.1	6.8				0.14
	01/25/07					Well	Abandoned							
MW-3	04/30/90					56,000	3,600	8,600	1,300	7,200				
(98.14)	05/17/90		85.72	12.42										
	09/26/90		84.64	13.50		54,000	5,100	420	1,600	8,000				
	01/14/91		85.56	12.58		35,000	2,600	6,600	1,500	5,700				
(102.46)	07/03/91		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)	03/04/92		91.92	10.26		57,000	720	870	81	3,100				
(97.94)	06/02/92		86.54	11.40		50,000	240	240	220	740				
	09/28/92		85.30	12.64		64,000	110	93	97	250				
	01/11/93		87.84	10.10		68,000	210	280	360	990				
	08/15/94		85.74	12.20		50,000	870	1,200	1,300	3,000				
	11/07/96		85.54	12.40	470	68,000	33	27	63	120	< 0.5			
	02/12/97		87.71	10.23	3,500	25,000	39	43	15	91	< 0.5			
	06/16/97		86.15	11.79	< 50	9,700	26	29	45	81	< 0.5			
	09/30/97		88.54	9.40	1,600	6,000	43	36	12	11	< 0.5			
	01/27/98		88.14	9.80	560	380	5.7	4.1	1.7	9.1	< 0.5			

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

Well ID	Date		Groundwater	Depth										Dissolved
TOC Elev	Sampled	SPH	Elevation	to Water	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	1,2-DCA	Oxygen
(ft)		(ft)	(ft)	(ft)	←				μg/L —				→	mg/L
MW-3	04/24/98		88.04	9.90	680	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5			
(continued)	08/17/98		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			
	02/16/99		87.22	10.72	<50	33,000	270	110	<5.0	770	170			
	05/17/99		87.40	10.54		72,000	280	230	320	890	<250			
	08/17/99		85.99	11.95	1,800	20,000	51	41	61	130	<5.0			
	11/17/99		84.34	13.60		1,700	39	22	31	84	<1.0			
	02/17/00		87.26	10.68		8,800	16	39	74	90	<5.0			
	05/17/00		87.69	10.25		22,000	300	260	410	940	<5.0			
	08/17/00		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			
	02/16/01		88.26	9.68		7,400	40	72	700	250	<25			
	01/11/02		88.36	9.58	1,900	9,300	230	200	290	580	<25			
(161.43)	07/01/02		150.29	11.14	5,200	13,000	230	220	450	890	<13			
	10/04/02		148.61	12.82	4,900	11,000	280	170	450	730	<25			
	07/28/06			Not Samp	led - Unable to	locate well								
	10/16/06			Not Samp	led - Unable to	locate well								
	01/09/07			Not Samp	led - Unable to	locate well								
	01/22/07		149.81	11.62	93,000	34,000	770	250	760	2,000	<1,000			
	03/16/07						Well Abandon	ned						
STMW-4	07/03/91		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)	03/04/92		91.64	9.44		5,000	35	20	22	71				
(98.80)	06/02/92	_	88.48	10.32	-	13,000	140	45	63	210				
(20.00)	09/28/92	_	88.04	10.76		40,000	35	20	48	110				
	01/11/93		89.52	9.28		24,000	26	88	92	280				
	08/15/94	_	88.26	10.54	-	9,000	500	34	46	130				
	11/07/96	_	88.43	10.37	180	13,000	40	2.9	7.8	19	<0.5			
	02/12/97	-	89.44	9.36	5,700	5,300	95	5.3	5.9	18	<0.5			
	06/16/97		88.40	10.40	<50	5,300	37	6.2	1.7	11	<0.5			
	09/30/97		90.30	8.50	<50	2,700	42	7.7	5.7	26	<0.5			
	01/27/98		89.90	8.90	300	3,000	60	17	12	49	<0.5			
	04/24/98	-	89.30	9.50	<50	<50	<0.5	<0.5	< 0.5	<0.5	<0.5			
	04/24/98	-	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	<0.5			
	02/16/99		89.16 88.84	9.64	<50	32,000	660	16 30	16	150	<100			
	05/17/99			9.96	990	13,000	1600 260		45	78	<250			
	08/17/99		88.16	10.64		12,000		22 12	33	72 40	<5.0			
	11/17/99		86.78	12.02		7,900	21		17		<1.0			
	02/17/00		89.48	9.32		4,900	8.9	21	38	50	<5.0			
	05/17/00		89.15	9.65		9,600	840	<50	61	<50	<50			
	08/17/00		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			

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

Well ID TOC Elev	Date	SPH	Groundwater Elevation	Depth to Water	трца	TDUc	Panzana	Toluana	Ethylhanzara	Vylanas	MTBE	DIPE	1,2-DCA	Dissolved
	Sampled	SPH (ft)	Elevation (ft)	to Water (ft)	TPHd ←	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MIBE	DIPE	1,2-DCA	Oxygen mg/I
(ft)		(II)	(11)	(II)					μg/L —					mg/L
STMW-4	02/16/01		89.60	9.20		5,700	560	<25	<25	<25	<25			
(continued)	01/11/02		89.22	9.58	930	4,900	560	59	25	<25	<250			
(162.13)	07/01/02		151.85	10.28	6,700	6,700	470	18	32	45	<13			
	10/04/02		151.05	11.08	2,900	13,000	590	26	65	110	<25			
	07/28/06	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
	01/09/07	0.03	152.20	9.93			Not Sampled - S							0.24
	01/26/07						Well Abandone							0.24
om ov s	07/02/01		00.70	12.20		500	00	0.1	10	00				
STMW-5	07/03/91		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)	03/04/92		89.56	11.80		460	13	6.5	11	18				
	06/02/92		88.30	13.06		1,800	27	20	21	43				
	09/28/92		87.32	14.04		1,500	14	6.1	18	22				
	01/11/93		89.75	11.61		800	1.8	3	3.1	9.4				
	08/15/94		87.51	13.85		3,000	320	62	34	220				
(97.14)	11/07/96		83.47	13.67	330	1,200	11	1.7	4.4	13	<0.5			
	02/17/97		85.07	12.07	3,700	1,000	11	17	1.7	9.7	<0.5			
	06/19/97		83.81	13.33	2,300	950	7.4	1	1	7.2	<0.5			
	09/30/97		85.90	11.24	1,100	710	5.8	4	1	1	<0.5			
	01/27/98	-	85.50	11.64	1,100	340	2	1.8	1.6	8.2	<0.5			
	04/24/98		85.30	11.84	<50	3,300	12	9.4	8.5	37	<0.5			
	08/17/98		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			
	02/16/99		84.92	12.22	<50	950	150	3.8	1.4	14	11			
	05/17/99		84.56	12.58		2,800	67	9.4	<2.5	16	30			
	08/17/99		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			
	02/17/00		84.58	12.56		770	1.5	3.2	5.8	7	<5.0			
	05/17/00		85.06	12.08		4,500	<25	<25	<25	<25	<25			
	08/17/00		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			
	02/16/01	-	85.54	11.60		850	58	9.8	9.4	18	<5.0			
	01/11/02		85.42	11.72	<50	920	76	16	16	28	13			
(160.65)	07/01/02	-	147.51	13.14	1,500	4,300	71	14	14	36	<5.0			
	10/04/02		146.13	14.52	60	1,400	71	17	26	35	<5.0			
	07/28/06		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
	01/09/07		148.19	12.46	180	390	30	3.2	1.8	3.2				0.17
	01/18/07						weii A	Abandoned						
MW-2C	03/09/07		152.24	8.41	140	450	40	9.3	2.9	16	<10			
(160.65)	03/26/07		151.93	8.72										
	06/24/07		151.21	9.44	160	440	30	1.8	5.9	7.4	< 5.0			
	09/29/07		150.45	10.20	120	200	13	<0.5	<0.5	2.0	<5.0			
MW-3A	03/09/07		152.20	9.35	4,500	39,000	3,800	220	830	2,800	<500			
(161.55)	03/26/07		152.33	9.22										
(161.57)	06/24/07		151.61	9.94	11,000	34,000	3,200	330	990	3,200	<250			
	09/29/07		150.21	11.36	11,000	43,000	3,500	150	730	2,200	<1,000			

