FIRST QUARTER 2009
GROUNDWATER MONITORING

ABE Petroleum LLC
17715 Mission Boulevard
Hayward, California 94539

Prepared for

Mr. Paul Garg
ABE Petroleum LLC

Prepared by

Sierra Environmental, Inc.

March 26, 2009
Project 03-103.00

Sierra Environmental, Inc.
Environmental Consultants

March 26, 2009
Project 03-103.00

Mr. Paul Garg
ABE Petroleum LLC
33090 Mission Boulevard
Union City, California 94587

Subject: Report for First Quarter 2009 Groundwater Monitoring, ABE Petroleum LLC, 17715 Mission Boulevard, Hayward, California

Dear Mr. Garg:

Sierra Environmental, Inc. (Sierra) is pleased to present this report summarizing the results for the first quarter 2009 groundwater monitoring at the subject location, hereafter, referred to as Site. Figure 1 shows the Site location. The groundwater monitoring was concurred by Alameda County Health Care Services (ACHCS) in a letter dated February 16, 2000, as result of gasoline impact to groundwater beneath the Site.

On March 12, 2009, Sierra obtained and recorded groundwater data, and collected groundwater samples from five (5) groundwater monitoring wells at and near the Site for chemical analysis. Sierra submitted the samples to Torrent Laboratories, Inc. (Torrent) for chemical analysis. Torrent is a State-certified analytical laboratory (ELAP #1991).

BACKGROUND

Please refer to Appendix A for Site's background information.

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GROUNDWATER MONITORING

On March 12, 2009, Sierra performed the fourth quarter 2008 groundwater monitoring at the Site. Sierra's field personnel measured the groundwater levels at MW1, MW2, MW3, MW6, and MW7 (Figure 2) using an electronic sounder. Depth of groundwater was measured to the TOC. Groundwater levels were measured at approximately 18.58' to 22.45' feet below TOC with a northwesterly flow direction during this monitoring event. Table I presents the groundwater measurement data.

MW4 and MW5 were inaccessible due to route 238 expansion project.

Sierra's field personnel purged the wells using bailers. pH, temperature, and electrical conductivity of groundwater were recorded during the purging activities to affirm that groundwater in the wells have stabilized. After completion of the purging, groundwater samples MW-1, MW-2, MW-3, MW-6, and MW-7 were collected from the wells. After collection, the groundwater from each well was transferred into clean volatile organic analysis vials. The vials were sealed with Teflon-septum screw caps, labeled, placed on ice in a cooler, and delivered to Torrent with chain-of-custody documentation.

All sampling and measurement equipment were washed with Liqui-Nox® (a phosphate free laboratory detergent), and rinsed with tap water at each measurement and sampling interval. Purged and wash water was stored in 55-gallon drums at a designated location at the Site. Sierra's quality assurance/quality control (QA/QC) protocol is presented in Appendix B.

CHEMICAL ANALYSIS

The samples were analyzed for TPHG using the United States Environmental Protection Agency (EPA) GC-MS/8260B method. The samples were also analyzed for benzene, toluene, ethyl benzene, total xylenes (BTEX), and fuel oxygenates using EPA method 8260B. Copies of certified analytical results and chain-of-custody documentation are presented in Appendix C. Copies of the field notes are presented in Appendix D.

ANALYTICAL RESULTS

Table II presents Summary of the analytical results.

CONCLUSION AND RECOMMENDATIONS

No gasoline constituents were detected in offsite monitoring well MW6 and MW7. Concentrations of the gasoline constituents in the groundwater samples collected from the onsite wells have a slight decrease during this monitoring event, and remain high. Sierra recommends continuing the quarterly groundwater monitoring at the Site. Additionally, Sierra recommends proceeding with the investigation work described in its work plan dated July 28, 2008, and related addendum dated November 19, 2008, at the Site. After the proposed investigation work, Sierra recommends to implement soil and groundwater remediation to reduce contaminant levels and qualify the Site for case closure.

LIMITATIONS

The content and conclusion provided by Sierra in this report are based on information collected during its assessment/monitoring, which include, but are not limited to field observations and analytical results for the groundwater samples collected at the Site. Sierra assumes that the samples collected and laboratory results are reasonably representative of the whole Site, which may not be the case at unsampled areas. This assessment/monitoring was performed in accordance with generally accepted principles and practices of environmental engineering and assessment in Northern California at the time of the work. This report presents our professional opinion based on our findings, technical knowledge, and experience working on similar projects. No warranty, either expressed or implied, is made. The conclusions presented are based on the analytical results and current regulatory requirements. We are not responsible for the impact of any changes in environmental standards or regulations in the future.

Please feel welcome to call us if you have questions.

Very Truly Yours,
Sierra Environmental, Inc.

Apr 7 2009

Reza Baradaran, PE, GE
Principal

Mitch Hajiaghai, REA II, CAC
Principal

Attachments:

Table I	-	Groundwater Elevation Data
Table II	-	Analytical Results for Groundwater Samples
Figure 1	-	Site Location Map
Figure 2	-	Groundwater Monitoring Well Locations
Appendix A	-	Background Information
Appendix B	-	QA/QC Protocol
Appendix C	-	Certified Analytical Results and Chain-of-Custody Documentation
Appendix D	-	Field Notes

cc: Mr. Paresh Khatri ACHCS (1 Copy)

R03-103.00\1stQ2009GW\MH03262009

TABLE I
GROUNDWATER ELEVATION DATA

Well ID	Measurement Date	Well Casing Diameter (in)	Well Casing Elevation (ft)	Depth to[1] Water (ft)	Water Table[2] Elevation (ft)
MW1	8-18-00	2	99.46	20.32	79.14
	3-30-01			20.30	79.16
	6-22-01			21.91	77.55
	9-20-01			23.56	75.90
	12-27-01			22.59	76.87
	9-24-02			23.69	75.77
	12-17-02			22.75	76.71
	4-2-03			21.15	78.31
	6-12-03			20.64	78.82
	9-29-03			22.95	76.51
	12-04-03			23.70	75.76
	03-09-04			19.80	79.66
	6-24-04			21.44	78.02
	9-09-04			23.30	76.16
	12-21-04			22.92	76.54
	3-16-05			18.99	80.47
	6-09-05			20.02	79.44
	9-22-05			20.69	78.77
	12-07-05			21.90	77.56
	3-10-06			17.85	81.61
	6-7-06		59.50	15.91	43.59
	9-11-06			18.60	40.90
	12-13-06			20.05	39.45
	3-12-07			19.47	40.03
	6-6-07			21.11	38.39
	9-6-07			22.61	36.89
	12-14-07			23.50	36.00
	3-13-08			20.09	39.41
	6-13-08			22.08	37.42
	09-09-08			23.57	35.93
	12-12-08			24.42	35.08
	03-12-09			21.22	38.28

TABLE I
GROUNDWATER ELEVATION DATA
(CONTINUED)

Well ID	Measurement Date	Well Casing Diameter (in)	Well Casing Elevation (ft)	Depth to Water (ft)	Water Table Elevation (ft)
MW2	8-18-00	2	100.58	21.55	79.03
	3-30-01			21.55	79.03
	6-22-01			23.15	77.43
	9-20-01			24.78	75.80
	12-27-01			23.82	76.76
	9-24-02			24.89	75.69
	12-17-02			23.99	76.59
	4-2-03			22.32	78.26
	6-12-03			21.84	78.74
	9-29-03			24.15	76.43
	12-04-03			24.91	75.67
	03-09-04			21.05	79.53
	6-24-04			22.95	77.63
	9-09-04			24.55	76.03
	12-21-04			24.21	76.37
	3-16-05			20.29	80.29
	6-09-05			21.68	78.90
	9-22-05			21.98	78.60
	12-7-05			23.22	77.36
	3-10-06			19.15	81.43
	6-7-06		60.61	17.31	43.30
	9-11-06			19.99	40.62
	12-13-06			21.48	39.13
	3-12-07			20.71	39.90
	6-6-07			22.33	38.28
	9-6-07			23.85	36.76
	12-14-07			24.71	35.90
	3-13-08			21.34	39.27
	6-13-08			23.29	37.32
	09-09-08			24.82	35.79
	12-12-08			25.65	34.96
	03-12-09			22.45	38.16

TABLE I
GROUNDWATER ELEVATION DATA
(CONTINUED)

Well ID	Measurement Date	Well Casing Diameter (in)	Well Casing Elevation (ft)	Depth to Water (ft)	Water Table Elevation (ft)
MW3	8-18-00	2	99.69	20.68	79.01
	3-30-01			20.68	79.01
	6-22-01			22.31	77.38
	9-20-01			23.92	75.77
	12-27-01			22.95	76.74
	9-24-02			24.03	75.66
	12-17-02			23.09	76.60
	4-2-03			21.46	78.23
	6-12-03			20.99	78.70
	9-29-03			23.30	76.39
	12-04-03			24.05	75.64
	03-09-04			20.20	79.49
	6-24-04			22.11	77.58
	9-09-04			20.20	79.49
	12-21-04			23.35	76.34
	3-16-05			19.43	80.26
	6-09-05			20.47	79.22
	9-22-05			21.13	78.56
	12-7-05			22.36	77.33
	3-10-06			18.30	81.39
	6-7-06		59.73	16.47	43.26
	9-11-06			19.13	40.60
	12-13-06			20.66	39.07
	3-12-07			19.88	39.85
	6-6-07			21.48	38.25
	9-6-07			22.99	36.74
	12-14-07			23.85	35.88
	3-13-08			20.47	39.26
	6-13-08			22.43	37.30
	09-09-08			23.98	35.75
	12-12-08			24.91	34.82
	03-12-09			21.57	38.16

TABLE I
GROUNDWATER ELEVATION DATA
(CONTINUED)

Well ID	Measurement Date	Well Casing Diameter (in)	Well Casing Elevation (ft)	Depth to Water (ft)	Water Table Elevation (ft)
MW4	6-7-06	2	59.29	15.71	43.58
	9-11-06			18.40	40.89
	12-13-06			19.64	39.65
	3-12-07			19.13	40.16
	6-6-07			N/A[3]	N/A
	9-6-07			N/A	N/A
	12-14-08			N/A	N/A
	3-13-08			N/A	N/A
	6-13-08			N/A	N/A
	09-09-08			N/A	N/A
	12-12-08			N/A	N/A
	03-12-09			N/A	N/A
MW5	6-7-06	2	56.31	13.35	42.96
	9-11-06			15.99	40.32
	12-13-06			17.45	38.86
	3-12-07			16.68	39.63
	6-6-07			N/A	N/A
	9-6-07			N/A	N/A
	12-14-08			N/A	N/A
	3-13-08			N/A	N/A
	6-13-08			N/A	N/A
	09-09-08			N/A	N/A
	12-12-08			N/A	N/A
	03-12-09			N/A	N/A

TABLE I
GROUNDWATER ELEVATION DATA
(CONTINUED)

Well ID	Measurement Date	Well Casing Diameter (in)	Well Casing Elevation (ft)	Depth to Water (ft)	Water Table Elevation (ft)
MW6	6-7-06	2	56.63	13.64	42.99
	9-11-06			16.25	40.38
	12-13-06			17.72	38.91
	3-12-07			16.95	39.68
	6-6-07			18.47	38.16
	9-6-07			19.96	36.67
	12-14-07			20.81	35.82
	3-13-08			17.46	39.17
	6-13-08			19.38	37.25
	09-09-08			20.96	35.67
	12-12-08			21.81	34.82
	03-12-09			18.58	38.05
MW7	6-7-06	2	57.50	14.50	43.00
	9-11-06			17.12	40.38
	12-13-06			18.58	38.92
	3-12-07			17.81	39.69
	6-6-07			19.32	38.18
	9-6-07			20.87	36.63
	12-14-07			21.30	36.20
	3-13-08			18.34	39.16
	6-13-08			20.15	37.35
	09-09-08			21.31	36.19
	12-12-08			22.29	35.21
	03-12-09			19.45	38.05

1. Depths to groundwater were measured to the top of the well casings
2. Water table elevations were measured in relation to mean sea level (MSL)
3. N/A = Not Accessible

TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES

Sample ID	Sample Date	Sample Location	TPHG[1] µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	MTBE[2] µg/L
MW-1	8-18-00	MW1	280,000	10,000	16,000	11,000	49,000	4,000
*	3-30-01		98,000	8,600	14,000	6,300	26,000	7,600
*	6-22-01		110,000	7,500	12,000	5,700	24,000	3,800
*	9-20-01		93,000	8,700	11,000	6,300	27,000	4,600
*	12-27-01		140,000	7,700	11,000	6,500	28,000	7,700
*	9-24-02		110,000	4,600	4,000	4,000	18,000	3,400
*	12-17-02		110,000	6,600	6,700	5,400	23,000	2,900
*	4-2-03		89,000	4,800	6,000	4,600	20,000	5,900
*	6-12-03		69,000	4,100	4,300	3,900	17,000	4,700
*	9-29-03		96,000	7,000	7,700	5,100	22,000	6,200
*	12-04-03		110,000	5,800	5,900	4,300	18,000	4,500
*	03-09-04		130,000	5,900	9,700	4,900	22,000	6,000
*	6-24-04		48,000	5,800	7,500	4,000	18,000	4,000
*	9-09-04		64,000	4,800	7,500	4,500	19,000	2,200
*	12-21-04		53,000	4,800	6,000	3,600	15,000	2,600
*	3-16-05		82,000	4,000	8,600	3,900	18,000	4,300
*	6-09-05		52,000	3,600	6,400	3,300	17,000	3,500
*	9-22-05		62,000	3,500	5,400	3,900	17,000	2,100
*	12-7-05		40,000	3,300	7,500	3,700	18,000	2,500
*	3-10-06		53,000	3,600	6,900	4,000	18,000	3,300
*	6-07-06		57,000	4,200	12,000	3,700	16,000	3,900
*	9-11-06		120,000	3,600	9,500	5,200	23,000	3,000
*	12-13-06		21,000	2,600	8,400	4,300	20,000	1,200
*	3-12-07		96,000	2,300	5,600	5,900	26,000	1,400
*	6-6-07		58,000	2,000	3,400	3,900	16,000	1,500
*	9-6-07		84,000	3,000	4,300	6,000	25,000	2,300
*	12-14-07		55,000	2,500	2,400	4,400	18,000	1,900
*	3-13-08		80,000	2,400	5,400	4,700	22,000	2,000
*	6-13-08		87,000	2,800	2,200	5,000	21,000	3,100
*	09-09-08		34,400	2,040	1,120	2,390	10,100	1,890
*	12-12-08		91,000	2,110	1,240	3,660	17,200	1,560
*	03-12-09		92,000	1,510	1,240	2,630	16,500	1,040

TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
(CONTINUED)

Sample ID	Sample Date	Sample Location	TPHG µg/L	Benzene µg/L	Toluene µg/L	Ethyl benzene µg/L	Xylenes µg/L	MTBE µg/L
MW-2	8-18-00	MW2	290,000	3700	990	7,300	26,000	ND[3]
*	3-30-01		47,000	3,200	470	4,500	13,000	3,100
*	6-22-01		57,000	2,500	350	4,200	12,000	1,800
*	9-20-01		42,000	2,300	230	4,300	12,000	2,200
*	12-27-01		70,000	2,900	390	4,800	14,000	2,400
*	9-24-02		110,000	1,600	200	3,400	9,100	2,500
*	12-17-02		66,000	2,400	340	4,600	13,000	1,900
*	4-2-03		29,000	1,000	130	2,300	5,100	2,000
*	6-12-03		8,700	380	52	790	2,000	2,200
*	9-29-03		52,000	1,700	200	4,500	9,800	2,300
*	12-04-03		66,000	1,500	210	4,500	9,200	1,900
*	03-09-04		61,000	1,500	2,000	4,200	8,500	2,200
*	6-24-04		29,000	1,200	72	3,100	6,000	2,100
*	9-09-04		37,000	1,600	110	4,000	8,500	3,100
*	12-21-04		27,000	1,400	84	3,100	5,400	3,200
*	3-16-05		54,000	1,700	140	4,500	8,900	4,000
*	6-09-05		2,800	420	ND[3]	180	51	930
*	9-22-05		33,000	1,400	ND	3,400	5,700	2,200
*	12-7-05		20,000	1,600	130	3,400	6,000	3,000
*	3-10-06		34,000	2,100	170	4,200	7,500	4,400
*	6-07-06		29,000	2,400	250	3,600	5,100	3,200
*	9-11-06		32,000	1,100	140	2,400	3,500	1,600
*	12-13-06		36,000	1,400	220	3,400	4,900	1,900
*	3-12-07		36,000	1,200	250	3,800	5,700	1,800
*	6-6-07		24,000	1,100	170	3,000	4,200	1,400
*	9-6-07		44,000	1,600	290	5,700	6,800	1,900
*	12-14-07		28,000	1,200	160	3,600	3,700	1,500
*	3-13-08		47,000	1,100	190	5,800	7,500	1,200
*	6-13-08		40,000	950	170	4,600	4,800	1,400
*	09-09-08		20,300	706	121	2,680	2,580	1,180
*	12-12-08		48,000	826	114	4,050	4,250	1,610
*	03-12-09		43,000	686	128	2,740	4,520	974

TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
(CONTINUED)