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

Well ID TOC Elev	Date Sampled	SPH	Groundwater Elevation	Depth to Water	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	1,2-DCA	Dissolved Oxygen
(ft)	Sampled	(ft)	(ft)	(ft)	· · · · · ·	11115	Denzene	Toruciic	μg/L —	Ayienes	MIDL	DILL	1,2-DCA	mg/L
0-7		(11)	(11)	(*1)	`				µg/L					g.L
MW-3C	03/26/07		151.15	10.64										
(161.79)	04/16/07		150.87	10.92	36,000	32,000	1,200	710	600	1,900	< 500			
	06/24/07		149.43	12.36	200,000	50,000	2,200	4,100	860	6,100	<500			
	09/29/07	-	148.33	13.46	48,000	37,000	1,700	3,300	830	4,800	<1,000			
MW-4A	03/09/07		152.88	9.56	3,600	16,000	1,600	36	37	150	<250			
(162.44)	03/26/07		152.56	9.88										
	06/24/07		152.02	10.42	110,000	87,000	1,500	59	290	800	< 500			
	09/29/07	-	151.33	11.11	170,000	130,000	2,700	69	400	1,400	<240			
MW-5A	03/09/07		150.40	10.42	56	<50	< 0.5	< 0.5	< 0.5	<0.5	<5.0			
(160.82)	03/26/07		150.00	10.82										
	06/24/07		148.94	11.88	< 50	180	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0			
	09/29/07		147.86	12.96				-						
MW-5B	03/09/07		146.42	15.08	59	140	1.3	0.77	< 0.5	1.6	<5.0			
(161.50)	03/26/07		148.88	12.62										
	06/24/07		147.98	13.52	53	52	1.1	< 0.5	< 0.5	< 0.5	<5.0			
	09/29/07	-	146.60	14.90	<50	<50	0.95	<0.5	<0.5	<0.5	<5.0			
MW-5C	03/09/07		148.12	12.91	< 50	<50	< 0.5	< 0.5	< 0.5	<0.5	<5.0			
(161.03)	03/26/07		148.41	12.62										
	06/24/07		147.58	13.45	< 50	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0			
	09/29/07		146.41	14.62	66	<50	<0.5	<0.5	<0.5	<0.5	<5.0			-
MW-6A	03/09/07		154.91	6.67	380	<50	< 0.5	< 0.5	< 0.5	< 0.5	<5.0			
(161.58)	03/26/07		154.41	7.17										
	06/24/07		153.79	7.79	590	140	< 0.5	< 0.5	< 0.5	< 0.5	<5.0			
	09/29/07	-	152.84	8.74	540	52	<0.5	<0.5	<0.5	<0.5	<5.0			
MW-7B	03/09/07		147.97	11.18	930	18,000	1,500	1,600	140	1,800	<600			
(159.15)	03/26/07		148.10	11.05										
	06/24/07	-	147.54	11.61	40,000	30,000	1,800	2,400	240	2,800	<700			
(159.02)	09/29/07	-	146.91	12.11	16,000	37,000	1,300	1,500	180	2,700	<500			
MW-7C	03/09/07		145.44	13.09	190	3,600	970	100	12	90	<120			
(158.53)	03/26/07		147.53	11.00										
	06/24/07	-	146.65	11.88	7,100	16,000	510	520	190	1,300	<100			
	09/29/07	-	146.21	12.32	11,000	29,000	580	1,400	600	4,800	<1,000		-	
MW-8A	03/09/07		152.05	9.52	4,200	10,000	430	18	<10	88	<100			
(161.57)	03/26/07	-	151.74	9.83										
	06/24/07		151.40	10.17	17,000	12,000	720	500	230	880	<300			
(161.59)	09/29/07	-	150.64	10.95	5,300	7,500	440	67	26	240	<90			
MW-8C	03/09/07		149.18	12.15	<50	150	9.8	1.3	2.0	3.9	<5.0			
(161.33)	03/26/07		149.56	11.77										
	06/24/07		148.96	12.37	< 50	<50	0.57	< 0.5	< 0.5	< 0.5	< 5.0			
	09/29/07		148.35	12.98	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	<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
(11)		(11)	(11)	(11)					μg/L —					mg/L
MW-9A	09/29/07		142.76	12.61	86	<50	2.6	<0.5	<0.5	<0.5	<5.0			-
(155.37)														
MW-9C	09/29/07		142.67	12.27	390	68	2.2	0.88	<0.5	< 0.5	<5.0			
(154.94)														
MW-10A	09/29/07		144.35	10.53	< 50	< 50	< 0.5	< 0.5	< 0.5	<0.5	<5.0			
(154.88)														

Abbreviations:

 $\mu g/L \ = \ Micrograms \ per \ liter \ - \ approximately \ equal \ to \ parts \ per \ billion = ppb.$

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.

BTEX = Benzene, toluene, ethylbenzene, xylenes 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



Well Gauging Data Sheet

			VVCII Cac	ignig Data	211001		
Project.Ta	ask #: 1145	5.001 212		Project Name	Feiner - 5	175 Broadw	ay
Address:	5175 Broa	dway, Oak	dand, CA		10	Date: 9/29/	07
Name: Sa	njiv Gill			Signature:	1/5		
Well ID	Well Size (in.)	Time	Depth to Immiscible Liquid (ft)	Thickness of Immiscible Liquid (ft)	Depth to	Total Depth (ft)	Measuring Point
vveirio	(111.)	Time	Liquid (it)	Liquiu (16)	vvalor (IL)	Depui (it)	Font
m2-1	4"	10:45			9.66	22.97	TOC
MW-2C	2"	10:00			10.20	23.03	
MU-3A	2"	10:55			11.36	13.83	
MW-3C	2"	10:15			13.46	26.75	
MN-4A	211	10:50			11-11	14.73	
MH-5A	2"	10:30			12.96	13.52	
MU-SB	2"	10:25			14.90	19.23	
MN-5C	2"	10:05			14.62		
MU6A	2"	10:40			8.74	14.92	
MH-7B	2//	9:55			12.11	18.55	
MW-7C	11	10:20			12.32	24.41	\star

Comments:

MW-7B & MW-7C latted incorrect on map & well box





Well Gauging Data Sheet

Well Gauging Data Sheet									
Project.Ta	Project Task #: 1145.001 212 Project Name: Feiner - 5175 Broadway								
	5175 Broa		land, CA		A.	Date: 9/29/	07		
Name: Sa	njiv Gill			Signature:	H				
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-8A	2"	10:35			10.95	14.90	TOC		
MN-80	a"	10:10			12.98	24.89			
MU9A		9:45			12.61	15.19			
MW-9C	2"	9:40			12.27	20.45			
MUTOB	2//	9:50			10.53	17.96			
							9		
Comments	:			1					



MONITORING FIELD DA	TA SHEET Well ID: Mu-
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway
Address: 5175 Broadway, Oakland, Ca	
Date: 9/29/07	Weather: Swny
Well Diameter: 4//	Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius ² * 0.163
Total Depth (TD): 22.97	Depth to Product:
Depth to Water (DTW): 9-66	Product Thickness:
Water Column Height: 13.31	1 Casing Volume: 8,65 gallons
Reference Point: TOC	3 Casing Volumes: 25.95 gallons
Purging Device Disposable Bailer, 3"	
Sampling Device: Parastaltic Pump (tu	
Time Temp © pH Cond (µs	NTU DO(mg/L) ORP (mV) Vol(gal) DTW
1:25 20.8 7.32 798	9
1:30 20.2 7.30 800	18
1:35 20.5 7.32 780	26
Comments: YSI 550A DO meter	pre purge DO = mg/l
Comments: 131 530A DO Meter	post purge DO = mg/l
very turbil, silty	poor purge DO mg.
Sample ID: Mu-)	Sample Time: 1.45
Laboratory: McCampbell Analytical, IN	NC. Sample Date: 9/29 /07
Containers/Preservative: Voa/HCI, An	nber Glass Liter/ HCI
Analyzed for: 8015, 8021	10
Sampler Name: Sanjiv Gill	Signature:
	,