Sample ID	Sample Date	Sample Location	TPHG µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	MTBE µg/L
MW-3	8-18-00	MW3	46,000	3,200	550	3,700	14,000	2,200
*	3-30-01		30,000	3,300	340	2,800	9,100	4,700
*	6-22-01		35,000	4,000	340	2,900	7,600	4,100
*	9-20-01		30,000	3,800	260	2,500	6,600	5,300
*	12-27-01		39,000	4,400	340	3,000	6,700	5,500
*	9-24-02		53,000	4,100	270	3,100	6,600	6,400
*	12-17-02		40,000	3,600	240	2,200	5,700	5,200
*	4-2-03		24,000	2,000	130	1,800	3,300	3,000
*	6-12-03		26,000	2,700	180	2,000	4,200	5,500
*	9-29-03		39,000	4,000	220	3,200	5,300	4,800
*	12-04-03		40,000	3,200	180	2,200	4,300	4,400
*	03-09-04		39,000	3,100	160	2,100	4,400	4,000
*	6-24-04		21,000	3,000	110	2,300	3,800	3,400
*	9-09-04		26,000	4,100	140	2,200	4,300	6,000
*	12-21-04		20,000	3,400	99	1,700	2,900	6,400
*	3-16-05		35,000	1,800	78	1,900	2,600	4,000
*	6-09-05		2,000	55	ND	120	30	150
*	9-22-05		17,000	2,000	69	1,500	1,900	3,500
*	12-7-05		11,000	1,800	62	1,500	1,700	2,300
*	3-10-06		9,100	1,100	24	990	810	1,300
*	6-07-06		3,000	440	16	180	450	320
*	9-11-06		17,000	1,300	38	1,000	1,600	690
*	12-13-06		13,000	1,200	ND	1,000	1,300	520
*	3-12-07		120,000	10,000	210	11,000	11,000	ND
*	6-6-07		13,000	1,200	19	1,100	1,100	590
*	9-6-07		22,000	1,900	32	2,000	1,600	1,000
*	12-14-07		16,000	1,400	23	1,200	1,300	600
*	3-13-08		10,000	870	ND	1,000	670	420
*	6-13-08		15,000	1,300	27	1,300	1,200	660
*	09-09-08		9,030	890	<10	695	372	460
*	12-12-08		26,000	1,200	15.4	995	875	423
*	03-12-09		15,000	759	18.3	704	1,010	300

TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
(CONTINUED)

Sample ID	Sample Date	Sample Location	TPHG µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	MTBE µg/L
MW-4	6-7-06	MW4	<25	<0.5	<0.5	<0.5	<0.5	<1
*	9-11-06		<25	<0.5	<0.5	<0.5	<0.5	<1
*	12-13-06		<25	<0.5	<0.5	<0.5	<0.5	<1
*	3-12-07		<25	<0.5	<0.5	<0.5	<0.5	<1
	6-6-07		NS[3]	NS	NS	NS	NS	NS
	9-6-07		NS	NS	NS	NS	NS	NS
	12-14-07		NS	NS	NS	NS	NS	NS
	3-13-08		NS	NS	NS	NS	NS	NS
	6-13-08		NS	NS	NS	NS	NS	NS
	09-09-08		NS	NS	NS	NS	NS	NS
	12-12-08		NS	NS	NS	NS	NS	NS
	03-12-09		NS	NS	NS	NS	NS	NS
MW-5	6-7-06	MW5	<25	<0.5	<0.5	<0.5	<0.5	<1
*	9-11-06		<25	<0.5	<0.5	<0.5	<0.5	<1
*	12-13-06		<25	<0.5	<0.5	<0.5	<0.5	<1
*	3-12-07		<25	<0.5	<0.5	<0.5	<0.5	<1
	6-6-07		NS	NS	NS	NS	NS	NS
	9-6-07		NS	NS	NS	NS	NS	NS
	12-14-07		NS	NS	NS	NS	NS	NS
	3-13-08		NS	NS	NS	NS	NS	NS
	6-13-08		NS	NS	NS	NS	NS	NS
	09-09-08		NS	NS	NS	NS	NS	NS
	12-12-08		NS	NS	NS	NS	NS	NS
	03-12-09		NS	NS	NS	NS	NS	NS

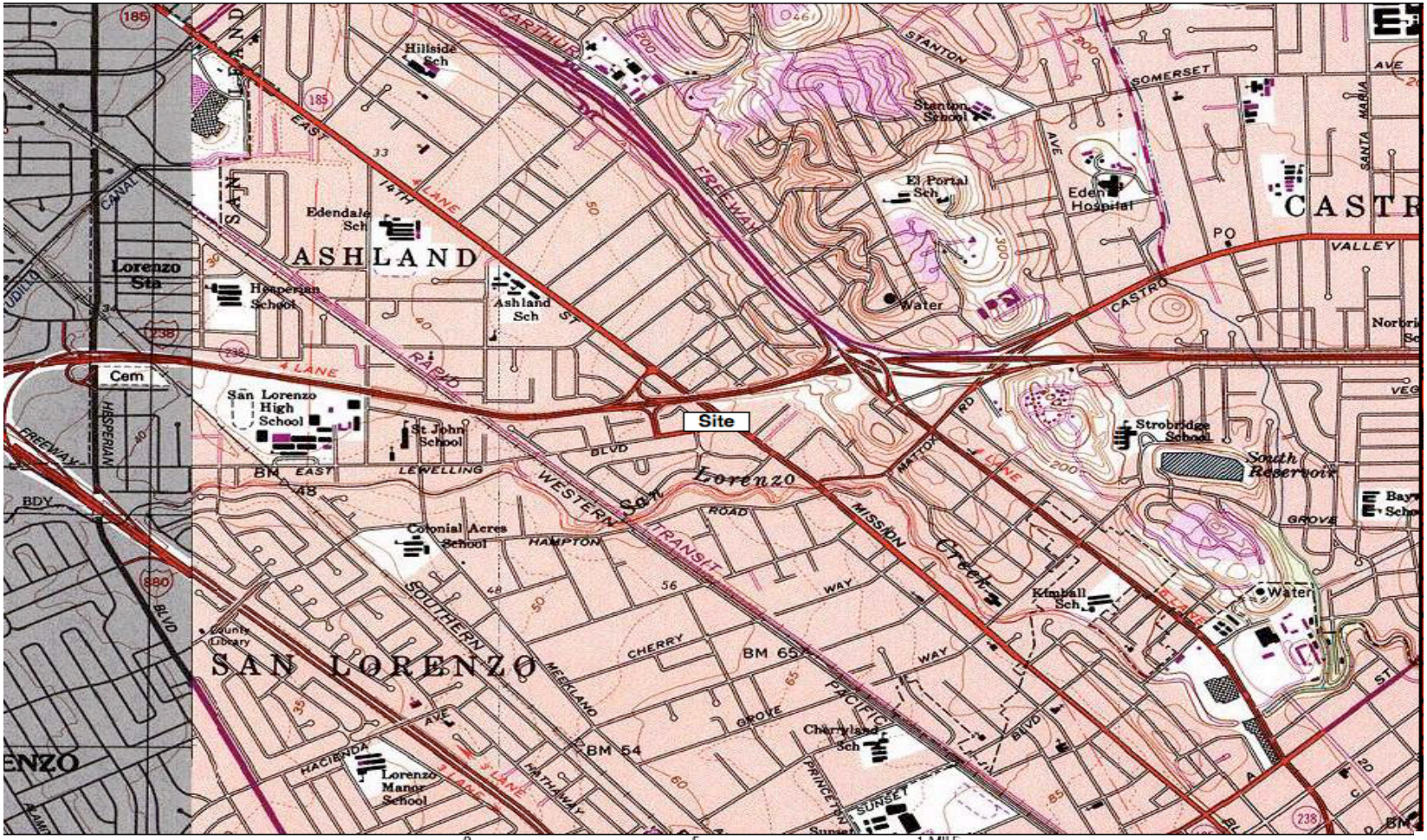
TABLE II
ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES
(CONTINUED)

Sample ID	Sample Date	Sample Location	TPHG µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	MTBE µg/L
MW-6	6-7-06	MW6	<25	<0.5	<0.5	<0.5	<0.5	<1
*	9-11-06		<25	<0.5	<0.5	<0.5	<0.5	<1
*	12-13-06		<25	<0.5	<0.5	<0.5	<0.5	<1
*	3-12-07		<25	<0.5	<0.5	<0.5	<0.5	<1
*	6-6-07		<25	<0.5	<0.5	<0.5	<0.5	<1
*	9-6-07		<25	<0.5	<0.5	<0.5	<0.5	<1
*	12-14-07		<25	<0.5	<0.5	<0.5	<0.5	<1
*	3-13-08		<25	<0.5	<0.5	<0.5	<0.5	<1
*	6-13-08		<25	<0.5	<0.5	<0.5	<1	<1
*	09-09-08		<25	<0.30	<0.5	<0.30	<0.70	<0.5
*	12-12-08		<50	<0.5	<0.5	<0.5	<1.5	<0.5
*	03-12-09		<50	<0.5	<0.5	<0.5	<1.5	<0.5
MW-7	6-7-06	MW7	<25	<0.5	<0.5	<0.5	<0.5	<1
*	9-11-06		<25	<0.5	<0.5	<0.5	<0.5	<1
*	12-13-06		<25	<0.5	<0.5	<0.5	<0.5	<1
*	3-12-07		27	<0.5	<0.5	<0.5	<0.5	<1
*	6-6-07		<25	<0.5	<0.5	<0.5	<0.5	<1
*	9-6-07		<25	<0.5	<0.5	<0.5	<0.5	<1
*	12-14-07		<25	<0.5	<0.5	<0.5	<0.5	<1
*	3-13-08		<25	<0.5	<0.5	<0.5	<0.5	<1
*	6-13-08		<25	<0.5	<0.5	<0.5	<1	<1
*	09-09-08		<25	<0.5	<0.5	<0.5	<1	<1
*	12-12-08		<50	<0.5	<0.5	<0.5	<1.5	<0.5
*	03-12-09		<50	<0.5	<0.5	<0.5	<1.5	<0.5

NOTE: 2,910µg/L tert-Butanol (TBA) was detected in sample MW-3.

1. TPHG = Total Petroleum Hydrocarbons as Gasoline
2. MTBE = Methyl Tertiary Butyl Ether
3. NS = Not Sampled

* The Sample was analyzed for Fuel Oxygenates using EPA Method 8260B. Analytical result is for MTBE



Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

SIERRA ENVIRONMENTAL, INC.
Environmental Consultants

980 W. Taylor Street, San Jose, CA 95126
Phone [408] 971-6758 • Fax [408] 971-6759

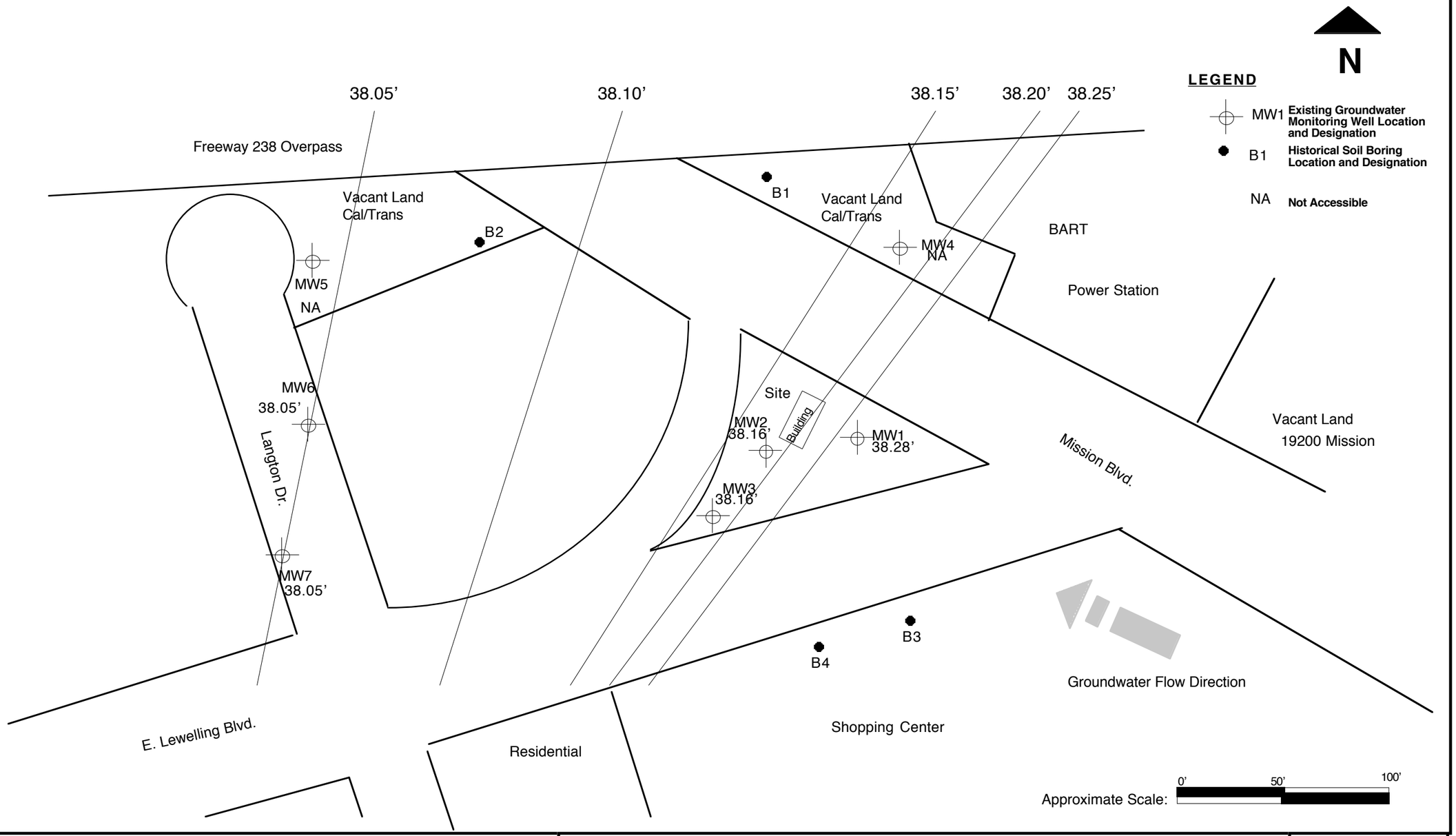
SITE LOCATION MAP

First Quarter 2009 Groundwater Monitoring
ABE Petroleum LLC

17715 Mission Boulevard • Hayward • California

FIGURE
1

March 26, 2009
Project 03-103.00



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On-Site & Off-Site Monitoring Well and Boring Locations

First Quarter 2009 Groundwater Monitoring
ABE Petroleum LLC

17715 Mission Boulevard·Hayward · California

FIGURE
2
March 26, 2009
Project 03-103.00

Appendix A
BACKGROUND INFORMATION

BACKGROUND

On September 16, 1997, Balch Petroleum Contractors & Builders, Inc. (Balch) of Milpitas, California, removed one 2,000-gallon, two 6,000-gallon, one 10,000-gallon single-wall steel gasoline, and one 500-gallon single-wall steel waste oil USTs from the Site. Former UST locations are shown in Figure A of this appendix.

No hole or damage was observed in the tanks. No groundwater was encountered in the tank excavations. After UST removal, Sierra collected soil samples from the tank excavations for chemical analysis.

Up to 2,300 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPHG) was detected in the soil samples collected from beneath the tanks at approximately 14 feet below ground surface (bgs). The soil sample locations are shown in Figure A.

On August 14, 2000, Sierra drilled three exploratory soil borings and converted them to groundwater monitoring well MW1 through MW3. The wells are approximately 35 feet deep. Sierra collected soil and groundwater samples from the borings/wells for chemical analysis. The analytical results showed up to 720 ppm TPHG, 2.2 ppm benzene, and 3.4 ppm methyl tertiary butyl ether (MTBE) in the soil samples. Up to 290000 ppb TPHG, 10000 ppb benzene, and 4300 ppb MTBE were detected in the groundwater samples. Gasoline constituents were detected in groundwater samples collected from all three monitoring wells. Groundwater monitoring well locations are shown on Figure 2.

Starting March 30, 2001, Sierra performed quarterly groundwater monitoring at the Site. The field and analytical results are presented in Table I and II.

On May 4, 2006, Sierra retained services of Vironex Environmental Services (Vironex) to drill soil boring B1 through B4 at the Jack In The Box and Cal/Trans properties. Sierra collected grab groundwater samples from the borings for chemical analysis. Up to 370 μg/l total petroleum hydrocarbons as gasoline (TPHG), 16 μg/l toluene, 15 μg/l ethylbenzene, and 100 μg/l xylenes were detected in the water sample collected from the borings (B3 and B4) advanced at the Jack In The Box property. No benzene or MTBE was detected in water samples collected at this property. 3.2 μg/l MTBE was detected in the water samples collected from the borings advanced at the Cal/Trans properties. The MTBE was detected in boring B2 located within 300 feet northwest at hydraulic down gradient of the Site. On May 10 and 11, 2006, Sierra retained services of Hew Drilling Company, Inc. (Hew) to construct 4 groundwater monitoring wells (MW4 through MW7) at the CalTrans properties, and Langton Drive. After the well construction, Sierra had the wellheads surveyed, developed the wells, and collected groundwater samples from the wells for chemical analysis. No gasoline constituents were detected in the groundwater samples collected from the wells. The analytical results for the soil and groundwater samples collected from the boring and the wells suggest the tip of the dissolved MTBE plume in the groundwater is confined within 300 feet northwest of the Site. The length of the dissolved plume of other gasoline

constituents in groundwater were shorter than the MTBE plume. Figure 2 shows the groundwater monitoring well locations.