MONI	TORING F	IELD DATA	A SHEET Well ID: MN-2C							
Project.Task #:	1145.001 21	2	Project N		ner - 5175		1			
Address: 5175 8	Broadway, O	akland, Ca								
Date: 9/29/07			Weather		w X					
Well Diameter:	2"		Volume/ft.	1" = 0.04 2" = 0.16	3" ='0.37 4" = 0.65	6" = 1.47 radius ² * 0.1	163			
Total Depth (TD): 23.0	3	Depth to Product:							
Depth to Water	(DTW): /	0.20	Product 1	Thickness	:					
Water Column H	Height:	2.83	1 Casing	Volume:	2.0	5	gallons			
Reference Point	t: TOC		3 Cas	sing Volur	nes: 6	.15	gallons			
Purging Device:	Disposable	Bailer, 3" PV	C Bailer, P	arastaltic	Pump (tu	bing)				
Sampling Devic			g) Dupe	sable [eiles					
Time Temp		Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW			
1:05 20.		853				4				
1:07 20.		850				6	,			
1.09 20.	1 1.22	050								
Comments: YSI 550	0A DO meter		pre purge [00 =	mg/l					
			post purge	DO =	mg/l					
reit tripi	d, silty									
Sample ID: M	D-2C.		Sample	Time: /:	11					
Laboratory: Mc	Campbell Ar	nalytical, INC.	Sample Date: 9/ 29 /07							
Containers/Pres	servative: Vo	oa/HCI, Ambe	r Glass Lit	ter/ HCI						
Analyzed for: 8	015, 8021				<i>~</i>					
Sampler Name:	Sanjiv Gill		Signature	e: /	5					
				, -						



ENVIRONMENTAL SERVICES, INC.								
MONITORING FIELD DA	Well ID: MN-3A							
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway							
Address: 5175 Broadway, Oakland, Ca								
Date: 9/29/07	Weather: Sunny							
Well Diameter: 2"	Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius ² * 0.163							
Total Depth (TD): 13.83	Depth to Product:							
Depth to Water (DTW): 11-36	Product Thickness:							
Water Column Height: 2.47	1 Casing Volume: 0 · 39 gallons							
Reference Point: TOC	3 Casing Volumes: 1-18 gallons							
Purging Device: Disposable Bailer, 3" F	PVC Bailer, Parastaltic Pump (tubing)							
Sampling Device: Parastatti. Pump.(tul								
Time Temp pH Cond (µs)								
2:30 22.2 8.90 694	0.3							
2:32 Dematered be	for O. 6 gallens							
Comments: YSI 550A DO meter	pre purge DO = mg/l							
	post purge DO = mg/l							
Sample ID: Mu-3A	Sample Time: 10:05							
Laboratory: McCampbell Analytical, IN	C. Sample Date: 9/ 30/07							
Containers/Preservative: Voa/HCI, Am	ber Glass Liter/ HCI							
Analyzed for: 8015, 8021	h							
Sampler Name: Sanjiv Gill	Signature:							
	W							



MONITORING FIELD DAT	A SHEET Well ID: MW-3C						
Project Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway						
Address: 5175 Broadway, Oakland, Ca							
Date: 9/29/07	Weather: Sunny						
Well Diameter: 2"	Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius ² * 0.163						
Total Depth (TD): 26.75	Depth to Product:						
Depth to Water (DTW): 13 46	Product Thickness:						
Water Column Height: \3.29	1 Casing Volume: 2.12 gallons						
Reference Point: TOC	3 Casing Volumes: 6.37 gallons						
Purging Device: Disposable Bailer, 3º PV	'C Bailer, Parastaltic Pump (tubing)						
Sampling Device: Parastaltic Rump (tubin							
7.00 Time Temp © pH Cond (µs)	NTU DÓ(mg/L) ORP (mV) Vol(gal) DTW						
2:19 19.8 7-02 1531	9						
2:21 Devateded	4.5						
Comments: YSI 550A DO meter	pre purge DO = mg/l post purge DO = mg/l						
odor, very turbich, silty, light							
Sample ID: MW-3C	Sample Time: #3:55						
Laboratory: McCampbell Analytical, INC.							
Containers/Preservative: Voa/HCl, Ambe							
Analyzed for: 8015, 8021	SI GIOSS EILOIT FICE						
	Signature						
Sampler Name: Sanjiv Gill	Signature:						



MONITORING FIELD DA	Well ID: MU-4A			
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway			
Address: 5175 Broadway, Oakland, C	а			
Date: 9/29/07	Weather: Sunn X Volume/8 1" = 0.04 3" = 0.37 6" = 1.47			
Well Diameter: 2"	Volume/ft. $1" = 0.04 3" = 0.37 6" = 1.47$ $2" = 0.16 4" = 0.65 \text{radius}^2 \cdot 0.163$			
Total Depth (TD): 14.73	Depth to Product:			
Depth to Water (DTW): 11-11	Product Thickness:			
Water Column Height: 3.62	1 Casing Volume: 0.57 gallons			
Reference Point: TOC	3 Casing Volumes: 1.73 gallons			
Purging Device: Disposable Bailer, 3"	PVC Bailer, Parastaltic Pump (tubing)			
Sampling Device: Parastaltic Device:	mang) Disposable Beiler			
Time Temp pH Cond (µ				
1:55 220 7.65 860	0.5			
1:56 22.5 7.68 902	1.0			
1:57 22.3 7.69 9.09	1.5			
Comments: YSI 550A DO meter	pre purge DO = mg/l			
odor, tuckid	post purge DO = mg/l			
Sample ID: MU-4A	Sample Time: 2:00			
Laboratory: McCampbell Analytical, IN	NC. Sample Date: 9/29 /07			
Containers/Preservative: Voa/HCI, Ar	mber Glass Liter/ HCI			
Analyzed for: 8015, 8021	R			
Sampler Name: Sanjiv Gill	Signature:			



MONITORING FIELD DATA	Well ID: MN-5A				
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway				
Address: 5175 Broadway, Oakland, Ca					
Date: 9/29/07	Weather: Sunny				
Well Diameter: 2''	Weather: Swnw Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius² o 0.163				
Total Depth (TD): 13.52	Depth to Product:				
Depth to Water (DTW): 12-96	Product Thickness:				
Water Column Height: 0.56	1 Casing Volume: 0.08 gallons				
Reference Point: TOC	3 Casing Volumes: 0.26 gallons				
Purging Device: Property Briller, Br PV	C Bailer, Parastaltic Pump (tubing)				
Sampling Device: Parastaltic Pump (tubin	1				
Time Temp © pH Cond (µs)	NTU DO(mg/L) ORP (mV) Vol(gal) DTW				
Todauffileent heart					
	hable to obtain sufficent				
water in baile	4				
	1				
Comments: YSI 550A DO meter	pre purge DO = mg/l				
	post purge DO = mg/l				
Sample ID:	Sample Time: Sample Date: 9/ /07				
Containers/Preservative: Voa/HCl, Amber Glass Liter/ HCl					
Analyzed for: 8015, 8021					
Sampler Name: Sanjiv Gill	Signature:				



MONITORING FIELD D	ATA SHEET Well ID: MN-5B
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway
Address: 5175 Broadway, Oakland, (Ca
Date: 9/29/07	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47
Total Depth (TD): 19.23	Depth to Product:
Depth to Water (DTW): 14.90	Product Thickness:
Water Column Height: 4-33	1 Casing Volume: () . 69 gallons
Reference Point: TOC	3 Casing Volumes: 2-07 gallons
	PVC Bailer, Parastaltic Pump (tubing)
Sampling Device: Parastatic Pump (n.
Time Temp © pH Cond (
11:40 19.1 6.73 1564	.5
11:42 Dewate	ced .7
Comments: YSI 550A DO meter	pre purge DO = mg/l
Comments. For obstract motor	post purge DO = mg/l
wert tuckid, very silty	
Sample ID: MN-5B	Sample Time: q:10
Laboratory: McCampbell Analytical,	INC. Sample Date: 9/30 /07
Containers/Preservative: Voa/HCI, /	Amber Glass Liter/ HCI
Analyzed for: 8015, 8021	10
Sampler Name: Sanjiv Gill	Signature:
	R



Project Name: Feiner - 5175 Broadway Address: 5175 Broadway Oakland, Ca	MONITORING FIELD DATA			SHEET		Well ID	MW-	5 C	
Date: 9/29/07 Weather: \$\(\sum_{1}^{2} \)	Project.T	ask #: 11	45.001 21	12					
Volume/ft. 1 = 0.04 3 = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 2" = 0.16 4" = 0.65 radius 1 = 0.16 3" = 0.37 6" = 1.47 4" = 0.65 radius 1 = 0.16 5 7 3 3 3 3 6 9 7 9 9 9 9 9 9 9 9 9	Address:	5175 Bro	adway, C	akland, Ca	,				
Total Depth (TD): 26-70 Depth to Water (DTW): 14-62 Water Column Height: 12-08 Reference Point: TOC 2 Casing Volume: 5-79 gallons Reference Point: TOC 3 Casing Volumes: 5-79 gallons Purging Device: Disposable Bailey, 3" PVC Bailer, Parastaltic Pump (tubing) Sampling Device: Parastaltic Total (tubing) Disposable Pump (tubing) Disposa	Date: 9/2	9/07			Weather	Suns	١ ٧		
Depth to Water (DTW): 14-62. Product Thickness: Water Column Height: 12.08 1 Casing Volume: 1-93 gallons Reference Point: TOC 3 Casing Volumes: 5-79 gallons Purging Device: Disposable Baile, 3" PVC Bailer, Parastaltic Pump (tubing) Sampling Device: Parastaltic Pump (tubing) Sampling Device: Parastaltic Pump (tubing) Sampling Device: Parastaltic Pump (tubing) Disposable Device: Parastaltic Pump (tubing) NTU DO(mg/L) ORP (mV) Vol(gal) 11:20 19.7 7.20 1804 11:23 18.7 7.13 182 1 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Well Diar	neter:	2"		Volume/ft.	1" = 0.04 2" = 0.16	3" = 0.37 4" = 0.65	6" = 1.47 radius ² * 0.	163
Water Column Height: 12.08 1 Casing Volume: J. 9.3 gallons Reference Point: TOC 3 Casing Volumes: 5.79 gallons Purging Device: Disposable Bailer, 3" PVC Bailer, Parastaltic Pump (tubing) Sampling Device: Parastaltic (tubing) Disposable Dailer, Parastaltic Pump (tubing) Sampling Device: Parastaltic (tubing) Disposable Dailer, Parastaltic Pump (tubing) Sampling Device: Parastaltic (tubing) Disposable Dailer, Parastaltic Pump (tubing) Sampling Device: Parastaltic (tubing) Disposable Dailer, Parastaltic Pump (tubing) Disposable Disposable Dailer, Parastaltic Pump (tubing) Sampling Device: Parastaltic (tubing) Disposable Dispos	Total Dep	oth (TD):	26.7	0	Depth to	Product:			
Reference Point: TOC 2 Casing Volumes: 5.79 gallons Purging Device: Disposable Baile), 3" PVC Bailer, Parastaltic Pump (tubing) Sampling Device: Parastaltic Cond (µe) Time Temp © pH Cond (µe) NTU DO(mg/L) ORP (mV) Vol(gai) DTW 11: 20 9.7 7.20 806 11: 23 8.9 7.15 8.47 11: 25 18.7 7.13 18.2 6 Comments: YSI 550A DO meter pre purge DO = mg/l Post purge DO = mg/l VCry Lac bid Si NY Sample ID: MD-5 (Sample Time: 11: 30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/24 /07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021	Depth to	Water (D	TW): 14	1.62	Product '	Thickness	;		
Purging Device: Disposable Bailey, 3" PVC Bailer, Parastaltic Pump (tubing) Sampling Device: Parastaltic Survivibing) Time Temp	Water Co	olumn Hei	ght: /	2.08	1 Casing	Volume:	1.93		gallons
Sampling Device: Parastaltic Sample Disposable	Reference	e Point: T	гос		_3_Ca	sing Volur	nes: 5	79	gallons
Time Temp © pH Cond (µs) NTU DO(mg/L) ORP (mV) Vol(gal) DTW	Purging [Device: 0	sposable	Bailer, 3" PVC	Bailer, P	arastaltic	Pump (tu	bing)	
	Sampling				g) Dispo	suble Do	iler		
					NTU	DO(mg/L)	ORP (mV)		DTW
Comments: YSI 550A DO meter pre purge DO = mg/l post purge DO = mg/l Vcry Inc bick si 14 x Sample ID: MD-5C Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/26/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021			7						
Comments: YSI 550A DO meter pre purge DO = mg/l post purge DO = mg/l YCry Lucky Si NA Sample ID: (\sqrt{2}) - 5 (\sqrt{2}) Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCl, Amber Glass Liter/ HCl Analyzed for: 8015, 8021	11:23							,	
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021	11:25	18.7	7.13	1821				6	
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021									
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021									
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021									
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021									
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021									
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021									
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021					1				
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021									
Sample ID: My -5 (Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021	Comments	YSI 550A I	DO meter		pre purge [00 =	mg/l		
Sample ID: MD-50 Sample Time: 11:30 Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021									
Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021	Ver	1 tuchid	xfliz			,			
Laboratory: McCampbell Analytical, INC. Sample Date: 9/29/07 Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021					1				
Containers/Preservative: Voa/HCI, Amber Glass Liter/ HCI Analyzed for: 8015, 8021	Sample ID: MU-50		Sample Time: 11:30						
Analyzed for: 8015, 8021	Laborato	y: McCa	mpbell Ar	nalytical, INC.	Sample Date: 9/29 /07				
	Containe	rs/Presen	vative: V	oa/HCI, Amber	r Glass Lit	ter/ HCI			
Sampler Name: Sanjiv Gill Signature:	Analyzed	for: 801	5, 8021		7	10	2		
	Sampler	Name: Sa	njiv Gill		Signature	: /2	>		



1	MONITO	RING F	IELD DATA	SHEET		Well ID:	MW-6	A
Project.T	ask #: 114	45.001 212	2	Project Name: Feiner - 5175 Broadway				
Address:	5175 Bro	adway, Oa	akland, Ca					
Date: 9/2	9/07			Weather:				
	neter:	2''		Volume/ft.	1" = 0.04 2" = 0.16	3" = 0.37 4" = 0.65	6" = 1.47 radius [∠] * 0.1	163
	oth (TD):	14.9	2	Depth to	Product:			
		TW): 8	.74	Product *	Thickness	:		
	olumn Hei		.18	1 Casing	Volume:	0.98		gallons
	e Point: T	N. 20		_3_Cas	sing Volur	nes: 2.	96	gallons
Purging (Device Di	sposable	Bailer, 8" PV	Bailer, P	arastaltic	Pump (tu	bing)	
			Pump (tubiq	100	posable [Saljer		
Time	Temp €	pН	Cond (µs)	MTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
12:45	22-6	7.00	1180	-				
12:47	22.7	695	1210	1			2	
12:49	14 11 1	6.91	1206					
-								
Comments	: YSI 550A I	DO meter		pre purge [00 =	mg/l		
			2 22	post purge	DO =	mg/l		
Ver	y tuchi	d, very	s: 1+y					
Sample ID: MW-6A			Sample Time: 12:52					
Laboratory: McCampbell Analytical, INC.		Sample	Date: 9/ 2	9 /07		1201		
Containe	rs/Preser	vative: Vo	a/HCI, Ambe	r Glass Li	ter/ HCI			
Analyzed	for: 801	5, 8021		,		B		
Sampler	Name: Sa	anjiv Gill		Signature	e: /	2		
					10			