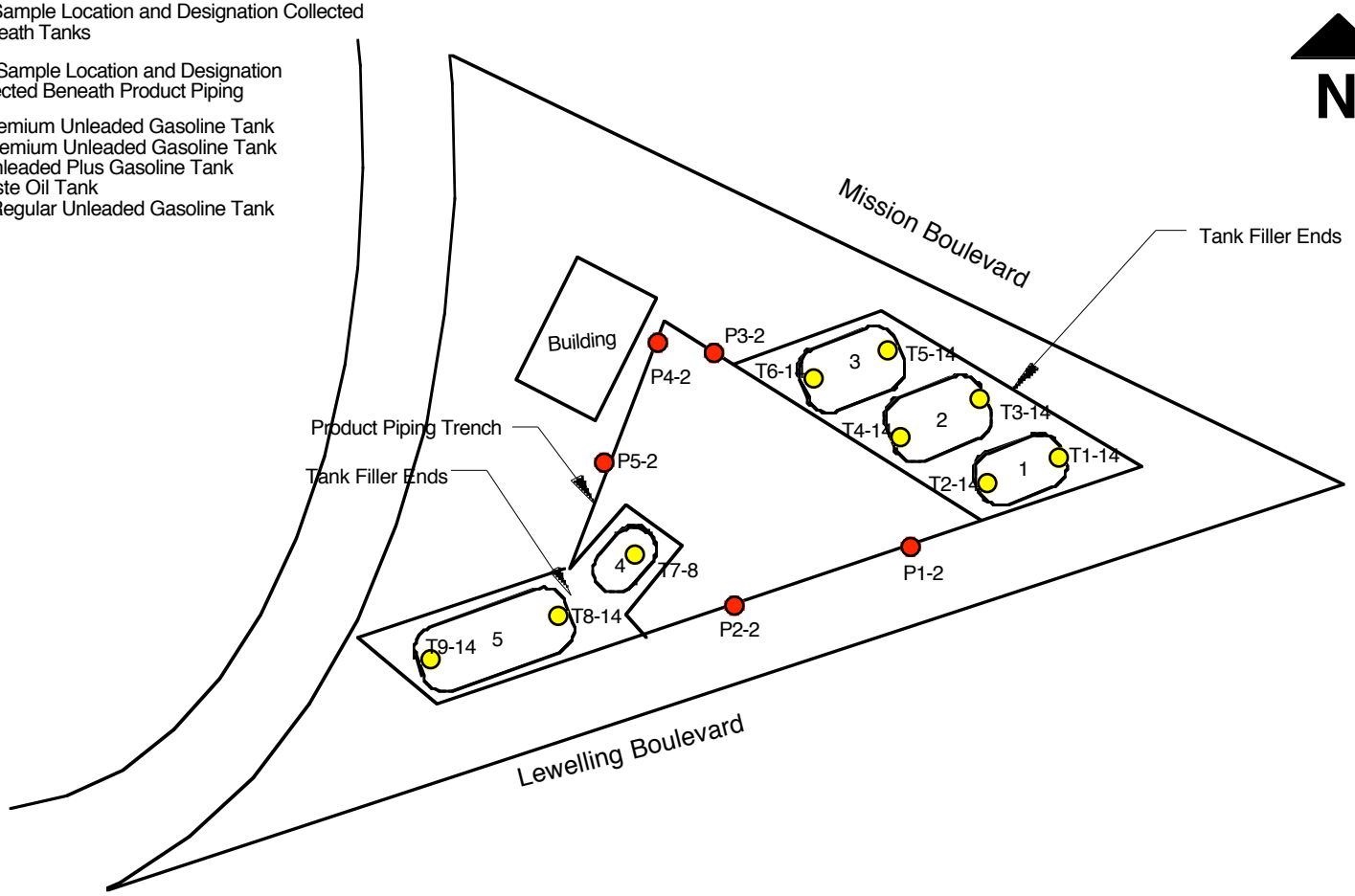
On September 11, 2006, Sierra started quarterly groundwater monitoring of MW1 through MW7. Table I and II presents the groundwater measurement and analytical data.

LEGEND

T1-14 Soil Sample Location and Designation Collected Beaneath Tanks

P1-2 Soil Sample Location and Designation Collected Beneath Product Piping

1 = 2,000-Gallon Premium Unleaded Gasoline Tank
2 = 6,000-Gallon Premium Unleaded Gasoline Tank
3 = 6,000-Gallon Unleaded Plus Gasoline Tank
4 = 500-Gallon Waste Oil Tank
5 = 10,000-Gallon Regular Unleaded Gasoline Tank



Approximate Scale: 0' 30' 60'

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Former UST and Soil Sample Locations

First Quarter 2009 Groundwater Monitoring
ABE Petroleum LLC

17715 Mission Boulevard · Hayward · California

FIGURE
A
March 26, 2009
Project 03-103.00

Appendix B
QA/QC PROTOCOL

QA/QC PROTOCOL

Groundwater Level and Well Depth Measurements

Groundwater level and well depths are measured using electrical sounder. An electrical sounder consists of a reel, two-conductor cable, a water sensor, and a control panel with a buzzer. To measure groundwater level, the sensor is lowered into a well. A low current circuit is completed when the sensor makes contact with water. The current in the circuit is then amplified and activates a buzzer which produce an audible signal. Cable markings are divided at 0.05-foot increments. Well depths are measured to the nearest 0.01 foot. Groundwater levels are measured before and after sample collection to ensure data accuracy.

Well Purging

Low flow submersible electrical pumps or bailers are used to purge groundwater monitoring wells. Approximately 3 to 5 well casing volume of water is removed from the well as a measure to stabilize natural, and representative groundwater in each well. pH, electrical conductivity, and temperature of the purged water is measured and recorded at approximately each casing volume interval. Purge water is stabilized when pH is recorded within 0.5 unit, electrical conductivity is within 5 percent, and temperature is within 1.0 degree Celsius.

Groundwater Sampling

Groundwater samples are transferred into appropriate containers provided by certified analytical laboratories. The containers include proper preservatives, and labels with appropriate project information. Groundwater is transferred into the containers with as little agitation as possible. After collection, containers are sealed and checked to ensure that no head space or air bubbles are present in the sample.

After collection, if required, samples are kept in a cooler to be delivered to analytical laboratory with chain-of-custody documentation.

Equipment Decontamination

All sampling equipment are washed with Liqui-Nox® (a phosphate free laboratory detergent), and rinsed with tap water before each sampling event, and at each sampling interval. To reduce the risk of cross contamination, wells which have shown lower levels of contamination historically are purged and sampled first.

Analytical Procedures

Samples are analyzed by an accredited State-certified analytical laboratory using procedures prescribed by United State Environmental Protection Agency (EPA) and other Federal, State, and Local agencies. At minimum a field blank is analyzed with each group of samples for quality assurance measures. At minimum two qualified personnel review analytical results and compare them with historical data for consistency and accuracy.

Field Reports

All field observations are documented in field reports. A field report contain project information, climatic condition, contractor/subcontractor information, field observation, discussions and communications during each particular field activity. Field reports are stored in appropriate project files. Project managers review field reports to obtain necessary information regarding the status of each project on daily basis.

Appendix C
CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Torrent
LABORATORY, INC.

March 19, 2009

Mazyar Hajiaghai
Sierra Environmental,Inc
980 W Taylor Street
San Jose, CA 95126

TEL: (408) 971-6758
FAX (408) 971-6759

RE: ABE/03-103.00/17715 Mission Boulevard

Order No.: 0903063

Dear Mazyar Hajiaghai:

Torrent Laboratory, Inc. received 5 samples on 3/12/2009 for the analyses presented in the following report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.
Reported data is applicable for only the samples received as part of the order number referenced above.

Torrent Laboratory, Inc, is certified by the State of California, ELAP #1991. If you have any questions regarding these tests results, please feel free to contact the Project Management Team at (408)263-5258;ext: 204.

Sincerely,

Laboratory Director

3/19/09
Date

TORRENT LABORATORY, INC.

483 Sinclair Frontage Road • Milpitas, CA • Phone: (408) 263-5258 • Fax: (408) 263-8293

Visit us at www.torrentlab.com email: analysis@torrentlab.com

Report prepared for: Mazyar Hajiaghai
Sierra Environmental,Inc

Date Received: 3/12/2009
Date Reported: 3/19/2009

Client Sample ID: MW-1
Sample Location: ABE/17715 Mission
Sample Matrix: WATER
Date/Time Sampled 3/12/2009 11:00:00 AM

Lab Sample ID: 0903063-001
Date Prepared: 3/14/2009-3/16/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Benzene	SW8260B	3/14/2009	0.5	44	22.0	1510	µg/L	R18962
Toluene	SW8260B	3/14/2009	0.5	44	22.0	1240	µg/L	R18962
Ethylbenzene	SW8260B	3/14/2009	0.5	44	22.0	2630	µg/L	R18962
Methyl tert-butyl ether (MTBE)	SW8260B	3/14/2009	0.5	44	22.0	1040	µg/L	R18962
Diisopropyl ether (DIPE)	SW8260B	3/14/2009	0.5	44	22.0	ND	µg/L	R18962
Ethyl tert-butyl ether (ETBE)	SW8260B	3/14/2009	0.5	44	22.0	ND	µg/L	R18962
tert-Amyl methyl ether (TAME)	SW8260B	3/14/2009	0.5	44	22.0	ND	µg/L	R18962
t-Butyl alcohol (t-Butanol)	SW8260B	3/14/2009	10	44	440	ND	µg/L	R18962
Xylenes, Total	SW8260B	3/16/2009	1.5	88	132	16500	µg/L	R18964
Surr: Dibromofluoromethane	SW8260B	3/14/2009	0	44	61.2-131	103	%REC	R18962
Surr: Dibromofluoromethane	SW8260B	3/16/2009	0	88	61.2-131	95.2	%REC	R18964
Surr: 4-Bromofluorobenzene	SW8260B	3/14/2009	0	44	64.1-120	89.7	%REC	R18962
Surr: 4-Bromofluorobenzene	SW8260B	3/16/2009	0	88	64.1-120	109	%REC	R18964
Surr: Toluene-d8	SW8260B	3/14/2009	0	44	75.1-127	118	%REC	R18962
Surr: Toluene-d8	SW8260B	3/16/2009	0	88	75.1-127	89.3	%REC	R18964
TPH (Gasoline)	SW8260B(TPH)	3/16/2009	50	88	4400	92000	µg/L	G18964
Surr: 4-Bromofllurobenzene	SW8260B(TPH)	3/16/2009	0	88	58.4-133	105	%REC	G18964

Note: Although TPH as Gasoline constituents are present, result is elevated due to the presence of heavy end hydrocarbons within range of C5-C12 quantified as Gasoline that biases the quantitation (possibly aged gasoline).