MONITORIN	IG FIELD DATA	SHEET		Well ID:	Mu-	18		
Project.Task #: 1145.00	Project.Task #: 1145.001 212				Project Name: Feiner - 5175 Broadway			
Address: 5175 Broadwa	ay, Oakland, Ca	,						
Date: 9/29/07			Sunn					
Well Diameter: 2"		Volume/ft.	1" = 0.04 2" = 0.16	3" = 0.37 4" = 0.65	6" = 1.47 radius * 0.1	63		
Total Depth (TD): 18	8.55	Depth to	Product:					
Depth to Water (DTW):		Product 7	Thickness	t .				
Water Column Height:	6.44	1 Casing	Volume:	1-03		gallons		
Reference Point: TOC		3 Ca	sing Volur	nes: 3	.09	gallons		
Purging Device: Dispos	able Bailer, 3" PV	C Bailer, F	arastaltic	Pump (tu	bing)			
Sampling Device: Paras		a) Dis	00 selec	Beiles				
Time Temp © p	H Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	WTD		
	19 1456	 			1.5			
12:09	Devatere	<u> </u>			1.2			
	-							
		1						
Comments: YSI 550A DO m	eter	pre purge l		mg/l				
		post purge	DO =	mg/l				
turbid								
Sample ID: MU-7	ß	Sample '	Time: 9	:45				
Laboratory: McCampbell Analytical, INC.								
Containers/Preservative	e: Voa/HCI, Ambe	r Glass Li	ter/ HCI					
Analyzed for: 8015, 80	21			0				
Sampler Name: Sanjiv	Gill	Signatur	e: /	35				



MONITORING FIELD DATA	A SHEET Well ID: MW-7C			<u></u>	
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway				
Address: 5175 Broadway, Oakland, Ca					
Date: 9/29/07	Weather: Sur	M X			
Well Diameter: 2'1	Weather: 5 0.04 Volume/ft. 1" = 0.04 2" = 0.16	3" = 0.37 4" = 0.65	6" = 1.47 radius ² * 0.1	63	
	Depth to Product:	1			
Total Depth (TD): 24.41					
Depth to Water (DTW): 12.32	Product Thickness				
Water Column Height: 12.09	1 Casing Volume:			gallons	
Reference Point: TOC	3 Casing Volu	mes: 5	.80	gallons	
Purging Device: Disposable Bailer, 3" PV	C Bailer, Parastaltic	Pump (tu	bing)		
Sampling Device: Parastellic Pump (tubic	g) Disposable	Bailer			
Time Temp © pH Cond (µs)	NTU DO(mg/L)	ORP (mV)		DTW	
11:55 20.1 7.14 1438		1	2		
11:57 Denotered	 		3.5		
	 	-			
	 		_		
	-				
	ļ				
	ļ <u> </u>				
				,	
Comments: YSI 550A DO meter	pre purge DO ≃	mg/l			
. 1.5	post purge DO =	mg/l			
odar wery trubid, very silty					
Sample ID: MU-7C	Sample Time: 9:35				
Laboratory: McCampbell Analytical, INC.	Sample Date: 9/30 /07				
Containers/Preservative: Voa/HCI, Ambe	er Glass Liter/ HCI				
Analyzed for: 8015, 8021		0			
Sampler Name: Sanjiv Gill	Signature:	_			
	10				



MONITORING FIELD DATA	SHEET Well ID: MW-8A			
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway			
Address: 5175 Broadway, Oakland, Ca				
Date: 9/29/07	Weather: Swny			
Well Diameter: 2'	Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius ^{2 *} 0.163			
Total Depth (TD): 14-90	Depth to Product:			
Depth to Water (DTW): 10.95	Product Thickness:			
Water Column Height: 3.95	1 Casing Volume: 0.63 gallons			
Reference Point: TOC	3 Casing Volumes: /-89 gallons			
Purging Device: Disposable Bailer, 3" PVC	Bailer, Parastaltic Pump (tubing)			
Sampling Device: Parestellic Pump (tubin	d) Disposable Boiler			
Time Temp © pH Cond (µs)	NTU DO(mg/L) ORP (mV) Vol(gal) DTW			
12:30 19.8 6.90 1372	0.5			
2:32 19.1 6.85 1360	1.5			
12:33 Devatered ordo	te 2 gellons			
Comments: YSI 550A DO meter	pre purge DO = mg/i			
	post purge DO = mg/l			
odes, very toubid, very silty				
Sample ID: MD-8A	Sample Time: 9:25			
Laboratory: McCampbell Analytical, INC.	Sample Date: 9/ 30 /07			
Containers/Preservative: Voa/HCI, Amber	r Glass Liter/ HCl			
Analyzed for: 8015, 8021				
Sampler Name: Sanjiv Gill	Signature:			



MONITORING FIELD DATA	SHEET Well ID: MW-8C			
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway			
Address: 5175 Broadway, Oakland, Ca				
Date: 9/29/07	Weather: Swnny			
Well Diameter: 2"	Weather: Sunny Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius²* 0.163			
Total Depth (TD): 24.89	Depth to Product:			
Depth to Water (DTW): 12.98	Product Thickness:			
Water Column Height: 11-91	1 Casing Volume: 1,90 gallons			
Reference Point: TOC	3 Casing Volumes: 5,71 gallons			
Purging Device: Disposable Bailer 3" PVC	C Bailer, Parastaltic Pump (tubing)			
Sampling Device: Parastaltic Pump (tubin	Disposable Bailes			
Time Temp Φ pH Cond (μs)	NTU DO(mg/L) ORP (mV) Vol(gal) DTW			
12:20 18.8 7.10 1709 12:22 Denatered	3.5			
Comments: YSI 550A DO meter	pre purge DO = mg/l			
very tuckid, very silty	post purge DO = mg/l			
Sample ID: MU-8C	Sample Time: 9:20			
Laboratory: McCampbell Analytical, INC.	Sample Date: 9/90 /07			
Containers/Preservative: Voa/HCI, Amber	r Glass Liter/ HCI			
Analyzed for: 8015, 8021				
Sampler Name: Sanjiv Gill	Signature:			



MONITORING FIELD DATA	SHEET Well ID: MU-9A			
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway			
Address: 5175 Broadway, Oakland, Ca				
Date: 9/29/07	Weather: Sunny			
Well Diameter: 2"	Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius ² * 0.163			
Total Depth (TD): 15.19	Depth to Product:			
Depth to Water (DTW): 12-61	Product Thickness:			
Water Column Height: 2.5%	1 Casing Volume: 0.4 gallons			
Reference Point: TOC	Casing Volumes: (.2.3 gallons			
Purging Device: Disposable Bailer, 3" PVC	Bailer, Parastaltic Pump (tubing)			
Sampling Device: Parastellic Pump (tubing	Diseaselle Riler			
Time Temp © pH Cond (μs)	NTU DO(mg/L) ORP (mV) Vol(gal) DTW			
8:30 21.6 7.02 1816	.3			
8:31 21.7 7.06 1891	1.6			
8:33 216 7.04 1890	1.8			
Comments: YSI 550A DO meter	pre purge DO ≃ mg/l			
	post purge DO = mg/l			
very tuckid, silty				
Sample ID: Mu-9A	Sample Time: 8:35			
Laboratory: McCampbell Analytical, INC.	Sample Date: 9/30/07			
Containers/Preservative: Voa/HCI, Amber	r Glass Liter/ HCI			
Analyzed for: 8015, 8021	6			
Sampler Name: Sanjiv Gill	Signature:			

T'A ENICACANTET:UI

DOL-5-2007 II:4(H FKUM:



MONITORING FIELD DATA	A SHEET Well ID: MD-9C				
Project.Task #: 1145.001 212	Project Name: Feiner - 5175 Broadway				
Address: 5175 Broadway, Oakland, Ca					
Date: 9/29/07	Weather: SunnX				
Well Diameter: 2"	Volume/ft. 1" = 0.04 3" = 0.37 6" = 1.47 2" = 0.16 4" = 0.65 radius²* 0.163				
Total Depth (TD): 20.45	Depth to Product:				
	Product Thickness:				
Depth to Water (DTW): 12.27					
Water Column Height: 8.18	1 Casing Volume: 1-30 gallons				
Reference Point: TOC	Casing Volumes: 3.90 gallons				
Purging Device: Disposable Baller, 3" PVC					
Sampling Device: Parastaltic Pump (tubing Time Temp © pH Cond (µs)	9) Disposable Railer I NTO I DO(mg/L) [ORP (mV) Vol(gal) DTW				
8:00 21-1 7-33 1186	1.5				
8:05 20.8 7.32 1194	3				
8:10 20.9 7:33 1190	4				
Comments: YSI 550A DO meter	pre purge DO = mg/l post purge DO = mg/l				
very turbidisilty					
Sample ID: MW-9C	Sample Time: 8:20				
Laboratory: McCampbell Analytical, INC.	Sample Date: 9/\$> /07				
Containers/Preservative: Voa/HCl, Amber	r Glass Liter/ HCI				
Analyzed for: 8015, 8021					
Sampler Name: Sanjiv Gill	Signature:				



	MONIT	ORING F	IELD DATA	SHEET	•	Well ID	MH-	IOA
Project.	Task #: 11	45.001 21	2	Project Name: Feiner - 5175 Broadway				
Address	: 5175 Bro	oadway, C	akland, Ca					
Date: 9/	29/07			Weather	Sur	לחי		
Well Dia	meter.	2"	**************************************	Volume/ft.	1" = 0.04 2" = 0.16	3" = 0.37 4" = 0.65	6" = 1.47 radius ² * 0.1	63
	pth (TD):			1	Product:			
		TW): 10.	53		Thickness	S:		
		ight:			Volume:			gallons
	ce Point:					mes: 3	.56	gallons
			Baile, 3" PV					
			Pump (tubin			- 16	3/	
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Voi(gal)	DTW
8:45	21.7	7.30	1514				1.5	
8:47	21.6	7.36	1450				2.5	
8:49	21.3	7.34	1465				3.5	
	-							
							-	
Comment	s: YSI 550A	DO meter		pre purge (00 =	mg/l		
				post purge	DO =	mg/l		
vec	y trucki	d,silt,		_				
Sample	ID: MN	-10A		Sample 1	Time: 8	:52		
Laborato	ory. McCa	mpbell Ar	alytical, INC.	Sample Date: 9/30/07				
			pa/HCI, Amber					
Analyzed	d for: 801	5, 8021						
	Name: Sa			Signature	: //L	_		
						law		

APPENDIX B

Laboratory Analytical Report

Pangea Environmental Svcs., Inc.	Client Project ID: #1145001; Feiner-5175	Date Sampled:	09/29/07-09/30/07
1710 Franklin Street, Ste. 200	Broadway Oakland, CA	Date Received:	10/02/07
Oakland, CA 94612	Client Contact: Bob Clark-Riddell	Date Reported:	10/10/07
outdid, CH 71012	Client P.O.:	Date Completed:	10/10/07

WorkOrder: 0710050

October 10, 2007

Dear Bob:

Enclosed are:

- 1). the results of 15 analyzed samples from your #1145001; Feiner-5175 Broadway Oakland, CA 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

M	IcCAMP	BELL 110 2ad AV				AI	L, I	N(C.														C	U		O	DY	R	E	CO	RI	0	500
000000		PACHEC	O. CA 945	553-5	560									1	UR	N A	AR	υU	ND	T	IMI	E				1		rm.				П	
	site:		Em	ail: r	nain@	mcc	amp	bell	l.com	1				FI	DF R	ear	iire	100	100	No				R	USH		24 F	IR	4	8 H	R	72	HR 5 DAY
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Report To: Bob C	AND DESCRIPTION OF THE PARTY OF	THE RESERVE OF THE PARTY OF THE	The street of the state of the		To: Pa	inge	a Ei	nvir	onn	ien	tai			-	9	3	_	-	A	nai	VSIS	Re	ques	t	_		_	_	1	_(Othe	r	Comments
Company: Pange				С.			-			-	_		-	6	4	8	(F)				ners				šA,								Filter
Committee of the Commit	Franklin St	-		3.4	oil. h	au/a								8015)	1	5	K/B&F)				ague				S, TE	60B							Samples for
Tele: 510-836-37	dand, CA 9	4012			ail: b							-	_	+ +	10.7	h	975	25			0/1				DIP								Metals
Project #: 1145			- F	Proje	510-	me.	Fe	ine	Y- 9	5,1	15	Brow	dua	1/8021	1288	3	64/5	18.1)	0Cs)		clor		(sap)		FAME, DIPE, TBA, by 8260B	n by							analysis: Yes / No
Project Location:		co. d	(1.6	1	J.	01	DEK	Llan	0,	u	1		(602)	927	5	90)	12 (4	(HV	cides	. Are	9	rpje		TA D by	confirm							168/140
Sampler Signatur	e: Muskan	Environn	iental Sa	mp	ling	龙		1	*********	-	-		-	S.	PAG	2	reas	urbo	1001	Pesti	NLY	ictde	3 He	00	ETBE,	21 00							
The second		SAMP	THE REAL PROPERTY.	T		T	MA	TP	iv	T		ЕТН		T H	Y (E	3	80	droc	10/1	0	V. S. O.	Pest	idic (0 00	3E, F	y 8021							
		SAMP	LING	2	ner	-	MAR	711	MA.	-	PRE	SER	VED	& TPH	DNE	8015	10	m Hydrocarbons (418.1)	/ 80	1808	PCB	S.	(Aci	/ 82	(MIBE, EIBE, TAME, DI - EDB, ethanol) by 8260B	led b							
SAMPLE ID (Field Point Name)	LOCATION	Date	Time	# Containers	Type Containers	Water	Soil	Air	Shadge	Other	ICE	HCL	Other	MTBE/BTEX	MITBE / BITEX ONLY (EPA 602 / 8021)	TPH as Diesel (8015) with 3111ce of closed	Total Petroleum Oil & Grease (1664 / 5520	Total Petroleum	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8092 PCB's ONLY; Arochors / Co	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 5242 / 624 / 8260 (VOCs)	Fuel Additives (MTBE, 1,2 - DCA, 1,2 - EDB, e	If Mithe is detected by							*
MW-1		9-29-07	1:45	3	Day.	17					X ?	X		X		X																-	
MN-2C		9-29-07	1:11	Ц	11	П				1	1			Ц								,											
MW-3A		9-30-07	10:05																														
MW-3C		9-30-07	9:55	П		II																											
MW-4A		9-29-07	2:00	П		17								П																1			
MN-5B		9-30-07		П	IT	T				T	П	П		П																			
MW-5C		9-29-07		T	\Box	1				1				П			-																
MN-6A		9-29-07	12:52	H	1	\dagger			1	1					\Box				10	E/E	. 1	. 3	2										
MW-7B		9-30-07		\vdash	1	1			+	+		1		1		1		7	G	000	CO	NDI	TION		~	API	PRO	PRIA	TE				
MW-7C		9-30-07			+	#		+	-	+	1		+	1		+		-	HI	EAD	.SPA	CE	A Dei	EMT	AB	_	CON	TAII	ER	IN L			
MW-8A		9-30-07			+	#		-	+	+	1		-	+		1	+	+	-	-	ERVA	-	-	OAS	108	GII	WETA	LSIC	THE	INL	AB_		
		9-30-07	The same of the sa	+	+	+		-	+	+	H	-	+	+		+	+	-	-				-					-		1	-	-	
MW-8C		9-30-01		1	+	++		-	-	+	#	+	-	+		+	+	-	-	-	-	-	-	-			-	-		-	-	-	
MN-9A			-		+	++		-	+	+	1	+	-	+		+	-	+	+	-	+		-		-	-	-	-	\vdash				
MW-9C		9-30-07	THE RESERVE THE PERSON NAMED IN	H	1	11		-	_	+	1	-	-	4		1	4		-	_	_					_	-	_		-			
MW-10A		9-30-07	-	X	*	*				2	11	1		X		×																	
Relinquished Boy		Date: 10/2/07	Time:	Rec	ceived]	By:	1		-																								
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Relinquished By:		Date:	Time:	Rec	ceived l	By:																											