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Mazyar Hajiaghai
Sierra Environmental,Inc

Date Received: 3/12/2009
Date Reported: 3/19/2009

Client Sample ID: MW-2
Sample Location: ABE/17715 Mission
Sample Matrix: WATER
Date/Time Sampled 3/12/2009 11:15:00 AM

Lab Sample ID: 0903063-002
Date Prepared: 3/13/2009-3/14/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Benzene	SW8260B	3/13/2009	0.5	11	5.50	686	µg/L	R18962
Toluene	SW8260B	3/13/2009	0.5	11	5.50	128	µg/L	R18962
Ethylbenzene	SW8260B	3/14/2009	0.5	44	22.0	2740	µg/L	R18962
Methyl tert-butyl ether (MTBE)	SW8260B	3/13/2009	0.5	11	5.50	974	µg/L	R18962
Diisopropyl ether (DIPE)	SW8260B	3/13/2009	0.5	11	5.50	ND	µg/L	R18962
Ethyl tert-butyl ether (ETBE)	SW8260B	3/13/2009	0.5	11	5.50	ND	µg/L	R18962
tert-Amyl methyl ether (TAME)	SW8260B	3/13/2009	0.5	11	5.50	ND	µg/L	R18962
t-Butyl alcohol (t-Butanol)	SW8260B	3/13/2009	10	11	110	783	µg/L	R18962
Xylenes, Total	SW8260B	3/14/2009	1.5	44	66.0	4520	µg/L	R18962
Surr: Dibromofluoromethane	SW8260B	3/14/2009	0	44	61.2-131	111	%REC	R18962
Surr: Dibromofluoromethane	SW8260B	3/13/2009	0	11	61.2-131	79.3	%REC	R18962
Surr: 4-Bromofluorobenzene	SW8260B	3/14/2009	0	44	64.1-120	66.5	%REC	R18962
Surr: 4-Bromofluorobenzene	SW8260B	3/13/2009	0	11	64.1-120	96.7	%REC	R18962
Surr: Toluene-d8	SW8260B	3/14/2009	0	44	75.1-127	115	%REC	R18962
Surr: Toluene-d8	SW8260B	3/13/2009	0	11	75.1-127	115	%REC	R18962
TPH (Gasoline)	SW8260B(TPH)	3/14/2009	50	44	2200	43000	µg/L	G18962
Surr: 4-Bromofllurobenzene	SW8260B(TPH)	3/14/2009	0	44	58.4-133	88.8	%REC	G18962

Note: Although TPH as Gasoline constituents are present, result is elevated due to the presence of oxygenates (MTBE/TBA) and heavy end hydrocarbons within range of C5-C12 quantified as Gasoline that biases the quantitation (possibly aged gasoline).

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Mazyar Hajiaghai
Sierra Environmental,Inc

Date Received: 3/12/2009
Date Reported: 3/19/2009

Client Sample ID: MW-3
Sample Location: ABE/17715 Mission
Sample Matrix: WATER
Date/Time Sampled 3/12/2009 11:35:00 AM

Lab Sample ID: 0903063-003
Date Prepared: 3/13/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Benzene	SW8260B	3/13/2009	0.5	11	5.50	759	µg/L	R18962
Toluene	SW8260B	3/13/2009	0.5	11	5.50	18.3	µg/L	R18962
Ethylbenzene	SW8260B	3/13/2009	0.5	11	5.50	704	µg/L	R18962
Methyl tert-butyl ether (MTBE)	SW8260B	3/13/2009	0.5	11	5.50	300	µg/L	R18962
Diisopropyl ether (DIPE)	SW8260B	3/13/2009	0.5	11	5.50	ND	µg/L	R18962
Ethyl tert-butyl ether (ETBE)	SW8260B	3/13/2009	0.5	11	5.50	ND	µg/L	R18962
tert-Amyl methyl ether (TAME)	SW8260B	3/13/2009	0.5	11	5.50	ND	µg/L	R18962
t-Butyl alcohol (t-Butanol)	SW8260B	3/13/2009	10	11	110	1980	µg/L	R18962
Xylenes, Total	SW8260B	3/13/2009	1.5	11	16.5	1010	µg/L	R18962
Surr: Dibromofluoromethane	SW8260B	3/13/2009	0	11	61.2-131	93.2	%REC	R18962
Surr: 4-Bromofluorobenzene	SW8260B	3/13/2009	0	11	64.1-120	98.6	%REC	R18962
Surr: Toluene-d8	SW8260B	3/13/2009	0	11	75.1-127	109	%REC	R18962
TPH (Gasoline)	SW8260B(TPH)	3/13/2009	50	44	2200	15000	µg/L	G18962
Surr: 4-Bromofllurobenzene	SW8260B(TPH)	3/13/2009	0	44	58.4-133	94.0	%REC	G18962

Note: Although TPH as Gasoline constituents are present, result is elevated due to the presence of oxygenates (MTBE/TBA) and heavy end hydrocarbons within range of C5-C12 quantified as Gasoline that biases the quantitation (possibly aged gasoline).

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Mazyar Hajiaghai
Sierra Environmental,Inc

Date Received: 3/12/2009
Date Reported: 3/19/2009

Client Sample ID: MW-6
Sample Location: ABE/17715 Mission
Sample Matrix: WATER
Date/Time Sampled 3/12/2009 12:00:00 PM

Lab Sample ID: 0903063-004
Date Prepared: 3/13/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Benzene	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Toluene	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Ethylbenzene	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Methyl tert-butyl ether (MTBE)	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Diisopropyl ether (DIPE)	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Ethyl tert-butyl ether (ETBE)	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
tert-Amyl methyl ether (TAME)	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
t-Butyl alcohol (t-Butanol)	SW8260B	3/13/2009	10	1	10.0	ND	µg/L	R18962
Xylenes, Total	SW8260B	3/13/2009	1.5	1	1.50	ND	µg/L	R18962
Surr: Dibromofluoromethane	SW8260B	3/13/2009	0	1	61.2-131	86.4	%REC	R18962
Surr: 4-Bromofluorobenzene	SW8260B	3/13/2009	0	1	64.1-120	86.9	%REC	R18962
Surr: Toluene-d8	SW8260B	3/13/2009	0	1	75.1-127	89.3	%REC	R18962
TPH (Gasoline)	SW8260B(TPH)	3/13/2009	50	1	50	ND	µg/L	G18962
Surr: 4-Bromofllurobenzene	SW8260B(TPH)	3/13/2009	0	1	58.4-133	87.1	%REC	G18962

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Mazyar Hajiaghai
Sierra Environmental,Inc

Date Received: 3/12/2009
Date Reported: 3/19/2009

Client Sample ID: MW-7
Sample Location: ABE/17715 Mission
Sample Matrix: WATER
Date/Time Sampled 3/12/2009 12:20:00 PM

Lab Sample ID: 0903063-005
Date Prepared: 3/13/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
Benzene	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Toluene	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Ethylbenzene	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Methyl tert-butyl ether (MTBE)	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Diisopropyl ether (DIPE)	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
Ethyl tert-butyl ether (ETBE)	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
tert-Amyl methyl ether (TAME)	SW8260B	3/13/2009	0.5	1	0.500	ND	µg/L	R18962
t-Butyl alcohol (t-Butanol)	SW8260B	3/13/2009	10	1	10.0	ND	µg/L	R18962
Xylenes, Total	SW8260B	3/13/2009	1.5	1	1.50	ND	µg/L	R18962
Surr: Dibromofluoromethane	SW8260B	3/13/2009	0	1	61.2-131	80.1	%REC	R18962
Surr: 4-Bromofluorobenzene	SW8260B	3/13/2009	0	1	64.1-120	85.8	%REC	R18962
Surr: Toluene-d8	SW8260B	3/13/2009	0	1	75.1-127	89.7	%REC	R18962
TPH (Gasoline)	SW8260B(TPH)	3/13/2009	50	1	50	ND	µg/L	G18962
Surr: 4-Bromofllurobenzene	SW8260B(TPH)	3/13/2009	0	1	58.4-133	91.4	%REC	G18962

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Definitions, legends and Notes

Note	Description
ug/kg	Microgram per kilogram (ppb, part per billion).
ug/L	Microgram per liter (ppb, part per billion).
mg/kg	Milligram per kilogram (ppm, part per million).
mg/L	Milligram per liter (ppm, part per million).
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate.
MDL	Method detection limit.
MRL	Modified reporting limit. When sample is subject to dilution, reporting limit times dilution factor yields MRL.
MS/MSD	Matrix spike/matrix spike duplicate.
N/A	Not applicable.
ND	Not detected at or above detection limit.
NR	Not reported.
QC	Quality Control.
RL	Reporting limit.
% RPD	Percent relative difference.
a	pH was measured immediately upon the receipt of the sample, but it was still done outside the holding time.
sub	Analyzed by subcontracting laboratory, Lab Certificate #

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

CLIENT: Sierra Environmental,Inc
Work Order: 0903063
Project: ABE/03-103.00/17715 Mission Boulevard

ANALYTICAL QC SUMMARY REPORT

BatchID: G18962

Sample ID **MB-G18962**	SampType: **MBLK**	TestCode: **TPH_GAS_W**	Units: **µg/L**	Prep Date: **3/13/2009**	RunNo: **18962**
Client ID: **ZZZZZ**	Batch ID: **G18962**	TestNo: **SW8260B(TP**		Analysis Date: **3/13/2009**	SeqNo: **273380**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	ND	50									
Surr: 4-Bromofllurobenzene	10.50	0	11.36	0	92.4	58.4	133				

Sample ID **LCS-G18962**	SampType: **LCS**	TestCode: **TPH_GAS_W**	Units: **µg/L**	Prep Date: **3/13/2009**	RunNo: **18962**
Client ID: **ZZZZZ**	Batch ID: **G18962**	TestNo: **SW8260B(TP**		Analysis Date: **3/13/2009**	SeqNo: **273381**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	250.4	50	227	0	110	52.4	127				
Surr: 4-Bromofllurobenzene	11.60	0	11.36	0	102	58.4	133				

Sample ID **LCSD-G18962**	SampType: **LCSD**	TestCode: **TPH_GAS_W**	Units: **µg/L**	Prep Date: **3/14/2009**	RunNo: **18962**
Client ID: **ZZZZZ**	Batch ID: **G18962**	TestNo: **SW8260B(TP**		Analysis Date: **3/14/2009**	SeqNo: **273382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	224.1	50	227	0	98.7	52.4	127	250.4	11.1	20	
Surr: 4-Bromofllurobenzene	11.50	0	11.36	0	101	58.4	133	0	0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Sierra Environmental,Inc
Work Order: 0903063
Project: ABE/03-103.00/17715 Mission Boulevard

ANALYTICAL QC SUMMARY REPORT

BatchID: G18964

Sample ID **MB-G18964**	SampType: **MBLK**	TestCode: **TPH_GAS_W**	Units: **µg/L**	Prep Date: **3/16/2009**	RunNo: **18964**
Client ID: **ZZZZZ**	Batch ID: **G18964**	TestNo: **SW8260B(TP**		Analysis Date: **3/16/2009**	SeqNo: **273420**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	ND	50									
Surr: 4-Bromofllurobenzene	12.20	0	11.36	0	107	58.4	133				

Sample ID **LCS-G18964**	SampType: **LCS**	TestCode: **TPH_GAS_W**	Units: **µg/L**	Prep Date: **3/16/2009**	RunNo: **18964**
Client ID: **ZZZZZ**	Batch ID: **G18964**	TestNo: **SW8260B(TP**		Analysis Date: **3/16/2009**	SeqNo: **273421**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	266.7	50	227	25	106	52.4	127				
Surr: 4-Bromofllurobenzene	13.10	0	11.36	0	115	58.4	133				

Sample ID **LCSD-G18964**	SampType: **LCSD**	TestCode: **TPH_GAS_W**	Units: **µg/L**	Prep Date: **3/16/2009**	RunNo: **18964**
Client ID: **ZZZZZ**	Batch ID: **G18964**	TestNo: **SW8260B(TP**		Analysis Date: **3/16/2009**	SeqNo: **273422**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	228.4	50	227	25	89.6	52.4	127	266.7	15.5	20	
Surr: 4-Bromofllurobenzene	12.10	0	11.36	0	107	58.4	133	0	0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Sierra Environmental,Inc
Work Order: 0903063
Project: ABE/03-103.00/17715 Mission Boulevard

ANALYTICAL QC SUMMARY REPORT

BatchID: R18962

Sample ID **MB-R18962**	SampType: **MBLK**	TestCode: **8260B_W_PE**	Units: **µg/L**	Prep Date: **3/13/2009**	RunNo: **18962**
Client ID: **ZZZZZ**	Batch ID: **R18962**	TestNo: **SW8260B**		Analysis Date: **3/13/2009**	SeqNo: **273350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.500									
Toluene	ND	0.500									
Ethylbenzene	ND	0.500									
Methyl tert-butyl ether (MTBE)	ND	0.500									
Diisopropyl ether (DIPE)	ND	0.500									
Ethyl tert-butyl ether (ETBE)	ND	0.500									
tert-Amyl methyl ether (TAME)	ND	0.500									
t-Butyl alcohol (t-Butanol)	ND	10.0									
Xylenes, Total	ND	1.50									
Surr: Dibromofluoromethane	9.570	0	11.36	0	84.2	61.2	131				
Surr: 4-Bromofluorobenzene	10.58	0	11.36	0	93.1	64.1	120				
Surr: Toluene-d8	10.52	0	11.36	0	92.6	75.1	127				

Sample ID **LCS-R18962**	SampType: **LCS**	TestCode: **8260B_W_PE**	Units: **µg/L**	Prep Date: **3/14/2009**	RunNo: **18962**
Client ID: **ZZZZZ**	Batch ID: **R18962**	TestNo: **SW8260B**		Analysis Date: **3/14/2009**	SeqNo: **273351**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	16.92	0.500	17.04	0	99.3	66.9	140				
Toluene	15.67	0.500	17.04	0	92.0	76.6	123				
Surr: Dibromofluoromethane	11.49	0	11.36	0	101	61.2	131				
Surr: 4-Bromofluorobenzene	10.95	0	11.36	0	96.4	64.1	120				
Surr: Toluene-d8	12.58	0	11.36	0	111	75.1	127				

Sample ID **LCSD-R18962**	SampType: **LCSD**	TestCode: **8260B_W_PE**	Units: **µg/L**	Prep Date: **3/14/2009**	RunNo: **18962**
Client ID: **ZZZZZ**	Batch ID: **R18962**	TestNo: **SW8260B**		Analysis Date: **3/14/2009**	SeqNo: **273353**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	16.38	0.500	17.04	0	96.1	66.9	140	16.92	3.24	20	
Toluene	18.31	0.500	17.04	0	107	76.6	123	15.67	15.5	20	
Surr: Dibromofluoromethane	9.930	0	11.36	0	87.4	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	10.27	0	11.36	0	90.4	64.1	120	0	0	0	

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Sierra Environmental,Inc
Work Order: 0903063
Project: ABE/03-103.00/17715 Mission Boulevard

ANALYTICAL QC SUMMARY REPORT

BatchID: R18962

Sample ID **LCSD-R18962**	SampType: **LCSD**	TestCode: **8260B_W_PE**	Units: **µg/L**	Prep Date: **3/14/2009**	RunNo: **18962**
Client ID: **ZZZZZ**	Batch ID: **R18962**	TestNo: **SW8260B**		Analysis Date: **3/14/2009**	SeqNo: **273353**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	12.52	0	11.36	0	110	75.1	127	0	0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Sierra Environmental,Inc
Work Order: 0903063
Project: ABE/03-103.00/17715 Mission Boulevard

ANALYTICAL QC SUMMARY REPORT

BatchID: R18964

Sample ID **MB-R18964**	SampType: **MBLK**	TestCode: **8260B_W_PE**	Units: **µg/L**	Prep Date: **3/16/2009**	RunNo: **18964**
Client ID: **ZZZZZ**	Batch ID: **R18964**	TestNo: **SW8260B**		Analysis Date: **3/16/2009**	SeqNo: **273415**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.500									
Toluene	ND	0.500									
Ethylbenzene	ND	0.500									
Methyl tert-butyl ether (MTBE)	ND	0.500									
Diisopropyl ether (DIPE)	ND	0.500									
Ethyl tert-butyl ether (ETBE)	ND	0.500									
tert-Amyl methyl ether (TAME)	ND	0.500									
t-Butyl alcohol (t-Butanol)	ND	10.0									
Xylenes, Total	ND	1.50									
Surr: Dibromofluoromethane	10.80	0	11.36	0	95.1	61.2	131				
Surr: 4-Bromofluorobenzene	12.10	0	11.36	0	107	64.1	120				
Surr: Toluene-d8	10.66	0	11.36	0	93.8	75.1	127				