McCampbell Analytical, Inc.

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

1534 Willow Pass Rd Pittsburg, CA

7976-727 (276)				WorkOr	WorkOrder: 0710050		ClientID: PEO		
			Z	Excel	Fax	Email	HardCopy	☐ HardCopy ☐ ThirdParty	
Report to:				Bill t	<u>±</u>		Re	Requested TAT:	5 days
Bob Clark-Riddell	Email:	Email: bcr@pangeaenv.com	.com		Bob Clark-Riddell	ddell			
Pangea Environmental Svcs., Inc.	ij ij	(510) 836-370	(510) 836-370 FAX: (510) 836-370	6-370	Pangea Envir	Pangea Environmental Svcs., Inc.			
1710 Franklin Street, Ste. 200	ProjectNo:	ProjectNo: #1145001; Feiner-5175 Broadway Oakl	r-5175 Broadway	, Oakl	1710 Franklin	1710 Franklin Street, Ste. 200		Date Received 10/02/2007	10/02/2007
Oakland, CA 94612	Ö				Oakland, CA 94612	94612	D_{ϵ}	Date Printed: 10/02/2007	10/02/2007

							•	Redu	ested T	ests (S	ee leg	Requested Tests (See legend below)	ow)	•		
Sample ID	ClientSampID	Matrix	Collection Date Hold	Hold	1	2	3	4	2	9	7	8	6	10	11	12
0710050-001	MW-1	Water	9/29/2007 1:45:00		Α	Α	В									
0710050-002	MW-2C	Water	9/29/2007 1:11:00		∢		В									
0710050-003	MW-3A	Water	9/30/2007		∢		В									
0710050-004	MW-3C	Water	9/30/2007 9:55:00		Α		В									
0710050-005	MW-4A	Water	9/30/2007 2:00:00		Α		В									
0710050-006	MW-5B	Water	9/30/2007 9:10:00		∢		В									
0710050-007	MW-5C	Water	9/29/2007		∢		В									
0710050-008	MW-6A	Water	9/29/2007		∢		В									
0710050-009	MW-7B	Water	9/30/2007 9:45:00		∢		В									
0710050-010	MW-7C	Water	9/30/2007 9:35:00		Α		В									
0710050-011	MW-8A	Water	9/30/2007 9:25:00		Α		В									
0710050-012	MW-8C	Water	9/30/2007 9:20:00		Α		В									
0710050-013	MW-9A	Water	9/30/2007 8:35:00		Α		В									
0710050-014	MW-9C	Water	9/30/2007 8:20:00		Α		В									
0710050-015	MW-10A	Water	9/30/2007 8:52:00		A		В									
Test Legend:																
1 G-MBTEX_W	2 PREDF REPORT	RT	3 TPH	TPH(D)WSG_W	y_ S		4					2				
9			80				6					10	-			
>		Ī	,			1	,				1	3				

7	7	12
G-MBTEX_W		
_	9	7

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Prepared by: Ana 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.



Sample Receipt Checklist

Client Name:	Pangea Envir	onmental Svcs., Inc	:.		Date a	and Time Received:	10/2/2007	2:51:26 PM
Project Name:	#1145001; Fe	iner-5175 Broadway	Oakla	nd, CA	Check	klist completed and i	reviewed by:	Ana Venegas
WorkOrder N°:	0710050	Matrix Water			Carrie	r: <u>Client Drop-In</u>		
		Chai	n of Cu	stody (C	OC) Informa	ation		
Chain of custody	y present?		Yes	V	No 🗆			
Chain of custody	/ signed when reli	nquished and received?	Yes	V	No 🗆			
Chain of custody	agrees with sam	ple labels?	Yes	✓	No 🗌			
Sample IDs noted	d by Client on COC	?	Yes	V	No 🗆			
Date and Time of	f collection noted b	y Client on COC?	Yes	✓	No 🗆			
Sampler's name	noted on COC?		Yes	✓	No 🗆			
			Sample	Receipt	Information	<u>!</u>		
Custody seals in	tact on shipping c	ontainer/cooler?	Yes		No 🗆		NA 🔽	
Shipping contain	er/cooler in good	condition?	Yes	V	No 🗆			
Samples in prope	er containers/bottl	es?	Yes	✓	No 🗆			
Sample containe	ers intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indica	ated test?	Yes	✓	No 🗌			
		Sample Pres	ervatio	n and Ho	old Time (HT) Information		
All samples recei	ived within holding	time?	Yes	✓	No 🗌			
Container/Temp I	Blank temperature		Coole	er Temp:	1.2°C		NA \square	
Water - VOA via	ls have zero head	Ispace / no bubbles?	Yes	✓	No 🗆	No VOA vials subm	nitted \square	
Sample labels ch	hecked for correct	preservation?	Yes	✓	No 🗌			
TTLC Metal - pH	acceptable upon r	receipt (pH<2)?	Yes		No 🗆		NA 🗹	
		======	===					======
Client contacted:		Date conta	cted:			Contacted	l by:	
Comments:								

"When Ouality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Telephone: 877-252-9262 Fax: 925-252-9269

Pangea Environmental Svcs., Inc.	Client Project ID: #1145001; Feiner-5175	Date Sampled: 09/29/07-09/30/07
1710 Franklin Street, Ste. 200	Broadway Oakland, CA	Date Received: 10/02/07
Oakland, CA 94612	Client Contact: Bob Clark-Riddell	Date Extracted: 10/04/07-10/09/07
outhure, erry forz	Client P.O.:	Date Analyzed 10/04/07-10/09/07
G 11 B	C C C C C C C C C C C C C C C C C C C	

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

	Gasolin	e Kange (C6-C12) Vola	uie Hydrocar	bons as Gasol	une with BTE	A and MIBE	T.		
Extracti	on method SW5030B		Analy	rtical methods SV	V8021B/8015Cm			Work Order	: 071	0050
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	540,a	ND	19	1.2	2.3	5.3	1	116
002A	MW-2C	W	200,a,i	ND	13	ND	ND	2.0	1	112
003A	MW-3A	W	43,000,a	ND<1000	3500	150	730	2200	200	98
004A	MW-3C	W	37,000,a,h	ND<1000	1700	3300	830	4800	200	92
005A	MW-4A	W	130,000,a,g,h	ND<240	2700	69	400	1400	33	102
006A	MW-5B	W	ND	ND	0.95	ND	ND	ND	1	93
007A	MW-5C	W	ND,i	ND	ND	ND	ND	ND	1	90
008A	MW-6A	W	52,g,i	ND	ND	ND	ND	ND	1	92
009A	MW-7B	W	37,000,a,h	ND<500	1300	1500	180	2700	100	103
010A	MW-7C	W	29,000,a,h	ND<1000	580	1400	600	4800	200	101
011A	MW-8A	W	7500,a,h	ND<90	440	67	26	240	10	105
012A	MW-8C	W	ND	ND	ND	ND	ND	ND	1	92
013A	MW-9A	W	ND	ND	2.6	ND	ND	ND	1	92
014A	MW-9C	W	68,a,h	ND	2.2	0.88	ND	ND	1	88
015A	MW-10A	W	ND	ND	ND	ND	ND	ND	1	106
Rep	porting Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5	1	μg/L
	means not detected at or ove the reporting limit	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.