Sample ID **LCS-R18964**	SampType: **LCS**	TestCode: **8260B_W_PE**	Units: **µg/L**	Prep Date: **3/16/2009**	RunNo: **18964**
Client ID: **ZZZZZ**	Batch ID: **R18964**	TestNo: **SW8260B**		Analysis Date: **3/16/2009**	SeqNo: **273416**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	13.95	0.500	17.04	0	81.9	66.9	140				
Toluene	15.41	0.500	17.04	0	90.4	76.6	123				
Surr: Dibromofluoromethane	10.12	0	11.36	0	89.1	61.2	131				
Surr: 4-Bromofluorobenzene	12.34	0	11.36	0	109	64.1	120				
Surr: Toluene-d8	11.20	0	11.36	0	98.6	75.1	127				

Sample ID **LCSD-R18964**	SampType: **LCSD**	TestCode: **8260B_W_PE**	Units: **µg/L**	Prep Date: **3/16/2009**	RunNo: **18964**
Client ID: **ZZZZZ**	Batch ID: **R18964**	TestNo: **SW8260B**		Analysis Date: **3/16/2009**	SeqNo: **273417**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	15.76	0.500	17.04	0	92.5	66.9	140	13.95	12.2	20	
Toluene	16.32	0.500	17.04	0	95.8	76.6	123	15.41	5.74	20	
Surr: Dibromofluoromethane	9.340	0	11.36	0	82.2	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	13.04	0	11.36	0	115	64.1	120	0	0	0	

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Sierra Environmental,Inc
Work Order: 0903063
Project: ABE/03-103.00/17715 Mission Boulevard

ANALYTICAL QC SUMMARY REPORT

BatchID: R18964

Sample ID **LCSD-R18964**	SampType: **LCSD**	TestCode: **8260B_W_PE**	Units: **µg/L**	Prep Date: **3/16/2009**	RunNo: **18964**
Client ID: **ZZZZZ**	Batch ID: **R18964**	TestNo: **SW8260B**		Analysis Date: **3/16/2009**	SeqNo: **273417**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	11.64	0	11.36	0	102	75.1	127	0	0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

SIERRA ENVIRONMENTAL, INC.
Environmental Consultants

0903063

CHAIN OF CUSTODY

Project Name: ABE **Project No:** 03-103.00 **Date:** 3/12/09

Project Location: 17715 Mission Boulevard **Client:** Paul Garg **Sampler:** Mike Hagi

	Sample ID	Date Sampled	Sampling Time	Matrix	N° of Containers	Analysis Requested: TPHG&BTEX Fuel Oxygenates 8260B							Turnaround Time
001A	MW-1	3/12/09	11:00	water	3	X							24-hour Other ____ Normal
002A	MW-2	"	11:15	"	"	X							24-hour Other ____ Normal
003A	MW-3	"	11:35	"	"	X							24-hour Other ____ Normal
004A	MW-6	"	12:00	"	"	X							24-hour Other ____ Normal
005A	MW-7	"	12:20	"	"	X							24-hour Other ____ Normal
													24-hour Other ____ Normal
													24-hour Other ____ Normal

Remarks: Please email the results in EDF format for Geotracker ID# T0600102154 to maz.sierra@sbcglobal.net

Relinquished by	Date	Time	Received by	Date	Time
	3/12/09	13:22	NAVIN	3/12/09	13:22
Relinquished by	Date	Time	Received by	Date	Time

Drop-off

980 W. Taylor Street · San Jose · California · 95126
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SIERRA Form 104-02

Appendix D
FIELD NOTES

SIERRA ENVIRONMENTAL, INC.
Environmental Consultants

GROUNDWATER MONITORING DATA FORM

Project No: 03-103.00 **Date:** 3-12-09

Project Name: ~~ABE~~ **Well N°:** ~~MW1~~

Field Personnel: Mike & Maz **Weather:** Sunny

Project Location: ~~17715 Mission Boulevard, Hayward~~

PURGE WATER VOLUME CALCULATION	Total Well Depth (ft)	Depth to Water (ft	Water Column (ft)	Multiplier Casing Diameter			Casing Volume (gal)	Purged Volume (gal)
				2"	4"	6"		
	33.25	21.22	12.03	0.16	0.64	1.44	1.92	≈ 6.0

Purge Method: Bailer **Measuring Reference:** TOC

Time						
Volume Purged (gal)	0	2	4	6		
Temperature (° F)	63.81	63.83	63.87	63.91		
pH	6.22	6.27	6.25	6.25		
Specific Conductivity (umhos/cm)	440	420	430	430		
Turbidity/Color	Light gray	→	→	→		
Odor	Yes	→	→	→		

Comments:

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SIERRA ENVIRONMENTAL, INC.
Environmental Consultants

GROUNDWATER MONITORING DATA FORM

Project No: 03-103.00 **Date:** 3-12-99

Project Name: ~~ABE~~ **Well N°:** ~~MW2~~

Field Personnel: Mike & Maz **Weather:** Sunny

Project Location: ~~17715 Mission Boulevard, Hayward~~

PURGE WATER VOLUME CALCULATION	Total Well Depth (ft)	Depth to Water (ft	Water Column (ft)	Multiplier Casing Diameter			Casing Volume (gal)	Purged Volume (gal)
				2"	4"	6"		
	33.75	22.45	11.30	0.16	0.64	1.44	1.80	≈ 5.0

Purge Method: Bailer **Measuring Reference:** ~~TOC~~

Time						
Volume Purged (gal)	0	1.5	3.0	5.0		
Temperature (° F)	63.45	63.48	63.51	63.53		
pH	6.33	6.30	6.31	6.29		
Specific Conductivity (umhos/cm)	650	630	600	610		
Turbidity/Color	Light gray	→	→	→		
Odor	yes	→	→	→		

Comments:

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SIERRA ENVIRONMENTAL, INC.
Environmental Consultants

GROUNDWATER MONITORING DATA FORM

Project No: 03-103.00 Date: 3-12-09

Project Name: ~~ABE~~ Well N°: ~~MW3~~

Field Personnel: Mike & Maz Weather: Sunny

Project Location: ~~17715 Mission Boulevard, Hayward~~

PURGE WATER VOLUME CALCULATION	Total Well Depth (ft)	Depth to Water (ft	Water Column (ft)	Multiplier Casing Diameter			Casing Volume (gal)	Purged Volume (gal)
				2"	4"	6"		
	33.75	21.57	12.18	0.16	0.64	1.44	1.94	~6.0

Purge Method: ~~Bailer~~ Measuring Reference: ~~TOC~~

Time						
Volume Purged (gal)	0	2	4	6		
Temperature (° F)	63.5	63.55	63.54	63.56		
pH	6.40	6.36	6.35	6.30		
Specific Conductivity (umhos/cm)	550	570	570	575		
Turbidity/Color	Light gray	→	→	→		
Odor	Yes	→	→	→		

Comments:

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SIERRA ENVIRONMENTAL, INC.
Environmental Consultants

GROUNDWATER MONITORING DATA FORM

Project No: 03-103.00 **Date:** 3-12-09

Project Name: ~~ABE~~ **Well N°:** ~~MW6~~

Field Personnel: Mike & Maz **Weather:** Sunny

Project Location: ~~17715 Mission Boulevard, Hayward~~

PURGE WATER VOLUME CALCULATION	Total Well Depth (ft)	Depth to Water (ft	Water Column (ft)	Multiplier Casing Diameter			Casing Volume (gal)	Purged Volume (gal)
				2"	4"	6"		
	25	18.58	6.42	0.16	0.64	1.44	1.02	≈ 3.0

Purge Method: ~~Bailer~~ **Measuring Reference:** ~~TOC~~

Time						
Volume Purged (gal)	0	1	2	3		
Temperature (° F)	63.1	63.0	63.22	63.23		
pH	6.25	6.23	6.21	6.20		
Specific Conductivity (umhos/cm)	~~5~~80	577	580	579		
Turbidity/Color	NO	→	→	→		
Odor	SLT Brown	→	→	→		

Comments:

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SIERRA ENVIRONMENTAL, INC.
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GROUNDWATER MONITORING DATA FORM

Project No: 03-103.00 **Date:** 3-12-09

Project Name: ~~ABE~~ **Well N°:** ~~MW7~~

Field Personnel: Mike & Maz **Weather:** Sunny

Project Location: ~~17715 Mission Boulevard, Hayward~~

PURGE WATER VOLUME CALCULATION	Total Well Depth (ft)	Depth to Water (ft	Water Column (ft)	Multiplier Casing Diameter			Casing Volume (gal)	Purged Volume (gal)
				2"	4"	6"		
	25	19.45	5.55	0.16	0.64	1.44	.88	≈ 3.0

Purge Method: Bailer **Measuring Reference:** TOC

Time						
Volume Purged (gal)	0	1	2	3		
Temperature (° F)	62.99	63.0	63.11	63.18		
pH	6.33	6.30	6.30	6.28		
Specific Conductivity (umhos/cm)	550	560	550	550		
Turbidity/Color	light brown	"	"	"		
Odor	NV	"	"	"		

Comments:

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