"When Ouality 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: #1145001; Feiner- 5175 Broadway Oakland, CA	Date Sampled:	09/29/07-09/30/07
1710 Franklin Street, Ste. 200	5175 Bloadway Oaklaild, CA	Date Received:	10/02/07
Oakland, CA 94612	Client Contact: Bob Clark-Riddell	Date Extracted:	10/02/07
	Client P.O.:	Date Analyzed	10/05/07-10/09/07

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

Extraction method SW3510C/3630C		Analytical	methods SW8015C	Work Order: 0710050		
Lab ID	Client ID	Matrix	TPH(d)	DF	% SS	
0710050-001B	MW-1	W	180,d	1	83	
0710050-002B	MW-2C	W	120,d,i	1	119	
0710050-003B	MW-3A	W	11,000,d	1	93	
0710050-004B	MW-3C	W	48,000,d,b,h	20	104	
0710050-005B	MW-4A	W	170,000,d,b,h	20	91	
0710050-006B	MW-5B	W	ND	1	87	
0710050-007B	MW-5C	W	66,b,i	1	88	
0710050-008B	MW-6A	W	540,d,b,i	1	110	
0710050-009B	MW-7B	W	16,000,d,b,h	1	100	
0710050-010B	MW-7C	W	11,000,d,b,h	1	107	
0710050-011B	MW-8A	w	5300,d,b	2	97	
0710050-012B	MW-8C	W	ND	1	100	
0710050-013B	MW-9A	W	86,b	1	99	
0710050-014B	MW-9C	W	390,a,h	1	88	
0710050-015B	MW-10A	W	ND	1	101	

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

^{*} water samples are reported in μ g/L, wipe samples in μ g/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 μ g/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; p) see attached narrative.

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0710050

EPA Method SW8021B/8015Cm		BatchID: 31008 Spiked Sample ID: 0710050					0710050-01	2A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
Analyte	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btexf)	ND	60	79.8	77.6	2.83	98.1	110	11.6	70 - 130	30	70 - 130	30
MTBE	ND	10	117	113	3.83	93	93	0	70 - 130	30	70 - 130	30
Benzene	ND	10	98.2	98.2	0	104	97.4	6.77	70 - 130	30	70 - 130	30
Toluene	ND	10	109	109	0	99.9	95.7	4.31	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	106	105	0.664	97.9	96.7	1.18	70 - 130	30	70 - 130	30
Xylenes	ND	30	113	110	2.99	90.9	90.9	0	70 - 130	30	70 - 130	30
%SS:	92	10	93	92	0.937	114	107	5.94	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 31008 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710050-001A	09/29/07 1:45 PM	10/04/07	10/04/07 10:50 PM	0710050-002A	09/29/07 1:11 PM	10/05/07	10/05/07 8:11 PM
0710050-003A	09/30/07 10:05 AM	10/04/07	10/04/07 11:56 PM	0710050-004A	09/30/07 9:55 AM	10/05/07	10/05/07 12:29 AM
0710050-005A	09/30/07 2:00 PM	10/05/07	10/05/07 10:12 PM	0710050-006A	09/30/07 9:10 AM	10/05/07	10/05/07 1:35 AM
0710050-007A	09/29/07 11:30 AM	10/05/07	10/05/07 4:52 AM	0710050-008A	09/29/07 12:52 PM	10/09/07	10/09/07 1:52 PM
0710050-009A	09/30/07 9:45 AM	10/05/07	10/05/07 3:46 AM	0710050-010A	09/30/07 9:35 AM	10/05/07	10/05/07 7:15 AM
0710050-011A	09/30/07 9:25 AM	10/06/07	10/06/07 10:47 AM	0710050-012A	09/30/07 9:20 AM	10/05/07	10/05/07 5:57 AM

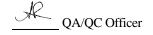
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% 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.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0710050

EPA Method SW8021B/8015Cm	5030B	BatchID: 31012 Spiked Sample ID: 0710					0710066-00	1A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (9		Criteria (%)	
Analyte	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex ^f)	ND	60	77.6	79.6	2.57	100	101	1.23	70 - 130	30	70 - 130	30
MTBE	ND	10	112	117	4.40	91.6	99.2	7.94	70 - 130	30	70 - 130	30
Benzene	ND	10	95	97.5	2.62	94.9	100	5.33	70 - 130	30	70 - 130	30
Toluene	ND	10	105	108	2.74	94.7	98.3	3.67	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	102	105	3.10	94.2	99.6	5.58	70 - 130	30	70 - 130	30
Xylenes	ND	30	110	113	2.99	90.7	95.3	5.02	70 - 130	30	70 - 130	30
%SS:	91	10	86	90	4.49	104	107	2.77	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 31012 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710050-013A	09/30/07 8:35 AM	1 10/05/07	10/05/07 6:30 AM	0710050-014A	09/30/07 8:20 AM	10/06/07	10/06/07 2:39 PM
0710050-015A	09/30/07 8:52 AM	I 10/05/07	10/05/07 4:40 PM				

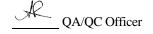
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% 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.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710050

EPA Method SW8015C	30C	BatchID: 30936			Spiked Sample ID: N/A							
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
ruidiyto	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	120	112	6.95	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	113	87	25.4	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 30936 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710050-001B	09/29/07 1:45 PM	10/02/07	10/05/07 5:11 AM	0710050-002B	09/29/07 1:11 PM	10/02/07	10/05/07 8:34 AM
0710050-003B	09/30/07 10:05 AM	10/02/07	10/09/07 8:46 AM	0710050-004B	09/30/07 9:55 AM	10/02/07	10/06/07 3:49 AM
0710050-005B	09/30/07 2:00 PM	10/02/07	10/06/07 2:33 AM				

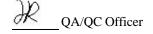
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% 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.

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.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710050

EPA Method SW8015C	Extraction SW3510C/3630C				BatchID: 31013			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
Analyte	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	106	104	1.95	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	116	116	0	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 31013 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710050-006B	09/30/07 9:10 AM	10/02/07	10/08/07 9:14 PM	0710050-007B	09/29/07 11:30 AM	10/02/07	10/08/07 10:25 PM
0710050-008B	09/29/07 12:52 PM	10/02/07	10/05/07 5:20 PM	0710050-009B	09/30/07 9:45 AM	10/02/07	10/09/07 7:36 AM
0710050-010B	09/30/07 9:35 AM	10/02/07	10/05/07 1:42 PM	0710050-011B	09/30/07 9:25 AM	10/02/07	10/09/07 11:08 AM
0710050-012B	09/30/07 9:20 AM	10/02/07	10/05/07 12:34 PM	0710050-013B	09/30/07 8:35 AM	10/02/07	10/05/07 1:42 PM
0710050-014B	09/30/07 8:20 AM	10/02/07	10/09/07 5:09 PM	0710050-015B	09/30/07 8:52 AM	10/02/07	10/06/07 3:26 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.

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.

